

UNDERGRADUATE

ACADEMIC CALENDAR 2015-2016



UNIVERSITY
OF MANITOBA



ACADEMIC CALENDAR 2015-2016

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CONTENTS

IMPORTANT NOTICE	1	Course Identification	43
Freedom of Information and Protection of Privacy Act (FIPPA)	1	Grades and Grade Point Average Calculation	43
Disclosure of Personal Information to Statistics Canada	1	Academic Evaluation	44
ABOUT THE UNIVERSITY	2	Deferred and Supplemental Examinations	46
ORGANIZATIONAL STRUCTURE	2	Attendance and Withdrawal	46
Members of the Board of Governors	2	Academic Integrity	47
Senior Administrative Officers	2	Graduation and Convocation	47
Affiliated, Member and Constituent Colleges and Universities	2	Personal Information	48
University Distinguished Professors	3	ACADEMIC PROGRAMS	49
Chancellors and Presidents Emeriti	3	Undergraduate Programs Offered	49
Faculties/Schools and Departments	3	Areas of Study	50
Alphabetical Listing of Subjects	4	ADMISSIONS	52
ACADEMIC SCHEDULE	6	SECTION 1: Welcome	52
SECTION 1: DATES FOR FALL/WINTER SESSION	6	SECTION 2: An Overview of Undergraduate Admission	52
1.1 Dates applicable to all U of M students:	6	SECTION 3: Direct Entry Options	52
1.2 Dates applicable to most U of M students:	6	SECTION 4: Advanced Entry Options	56
1.3 Dates applicable to Agriculture Diploma:	8	SECTION 5: Other Admission Categories	57
1.4 Dates applicable to Dental Hygiene:	9	SECTION 6: Admission with Advanced Standing	58
1.5 Dates applicable to Dentistry:	9	SECTION 7: Definition of Manitoba Residency	58
1.6 Dates applicable to Law:	9	SECTION 8: English Language Proficiency	59
1.7 Dates applicable to Medicine:	10	SECTION 9: Application Procedure	59
1.8 Dates applicable to Nursing:	10	UNIVERSITY 1	61
1.9 Dates applicable to Occupational Therapy:	10	SECTION 1: University 1	61
1.10 Dates applicable to Pharmacy:	10	SECTION 2: Admission Requirements	62
1.11 Dates applicable to Physical Therapy:	11	SECTION 3: University 1 Academic Regulations	62
1.12 Dates applicable to Respiratory Therapy:	11	SECTION 4: University 1 Program Requirements	64
1.13 Dates applicable to Social Work:	11	SECTION 5: Recommended Introductory Courses	64
1.14 Other University Special Events	11	FACULTY OF AGRICULTURAL AND FOOD SCIENCES	74
SECTION 2: DATES FOR SUMMER TERM	11	SECTION 1: Programs Offered	75
2.1 Distance and Online Education Dates	11	SECTION 2: Admission Requirements	76
2.2 Summer Session 2015 Start and End Dates	12	SECTION 3: Faculty Academic Regulations	80
2.3 Summer Session 2016 Class Start Dates	12	SECTION 4: Program and Graduation Requirements	86
UNIVERSITY POLICIES	13	SECTION 5: Course Descriptions	116
Responsibilities of Academic Staff with Regard to Students	13	FACULTY OF ARCHITECTURE	132
Respectful Work and Learning Environment	14	SECTION 1: Degree Programs Offered	132
The University of Manitoba Accessibility Policy	16	SECTION 2: Admission Requirements	133
Disclosure and Security of Student Academic Records	20	SECTION 3: Faculty Academic Regulations	133
Conflict of Interest Between Evaluators and Students Due to Close Personal Relationships	20	SECTION 4: Program and Graduation Requirements	133
Campus Alcohol Policy	21	SECTION 5: Course Descriptions	138
Parking Regulations	21	SCHOOL OF ART	142
Student Discipline Bylaw	27	SECTION 1: Degree and Diploma Programs Offered	142
Inappropriate or Disruptive Student Behaviour	33	SECTION 2: Admission Requirements	142
Violent or Threatening Behavior	34	SECTION 3: Faculty Academic and Other Regulations	143
Hold Status	35	SECTION 4: Program and Graduation Requirements	145
Electronic Communications with Students	35	SECTION 5: Course Descriptions	148
Final Examinations and Final Grades	36	FACULTY OF ARTS	153
GENERAL ACADEMIC REGULATIONS	41	SECTION 1: Degree Programs Offered Leading to a B.A.	154
Introduction	41		
Residence and Written English and Mathematics Requirements	41		

ACADEMIC CALENDAR 2015-2016

SECTION 2: Admission to the Faculty of Arts B.A. General, Advanced or Honours Degree Programs	155	SECTION 5: Academic Regulations for Bachelor of Education	334
SECTION 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs	156	SECTION 6: Post Baccalaureate Diploma in Education	337
SECTION 4: Admission Requirements and Basic Faculty Regulations for the B.A. Integrated Studies (B.A.I.S.) Degree Program	161	SECTION 7: Additional Information	342
SECTION 5: Additional Faculty Regulations and Policies Applicable to All Degree Programs in the Faculty of Arts	163	SECTION 8: Course Descriptions	343
SECTION 6: Student Responsibilities	169	FACULTY OF ENGINEERING	355
SECTION 7: Special Circumstances and Appeals of Matters Regarding Academic Regulations	171	SECTION 1: Degrees Offered	356
SECTION 8: Departments in, and Programs and Courses Offered by, the Faculty of Arts	171	SECTION 2: Admission to the Faculty of Engineering	356
8.1 Department of Anthropology	171	SECTION 3: Academic Regulations	357
8.2 Asian Studies Centre	177	SECTION 4: Program Requirements	361
8.3 Canadian Studies Program	183	SECTION 5: Co-operative Education and Industrial Internship Programs	393
8.4 Catholic Studies Program	188	CLAYTON H. RIDDELL FACULTY OF ENVIRONMENT, EARTH, AND RESOURCES	394
8.5 Central and East European Studies Program	190	SECTION 1: Degree Programs Offered	395
8.6 The Changing Workplace Program	193	SECTION 2: Admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources	396
8.7 Department of Classics	194	SECTION 3: Degree Regulations and Services Applicable to all Programs in the Clayton H. Riddell Faculty of Environment, Earth, and Resources	398
8.8 Cross-Disciplinary Programs	200	SECTION 4: Department of Environment and Geography	402
8.9 Department of Economics	200	SECTION 5: Bachelor of Arts in Geography Degree Regulations, Program Description and Courses Offered by	403
8.10 English, Film, and Theatre	207	SECTION 6: Bachelor of Science in Physical Geography Degree Regulations, Program Description and Courses Offered by	412
8.11 Department of French, Spanish and Italian	221	SECTION 7: Bachelor of Environmental Science and Bachelor of Environmental Studies Degree Regulations, Program Descriptions and Courses Offered by	420
8.12 German and Slavic Studies	233	SECTION 8: Department of Geological Sciences: Bachelor of Science in Geological Sciences - Geology, Geophysics, and General Degree Regulations, Program Descriptions and Courses Offered by	429
8.13 Global Political Economy Program	244	EXTENDED EDUCATION	441
8.14 Department of History	247	SECTION 1: Extended Education	441
8.15 Department of Icelandic	256	SECTION 2: Program Areas	441
8.16 Interdisciplinary Courses	258	FACULTY OF HEALTH SCIENCES	451
8.17 Judaic Studies	259	BACHELOR OF HEALTH SCIENCES, HEALTH STUDIES AND HUMAN ECOLOGY(GENERAL)	451
8.18 Labour Studies Program	262	SECTION 1: Degree Programs Offered	452
8.19 Latin American Studies Program	266	SECTION 2: Admission Requirements for the Interdisciplinary Health Program	452
8.20 Department of Linguistics	267	SECTION 3: Academic Regulations	453
8.21 Medieval and Early Modern Studies Program	272	SECTION 4: Program and Graduation Requirements	455
8.22 Department of Native Studies	274	SECTION 5: Course Descriptions	459
8.23 Department of Philosophy	281	COLLEGE OF DENTISTRY	460
8.24 Department of Political Studies	286	SECTION 1: Degree Programs Offered	461
8.25 Department of Psychology	292	SECTION 2: Admission Requirements	461
8.26 Department of Religion	300	SECTION 3: College Academic Regulations	462
8.27 Department of Sociology	307	SECTION 4: Program and Graduation Requirements	466
8.28 Ukrainian Canadian Heritage Studies Program	314	SECTION 5: Course Descriptions	467
8.29 Women's and Gender Studies Program	317	SCHOOL OF DENTAL HYGIENE	473
SECTION 9: Courses and Programs Offered by Other Faculties and Schools for Credit in Arts	322	SECTION 1: Degree Programs Offered	473
FACULTY OF EDUCATION	326	SECTION 2: Admission Requirements	474
SECTION 1: Degree and Diploma Programs Offered	327	SECTION 3: Faculty Academic Regulations	475
SECTION 2: Admission to Bachelor of Education & Integrated Bachelor of Music/Bachelor of Education Programs	328	SECTION 4: Program and Graduation Requirements	481
SECTION 3: Program Requirements After-Degree Bachelor of Education	330		
SECTION 4: Program Requirements Integrated Bachelor of Music/Bachelor of Education	332		

SECTION 5: Course Descriptions	483	SECTION 3: Admission to the Faculty of Law	573
COLLEGE OF MEDICINE	486	SECTION 5: Program Requirements	575
Department of Community Health Sciences	487	SECTION 6: Registration	576
SECTION 1: Degree Programs Offered	487	SECTION 7: Law Course Descriptions	577
SECTION 2: Admission Requirements for Family Social Sciences	488	FACULTY OF MANAGEMENT/I.H. ASPER SCHOOL OF BUSINESS	581
SECTION 3: Department Academic Regulations	488	SECTION 1: Degree Programs Offered	582
SECTION 4: Program and Graduation Requirements	490	SECTION 2: Admission Requirements	582
SECTION 5: Family Social Sciences Course Descriptions	497	SECTION 3: Academic Regulations	585
SECTION 1: Medical Education	500	SECTION 4: Program and Graduation Requirements	590
SECTION 2: Admission to the College of Medicine	501	SECTION 5: Course Descriptions	601
SECTION 3: Academic Regulations	502	MARCEL A. DESAUTELS FACULTY OF MUSIC	609
SECTION 4: The Program for the M.D. Degree	503	SECTION 1: Degree and Diploma Programs Offered	610
SECTION 5: Student Evaluation and Academic Progress	506	SECTION 2: Admission to Music	610
SECTION 6: Academic Research in Medical Education	516	SECTION 3: Academic Regulations	610
SECTION 7: Additional Degrees in Medicine	517	SECTION 4: Program Requirements- Bachelor of Music, Bachelor of Jazz Studies, Years 1-4	611
SECTION 8: Registration Information	519	SECTION 5: Program Requirements-Integrated Bachelor of Music/Bachelor of Education Years 1-5	618
SECTION 9: Course Descriptions	520	SECTION 6: Post-Baccalaureate Diploma in Performance	621
COLLEGE OF NURSING	521	SECTION 7: Offerings for Non-Music Students	622
SECTION 1: Degree Programs Offered	521	SECTION 8: Music Course Descriptions	623
SECTION 2: Admission Requirements	522	FACULTY OF SCIENCE	629
SECTION 3: Academic Regulations	525	SECTION 1: DEGREES AND PROGRAMS OFFERED BY THE FACULTY OF SCIENCE	629
SECTION 4: Program and Graduation Requirements	532	SECTION 2: ADMISSION TO THE FACULTY OF SCIENCE	630
SECTION 5: Nursing Course Descriptions	538	SECTION 3: ACADEMIC REGULATIONS	632
COLLEGE OF PHARMACY	542	SECTION 4: PROGRAMS AND COURSES OFFERED BY THE FACULTY OF SCIENCE	640
SECTION 1: Degree Programs Offered	543	4.1 Actuarial Mathematics	641
SECTION 2: Admission Requirements	543	4.2 Biochemistry	642
SECTION 3: College Academic Regulations	544	4.3 Department of Biological Sciences	645
SECTION 4: Program and Graduation Requirements	546	4.4 Biotechnology	662
SECTION 5: Course Descriptions	549	4.5 Department of Chemistry	666
COLLEGE OF REHABILITATION SCIENCES	551	4.6 Department of Computer Science	675
SECTION 1: Degree Programs Offered	551	4.7 Interdisciplinary Courses in Forensic Science	685
SECTION 2: Admission Requirements	552	4.8 Genetics Program	686
SECTION 3: College Academic Regulations	552	4.9 Department of Mathematics	688
SECTION 4: Program and Graduation Requirements	553	4.10 Department of Microbiology	703
SECTION 5: Course Descriptions	554	4.11 Department of Physics and Astronomy	710
FACULTY OF HUMAN ECOLOGY	556	4.12 Psychology Program	718
FACULTY OF KINESIOLOGY AND RECREATION MANAGEMENT	557	4.13 Department of Statistics	720
SECTION 1: Degree Programs Offered	557	FACULTY OF SOCIAL WORK	728
SECTION 2: Admission Requirements	558	SECTION 1: DEGREE OFFERED	728
SECTION 3: Faculty Academic Regulations	559	SECTION 2: ADMISSION REQUIREMENTS	728
SECTION 4: Program and Graduation Requirements	560	SECTION 3: FACULTY ACADEMIC REGULATIONS	731
SECTION 5: Registration Information for All Students	565	SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS	732
SECTION 6: Course Descriptions	567	SECTION 5: COURSE DESCRIPTIONS	737
FACULTY OF LAW	572	UNIVERSITÉ DE SAINT BONIFACE	739
SECTION 1: Degree Programs Offered	572	Université de Saint -Boniface Profile and Programs Offered	739
SECTION 2: The Profession and the Faculty of Law	572	Courses taught at Université de Saint-Boniface	743

IMPORTANT NOTICE

The University of Manitoba reserves the right to make changes in the information contained in the Undergraduate Calendar and the Graduate Calendar without prior notice. The University of Manitoba web site, umanitoba.ca is a source for updated information.

Not every course listed in the Undergraduate Calendar or the Graduate Calendar will be offered in this academic year.

It is the responsibility of all students:

- To familiarize themselves each year with the university's academic regulations and policy in general;
- To familiarize themselves with the regulations and policies applying specifically to their faculty, school, or program;
- To familiarize themselves with the specific graduation requirements of the degree, diploma, or certificate they are seeking; and
- To ensure that the courses they have selected are appropriate to their programs.

In the event of an inconsistency between the general academic regulations and policies published in the Undergraduate Calendar and the Graduate Calendar, and such regulations and policies established by Senate and the councils of the faculties and schools, the version established by Senate and the councils of the faculties and schools shall prevail.

The regulations and policies contained in this year's editions of the Undergraduate Calendar and the Graduate Calendar apply, subject to change, only for the academic year indicated on the cover page of each publication.

The material in the current editions of the Undergraduate Calendar and the Graduate Calendar was submitted by the academic and administrative units concerned. The university neither represents nor warrants that all general information and course references used in these publications is accurate although reasonable efforts have been used to check the accuracy of the information.

Students also agree by the act of registration to be bound by the regulations, policies, and bylaws of the University of Manitoba that are in effect at the time of registration, including any amendments which may be enacted during the period of their registration. Students agree by the act of registration to be bound by the regulations, policies, and bylaws of the faculty or program in which they have registered, including any amendments which may be made during the period of their registration. Students also acknowledge that such amendments may have retroactive application.

No liability shall be incurred by the University of Manitoba for any loss or damage suffered or incurred by any student, or any party claiming through or under any student, as a result of delays in, or termination of, services, courses or classes by acts of God, fires, floods, riots, wars, strikes or lock-outs, damage to university property, financial exigency, or any occurrence beyond the reasonable control of the university. Further, the University of Manitoba shall not be liable for any losses or damage suffered by a student who discloses his/her personal identification number (PIN) to anyone other than a university employee in the course of registration.

Freedom of Information and Protection of Privacy Act (FIPPA)

This personal information is being collected under the authority of The University of Manitoba Act. It will be used for the purposes of admission, registration, assessment of academic status, and communication with the student. It may be used for administrative research in support of provision of education and general administration of the University. It may be disclosed to other educational institutions, government departments, and co-sponsoring organizations, and, for those students who are members of UMSU, it will be disclosed to the University of Manitoba Students' Union. Upon graduation, the student's name and address, together with information on degrees, diplomas, and certificates earned will be given to and maintained by the alumni records department in order to assist the University's advancement and development efforts. Information regarding graduation and awards may be made public. Personal information will not be used or disclosed for other purposes, unless permitted by The Freedom of Information and Protection of Privacy Act (FIPPA). If you have any questions about the collection of personal information, contact the Access and Privacy Office (tel. 204-474-9462), The University of Manitoba, 233 Elizabeth Dafoe Library, Winnipeg, Manitoba, Canada, R3T 2N2.

Disclosure of Personal Information to Statistics Canada

The Federal Statistics Act provides the legal authority for Statistics Canada to obtain access to personal information held by educational institutions. The information may be used only for statistical purposes, and the confidentiality provisions of the Statistics Act prevent the information from being released in any way that would identify a student. At any time, students who do not wish to have their information used are able to ask Statistics Canada to remove their identifying information from the national database. Further information on the use of this information can be obtained from Statistics Canada's website (statcan.gc.ca) or by writing to the Post-Secondary Section, Centre for Education Statistics, 17th Floor, R.H. Coats Building, Tunney's Pasture, Ottawa, Ontario, Canada, K1A 0T6.

ABOUT THE UNIVERSITY

Welcome to the University of Manitoba - western Canada's first university. Founded more than 137 years ago, and located in the heart of the country, we are the region's largest and only research intensive university offering over 100 degrees, diplomas, and certificates – more than 60 at the undergraduate level including professional disciplines such as medicine, law, and engineering.

Our energetic university community is comprised of close to 30,000 students, 8,700 faculty and staff, and 190,000 alumni. Nearly 13 per cent of our current students are international, representing close to 104 countries.

The University of Manitoba is located on Anishinabe and Metis traditional land and is home to a thriving community of Indigenous researchers, staff and more than 2,000 First Nations, Metis and Inuit students, including over 150 graduate students — one of the largest Indigenous student bodies in the country.

Our university stimulates over \$1.8 billion in economic activity in the province, and we are leaders in Manitoba's knowledge economy with groundbreaking research in areas such as nanotechnology, functional foods and nutraceuticals, HIV/AIDS, and climate change.

With a strong legacy of excellence to guide us, the University of Manitoba and its dynamic community of researchers, students, teachers and staff, are addressing the challenges facing Canada and the world in the 21st century.

The University of Manitoba is a coeducational, nondenominational, government-supported institution. It is a member of the Association of Commonwealth Universities and of the Association of Universities and Colleges of Canada.

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Bev Passey, FRCGA

Ryan Sherbo

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Rennie Zegalski, B.Comm. (Hons.)

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John E. Kearsey, B.A.

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Leah Janzen, B.A.

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Recteur: Gabor Csepregi, B.A., M.A., Ph.D. (Laval)

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Prairie Theatre Exchange

University Distinguished Professors

Distinguished Professors

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Chancellors Emeriti

Auld, I.G., B.A.(Hons.); M.A.; LL.D.

Mauro, A.V., O.C., Q.C., B.A., LL.B., LL.M., LL.D. (Manitoba), D.Comm. (Lakehead)

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Szathmáry, E.J.E. C.M., O.M., B.A. (Hons.), Ph.D., LL.D. (Toronto), D.Sc. (Western Ontario), D. Litt.S. (St. Michael's College), LL.D. (York), LL.D. (McMaster), F.R.S.C.

Faculties/Schools and Departments

Note: Codes for Faculties/Schools, Departments are shown in brackets.

Faculties/Schools	Departments
Agricultural and Food Sciences (Faculty 07; School 24)	Agribusiness and Ageconomics (061) Animal Science (035) Biosystems Engineering (034) Textile Sciences (064) Entomology (038) Food Science (078) General Agriculture (065) Plant Science (039) Soil Science (040) Human Nutritional Science (030)
Architecture (09)	Architecture (050) Architecture Interdisciplinary (166) City Planning (073) Environmental Design (079) Interior Design (051) Landscape Architecture (031) Fine Arts (054) Anthropology (076) Arts Interdisciplinary (099) Asian Studies (150) Canadian Studies (151) Catholic Studies (160) Central and East European Studies (0995) Classics (003) Economics (018) English, Film, and Theatre (004) French, Spanish and Italian (044) German and Slavic Studies (008) Global Political Economy (157) History (011) Icelandic (012) Judaic Studies (055) Labour Studies (153) Linguistics (126) Native Studies (032) Philosophy (015) Political Studies (019) Psychology (017) Religion (020) Sociology (077) Ukrainian Canadian Heritage Studies (155) Women's and Gender Studies (156)
Art (15) Arts (01)	Curriculum, Teaching and Learning (132) Educational Administration, Foundations and Psychology (129) Education Ph.D. (124) Civil Engineering (023) Electrical and Computer Engineering (024) Engineering - Preliminary Year (130) Mechanical (025) Engineering (025)
Education (08)	
Engineering (03)	

ACADEMIC CALENDAR 2015-2016

Environment, Earth, and Resources, Clayton H. Riddell (028)

Geological Sciences (007)
Environment and Geography (128)
Environment, Earth, and Resources (177)
Resource Management (056)

Extended Education (26)
Graduate Studies (016)

Disability Studies (162)
Graduate Studies (069)
Mauro Centre for Peace Studies (170)

Health Sciences (29)

General Human Ecology (028)
Health Sciences (173)
Health Studies (173)

Dentistry (17)

Dental Diagnostic and Surgical Sciences (103)
Dentistry (066)
Oral Biology (100)
Preventative Dental Science (101)
Restorative Dentistry (102)

Dental Hygiene (20)
Medicine (05)

Dental Hygiene (070)
Anaesthesia (096)
Biochemistry and Medical Genetics (137)
Community Health Sciences (093)
Family Social Sciences (062)
Human Anatomy and Cell Science (080)
Immunology (072)
Interdisciplinary Medicine (165)
Medical Education (888)
Medical Microbiology (097)
Medicine (083)
Pathology (088)
Pharmacology (089)
Psychiatry (091)
Physiology (090)
Surgery (094)
Nursing (049)
Pharmacy (046)
Medical Rehabilitation (068)
Occupational Therapy (168)
Physical Therapy (167)
Respiratory Therapy (169)

Nursing (13)

Pharmacy (11)

Rehabilitation Sciences (19)

Kinesiology and Recreation Management (22)

Kinesiology (171)
Physical Education (057)
Physical Education & Recreation Studies General (172)
Recreation Studies (123)

Law (10)
Management, I. H. Asper School of Business (06)

Law (045)
Accounting and Finance (009)
Actuarial Studies, Warren Centre (010)
Business Administration (027)
Interdisciplinary Management (098)
Marketing (118)
Supply Chain Management (164)

Music, Marcel A. Desautels (21)
Science (02)

Music (033)
Biological Sciences (071)
Chemistry (002)
Computer Science (074)

Mathematics (136)
Microbiology (060)
Physics and Astronomy (016)
Statistics (005)
Social Work (047)

Social Work (12)
University 1 (27)

Alphabetical Listing of Subjects

Subject	Code	Faculty/School
Accounting	ACC	Management
Actuarial Studies Warren Centre	ACT	Management
Agribusiness and Ageconomics	ABIZ	Agricultural and Food Sciences
Agroecology	AGEC	Agricultural and Food Sciences
Agriculture	AGRI	Agricultural and Food Sciences
Agriculture Diploma	DAGR	Agricultural and Food Sciences
Anatomy	ANAT	Medicine
Anesthesia	ANES	Medicine
Animal Science	ANSC	Agricultural and Food Sciences
Anthropology	ANTH	Arts
Applied Mathematics	AMAT	Science
Arabic	ARA	Arts
Architecture	ARCG	Architecture
Architecture Interdisciplinary	ARCH	Architecture
Arts Interdisciplinary	ARTS	Arts
Asian Studies	ASIA	Arts
Biochemistry and Medical Genetics	BGEN	Medicine
Biological Sciences	BIOL	Science
Biosystems Engineering	BIOE	Agricultural and Food Sciences
Biotechnology	BTEC	Science
Canadian Studies	CDN	Arts
Catholic Studies	CATH	Arts
Chemistry	CHEM	Science
City Planning	CITY	Architecture
Civil Engineering	CIVL	Engineering
Classics	CLAS	Arts
Community Health Sciences	CHSC	Medicine
Computer Science	COMP	Science
Dental Diagnostic and Surgical	DDSS	Dentistry
Dental Hygiene	HYGN	Dental Hygiene
Dentistry	DENT	Dentistry
Diagnostic Cytology	CYTO	Medical Rehabilitation
Diploma in Agriculture	AGRI	Agricultural and Food Sciences
Disability Studies	DS	Disability Studies
Economics	ECON	Arts
Education Ph.D.	EDUC	Education
Educational Administration, Foundations and Psychology	EDUA	Education
Education: Curriculum, Teaching and Learning	EDUB	Education
Electrical Engineering	ECE	Engineering
Engineering - Preliminary Year	ENG	Engineering
English	ENGL	Arts
Entomology	ENTM	Agricultural and Food Sciences

Entrepreneurship/Small Business	ENTR	Management	Medical Microbiology	MMIC	Medicine
Environment	ENVR	Environment, Earth, and Resources	Medical Rehabilitation	REHB	Medical Rehabilitation
Environment, Earth, and Resources	EER	Environment, Earth, and Resources	Medicine	MED	Medicine
Environmental Architecture	EVAR	Architecture	Microbiology	MBIO	Science
Environmental Design	EVDS	Architecture	Music	MUSC	Music
Environmental Interior Environment	EVIE	Architecture	Native Studies	NATV	Arts
Environmental Landscape and Urbanism	EVLU	Architecture	Nursing	NURS	Nursing
Family Social Sciences	FMLY	Medicine	Occupational Therapy	OT	Medical Rehabilitation
Film Studies	FILM	Arts	Operations Management	OPM	Management
Finance	FIN	Management	Oral Biology	ORLB	Dentistry
Fine Art General Courses	FA	Art	Pathology	PATH	Medicine
Fine Art Diploma	FNDP	Art	Peace Studies	PEAC	Graduate Studies
Fine Art: Art History	FAAH	Art	Pharmacology	PHAC	Medicine
Fine Art Studio Courses	STDO	Art	Pharmacy	PHRM	Pharmacy
Food Science	FOOD	Agricultural and Food Sciences	Philosophy	PHIL	Arts
Forensic Sciences	FORS	Science	Physical Education	PHED	Kinesiology and Recreation Management
French	FREN	Arts	Physical Education and Recreation Studies General	PERS	Kinesiology and Recreation Management
General Agriculture	AGRI	Agricultural and Food Sciences	Physical Therapy	PT	Medical Rehabilitation
General Human Ecology	HMEC	Human Ecology	Physics and Astronomy	PHYS	Science
General Management	GMGT	Management	Physiology	PHGY	Medicine
Geography	GEOG	Environment, Earth, and Resources	Plant Science	PLNT	Agricultural and Food Sciences
Geological Sciences	GEOL	Environment, Earth, and Resources	Polish	POL	Arts
German	GRMN	Arts	Political Studies	POLS	Arts
Global Political Economy	GPE	Arts	Post Graduate Medical Education	PGME	Medicine
Graduate Studies	GRAD	Graduate Studies	Preventive Dental Science	PDS	Dentistry
Greek	GRK	Arts	Psychiatry	PCTY	Medicine
Health Studies	HEAL	Health Sciences	Psychology	PSYC	Arts
Hebrew	HEB	Arts	Recreation	REC	Kinesiology and Recreation Management
History	HIST	Arts	Religion	RLGN	Arts
Human Nutritional Sciences	HNSC	Agricultural and Food Sciences	Resource Management	NRI	Environment, Earth, and Resources
Human Resources Management/Industrial Relations	HRIR	Management	Respiratory Therapy	RESP	Medical Rehabilitation
Icelandic	ICEL	Arts	Restorative Dentistry	RSTD	Dentistry
Immunology	IMMU	Medicine	Russian	RUSN	Arts
Interdisciplinary Management	IDM	Management	Semitic Languages and Literature	SEM	Arts
Interdisciplinary Medicine	IMED	Medicine	Slavic Studies	SLAV	Arts
Interior Design	IDES	Architecture	Social Work	SWRK	Social Work
International Business	INTB	Management	Sociology	SOC	Arts
Italian	ITLN	Arts	Soil Science	SOIL	Agricultural and Food Sciences
Judaic Studies	JUD	Arts	Spanish	SPAN	Arts
Kinesiology	KIN	Kinesiology and Recreation Management	Statistics	STAT	Science
Labour and Workplace Studies	LABR	Arts	Supply Chain Management	SCM	Management
Landscape Architecture	LARC	Architecture	Surgery	SURG	Medicine
Latin	LATN	Arts	Textile Sciences	TXSC	Agriculture
Law	LAW	Law	Theatre	THTR	Arts
Linguistics	LING	Arts	Ukrainian	UKRN	Arts
Management Information Systems	MIS	Management	Ukrainian Cdn. Heritage	UCHS	Arts
Management Science	MSCI	Management	Undergraduate Medical Education	UGME	Medicine
Marketing	MKT	Management	Women's Studies	WOMN	Arts
Mathematics	MATH	Science	Yiddish	YDSH	Arts
Mechanical Engineering Graduate	MECG	Engineering			
Mechanical Engineering Undergraduate	MECH	Engineering			

ACADEMIC SCHEDULE

2015-2016 Academic Schedule

Admission Application Deadlines may be found on the web at umanitoba.ca/student/admissions. Additional Important Date information for Faculty of Graduate Studies students is available at umanitoba.ca/faculties/graduate_studies/deadlines/index.html.

SECTION 1: DATES FOR FALL/WINTER SESSION

[1.1 Dates applicable to all U of M students](#)

[1.2 Dates applicable to most U of M students:](#)

[1.2.1 Orientation](#)

[1.2.2 Start and End Dates](#)

[1.2.3 Registration and Withdrawal Dates](#)

[1.2.4 Fee Deadlines](#)

[1.2.5 Mid-Term Break](#)

[1.2.6 Examination and Test Dates](#)

[1.2.7 Challenge for Credit, Supplemental Examinations and Other Tests](#)

[1.2.8 Final Grade Appeal Periods](#)

[1.2.9 Graduation and University Convocation](#)

[1.3 Dates applicable to Agriculture Diploma:](#)

[1.4 Dates applicable to Dental Hygiene:](#)

[1.5 Dates applicable to Dentistry:](#)

[1.6 Dates applicable to Law:](#)

[1.7 Dates applicable to Medicine:](#)

[1.8 Dates applicable to Nursing:](#)

[1.9 Dates applicable to Occupational Therapy:](#)

[1.10 Dates applicable to Pharmacy:](#)

[1.11 Dates applicable to Physical Therapy:](#)

[1.12 Dates applicable to Respiratory Therapy:](#)

[1.13 Dates applicable to Social Work:](#)

[1.14 Other University Special Events](#)

SECTION 2: DATES FOR SUMMER TERM

[2.1 Distance and Online Education Dates](#)

[2.2 Summer Session 2015 Start and End Dates](#)

[2.3 Summer Session 2016 Class Start Dates](#)

SECTION 1: DATES FOR FALL/WINTER SESSION

This section includes information for Fall and Winter Terms. Summer Term information, including information specific to Distance and Online Education classes offered over Summer Term, is included in Section 3 of the Academic Schedule.

1.1 Dates applicable to all U of M students:

1.1.1 University Closure

When the University is closed no classes/examinations will be held.

Canada Day (Holiday Observed)	July 1, 2015
Civic Holiday	Aug. 3, 2015
Labour Day	Sept. 7, 2015
Thanksgiving Day	Oct. 12, 2015
Remembrance Day	Nov. 11, 2015
Winter Holiday	Dec. 24, 2015 to Jan. 4, 2016
Louis Riel Day	Feb. 15, 2016
Good Friday	Mar. 25, 2016
Victoria Day	May 23, 2016

1.2 Dates applicable to most U of M students:

Faculties, colleges, schools and/or programs may have other important dates and deadlines that are not included in the Academic Schedule. Some additional or differing date information is included separately for the following faculties, schools and/or programs: Agriculture Diploma, Dentistry (includes IDDP), Dental Hygiene, Law, Medicine, Nursing, Occupational Therapy, Pharmacy, Physical Therapy, Respiratory Therapy, and Social Work. Students in these programs should also see their respective section of the Academic Schedule.

1.2.1 Orientation

Additional or differing dates exist for the following faculties, colleges, schools and/or programs: Agriculture Diploma, IDDP, Medicine, Nursing, Occupational Therapy, Pharmacy, Physical Therapy, Respiratory Therapy, and Social Work. Students in these programs should also see their respective section of the Academic Schedule.

Head Start

For prospective 2015-2016 students	June 6, 2015
For prospective 2016-2017 students	June 4, 2016

New Student Orientation

Fall Term, Bannatyne Campus	Aug. 26, 2015
International Student orientation	Sept. 2, 2015
Fall Term, Fort Garry Campus	Sept. 8 to Sept. 9, 2015
Winter Term, Fort Garry Campus	Jan. 5, 2016
Faculty of Agricultural & Food Sciences Year 1	Sept. 9, 2015
School of Art	Sept. 8 to Sept. 9, 2015
Asper School of Business	
Year 1 student welcome luncheon	Sept. 8, 2015
Year 1 CSA orientation and Barbeque	Sept. 9, 2015
Faculty of Education	Aug. 31, 2015
Faculty of Engineering	Sept. 8 to Sept. 9, 2015
Marcel A. Desautels Faculty of Music	Sept. 8, 2015

1.2.2 Start and End Dates

Additional or differing dates exist for the following faculties, colleges, schools and/or programs: Agriculture Diploma, Dental Hygiene, Dentistry, Law, Medicine, Nursing, Occupational Therapy, Pharmacy, Physical Therapy, Respiratory Therapy, and Social Work. These students should also see their respective section of the Academic Schedule.

Fall Term	Sept. 10 to Dec. 9, 2015
Winter Term	Jan. 6 to Apr. 8, 2016
Winter/Summer Term Distance and Online Education classes	Jan. 6 to June 30, 2016

1.2.3 Registration and Withdrawal Dates

Additional or differing dates exist for the following faculties, colleges, schools and/or programs: Agriculture Diploma, Education, Law and other faculties and/or schools offering irregularly scheduled courses. Agriculture Diploma program and Law students should also see their respective section of the Academic Schedule. Education students are also referred to the Class Schedule. All others should also refer to either: the 100% Refund and Voluntary Withdrawal deadline information posted on the Registrar's Office website in June, or the Class Schedule.

Regular Registration Period

Fall Term and Fall/Winter Term classes	Ends Sept. 9, 2015
Winter Term classes	Ends Jan. 5, 2016
Winter/Summer Term Distance and Online Education courses	Ends Jan. 5, 2016

Late Registration/Registration Revision Period

A financial penalty may be assessed for late registrations. Students may use this period of time to make changes to their selected courses or class schedule.

Fall Term and Fall/Winter Term classes	Sept. 10 to Sept. 23, 2015
Winter Term classes	Jan. 6 to Jan. 19, 2016
Winter Term classes and Winter/Summer Term Distance and Online Education courses	Jan. 6 to Jan. 19, 2016

Last Date to Register/Registration Revision Deadline

Last date to drop and have class excluded from transcripts; VWs will be recorded on transcripts for classes dropped after this date.

Fall Term and Fall/Winter Term classes	Sept. 23, 2015
Winter Term classes	Jan. 19, 2016
Winter Term classes and Winter/Summer Term Distance and Online Education courses	Jan. 19, 2016

Voluntary Withdrawal (VW) deadline

Last date to withdraw and not receive a final grade; students cannot withdraw from courses dropped after this date.

Fall Term classes	Nov. 18, 2015
Winter Term and Fall/Winter Term classes	Mar. 18, 2016
Winter/Summer Term Distance and Online Education courses	June 6, 2016

1.2.4 Fee Deadlines

Fee Payment Deadline

A financial penalty will be assessed on accounts with an outstanding balance after this date. Additional or differing dates exist for Agriculture Diploma and Law students. Students in these programs should also see their respective section of the Academic Schedule.

Fall Term	Sept. 16, 2015
Winter Term	Jan. 13, 2016

Registration Revision Deadline

Last date to withdraw and have some fees removed from fee assessment. Additional or differing dates exist for Agriculture Diploma program students. Students in these programs should also see their respective section of the Academic Schedule.

Fall Term and Fall/Winter Term classes	Sept. 23, 2015
Winter Term classes and Winter/Summer Term Distance and Online Education courses	Jan. 19, 2016

1.2.5 Mid-Term Break

Feb. 15 to Feb. 19, 2016

Academic and administrative offices will be open during this period, but there will be no classes/examinations held for students. Additional or differing dates exist for the following faculties, colleges, schools and/or programs: Dentistry, Medicine, Occupational Therapy, Physical Therapy. Students in these programs should also see their respective section of the Academic Schedule.

1.2.6 Examination and Test Dates

Students are reminded that they must remain available until all examination and test obligations have been fulfilled. Additional or differing dates exist for the following faculties, colleges, schools and/or programs: Agriculture Diploma, Dental Hygiene, Dentistry, Law, Medicine, and Pharmacy. Students in these programs should also see their respective section of the Academic Schedule..

Fall Term (includes tests and midterm exams for Fall/Winter Term classes)	Dec. 11 to Dec. 23, 2015
Winter Term (includes final exams for Fall/Winter Term classes)	Apr. 11 to Apr. 25, 2016

Off-Campus Exam Application Deadline for Distance and Online Education Students:

Fall Term (includes tests and midterm exams for Fall/Winter Term courses)	Oct. 1, 2015
Winter Term (includes final exams for Fall/Winter Term courses)	Feb. 1, 2016

1.2.7 Challenge for Credit, Supplemental Examinations and Other Tests

This information is only for those faculties and schools that extend supplemental examination privileges. Additional or differing dates exist for Agriculture Diploma students; these students should also see their respective section of the Academic Schedule.

Supplemental Examination application deadline:

For autumn supplemental examinations	July 2, 2015
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ACADEMIC CALENDAR 2015-2016

Challenge for Credit application deadline:

For classes offered Fall Term 2015:	Sept. 23, 2015
For classes offered Winter Term 2016:	Jan. 19, 2016
For June 2016 series:	Apr. 22, 2016

Language Reading Tests for Graduate Students	Aug. 29, 2015; Mar. 26, 2016
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1.2.8 Final Grade Appeal Periods

For final grades received for Fall Term 2015 classes	Jan. 6 to Jan. 26, 2016
For final grades received for Winter Term 2016 and Fall 2015/Winter 2016 classes	May 24 to June 13, 2016

1.2.9 Graduation and University Convocation

Degrees, Diplomas and Certificates will be awarded at Convocation. Graduation date may differ from Convocation Ceremony date. Additional or differing dates exist for the following faculties, colleges, schools and/or programs: Agriculture Diploma, and Medicine. Students in these programs should also see their respective section of the Academic Schedule.

For students graduating Fall 2015:

Deadline to apply online to graduate for most Undergraduate students	July 30, 2015
Faculty of Graduate Studies Submission Deadline*	Aug. 27, 2015
Convocation Ceremony (Fort Garry Campus)	Oct. 21 to Oct. 22, 2015

For students graduating February 2016:

Deadline to apply online to graduate for most Undergraduate students	Sept. 23, 2015
Faculty of Graduate Studies Submission Deadline*	Jan. 5, 2016
Graduation date for students graduating in February	Feb. 3, 2016
Convocation Ceremony – Agriculture Diploma	May 6, 2016
Convocation Ceremony - Medicine	May 12, 2016
Convocation Ceremony (Fort Garry Campus)	May 31 to June 2, 2016

For students graduating Spring 2016:

Deadline to apply online to graduate for most Undergraduate students	Jan. 19, 2016
Faculty of Graduate Studies Submission Deadline*	Mar. 31, 2016
Convocation Ceremony – Agriculture Diploma	May 6, 2016
Convocation Ceremony - Medicine	May 12, 2016
Convocation Ceremony (Fort Garry Campus)	May 31 to June 2, 2016
Université de Saint-Boniface Convocation Ceremony	June 6, 2016

Faculty of Graduate Studies Submission

Deadline for students graduating Fall 2016:* Aug. 25, 2016

**For reports on theses/practica (and the corrected copies of the theses/practica), comprehensive examinations and M.Eng. projects to be submitted to Faculty of Graduate Studies by students expecting to graduate.*

Annual traditional Graduation PowWow in honour of Aboriginal students May 7, 2016

1.3 Dates applicable to Agriculture Diploma:

1.3.1 Orientation Sept. 16, 2015

1.3.2 Start and End Dates

Fall Term	Sept. 21 to Dec. 8, 2015
Winter Term	Jan. 6 to Mar. 31, 2016

1.3.3 Registration and Withdrawal Dates

Regular Registration Period

Fall Term and Fall/Winter Term classes	Ends Sept. 18, 2015
Winter Term classes	Ends Jan. 5, 2016

Late Registration/Registration Revision Period

A financial penalty may be assessed on late registrations. Students may use this period of time to make changes to their selected courses or class schedule.

Fall Term and Fall/Winter Term classes	Sept. 21 to Sept. 30, 2015
Winter Term classes	Jan. 6 to Jan. 19, 2016

Last Date to Register/Registration Revision Deadline

Last date to drop and have class excluded from transcripts; VWs will be recorded on transcripts for classes dropped after this date.

Fall Term and Fall/Winter Term classes	Sept. 30, 2015
Winter Term classes	Jan. 19, 2016

Voluntary (VW) Withdrawal deadline

Last date to withdraw and not receive a final grade; students cannot withdraw from classes after this date.

Fall Term classes	Nov. 17, 2015
Winter Term and Fall/Winter Term classes	Mar. 8, 2016

1.3.4 Fee Deadlines

Fee Payment Deadline

A financial penalty will be assessed on accounts with an outstanding balance after this date.

Fall Term	Sept. 21, 2015
Winter Term	Jan. 13, 2016

Registration Revision Deadline

Last date to withdraw and have fees removed from fee assessment; a credit will be granted for applicable fees that have already been paid.

Fall Term and Fall/Winter Term classes	Sept. 30, 2015
Winter Term classes	Jan. 19, 2016

1.3.5 Examination and Test Dates

Fall Term (includes tests and midterm exams for Fall/Winter Term classes)	Dec. 9 to Dec. 16, 2015
Winter Term (includes final exams for Fall/Winter Term classes)	April 1 to Apr. 8, 2016

1.3.6 Challenge for Credit and Supplemental Examinations and Tests

Supplemental Examination application deadline:

Fall Term 2015	Jan. 5, 2016
Winter Term 2016 (for graduating students)	Apr. 18, 2016
Winter Term 2016 (for non-graduating students)	May 24, 2016

Supplemental Examination dates:

Fall Term 2015	Jan. 7, 2016
Winter Term 2016 (for graduating students)	Apr. 20, 2016

Winter Term 2016 (for non-graduating students) June 1, 2016

Challenge for Credit application deadline:

For classes offered Fall Term 2015:	Sept. 16, 2015
For classes offered Winter Term 2016:	Jan. 19, 2016
For June 2016 series:	Apr. 22, 2016

1.3.7 School of Agriculture Convocation May 6, 2016

1.4 Dates applicable to Dental Hygiene:

1.4.1 Start and End Dates

Year 2

Fall Term	Aug. 17 to Nov. 27, 2015
Winter Term Classes	Jan. 5 to Apr. 1, 2016
Winter Term Clinic	Jan. 5 to Apr. 1, 2016

Year 3

Fall Term Classes	Aug. 10 to Nov. 27, 2015
Fall Term Clinics	TBA to Dec. 4, 2015
Winter Term Classes	Jan. 5 to Apr. 1, 2016
Winter Term Clinics	Jan. 5 to Apr. 15, 2016

1.4.2. Examination and Test Dates

Year 2

Fall Term (includes tests and midterm exams for Fall/Winter Term classes)	Nov. 30 to 11, 2015
Winter Term	Apr. 4 to Apr. 8, 2016

Year 3

Fall Term (includes tests and midterm exams for Fall/Winter Term classes)	Dec. 7 to Dec. 11, 2015
Winter Term	Apr. 4 to Apr. 8, 2016

1.5 Dates applicable to Dentistry:

1.5.1 International Dentist Degree Program (IDDP)

Year 1 Orientation	May-June 2015
On-Site Assessment	TBA

1.5.2 Start and End Dates

Years 1 and 2

Fall Term Classes	Aug. 10 to Nov. 27, 2015
Winter Term Classes	Jan. 5 to April 29, 2016

Year 3

Fall Term Classes	Aug. 4 to Nov. 27, 2015
Fall Term Clinic	TBA to Dec. 4, 2015
Winter Term Classes	Jan. 5 to April 29, 2016
Winter Term Clinics	Jan. 5 to April 29, 2016

Year 4

Fall Term Classes	Aug. 4 to Dec. 4, 2015
Fall Term Clinic	TBA to Dec. 4, 2015
Winter Term (most classes)	Jan. 5 to Jan. 9, 2016
Winter Term Clinics	Jan. 5 to Apr. 22, 2016

1.5.3 Mid-Term Break

Feb. 29 to Mar. 4, 2016

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

1.5.4 Examination and Test Dates

Years 1, 2 and 3

Fall Term (includes tests and midterm exams for Fall/Winter Term classes)	Nov. 30 to Dec. 11, 2015
Winter Term	May 2 to May 13, 2016

Year 4

Fall Term (includes tests and midterm exams for Fall/Winter Term classes)	Dec. 7 to Dec. 11, 2015
Winter Term	Jan. 11 to Jan. 15, 2016

1.6 Dates applicable to Law:

1.6.1 Start and End Dates

Fall Term	Sept. 8 to Dec. 7, 2015
Winter Term	Jan. 5 to Apr. 8, 2016

1.6.2 Registration and Withdrawal Dates

Regular Registration Period

Fall Term and Fall/Winter Term classes	Ends Sept. 9, 2015
Winter Term classes	Ends Jan. 5, 2016

Late Registration/Registration Revision Period

A financial penalty may be assessed for late registrations. Students may use this period of time to make changes to their selected courses or class schedule.

Fall Term and Fall/Winter Term classes	Sept. 10 to Sept. 21, 2015
Winter Term classes	Jan. 6 to Jan. 15, 2016

Last Date to Register/Registration Revision Deadline

Last date to drop and have class excluded from transcripts; VWs will be recorded on transcripts for classes dropped after this date.

Fall Term and Fall/Winter Term classes	Sept. 21, 2015
Winter Term classes	Jan. 15, 2016

ACADEMIC CALENDAR 2015-2016

Voluntary Withdrawal deadline

Last date to withdraw and not receive a final grade; students cannot withdraw from classes after this date.

Fall Term classes Nov. 18, 2015

Winter Term and Fall/Winter Term classes Mar. 18, 2016

1.6.3 Examination and Test Dates

Fall Term (includes tests and midterm exams for Fall/Winter Term classes) Dec. 10 to Dec. 23, 2015

Winter Term Apr. 11 to Apr. 25, 2016

1.7 Dates applicable to Medicine:

1.7.1 Orientation

Medicine Inaugural Exercises Aug. 19, 2015

1.7.2 Start and End Dates

Year 1

Fall Term Aug. 18 to Dec. 18, 2015

Winter Term Jan. 5 to May 27, 2016

Year 2

Fall Term Aug. 24 to Dec. 18, 2015

Winter Term Jan. 5 to May 27, 2016

Year 3

Fall Term Aug. 24 to Dec. 18, 2015

Winter Term Jan. 5 to Aug. 19, 2016

Year 4

Fall Term Aug. 24 to Dec. 18, 2015

Winter Term Jan. 5 to May 12, 2016

1.7.3 Mid-Term Break (Year 1 and Year 2)

Mar. 14 to 18, 2016
The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

1.7.4 College of Medicine Convocation Ceremony

May 12, 2016

1.8 Dates applicable to Nursing:

1.8.1 New Student Submission Deadline

Non Academic requirements due for all newly admitted Nursing students with fall admissions July 15, 2015

Non Academic requirements due for all newly admitted Nursing students with winter admissions Nov. 10, 2015

1.8.2 Orientation All New Students

Aug. 25, 26, 2015

Year 2 Clinical Orientation TBA

Year 3 Orientation Sept. 16, 2015

Year 4 clinical and senior practicum orientation (January start) Sept. 10, 2015

1.8.3 Start and End Dates

Nursing labs in:

NURS 3280 (Skills Year 3) Begin week of Sept. 14, 2015

Year 3 Clinical Rotation

Tuesday/Wednesday Starts Sept. 29, 2015

Thursday/Friday Starts Oct. 1, 2015

Year 4 NURS 4270 Clinical Rotation Starts Sept. 15, 2015

Year 4 NURS 4430 Clinical Rotation

Tuesday/Wednesday Starts Sept. 22, 2015

Thursday/Friday Starts Sept. 24, 2015

Year 4 NURS 4290 Senior Practicum Starts Sept. 14, 2015

1.8.4 Registration Dates

Last date to register for Fall 2015 and Winter 2016 Nursing Clinical Courses Aug. 4, 2015

1.9 Dates applicable to Occupational Therapy:

1.9.1 Year 1 Orientation

Aug. 20 to Aug. 21, 2015

1.9.2 Start and End Dates

Year 1

Fall Term Classes Aug. 24 to Nov. 13, 2015

Fall Term Basic Fieldwork Nov. 16 to Dec. 11, 2015

Winter Term Classes Jan. 5 to Apr. 29, 2016

Winter Term Intermediate Fieldwork 1 May 2 to June 24, 2016

Year 2

Fall Term Aug. 24 to Dec 11, 2015

Winter Term Intermediate Fieldwork 2 Jan. 4 to Feb. 26, 2016*

Winter Term Classes Mar. 7 to June 24, 2016

Feb. 29 to Mar. 4, 2016*

1.9.3 Mid-Term Break

*Note: Some students may need to complete fieldwork during mid-term break depending on availability of fieldwork sites. The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

1.10 Dates applicable to Pharmacy:

1.10.1 Year 1 Orientation

Sept. 9, 2015

1.10.2 Start and End Dates

Year 2 SPEP 2 May 2 to May 13, 2016

Year 3

Winter Term Classes Jan. 5 to Mar. 24, 2016

SPEP 3 Apr. 4 to Apr. 29, 2016

Year 4

Fall Term Classes Sept. 8 to Nov. 2, 2015

SPEP 4 – Block 1 Nov. 9 to Dec. 18, 2015

Electives – Block 1 Nov. 9 to Dec. 23, 2015

SPEP 4 – Block 2 Jan. 4 to Feb. 12, 2016

Electives – Block 2	Jan. 4 to Feb. 19, 2016
SPEP 4 – Block 3	Feb. 22 to Apr. 1, 2016
Electives – Block 3	Feb. 22 to Apr. 8, 2016

1.10.3 Examination and Test Dates

Year 4	Nov. 4 to Nov. 6, 2015
Year 3	Mar. 28 to Apr. 1, 2016

1.11 Dates applicable to Physical Therapy:

1.11.1 Year 1 Orientation Aug. 17, 2015

1.11.2 Start and End Dates

Year 1

Fall Term	Aug. 17 to Dec. 18, 2015
Winter Term Classes	Jan. 5 to Mar. 24, 2016
	6 week placement between Apr. 4 to June 24, 2016
Winter Term (PT 6291)	

Year 2

Fall Term	Aug. 17 to Dec. 18, 2015
Winter Term	Jan. 5 to Mar. 24, 2016

1.11.3 Mid-Term Break (Years 1 and 2) Mar. 28 to Apr. 1, 2016

The academic and administrative offices will be open during this period, but there will be no classes/examinations held for students.

1.12 Dates applicable to Respiratory Therapy:

1.12.1 Year 1 Orientation Aug. 31 to Sept. 4, 2015

1.12.2 Start and End Dates

Year 1

Fall Term	Sept. 8 to Dec. 18, 2015
Winter Term	Jan. 6 to May 27, 2016

Year 2

Fall Term	Sept. 8 to Dec. 18, 2015
Winter Term	Jan. 6 to June 24, 2016

Year 3

Fall Term	Aug. 17 to Dec. 18, 2015
Winter Term	Jan. 5 to June 3, 2016

1.13 Dates applicable to Social Work:

1.13.1 Orientation

Year 1

Sept. 9, 2015

Year 2 and 3 Field Orientation

Sept. 8 and Sept. 9, 2015

1.13.2 Start and End Dates

Years 2 and 3 Field Instruction

Fall Term	Sept. 8 to Dec. 11, 2015
Winter Term	Jan. 6 to Apr. 11, 2016

1.14 Other University Special Events

2015 School Counsellors Admissions Seminar	Sept. 2015 (date TBA)
Evening of Excellence	Oct. 2015 (date TBA)
Memorial events for 14 women murdered at l'École Polytechnique in 1989	Dec. 6, 2015
Information Days for High School Students	Feb. 17 to 18, 2016

SECTION 2: DATES FOR SUMMER TERM

2.1 Distance and Online Education Dates

This section includes information for Winter/Summer Term 2016 and in Summer Term 2016 Distance and Online Education Courses.

2.1.1 Start and End Dates

Winter Term/Summer Term courses	Jan. 6 to June 30, 2016
Summer Term	May 2 to July 29, 2016

2.1.2 Registration and Withdrawal Dates

Regular Registration Period

Winter/Summer Term courses	Ends Jan. 5, 2016
Summer Term courses	Ends May 1, 2016

Late Registration/Registration Revision Period

A financial penalty may be assessed on late registrations.

Winter Term and Winter/Summer Term courses	Jan. 6 to Jan. 19, 2016
Summer Term courses	May 2 to May 13, 2016

Last Date to Register/Registration Revision Deadline

Last date to drop and have class excluded from transcripts; VWs will be recorded on transcripts for courses dropped after this date.

Winter Term and Winter/Summer Term courses	Jan. 19, 2016
Summer Term courses	May 13, 2016

Voluntary Withdrawal (VW) deadline

Last date to withdraw and not receive a final grade; students cannot withdraw from courses after this date.

Winter/Summer Term courses	June 6, 2016
Summer Term courses	July 8, 2016

2.1.3 Examination Dates

Winter/Summer Term courses	July 4 to July 7, 2016
	Aug. 2 to Aug. 5 & Aug. 8, 2016
Summer Term courses	

Off-Campus Exam Application Deadline for Distance and Online Education Students

Winter/Summer Term courses	Apr. 29, 2016
Summer Term courses	June 1, 2016

ACADEMIC CALENDAR 2015-2016

2.2 Summer Session 2015 Start and End Dates

For more detailed information, please consult the Summer Session Calendar available from the Summer Session Office, 166 Extended Education Complex, or online at umanitoba.ca/summer.

2.2.1 Dates for May Day, June Day and May-June Day classes

Classes	May 4 to June 23, 2015
Examinations	
May Day	May 29 to May 30, 2015
June Day and May-June Day	June 25 to June 26, 2015

2.2.2 Dates for May-June Evening, June-August Evening and May-August Evening classes

Classes	May 4 to Aug. 6, 2015
Examinations	
May-June Evening	June 19 to June 20, 2015
June-August Evening and May-August Evening	Aug. 7 to Aug. 8, 2015

2.2.3 Dates for July Day, August Day and July-August Day classes

Classes	July 2 to Aug. 20, 2015
Examinations	
July Day	July 27, 2015
August Day and July-August Day	Aug. 21 to Aug. 22, 2015

2.2.4 Other Start and End Dates

Medicine, B.S.c	May 25 to Aug. 21, 2015
Nursing Summer Term	Apr. 20 to July 22, 2015
Occupational Therapy	
Year 1 Intermediate Fieldwork 1	May 4 to June 26, 2015
Year 2 Advanced Fieldwork	Flexible start and end between June 29 to Sept. 11, 2015
Physical Therapy Year 1 (PT 6291) rescheduled to Winter 2015 term	6 week placement between Apr. 7 to June 26, 2015
(PT 6292)	6 week placement between May 19 to Sept. 25, 2015
(PT 6310) class	Mar. 30 to Aug. 14, 2015
Year 2 (PT 7292 and PT 7390)	2 x 6 week placements between Apr. 7 to Sept. 11, 2015
Respiratory Therapy Year 2	Apr. 27 to June 26, 2015

2.3 Summer Session 2016 Class Start Dates

Other dates not yet available. More dates will be made available in the 2016-2017 Academic Schedule.

Summer Session Start Date	May 2, 2016
Medicine, B.Sc.	May 23 to Aug. 19, 2016
Nursing Summer Term	Apr. 18 to July 22, 2016
Occupational Therapy Year 2 Advanced Fieldwork	Flexible start and end between June 27 to Sept. 9, 2016
Physical Therapy Year 1 (PT 6292) (PT 6310) class Year 2 (PT 7292 and PT 7390)	6 week placement between May 16 to Sept. 23, 2016 Mar. 28 to Aug. 12, 2016 2 x 6 week placements between Apr. 4 to Sept. 9, 2016

UNIVERSITY POLICIES

Responsibilities of Academic Staff with Regard to Students

I. OBJECTIVES

The objectives of this policy are to identify the responsibilities of academic staff with regard to students; to promote harmonious relations between academic staff and students; to promote fair and equitable treatment of students.

II. DEFINITIONS

For the purposes of this document, the following terms shall be defined as provided by this article:

1. **Academic staff** shall include all individuals holding full- or part-time appointments at the rank of Instructor I, Instructor II, senior instructor, lecturer, assistant professor, associate professor or professor. The term shall include also academic administrators, academic librarians, counsellors, adjunct professors, professional associates, research associates, research assistants, student research assistants, and student teaching assistants, insofar as such persons perform duties within the ambit of the policy.

2. **Student** shall mean any person who is registered as a student in the University.

III. STATEMENT OF RESPONSIBILITIES

Some of the responsibilities of academic staff with regard to students rest with the individual staff member, while others are collective responsibilities, to be exercised through the actions of department and faculty/school administrators and councils.

A. Individual Responsibilities

The individual responsibilities of academic staff members with regard to students are primarily instructional and scholarly, and secondarily administrative. They may include:

1. undergraduate, graduate, and continuing education instruction, including the organization, preparation and delivery of course material, the evaluation of student academic progress, the reporting of such evaluation in accordance with approved policies and schedules, consultation with students out of class or laboratory hours, and supervision of student research and thesis preparation;
2. scholarly attainment through personal study and research, including study for purposes of academic self-improvement or course improvement, keeping abreast of new developments, and research that leads to a useful or original contribution toward the advancement of knowledge and understanding; and
3. administrative work as required for instructional and scholarly activities, including committee work at various levels - departmental, faculty, university - as it pertains directly or indirectly to students.

B. Collective Responsibilities

The collective responsibilities of the academic staff belonging to an academic unit are to provide an effective learning environment and to endeavour to ensure fair and consistent treatment of students. They include:

1. periodically reviewing and updating all courses and programs;
2. ensuring that academic regulations and policies provide for fair and consistent treatment of students; and
3. providing for convenient student access to information on policies, regulations and procedures that may affect their academic progress, including the provision of names of instructors assigned to teach particular courses and sections at the earliest possible opportunity.

IV. DISCHARGE OF RESPONSIBILITIES

A. Individual Responsibilities

1. Academic staff members shall discharge their instructional responsibilities with academic integrity, scholarly competence, and pedagogic effectiveness.
2. Academic staff members shall maintain their familiarity with current university, faculty/school and/or department policies regarding plagiarism and cheating, examination impersonations, student access to final examination scripts, student discipline, grade appeals, and the University policy regarding sexual harassment.
3. In discharging their instructional responsibilities, academic staff members shall adhere to regulations pertaining to the format, content and conduct of courses and laboratories, including regulations pertaining to examinations, term work, grades, and related matters.
4. A course outline or syllabus shall be provided in each course section, within the first week of classes:
 - a) the academic staff member responsible for that section shall provide in writing to every member of the class:
 - name of instructor
 - office number and telephone number
 - a list of the textbooks, materials and readings that the student is required to obtain including the appropriate referencing style guide(s) acceptable to the instructor and/or discipline in courses where it is relevant
 - an outline of topics to be covered
 - a description of the evaluation procedure to be used, including the weighting of the components that will contribute to the final grade and whether evaluative feedback will be given to the student prior to the voluntary withdrawal deadline (see note)
 - an indication of instructor availability for individual student consultation
 - a tentative schedule of term assignments and tests; and
 - a statement of the practice to be followed regarding late submission of assignments.
 - b) The academic staff member shall provide in writing to every member of the class, information regarding academic integrity which shall include:
 - a reference to the statements on academic dishonesty including "plagiarism and cheating" and "examination impersonation" found in the University General Calendar; and
 - where appropriate, a reference to specific course requirements for individual work and group work. Students should be made aware that group projects are subject to the rules of academic dishonesty and that group members must ensure that a group project adheres to the principles of academic integrity. Students should also be made aware of any specific instructions concerning study groups and individual assignments. The limits of collaboration on assignments should be defined as explicitly as possible.

NOTE: It is understood by Senate that the provision of this information is not intended to affect the question of equity in multi-sectioned courses in any way.

b) The academic staff member shall provide in writing to every member of the class, information regarding academic integrity which shall include:

- a reference to the statements on academic dishonesty including "plagiarism and cheating" and "examination impersonation" found in the University General Calendar; and
- where appropriate, a reference to specific course requirements for individual work and group work. Students should be made aware that group projects are subject to the rules of academic dishonesty and that group members must ensure that a group project adheres to the principles of academic integrity. Students should also be made aware of any specific instructions concerning study groups and individual assignments. The limits of collaboration on assignments should be defined as explicitly as possible.

5. Academic staff members shall teach their courses with due regard to calendar descriptions.

6. It is the responsibility of academic staff members to specify textbooks and materials in accordance with announced purchasing deadlines.

7. In their dealings with students, academic staff shall:

a) not deny registration for instruction in those courses for which the permission of the instructor is required, except where the student lacks appropriate qualifications or where an approved policy on limited enrolment is in effect;

b) comply with existing human rights legislation, and refrain from differential treatment of individual students on the basis of their actual or presumed membership in, or association with some class or group of persons;

c) not accept money or other goods or services from students for assistance with any course offered by the University. This clause, however, shall not prevent student teaching assistants or other part-time instructors from accepting payment for tutoring in courses/sections which do not fall within the scope of their University employment;

d) be available for a reasonable amount of time, on a known and posted basis, for individual consultation with students registered in their courses or laboratories;

e) evaluate student academic performance in a fair and reasonable manner, and by means of appropriate academic criteria only;

f) where appropriate, provide written evaluative feedback prior to the voluntary withdrawal deadlines specified in the General Calendar;

g) foster a free exchange of ideas between themselves and their students in the classroom and allow students the freedom to take legitimate exception to the data, views, or methods presented;

h) respect the confidentiality of documentary information about students;

i) keep confidential any information about the academic performance of a student, unless release is authorized by the student, required by his/her instructional team, or requested by an administrative officer in accordance with the University policy on the release of information;

j) explicitly acknowledge in written or oral presentations any indebtedness to student research or assistance;

k) not obtain any improper personal advantage from a student or student work; and

l) academic staff members shall not retaliate against a student who has filed a complaint, whether the complaint was substantiated or unsubstantiated.

8. Academic staff members shall not cancel, miss, terminate or shorten scheduled instruction except for good reasons. Whenever a scheduled period of instruction is cancelled, the academic staff member shall:

a) inform the class at the earliest possible time;

b) inform the administrative head of his/her academic unit; and

c) where possible, ensure that appropriate substitution or make-up instruction is provided.

9. Academic staff members who provide instruction shall comply with the schedules and formats for reporting student grades, as established by departments and the Registrar's Office. Where such grades are reviewed by departmental committees, instructors should be available for the duration of the committees' work. An instructor who learns of an error, which if corrected would raise an assigned grade shall correct it without requiring the student affected to appeal his/her grade.

10. Academic staff members shall adhere to the relevant University, faculty/school, and/or departmental policy regarding professor-course evaluation.

B. Collective Responsibilities

1. Through their faculty/school and department councils, academic staff members should review program and course descriptions periodically to ensure that the material to be presented is current and appropriate and that the calendar information is clear and accurate.

2. The following material must be kept on file in faculty/school or departmental general offices and made available to students:

a) University, faculty/school or departmental regulations regarding class attendance and penalties, if any, for non-compliance;

b) the information described in section 4 under "Discharge of Responsibilities, A - Individual Responsibilities", that is provided in writing to the class by the academic staff member for each course section;

c) University, faculty/school, and/or departmental regulations and procedures, if any, regarding the evaluation of professors and courses by students;

d) University, faculty/school, and/or department policy regarding student access to final examination scripts;

e) University policy on student discipline;

f) University, faculty/school, and departmental procedures regarding grade appeals;

g) University policy on the responsibilities of academic staff with regard to students; and

h) University policy regarding sexual harassment.

3. Where necessitated by large class sizes or other circumstances, academic units shall ensure that course instructors and/or designated substitutes are available for individual consultation with students for a reasonable amount of time on a known and posted basis.

V. CAUTIONARY NOTE

Students are reminded that the initiation of a frivolous or vexatious complaint may result in disciplinary action being taken against them by the University.

This Policy is available online at http://umanitoba.ca/admin/governance/governing_documents/students/278.html.

Respectful Work and Learning Environment

1.0 Reason for Policy

1.1 To support a climate of respect in the workplace and in the learning environment where individuals or groups of individuals are free from harassment and discrimination.

1.2 The issue of workplace safety and health with respect to a workplace harassment prevention policy is governed by provincial legislation and more specifically Manitoba Workplace Safety and Health Regulation #217. This Regulation identifies certain responsibilities for employers and employees in this regard. A policy on workplace harassment is required.

2.0 Policy Statement

2.1 The University of Manitoba supports equity, diversity and the dignity of all people. The University promotes equity in our learning programs and employment and in the conduct of the University's affairs.

2.2 The University recognizes the following:

- (a) a richly diverse society in Manitoba, as well as beyond;
- (b) a duty to act in a manner consistent with existing legislation regarding human rights;
- (c) a commitment to academic freedom and freedom of thought, inquiry, and expression among its members which may result in respectful disagreements regarding beliefs or principles.

2.3 Each individual has the right to participate, learn, and work in an environment that promotes equal opportunities and prohibits discriminatory practices.

2.4 The University of Manitoba does not condone behaviour that is likely to undermine the dignity, self-esteem or productivity of any of its members and prohibits any form of discrimination or harassment whether it occurs on University property or in conjunction with University-related activities. Therefore, the University of Manitoba is committed to an inclusive and respectful work and learning environment, free from:

- (a) discrimination or harassment as prohibited in the Manitoba Human Rights Code;
- (b) sexual harassment; and
- (c) personal harassment

2.5 These types of discrimination or harassment are defined in the Procedures document which relates to this Policy.

2.6 The University of Manitoba and all members of the University community, particularly those in leadership roles, share the responsibility of establishing and maintaining a climate of respect within this community and to address any situations in which respect is lacking.

2.7 Harassment and discrimination violate an individual's human rights and run contrary to the University's fundamental values. The University of Manitoba will act promptly and efficiently to deal with these behaviours. It will endeavour to ensure that individuals who believe that they have been subjected to harassment or discrimination are able to express concerns and register complaints without fear of retaliation or reprisal. The University will exercise care to protect and respect the rights of both the complainant and the respondent.

2.8 The University of Manitoba will establish mechanisms to give effect to this Policy including:

- (a) the appointment of an equity services advisor whose duties shall include the investigation of informal complaints and the provision of advice and assistance to staff members, students and administrative officers in connection with concerns and complaints;
- (b) the appointment of one or more investigation officer(s) whose duties shall include the investigation of formal complaints and the provision of advice and assistance to staff members, students and administrative officers in connection with concerns and complaints;
- (c) training for staff related to harassment and discrimination;
- (d) the University of Manitoba will establish and implement educational programs designed to enhance awareness of the Respectful Work and Learning Environment Policy and procedures relating to it.

2.9 Each year a report will be prepared by Equity Services and made available to the University community concerning the number, type and disposition of cases and on educational and other activities related to the Policy.

2.10 While the University of Manitoba supports the informal resolution of problems associated with such behaviour, it considers harassment and discrimination in all its forms to be serious offences. Normally the President shall delegate authority to the Vice-President (Administration) to

take disciplinary action, where appropriate, against individuals who have violated this Policy.

2.11 Discipline may range from a reprimand to dismissal or expulsion. Where Collective Agreement provisions require that the President obtain the approval of the Board of Governors for a suspension or dismissal, the finding of the Vice-President (Administration) shall be referred to the President in the form of a recommendation for action.

2.12 The Workplace Safety and Health Regulation #217 requires that every harassment prevention policy contain the following statements:

- (a) every employee is entitled to work free of harassment;
- (b) the employer must ensure, so far as it is reasonably practicable, that no worker is subject to harassment in the workplace;
- (c) the employer will take corrective action respecting any person under the employer's direction who subjects a worker to harassment;
- (d) the employer will not disclose the name of the complainant or an alleged harasser or the circumstances related to the complainant to any person except where disclosure is
 - i) necessary to investigate the complaint or take corrective action with respect to the complaint; or
 - ii) required by law;
- (e) a worker has the right to file a complaint with the Manitoba Human Rights Commission;
- (f) the employer's harassment prevention policy is not intended to discourage or prevent the complainant from exercising any other legal rights pursuant to any other law.

2.13 Workplace Safety and Health Regulation #217 defines "harassment" as "any objectionable conduct, comment or display by a person that

- a) is directed at a worker in a workplace;
- b) is made on the basis of race, creed, religion, colour, sex, sexual orientation, gender-determined characteristics, political belief, political association or political activity, marital status, family status, source of income, disability, physical size or weight, age, nationality, ancestry or place of origin, and
- c) creates a risk to the health of the worker".

This Policy is available online at http://umanitoba.ca/admin/governance/governing_documents/community/230.html

The University of Manitoba Accessibility Policy

Part I - Reason for Policy

1.1 The purpose of this Policy is to ensure that all members of the University community, including those with disabilities, are provided with an accessible learning and working environment.

Part II - Policy Content

Disability

2.1 For the purpose of this Policy and related procedures an employee or student with a disability is a person who experiences a mental, cognitive, physical or sensory impairment for which they may require accommodation.

General

2.3 The University recognizes it is subject to The Human Rights Code (Manitoba) and as such has a duty to provide reasonable accommodation to employees and students with documented disabilities in its efforts to provide an accessible learning and working environment.

2.4 The concept of reasonable accommodation requires a partnership between the individual requiring the accommodation and the University. All concerned should be responsible for respecting the dignity and confidentiality of the individual who requests the accommodation.

2.5 The University shall endeavor to maintain an accessible work and learning environment at all its campuses through the provision of accommodation supports and services to employees and students with disabilities.

2.6 The University will use reasonable efforts to offer reasonable accommodation in the working and learning environments.

2.7 The University will use reasonable efforts to ensure that employment opportunities and programs of study are accessible to potential employees and students with disabilities.

Confidentiality

2.8 All communication regarding the accommodation of an employee's or student's disability shall be confidential and in accordance with the University's policy and procedures related to the Personal Health Information Act (Manitoba).

This Policy and the Procedures below are available online at http://umanitoba.ca/admin/governance/governing_documents/students/accessibility.html

Student Accessibility Procedure

Part I - Reason for Procedure

1.1 To set out Procedures secondary to the Policy entitled "The University of Manitoba Accessibility Policy" in connection with supporting an accessible learning environment where students with disabilities who are admitted to the University can gain access to and participate in all programs for which they are academically qualified.

1.2 While it is a guiding principle of this policy that all members of the University community share responsibility for creating and maintaining an accessible learning environment, the University has designated Student Accessibility Services ("SAS") to facilitate the implementation of accommodations for students with documented disabilities.

1.3 The University's duty to provide reasonable accommodation to students with documented disabilities may obligate the University to offer a modification, substitution, or waiver. Such accommodations are consistent with the obligation to administer the University's academic programs as approved by Senate so long as

(a) The accommodation is reasonable;

(b) The accommodation does not create an undue hardship for the University; and

(c) The accommodation does not compromise a defined Bona Fide Academic Requirement.

Part II - Procedural Content

Definitions

2.1 The terms below have the following defined meanings for the purpose of this Procedure:

(a) "Documented Disability" means a disability requiring accommodation which has been accepted as such by Student Accessibility Services.

(b) "Bona Fide Academic Requirement" describes the knowledge and skills that a student must acquire in order to complete a course or program successfully. These are the essential and minimum requirements, including methods of assessment that the student must meet.

(c) "Accommodation" is an attempt to remove barriers to the equitable participation of students in learning and evaluation. Where a course or program requirement is a barrier to equitable participation, an accommodation must allow the student an opportunity to acquire and demonstrate the knowledge and skills (or achieve other learning outcomes) required to complete a course or program of study through an alternative mode of instruction or assessment. The accommodation must not erode the academic integrity and standards of the course or program in question.

(d) "Reasonable Accommodation" means an Accommodation that would address an inequality toward a person with a disability without offering that individual an unfair advantage over other students. A Reasonable Accommodation must not result in an undue hardship on the University, and must not result in the compromise of a Bona Fide Academic Requirement. Students must still acquire and demonstrate mastery of essential skills or other Bona Fide Academic Requirements of a student's course or program of study, although this may be done in an alternative or non-traditional way. A reasonable accommodation must not lower the Bona Fide Academic Requirements of the course or program, or violate the accreditation needs of a professional program. The goal of reasonable accommodation is not to 'lower the bar', but rather to provide a different and equitable approach that permits students with disabilities to access learning and assessment opportunities. The term 'reasonable accommodation' is used only in the context of the accommodation of a Documented Disability. The University is under no obligation to offer a reasonable accommodation (or any accommodation for that matter) on compassionate or other grounds.

(e) "Academic Staff Member" means a professor, instructor and/or academic staff person who is responsible for providing the educational program or course to a student requiring Accommodation.

(d) "Accessibility Advisory Committee" (AAC) means a Faculty/School committee which is responsible for advising the respective Dean/Director on matters related to accommodation and the impact of accommodation on academic standards. Typically AAC would meet minimally twice a year to discuss accommodations affecting the Faculty/School.

(e) "Accommodation Team" (AT) means the Faculty/School team established to work with individual students on the provision of accommodations when Student Accessibility Services identifies the Accommodation as nonstandard or unusual for the circumstances. It is intended AT will be engaged early on in the process when necessary.

2.2 The terms below have the following defined meanings and are types of 'Accommodation':

(a) "Modification" means an Accommodation involving a relatively minor change made to an academic requirement. Modifications usually entail a revision to the way a student must demonstrate required skills and knowledge, or sometimes additional assistance for a student which does not detract from the skills and knowledge the student must acquire.

Modifications may be implemented by Academic Staff Member on the advice of SAS.

(b) "Substitution" means the replacement of a certain admission criterion, prerequisite course, course/program requirement or University requirement with another that is deemed comparable. Substitutions are commonly used to effect Accommodations. Senate approves required program content including courses and other elements such as breadth, depth, math and written requirements; Faculties and Schools administer these programs. In administering a program, it may become impossible, impractical, or unfeasible for a student to complete all program requirements exactly as approved by Senate. Deans and directors, or their designates may approve substitutions. Deans may delegate their authority to an associate Dean or department head. Such delegations should be made in writing.

(c) "Waiver" means the removal of a criterion for admission, progression or graduation from a program of study. A waiver is an Accommodation, but may not be offered in regard to a Bona Fide Academic Requirement. A waiver does not include a case where a requirement is replaced by another requirement (this is a substitution), but rather is the complete elimination of a non-essential academic requirement. Deans and Directors may approve waivers and may delegate this authority to an associate Dean. Such delegations should be made in writing.

(d) "Degree Notwithstanding a Deficiency" means a degree that is conferred upon a student who has not met all the Senate-approved requirements of his or her program of study and for whom no other Accommodation has been approved in regard to the missing requirements. A degree notwithstanding a deficiency, when approved by Senate, is the only way in which a student may effectively obtain a waiver of what would otherwise be considered a Bona Fide Academic Requirement. Senate alone may grant a degree notwithstanding a deficiency.

Responsibilities and Rights of Students

2.3 In order to facilitate appropriate Accommodations of a student's disability related needs, SAS requires students with disabilities requesting Accommodations to register with the office as soon as possible.

2.4 Students registering with SAS must provide the following information:

- (a) Name, contact information, student number; and
- (b) Documentation from a registered health professional which should include:
 - (i) Name of diagnostician;
 - (ii) Name of the diagnostic tests used;
 - (iii) Date of the Clinical testing;
 - (iv) How the disability will affect the student on campus, in classroom, lab, clinical/fieldwork and other instructional settings, and during tests and exams;
 - (v) An indication of the duration of the student's period of disability; and
 - (vi) Recommendations for appropriate accommodations to be made for that student.

2.5 All personal information, including personal health information, shall be kept confidential in accordance with The Freedom of Information and Protection of Privacy Act (Manitoba) and The Personal Health Information Act (Manitoba). The information will be shared with only those who need to know in order to give effect to the Policy and assist the student in obtaining Reasonable Accommodations.

2.6 Students must schedule a meeting with SAS staff to discuss their accommodation requirements and acquaint themselves with the SAS procedures. The following documents should be prepared by SAS staff for each student as required:

- (a) Letter of Accommodation (outlining individual needs for distribution to instructors); and
- (b) Tests/Exams Particular Forms (to be completed for each test/exam).

2.7 As part of the registration process, students should be made aware of the Canada Student Grant program of funding.

The Canada Student Grant

2.8 All eligible students will be requested to complete an application for a Canada Student Grant or notify SAS of ineligibility for the grant.

2.9 Upon receipt of a Canada Student Grant, any portion designated for services retained through the SAS office at the University should be submitted to the SAS office. A receipt will then be issued to the student for their records.

Responsibility and Rights of Student Accessibility Services¹

2.10 Student Accessibility Services has the responsibility and right to:

- (a) Offer advice, guidance and support for students requiring academic accommodation and assign a SAS advisor to the student.
- (b) Request and evaluate documentation from registered health professionals provided by students requesting assistance from SAS and assign appropriate services to meet the needs of each student by adapting services, courses, and programs as feasible. SAS will consider the suggestions/recommendations noted in the documentation of a disability/condition but may not agree to all of the suggestions/recommendations.
- (c) On the basis of supporting documentation, make recommendations and decisions regarding academic accommodation in a timely manner.
- (d) Coordinate service(s) and accommodation(s) for students with disabilities to ensure that the needs of students with disabilities are addressed.
- (e) Provide support to academic staff members in accommodating and working with students with disabilities.
- (f) Prepare the recommended accommodation plan for the student with a disability and send out the Letter of Accommodation to alert academic staff members to the accommodations in place.
- (g) Inform and assist academic staff members and staff in providing suitable student academic accommodation and understanding disability issues.
- (h) Ensure that the University's Bona Fide Academic Requirements will not be compromised.
- (i) Work with students and faculty to resolve disagreements regarding recommended accommodation(s).
- (j) Provide a focus for activity and expertise regarding disability-related accommodations within the University, and for liaison with outside organizations regarding accessibility issues, and programs and services for students with disabilities at the University.

(k) Keep current with associated legislation.

(l) Prepare an annual report for the University Senate.

Responsibility and Rights of Academic Staff Members

2.11 Academic Staff Members have the right to:

- (a) Determine course content and methods of instruction.
- (b) Ensure that the academic integrity and standards of the course are not compromised and ensure that established entry-to-practice competencies and requirements for professional disciplines are not compromised.

(c) Evaluate student work, performance and competencies related to the course content and relevant academic standards, including failing any student who has not passed or satisfied the course requirements.

(d) Discuss with as much notice as possible, any particular Accommodation(s) with SAS, if in the Academic Staff Member's opinion, the Accommodation(s) compromise(s) the integrity of the course.

(e) Determine the appropriate method of adapting their teaching style to meet Accommodation(s).

(f) Consult with professionals, on or off campus, to determine how best to accommodate students with disabilities in their course.

(g) Question or challenge an Accommodation by working first with SAS and/or with any Faculty-specific Accommodation Team or Liaison.

2.12 Academic Staff Members have the responsibility to:

(a) Support the University's commitment and obligation to accommodate students with Disabilities.

(b) Work with SAS to gain knowledge of appropriate Accommodations(s) for student(s).

(c) Provide Accommodation(s) recommended by SAS without compromising the academic integrity and professional standards of the course.

(d) Maintain the student's dignity and privacy in relation to the Disability and Accommodation.

(e) Communicate in the classes and/or syllabus their willingness to meet with students with Disabilities who request classroom, examination, clinical, or practicum Accommodation(s).

(f) Work with students and SAS to resolve disagreements regarding Accommodation(s).

(g) Work with SAS when considering accommodations for field trips or clinical practicum that are requested or required.

(h) Work with their Accessibility Advisory Committee and /or Accommodation Team.

Responsibilities and Rights of Faculties/Schools

2.13 For the purposes of this policy "Faculty/School" means all Faculties, including constituent colleges within a faculty or schools in which students enroll for study, including the Extended Education Division and University 1.

2.14 Each Faculty/School has the responsibility to:

(a) create and maintain an Accessibility Advisory Committee ;

(b) create and maintain an Accommodation Team; and

(c) ensure that the academic integrity and standards of the program are not compromised and ensure that established entry-to-practice competencies and requirements for professional disciplines are not compromised.

Faculty/ School Accessibility Advisory Committee

2.15 Each Faculty/ School will maintain an Accessibility Advisory Committee ("AAC").

Membership of the Faculty/School AAC

2.16 The Faculty/ School AAC shall consist of the following staff:

(a) The Committee Chair will be the Associate Dean or designate, as appointed by the Dean/Director;

(b) 4 -6 Academic Staff Members of the Faculty/School as appointed by the Dean/Director; and

(c) A staff representative from SAS in a consultative role.

Responsibilities the Faculty/School AAC

2.17 The AAC will be responsible for:

(a) Advising the Dean on all matters related to accommodations including the resolution of conflict; and

(b) Reviewing impact of Accommodations on academic standards.

2.18 A Faculty/School AAC role is to:

(a) Meet a minimum of two times per year;

(b) Set policies;

(c) Receive reports from the SAS representative;

(d) Monitor trends internally, locally, and nationally regarding appropriate accommodations/approaches to accommodation;

(e) receive reports from the Accommodation Team and Monitors, in general terms, on progress of students receiving accommodation, at times recommending changes in support

(f) support the Faculty/School Accommodation Team in working through the logistics of accommodations, including the acquisition of resources

(g) generally monitor and ensure student awareness of procedures and processes

(h) provide an annual report to the Dean, Faculty Council and Vice-Provost, Students (a copy of the report shall also be provided to the Coordinator of SAS).

2.19 In fulfilling its responsibilities, a Faculty/School AAC will establish practices to include the following:

(a) a process to keep student identities anonymous, unless not feasible based on the requirements of the student;

(b) a process for prompt approval of routine or typical Accommodation requests

(c) a process to work with and support the Faculty/School Accommodation Team.

Faculty/ School Accommodation Team

2.20 Each Faculty/School will maintain an Accommodation Team ("AT").

2.21 The Faculty/ School AT shall consist of the following staff appointed by the Dean/Director or designate:

(a) one or more representatives from the Faculty/ School who have expertise and responsibilities in the area of student academic progress;

(b) a Faculty/ School academic staff person who can offer insight into the essential requirements of a course/program or Bona Fide Academic Requirements; and

(c) the SAS accessibility advisor assigned to Faculty/ School as member of the team.

2.22 The AT may consult with or add individuals to meetings as needed (for example: an academic staff person with content or assessment expertise in a particular field of knowledge).

Faculty/ School Accommodation Liaison

2.23 In certain circumstances, it may be more appropriate to have one AT member act as a Faculty/ School Accommodation Liaison to work with individual students.

Responsibilities the Faculty/School AT

2.24 The AT or the Accommodation Liaison shall have the following responsibilities:

- (a) meet monthly and/or as required;
- (b) work with individual students on the provision of accommodations;
- (c) review accommodation recommendations made by Student Accessibility Services (SAS);
- (d) facilitate the implementation of accommodations;
- (e) monitor individual student progress;
- (f) ensure that established processes and procedures are understood and are being followed;
- (g) provide information, as appropriate and on a 'need-to know' basis, to the respective AAC and to other individuals as needed; and
- (h) at least annually provide a report to the respective AAC.

2.25 In fulfilling its responsibilities, a Faculty/School AT will establish practices to include an effective system of communications that includes SAS, instructors, Academic Staff Members, department heads and the associate Dean.

Reconsideration Process

2.26 Students who believe that they have not been treated fairly in accordance with this policy or who believe they were not reasonably accommodated with the type of accommodation offered are expected first to discuss this matter with their SAS advisor.

2.27 Academic Staff Members concerned that the type of accommodation may compromise the academic integrity of a course or program of study are expected first to discuss this matter with the student's SAS advisor.

2.28 Any matters unresolved by discussion between students, Academic Staff Members and the SAS advisor will be handled in accordance with the Student Accessibility Appeal Procedure.

¹ Rights and Responsibilities section of policy adapted and used with permission from Mount Royal University, policy 517 Academic Accommodations for Students with Disabilities.

Student Accessibility Appeal Procedure

Part I

Reason for Procedure

Definitions

1.1 To define the extent to which the University provides a process for students to appeal decisions relating to accommodation of a disability which adversely affect them.

Part II

Procedural Content

Definitions

2.3 The terms below have the following defined meanings for the purpose of this Procedure:

- (b) **"Documented Disability"** means a disability requiring accommodation which has been accepted as such by Student Accessibility Services.
- (c) **"Bona Fide Academic Requirement"** describes the knowledge and skills that a student must acquire in order to complete a course or program successfully. These are the essential and minimum requirements, including methods of assessment that the student must meet.
- (d) **"Accommodation"** is an attempt to remove barriers to the equitable participation of students in learning and evaluation. Where a course or program requirement is a barrier to equitable participation, an accommodation must allow the student an opportunity to acquire and demonstrate the knowledge and skills (or achieve other learning outcomes) required to complete a course or program of study through an alternative mode of instruction or assessment. The accommodation must not erode the academic integrity and standards of the course or program in question.
- (e) **"Reasonable Accommodation"** means an Accommodation that would address an inequality toward a person with a disability without offering that individual an unfair advantage over other students. A Reasonable Accommodation must not result in an undue hardship on the University, and must not result in the compromise of a Bona Fide Academic Requirement. Students must still acquire and demonstrate mastery of essential skills or other Bona Fide Academic Requirements of a student's course or program of study, although this may be done in an alternative or non-traditional way. A reasonable accommodation must not lower the Bona Fide Academic Requirements of the course or program, or violate the accreditation needs of a professional program. The goal of reasonable accommodation is not to 'lower the bar', but rather to provide a different and equitable approach that permits students with disabilities to access learning and assessment opportunities. The term 'reasonable accommodation' is used only in the context of the accommodation of a Documented Disability. The University is under no obligation to offer a reasonable accommodation (or any accommodation for that matter) on compassionate or other grounds.
- (f) **"Academic Staff Member"** means a professor, instructor and/or academic staff person who is responsible for providing the educational program or course to a student requiring Accommodation.
- (g) **"Accessibility Advisory Committee"** (AAC) means a Faculty/School committee which is responsible for advising the respective Dean/Director on matters related to accommodation and the impact of accommodation on academic standards. Typically AAC would meet minimally twice a year to discuss accommodations affecting the Faculty/School.
- (h) **"Accommodation Team" (AT)** means the Faculty/School team established to work with individual students on the provision of accommodations when Student Accessibility Services identifies the Accommodation as nonstandard or unusual for the circumstances. It is intended AT will be engaged early on in the process when necessary.

Initial Reconsideration

2.1 Students who believe that they have not been treated fairly in accordance with this Policy, or who believe they were not reasonably accommodated by the proposed Accommodation, or who believe that the proposed Accommodation may have been different in light of new or previously unavailable information or documentation may first discuss this matter with

the Coordinator of SAS and request reconsideration. In seeking to resolve any disagreement, the Faculty/School Accessibility Advisory Committee may be consulted by a party.

2.2 Academic Staff Members who believe that a proposed accommodation would compromise the defined Bona Fide Academic Requirements or Essential Skills Document in question may request that the Coordinator of SAS reconsider the proposed accommodation. In seeking to resolve any disagreement, the Faculty/School Accommodation Team and/or Accessibility Advisory Committee may be consulted. An Academic Staff Member making the request for reconsideration must make it in writing and be able to demonstrate a substantial, viable and direct connection to the student and the proposed accommodation. In such cases, the student shall be made aware of the request for reconsideration and have the opportunity to provide their position to the Coordinator of SAS before a final determination is made.

2.3 Following a request for reconsideration from a student, an Academic Staff Member or both, the Coordinator of Student Accessibility Services shall issue a decision in writing to the student, the Academic Staff Member and the Faculty/School, as appropriate, normally within five business days of receipt of the request for reconsideration.

Formal Appeal

2.4 If a student or an Academic Staff Member does not agree with the decision of the Coordinator of SAS regarding a request for reconsideration, they may file a formal appeal to the Senate Committee on Accommodation Appeals.

2.5 Students may appeal a decision when:

Failure of Judgment

(a) they believe the decision made by the Coordinator of SAS was incorrect in his/her judgment regarding the need for, application of, or implementation of an Accommodation.

Failure of Process

(b) they believe the decision made by the Coordinator of SAS was incorrect due to a failure on his/her part or the part of SAS to dutifully perform the process of determining eligibility, or determining a reasonable Accommodation.

Failure of Information

(c) they believe the determination made by the Coordinator of SAS was incorrect due to a lack of information, or documentation. Generally speaking, a failure of information is informally handled by the student providing updated or requested documentation.

2.6 Faculty Members may appeal a decision when:

Compromising Academic Standards

(a) they believe that the decision made by the Coordinator of SAS would undermine the Bona Fide Academic Requirements or Essential Skills Document. The onus is on the Faculty Member to establish how the standards would be compromised by providing the accommodation. If a Bona Fide Academic Requirements or an Essential Skills Document has not been developed, no appeals shall be available to Faculty Members.

2.7 Academic Staff Members filing appeals under this policy must demonstrate a substantial, viable and direct connection to the student and the proposed accommodation.

2.8 The composition of the Senate Committee on Accommodation Appeals shall include:

- (a) Five members of the academic staff appointed by Senate;
- (b) Two students appointed by Senate;
- (c) A Chair appointed by the President.

2.9 Upon receipt of an Appeal, the Senate Committee on Accommodation Appeals will notify the Dean or delegate of the Faculty/ School, SAS and the respondent of a hearing date.

2.10 Appeals will be heard by a panel of at least four members: two academic staff members, a student and the Chair.

2.11 The Committee will meet to determine whether there are grounds to hear the appeal and whether the appeal falls within the jurisdiction of the Committee.

2.12 If the Committee determines that it will hear the appeal, the Committee shall convene a hearing with the appellant, SAS or others as soon as possible to consider submissions from all the parties and Dean, if applicable. If the appellant is an Academic Staff Member, the student shall also be invited to attend the hearing.

2.13 The Committee may establish rules and procedures for its hearings and meetings. Such procedures must ensure fairness for all parties and facilitate a timely resolution of appeals.

2.14 The Committee will determine the appropriate accommodation on the basis of the student's disability and the Bona Fide Academic Requirements or Essential Skills Document of the course or program.

2.15 The Committee will provide written reasons for its decision, which shall be final and binding on all parties.

2.16 All matters considered by the Committee shall be strictly confidential.

2.17 In the consideration of appeals by the Committee, time shall be of the essence. In most cases, the Committee shall make a decision within ten business days of the filing of an appeal.

Disclosure and Security of Student Academic Records

The University and its constituent units have a clear obligation to the student and to society concerning the disclosure and security of information about a student's academic record. All student records will be handled in accordance with The Freedom of Information and Protection of Privacy Act (Manitoba) (FIPPA) and the Personal Health Information Act (Manitoba) (PHIA) as appropriate.

Policy documents are available online at: http://umanitoba.ca/access_and_privacy/governance.html

Conflict of Interest Between Evaluators and Students Due to Close Personal Relationships

The purpose of this policy is to ensure that the relationship between an evaluator and the person being evaluated is and is seen to be impartial.

Definitions

1. An evaluator includes any person who participates, whether at first instance or on appeal, in the process of admitting or selecting a student to a course or program, determination of a student's progress or academic standing, or the receipt by a student of a prize, award or university financial support.

2. A conflict of interest means a close personal relationship between an evaluator and a student or applicant, or between evaluators, that gives rise to a reasonable apprehension of bias and, in any event, such relationships shall include that of:

- a) parent/child;
- b) spouses;
- c) grandparent/grandchild;
- d) siblings;
- e) in-laws; or
- f) persons living in the same dwelling unit.

Procedures

1. Responsibility for avoiding the conflict of interest rests with the evaluator. In cases of uncertainty, the evaluator shall and the student may refer the matter for determination to the department head (or dean/director, as appropriate). The decision of the department head is subject to review by the dean/director of the academic unit.

2. Where there is a conflict of interest, the evaluator shall immediately withdraw from participation and shall inform the student concerned and the head or dean/director, as appropriate.

a) Where alternative sections or electives exist, the alternative must be taken, unless the dean/director concerned determines that this will create an undue hardship for the student.

b) Where the dean/director has exercised discretion under 2.(a) or where no alternatives exist to compulsory courses, the dean/director shall ensure fair evaluation by having another suitably qualified evaluator review the submitted material or hear the oral presentations. Where practicable, the evaluator shall not participate in setting the examination or other evaluation method.

3. Where the dean or director has a conflict of interest, the president shall name a replacement to act in the matter.

4. In the case of failure to observe these regulations, staff members will be subject to the discipline procedures provided by the appropriate collective agreement or personnel policy of the University.

This Policy is available online at http://umanitoba.ca/admin/governance/governing_documents/students/277.html.

Campus Alcohol Policy

1.0 Reason for Policy

This policy is a general statement and guideline, setting out the University's requirement for strict compliance with the Liquor Control Act (Manitoba), as well as any rules and regulations, and any successor or replacement rules and regulations, at all events and facilities at which alcohol is available. This policy is further to the Liquor Control Act (Manitoba), as well as any rules and regulations and directives issued pursuant to the Act (The "MLCC rules and regulations").

2.0 Policy Statement

2.1 Alcohol abuse is a serious health problem and can lead to conduct that may endanger the safety of individuals and result in damage to property both on and off the University of Manitoba Fort Garry and Bannatyne Campuses (the "Campuses"). This in turn may result in legal claims involving the University and others. The purpose of this policy is to explicitly establish the general means by which alcohol abuse on the Campuses can be reduced, and to the extent possible, eliminated.

2.2 The University shall meet the policy's objective by:

2.2.1 Offering an alcohol education and awareness program within the scope of programs offered by or through Student Affairs;

2.2.2 Maintaining University guidelines with respect to the serving and consumption of alcohol on the Campuses;

2.2.3 Requiring that events and facilities at which alcohol is served on the Campuses (the "events and facilities") be managed effectively, and in accordance with the University's policy and procedures and MLCC rules and regulations; and This policy applies broadly, and covers all events and facilities on the Campuses.

This Policy is available online at http://umanitoba.ca/admin/governance/governing_documents/community/253.html.

Parking Regulations

Part I

Reason for Regulation

1.1 The University of Manitoba recognizes that at any given time there is a large number of motor vehicles driving and parking on campus. In order for the University to maintain orderly conduct of parking of motor vehicles, Parking Regulations must be established. Furthermore, as an ancillary service, parking must be operated on a cost recovery basis. These regulations set out the rules, fees and remedies available in association with parking on University property, and they apply to all staff, students, and the general public. The University of Manitoba Act, which is an act of legislature, empowers the University of Manitoba to govern parking on University property and to make parking regulations. This includes fees and charges for parking violations and actions taken for failure to pay fees and charges.

Part II

Regulation Content

Introduction

2.1 Responsibility for the overall administration and implementation of the Parking Regulations (the "Regulations") of the University of Manitoba (the "University") rests with the Vice-President (Administration), who may from time to time delegate to others aspects of the administration or implementation of the Regulations.

2.2 All members of the University community and persons attending on property owned and occupied or under the charge or control of the University, including roadways (the "University property"), are required to familiarize themselves and comply with the Regulations.

2.3 The Regulations are in addition to any bylaws of the City of Winnipeg and any legislation and regulations of the Province of Manitoba regulating the operation or use of motor vehicles or regulating the crossing of or walking upon roadways by pedestrians.

2.4 Nothing contained in these Regulations shall be deemed to limit the University's remedies or actions, either at law or through the University's policies, in respect of any matter arising under these Regulations.

General

Definitions

2.5 The following terms have the following defined meaning for the purpose of this Regulation:

(a) Any reference in the Regulations to **Parking Services** means the persons or administrative unit of the University to whom the Vice-President (Administration) may from time to time delegate responsibility for administration of parking permits and for the designation and assigning of parking areas.

(b) Any reference in the Regulations to **University Security Services** means the administrative unit of the University of which members may be sworn peace officers, and may include others contracted by the Vice-President (Administration) from time to time to assist in the implementation of the Regulations.

(c) Any reference in the Regulations to **motor vehicles** includes reference to motorcycles, mopeds and scooters, and where appropriate, snowmobiles, bicycles, golf carts and all-terrain vehicles.

(d) Any reference in the Regulations to **designated accessible parking area** means a parking space designated for individuals with physical disabilities.

(e) Any reference in the Regulations to **Event** means any event being held at the Investors Group Field with an expected attendance of 5,000 or more individuals.

(f) Any reference in the Regulations to **Event Day** shall mean the date on which there is a scheduled Event at the Investors Group Field.

(g) Any reference in the Regulations to **Investors Group Field Event Designated Parking Lots** shall mean any parking lot on University property, on Event Day, designated and posted by the University as such, and shall not include University Designated Parking Lots.

(h) Any reference in the Regulations to **University Designated Parking Lots** shall mean any parking lot on University property, on Event Day, designated and posted by the University as such, and all shall not include Investors Group Field Event Designated Parking Lots

Headings of Paragraphs

2.6 All headings in the Regulations are inserted solely for convenience of reference and shall not be deemed in any way to limit or affect the provisions to which they relate.

Scope of Regulations

2.7 The Regulations, without any exceptions, apply to:

(a) all persons who park, stop or leave a motor vehicle on University property; and

(b) all owners of motor vehicles which are parked, stopped or left on University property.

Procedure Where No Assigned Parking Space Available

2.8 Subject to sections 2.37-2.39 on Event Parking, holders of a valid staff parking permit who find their assigned parking area fully occupied may park in the next most convenient parking area (other than a reserved parking area, an accessible parking area, a residence student parking area, a metered parking area, a pay & display parking area or a parkade) and must immediately report the matter to Parking Services. The report should include the motor vehicle licence number and staff permit number.

2.9 Subject to sections 2.37-2.39 on Event Parking, holders of a valid staff parking permit who find their assigned parking area fully occupied may park in the next most convenient parking area (other than a reserved parking area, an accessible parking area, a residence student parking area, a metered parking area, a pay & display parking area or a parkade) and must immediately report the matter to Parking Services. The report should include the motor vehicle licence number and staff permit number.

2.10 Subject to sections 2.37-2.39 on Event Parking, holders of any other valid parking permit who find their assigned parking area fully occupied should contact Parking Services for directions on where to park without penalty.

Rates

2.11 Rates for all forms of available parking permits at the University (including rates for parking permit replacements) are set annually by the Vice-President (Administration).

Parking Permits – General

Eligibility and Priority

2.12 All persons are eligible to apply for a parking permit as hereinafter provided. Priority in allocation of parking permits will be given to full-time staff members and students of the University. Any person applying for a parking permit may be required to provide identification in order to establish eligibility.

Authorization

2.13 On Monday to Friday from 7:30 a.m. to 4:30 p.m, a parking permit is required for any motor vehicle parked or left on University property in an assigned parking area, unless the motor vehicle is otherwise parked at a meter or pay & display parking area or parkade in compliance with the Regulations. A parking permit conveys the authorization by the University for a specific motor vehicle, registered with Parking Services, to be parked in an assigned parking area. Registration includes the completion of a motor vehicle registration card or form, and payment of a fee

corresponding to the rates set annually for available parking permits (the “parking fee”). Each permit will indicate the category of parking authorized and, if appropriate, the area on campus where that motor vehicle is authorized to park.

Reserved Twenty-Four (24) Hour Parking

2.14 Subject to sections 2.37-2.39 on Event Parking, reserved twenty-four (24) hour parking areas are located in various parking lots (the “reserved parking areas”). Parking in a reserved parking area is limited to motor vehicles displaying a valid parking permit for that specific reserved parking area. Reserved parking areas are appropriately signed and identified.

Alternate Parking Permit

2.15 Alternate parking permits are available to eligible staff members who may be using an alternate vehicle on University property. Applications for such permits can be made through Parking Services, provided the second motor vehicle is registered and the applicant complies with any University policies, procedures, regulations and other rules then in effect. Where alternate parking permits are issued, only one (1) registered motor vehicle at any time is authorized to park on University property at any given time (unless the second registered motor vehicle is otherwise parked at a metered or pay & display parking area or parkade in compliance with the Regulations).

Affixing or Displaying Parking Permits

2.16 Parking permits must be properly affixed or displayed on the motor vehicle as follows:

(a) parking permit decals issued by the University must be affixed on the lower corner of the front windshield on the driver’s side of the motor vehicle. The backing must be removed from the permit and the permit affixed to the glass using the adhesive which is on the permit; and,

(b) parking permit hang tags issued by the University must be displayed according to directions printed on the permit.

2.17 Expired, invalid and cancelled parking permits must be removed from motor vehicles immediately after the expiry, invalidation or cancellation date and not displayed in conjunction with a valid parking permit.

Parking Permit Replacement

2.18 Parking permit replacements may be issued, at a predetermined rate, to eligible permit holders when parking permits have been lost or stolen.

2.19 Parking permit replacements may be issued, at no cost, to eligible permit holders where parking permits, through weather damage or fading, are in need of replacement, as determined by Parking Services.

2.20 Where a parking permit replacement is issued, the original parking permit must be returned to Parking Services, unless lost or stolen.

Term of Permit

2.21 Parking permits are issued for a specified period of time, but immediately become invalid upon the happening of any of the following events:

- (a) on the date of expiration shown on the parking permit;
- (b) when the parking permit is displayed on a motor vehicle other than the motor vehicle for which it was issued;
- (c) when the parking permit is not legible or has been altered;
- (d) when the parking permit has been cancelled or revoked;
- (e) when the parking permit is lost or stolen;
- (f) when the motor vehicle for which the parking permit is issued has been placed on the University's tow away list;
- (g) when the applicant for a parking permit gives false or incorrect information at the time of application; and
- (h) when a residence student of the University vacates or is required to vacate a residence located on University property (even if the property is leased from the University).

Permits Not Transferable

2.22 Parking permits are not transferable and may be used only for the motor vehicle in which the permit was issued unless otherwise authorized in writing by Parking Services. Parking permits remain the property of the University and must be destroyed when the permit expires or becomes invalid.

Permits for Persons with Physical Disabilities

2.23 Any persons with physical disabilities may apply to Parking Services for a parking permit for designated accessible parking areas as determined by Parking Services. A statement from a medical doctor is required verifying the degree of disability and assessing the length of time for which parking in a designated accessible parking area is required.

2.24 Holders of valid University accessible parking permits who find no signed designated accessible parking area is available, may park in the next most convenient parking area (other than a residence student parking area) and must immediately report the matter to Parking Services. The report should include the vehicle licence number and accessible parking permit number.

Bicycles

2.25 Bicycles should be parked only in proper University bicycle racks. Parking and storing of bicycles inside any University building, or in any manner which may create a problem related to pedestrian safety, building access or maintenance, as determined by the University, is prohibited. Bicycles parked in such a fashion are subject to removal by the University and their owners may be subject to a fee or charge, at rates established by the University, from time to time.

Rights of Cancellation

2.26 If the assigned parking area or any portion thereof for which the parking permit is valid is deemed by the University to be required for other purposes and if alternative parking is not provided by the University, the unearned portion of the parking fee, minus any amounts due and owing to the University as fees or charges incurred as a result of parking or leaving motor vehicles on University property in contravention of the Regulations, will be refunded to the registered holder of the parking permit.

Staff and Student Parking

Application for Parking

2.27 Staff members intending to park a motor vehicle, other than a bicycle, on University property must apply for assigned parking at Parking Services, unless the motor vehicle is otherwise parked at a metered parking area, pay & display parking area or parkade in compliance with the Regulations.

2.28 Students intending to park a motor vehicle on University property must apply for assigned parking at Parking Services or through any other valid registration system authorized by the University, unless the motor vehicle is otherwise parked at a metered parking area, pay & display parking area or parkade in compliance with the Regulations.

Conditions of Parking

2.29 Parking permits authorize the registered permit holder to park in the parking area designated by the parking permit.

2.30 Staff parking permits are valid from September 1 to August 31 of the following year. Electricity is supplied to electrical outlets depending on climatic conditions subject to Section E. Student parking permits are valid from the date of issue until April 30 following the date of issue. Electricity is supplied to electrical outlets depending on climatic conditions.

Summer Parking Permits

2.31 Summer parking permits may be issued upon application and authorize the registered permit holder to park in the parking area designated by the parking permit during the period of May 1 to August 31.

Residence Student Parking

2.32 Residence student parking areas are reserved on a twenty-four (24) hour basis for residence students of the University. Residence students who own and operate a motor vehicle, while maintaining approved residence on University property, may apply for available residence parking permits and must submit proof of ownership of the motor vehicle acceptable to Parking Services. These permits will be withdrawn by the University if the residence student vacates or is required to vacate residence on University property, and the unearned portion of the parking fee, minus any amounts due and owing to the University as fees or charges incurred as a result of parking or leaving motor vehicles on University property in contravention of the Regulations, will be refunded to the registered permit holder.

Visitor Parking

Visitors

2.33 Subject to sections 2.37-2.39 on Event Parking, and unless otherwise posted by the University, visitors may park in metered and pay & display parking areas or a parkade at the posted rate, on Monday to Friday from 7:30 a.m. to 4:30 p.m. Monday to Friday from 4:30 p.m. to 7:30 a.m. and on Saturdays and Sundays, visitors may park in all parking areas without charge, unless otherwise posted by the University. Visitors must at all times comply with the Regulations.

2.34 Any visitor (including contractors, trades people, and persons attending conferences and seminars) who wishes to park other than at a metered parking area, pay & display parking area or parkade must obtain written parking authorization through Parking Services in advance and must comply with the Regulations.

2.35 On an Event Day, visitors may not park or leave a motor vehicle in any parking area or parkade beginning ninety (90) minutes before an Event until one (1) hour after an Event.

Couriers

2.36 Courier companies making deliveries to the University are to use designated building loading zones and must comply with the Regulations. Parking is not to exceed the posted allowable time in duration and courier vehicles must be visibly identified as such.

Event Day Parking

Investors Group Field event Designated Parking Lots

2.37 Notwithstanding anything else in these Regulations, beginning ninety (90) minutes before the scheduled start of an Event and until one (1) hour after the end of any Event, no person shall stop, park or leave any motor vehicle in any Investors Group Field Event Designated Parking Lot, except in accordance with the authorization granted by a valid Investor's Group Field parking pass or paid Event parking ticket.

University Designated Parking Lots

2.38 Notwithstanding anything else in these Regulations, beginning ninety (90) minutes before the scheduled start of an Event and until one (1) hour after the end of any Event, no person shall stop, park or leave any motor vehicle in any University Designated Parking Lot without displaying a valid University of Manitoba parking permit. University Designated Parking Lots will be available to University of Manitoba parking permit holders on a first-come, first serve basis and space will not be guaranteed.

Visitor Parking on Event Day

2.39 Notwithstanding anything else in these Regulations, visitor parking areas at the University of Manitoba during Events will be temporarily unavailable. This will include all pay and display areas, metered areas and parkades.

Stalls Equipped With Heater Plugs

Restriction on Use of Power

2.40 No person shall use any heater plug except for the sole purpose of drawing power for a motor vehicle block heater or interior car warmer and no device may be used to supply power to another motor vehicle.

Liability

2.41 The University shall not be liable for any inconvenience, loss or damage caused by electricity surges or interruptions or the supply of electricity having ceased to be available at any heater plug.

Faulty Heater Plugs

2.42 Faulty heater plugs should be reported as soon as possible to the University's Physical Plant Department, or such other or substitute office as may be instituted in its place by the University from time to time.

Parking and Operation of Motor Vehicles

Prohibitions

2.43 No person shall stop, park or leave any motor vehicle, except for bicycles, upon any part of University property except in accordance with the authorization granted by a valid parking permit and the Regulations provided that, bicycles shall remain subject to all other Regulations and policies of the University.

2.44 Except as specifically authorized by a valid parking permit, no person shall stop, park or leave a motor vehicle alongside any building on University property.

2.45 No person shall stop, park, leave or operate a motor vehicle on sidewalks, paths, loading zones, landscaped areas or within three (3) meters of a fire hydrant on University property except in the course of the performance of essential University business.

2.46 No person shall stop, park or leave a motor vehicle in specific areas and roadways on University property identified and signed as fire lanes.

2.47 No person shall permit a motor vehicle to be stopped, parked or left in a metered space on University property when the meter at that space is hooded.

2.48 No person shall permit a motor vehicle to be stopped, parked or left in a metered space on University property when the meter at that space is hooded.

2.49 No person shall stop, park or leave a motor vehicle to be stopped, parked or left in a metered space or in any parking stall on University property in such a manner that the motor vehicle is not wholly within the metered space or parking stall.

2.50 No person shall move, disfigure, or in any way tamper with any parking control signs posted or erected on University property.

2.51 No person shall stop, park, leave or operate a snowmobile on University property, unless specifically authorized by the Vice-President (Administration), or designate, who may set terms and conditions in connection with such authorization wherever appropriate.

2.52 No person shall stop, park or leave a motor vehicle in a reserved parking area, a signed accessible parking area or a residence parking area at any time without a valid parking permit for that area unless otherwise posted.

2.53 No person shall permit a motor vehicle to be stopped, parked or left in a metered space on University property when the violation signal of the meter indicates a violation or when the pay parking ticket has expired.

2.54 No person shall stop, park or leave a motor vehicle within a multi-spaced meter parking area, a pay & display parking area or parkade on University property without purchasing and displaying a valid dispenser pay parking ticket.

2.55 No person shall stop, park or leave a motor vehicle from 7:30 a.m. to 4:30 p.m., Monday through Friday, in a signed parking area on University property, without displaying a valid parking permit for that area.

2.56 Prohibitions 2.43 through 2.51 and 2.57 through 2.59 shall be in effect at all times. Prohibitions 2.52 through 2.55 shall apply at all times except on Saturday, Sunday and holidays, unless otherwise posted or noted in the Regulations.

Theft of Service

2.57 No person shall deposit or cause to be deposited in a single or multi-space parking meter, parking pay station or pay & display machine, any substitute for a coin of Canada; or, deface, damage, tamper or impair the working of any single or multi-space parking meter, meter pole, electronic parking pay station, pass card reader, transponder or reader, parkade ticket terminal, pay & display machine or pay parking lot gate.

2.58 No operator of a motor vehicle shall, during the hours of operation, on entry into a parkade, proceed without first obtaining a pay parking ticket from either the attendant or the automated ticket dispenser for that parkade. On exiting from that parkade, no motor vehicle operator shall proceed to exit without stopping and submitting the pay parking ticket to

either the attendant or an automated pay station or terminal and paying the required fee.

2.59 No operator of a motor vehicle shall, during the hours of operation, as posted by the University, on entry into a pay & display lot or a multi-space meter area, proceed without first purchasing a pay parking ticket from either the attendant or the automated machine for that area.

Parking Signs

2.60 Operators of motor vehicles shall obey any parking signs on University property erected by either the University or with the consent of the University.

Temporary "No Parking" Signs

2.61 Where it is necessary to erect temporary "No Parking" signs in areas normally allotted for parking under the Regulations for such reasons as snow removal, cleaning, construction, special events or other good reasons, as same may be deemed by the University, such "No Parking" signs shall be observed and have priority over normal parking privileges. Wherever possible, persons temporarily displaced by the erection of such emergency signs will be assigned to other locations.

Fees and Charges

2.62 **Authority.** Pursuant to subsection 16(1) of *The University of Manitoba Act*, the University is authorized to impose fees and charges to be paid by owners or operators of motor vehicles stopped, parked in or left on University property in contravention of the Regulations.

2.63 **Notice of Parking Violation.** A notice or form ("violation notice") may be issued by the University to any operator or owner charged with violation of any of the provisions hereof.

2.64 **Failure to Pay Fees or Charges.** Violation notices must be settled within ten (10) days from the date of issue, failing which the University shall proceed to take all necessary legal action to receive payment of such fees and charges together with any costs incurred by the University in taking such legal action.

2.65 **Service of Violation Notices.** A violation notice shall be sufficiently served if served in any of the following ways:

- (a) by being handed to the operator of the motor vehicle;
- (b) by being mailed to the address of the person registered as the owner of the motor vehicle concerned; or,
- (c) by such violation notice being attached to, or left under, the windshield wiper or attached to the windshield of the motor vehicle.

2.66 **Content of Violation Notice.** The violation notice shall have endorsed thereon the following:

(a) "This parking violation is issued pursuant to section 16 of The University of Manitoba Act by authority of the Board of Governors of the University, or such other substitute office as may be instituted in its place by the University, from time to time, for a contravention of the Parking Regulations".

2.67 **Amount of Fees and Charges.** Fees and charges for parking violations are as follows:

- (a) for all violations other than those listed in subsections (b) to (f):
 - (i) Option "A" – TWENTY DOLLARS (\$20.00) if paid within ten (10) days of the date the contravention occurred; and
 - (ii) Option "B" – FORTY DOLLARS (\$40.00) if paid thereafter.
- (b) for possession and/or display of a stolen or forged parking permit or pay parking ticket – TWO HUNDRED AND FIFTY DOLLARS (\$250.00) and a charge in an amount equal to the costs that would have been incurred

for the purchase of a parking permit or pay parking ticket for the period during which the stolen or forged parking permit or pay parking ticket was being used upon order of the Vice-President (Administration) under section 2.73;

(c) for a violation of sections 2.57 through 2.59 - TWO HUNDRED AND FIFTY DOLLARS (\$250.00) and such amount as the University may deem appropriate in order to compensate the University for losses suffered as a result of damage to property caused by the person, upon order of the Vice-President (Administration) under section 2.74;

(d) for stopping or parking in an accessible parking space:

(i) Option "A" – SIXTY DOLLARS (\$60.00) if paid within ten (10) days of the date the contravention occurred; and

(ii) Option "B" – ONE HUNDRED DOLLARS (\$100.00) if paid thereafter;

(e) for stopping or parking in a fire lane or for displaying an invalid permit or pay parking ticket:

(i) Option "A" – FIFTY DOLLARS (\$50.00) if paid within ten (10) days of the date the contravention occurred; and

(ii) Option "B" – SEVENTY-FIVE DOLLARS (\$75.00) if paid thereafter; and

(f) for violations of sections 2.37 and/or 2.38:

(i) Option "A" – FIFTY DOLLARS (\$50.00) if paid within ten (10) days of the date the contravention occurred; and

(ii) Option "B" SEVENTY FIVE DOLLARS (\$75.00) if paid thereafter.

The University may require payment of fees and/or charges for parking violations under more than one of the above noted subsections, with respect to a single incident, as the University, within its sole discretion may determine is appropriate.

2.68 **Voluntary Payment.** Any fees or charges issued under sections 2.43-2.59 on Prohibitions may be paid within the time limit indicated on the notice thereof as follows:

(a) by on-line payment, on a twenty-four (24) hour basis, by visiting the University's website at www.umanitoba.ca/parking;

(b) by mail or after hours deposit (cheques only) at Parking Services at the Welcome Centre, 423 University Crescent, or such other location as the office may be located in from time to time;

(c) in person Monday to Friday, between the hours of 8:00 a.m. and 4:30 p.m. at Parking Services at the Welcome Centre, 423 University Crescent, or such other location as the office may be located in from time to time.

2.69 **Appeals and Extenuating Circumstances.** Those persons wishing to appeal and outline extenuating circumstances, or appeal a parking fee or charge issued under section 2.67 (excluding clauses e-f of section 2.72), may do so as follows:

(a) with respect to fees or charges for parking in contravention of the Regulations – attend to Parking Services at the Welcome Centre, 423 University Crescent, (or such other location as the office may be located in from time to time), Monday through Friday, 8:00 a.m. to 4:30 p.m. respecting a fee or charge; or

(b) with respect to appeals of decisions under (a) above and with respect to the other decisions issued under sections 2.70 through 2.72 inclusive – appeal to the Vice-President (Administration) or such person or body designated by the Vice-President (Administration) in accordance with procedures established from time to time.

2.70 Revocation of Parking Permit. In addition to any other fees or charges provided by the Regulations, a parking permit of an individual violating the Regulations, may be revoked by the Vice-President (Administration) at his/her sole discretion.

2.71 Prohibition from Parking on University Property. Any person whose parking permit is revoked may also be prohibited by the Vice-President (Administration) from parking, stopping or leaving a motor vehicle on University property for a period of up to twelve (12) months, during which time any motor vehicle registered to that person may be removed and impounded under sections 2.75-2.78 on Removal, Impoundment and Liability.

2.72 Failure to Pay Fees or Charges. Where a person does not pay the fees or charges owing under sections 2.67, 2.73 or 2.74, any one (1) or more of the following actions may be taken by the University:

- (a) discipline (including dismissal) of faculty and staff members;
- (b) discipline of students under the Student Discipline Bylaw;
- (c) withholding of examination marks, transcripts, diplomas, or denying registration and registration materials until the outstanding fees or charges have been paid in full or other arrangements have been made which are satisfactory to the University;
- (d) revocation of a parking permit under section 2.70 and prohibition from parking on University property under section 2.71;
- (e) removal and impoundment of a motor vehicle under sections 2.75-2.78 on Removal, Impoundment and Liability; and
- (f) collection activities by the University or by others at the request of the University, including the issuance of a Statement of Claim in a civil court against the owner or operator of a motor vehicle for the amount of the fee or charge and all costs relating to and including the costs of removal, impoundment and storage of the motor vehicle, as well as any legal costs incurred by the University in taking such collection activities and/or legal action.

2.73 Stolen or Forged Parking Permits and Pay Parking Tickets. Where a person has been found in possession of and/or displaying a stolen or forged parking permit or pay parking ticket:

- (a) the unauthorized parking permit or pay parking ticket shall be confiscated;
- (b) the person shall pay a fine of:
 - (i) Option "A" - FIFTY DOLLARS (\$50.00) if paid within ten (10) days of the date the contravention occurred; and
 - (ii) Option "B" - SEVENTY - FIVE DOLLARS (\$75.00) if paid thereafter; and
- (c) upon the order of the Vice-President (Administration), the person:
 - (i) shall pay a fee of TWO HUNDRED AND FIFTY DOLLARS (\$250.00);
 - (ii) shall be required to make payment to the University in an amount equal to the costs that would have been incurred for the purchase of a parking permit or pay parking ticket for the period during which the stolen or forged parking permit or pay parking ticket was being used; and
 - (iii) shall not be entitled to, and shall be prohibited from, parking a motor vehicle on University property for a period of up to twelve (12) months, during which time any motor vehicle registered to that person may be towed away and impounded under Sections 2.75-2.78 on Removal, Impoundment and Liability.

2.74 Violation of Sections 2.57 - 2.59. Where a person has violated one or more of sections 2.57 - 2.59:

- (a) the person shall pay a fine of:
 - (i) Option "A" - FIFTY DOLLARS (\$50.00) if paid within ten (10) days of the date the contravention occurred; and
 - (ii) Option "B" - SEVENTY - FIVE DOLLARS (\$75.00) if paid thereafter; and
- (b) upon the order of the Vice-President (Administration), the person:
 - (i) shall pay a fee of TWO HUNDRED AND FIFTY DOLLARS (\$250.00);
 - (ii) shall pay such amount as the University may deem appropriate in order to compensate the University for losses suffered as a result of damage to property caused by the person that violated one or more of sections 2.57-2.59; and
 - (iii) shall not be entitled to, and shall be prohibited from, parking a motor vehicle on University property for a period of up to twelve (12) months, during which time any motor vehicle registered to that person may be towed away and impounded under Sections 2.75-2.78 on Removal, Impoundment and Liability.

Removal, Impoundment and Liability

2.75 Motor vehicles parked or left on University property may be removed, impounded and stored if such motor vehicles are considered by the University to be impeding snow removal operations or any other essential operation whatsoever or where removal or impoundment of the motor vehicle is deemed to be reasonable in the sole discretion of the University.

2.76 Motor vehicles parked or left on University property on an Event Day may be removed, impounded and stored if such motor vehicles are parked in in contravention of these Regulations, as determined by the University in its sole discretion.

2.77 In addition to any other fee, charge or consequence provided by these Regulations, a motor vehicle removed and impounded under these Regulations shall be at the owner's risk. The owner or operator shall be responsible for the charges incurred for removal, impoundment and storage, which charges must be paid before the motor vehicle will be released.

2.78 Neither the University, nor its employees, servants or agents, shall be liable in any way whatsoever for such damage or inconvenience in the event of any damage or inconvenience caused by reason of any motor vehicle being towed away, removed, stored or impounded in accordance with these Regulations.

Liability for Lost, Stolen or Damaged Property

2.79 Neither the University, nor its employees, servants or agents, shall be liable in any way whatsoever for any lost, stolen or damaged property contained within the motor vehicle or any loss, damage or theft to the motor vehicle, notwithstanding that the loss, theft or damage may have occurred while on University property.

This policy is available online at http://umanitoba.ca/admin/governance/governance_documents/community/255.html.

Student Discipline Bylaw

1.0 Reason for Bylaw

The Student Discipline Bylaw and related Procedures provide guidance to those individuals charged with administering disciplinary action (“Disciplinary Authority”) while, at the same time, outlining the prohibited conduct and the right of appeal.

2.0 Rule/Principle

2.1 As members of the University Community, students have an obligation to act with academic integrity and in a fair and reasonable manner toward their peers, faculty, staff, administration and the physical property of the University. Academic integrity and personal conduct, both on-campus and off-campus in university-sanctioned activities, are critical elements in achieving these obligations.

2.2 Students will be subject to disciplinary action under this bylaw, for the following matters regardless of whether such behaviour is covered by other University governing documents; (bylaws, policies, procedures and regulations).

2.2.1 Academic dishonesty including, but not limited to:

- (a) academic/scientific fraud;
- (b) cheating on exams or tests;
- (c) contravention of academic regulations;
- (d) re-submitting own previous course work as new work;
- (e) examination personation;
- (f) inappropriate collaboration; and
- (g) plagiarism (i.e., passing off the thoughts, writings and work of another person as one’s own).

2.2.2 Inappropriate behaviour including, but not limited to:

- (a) abuse of computer privileges;
- (b) alcohol and substance abuse;
- (c) breach of residence hall regulations;
- (d) disorderly, violent or threatening behaviour;
- (e) false or misleading information made for any purpose including information in connection with:
 - (i) application for admission;
 - (ii) application for awards;
 - (iii) medical certificates;
 - (iv) letters of permission;
 - (v) transfer of credits; and
 - (vi) transcript/student records matters;
- (f) harassment and unlawful discrimination;
- (g) indecent exposure;
- (h) theft;
- (i) unprofessional conduct; and
- (j) vandalism.

2.3 The specific jurisdiction for each of the Disciplinary Authorities is set out in “[Table 1: Jurisdiction of Disciplinary Authorities](#)” (“Table 1”) which follows this Bylaw. For the purposes of this document and the related Procedures document, references to Faculty/School will include University 1 and Dean/Director will include the Director of University 1.

2.4 The specific disciplinary actions available for each Disciplinary Authority are set out in “[Table 2: Disciplinary Actions Available to Disciplinary Authorities](#)” (“Table 2”) which follows this Bylaw.

2.5 Disciplinary Authorities having the closest connection with the particular alleged disciplinary matter are encouraged whenever possible and appropriate to resolve student disciplinary matters informally in the first instance.

2.6 Students who make complaints or appeals which are found by the Disciplinary Authority to be frivolous or made for an improper purpose, may be subject to disciplinary action.

2.7 If the disciplinary matter relates to a criminal offence, the Disciplinary Authority shall provide relevant information to Campus Security Services for potential follow-up by the appropriate policing authority.

2.8 Students have a right to appeal disciplinary actions made by a Disciplinary Authority excluding the decisions of the University Discipline Committee (“UDC”) which are final decisions.

2.9 Students are advised that the Disciplinary Authority to whom an appeal has been made may impose a more severe disciplinary action than previously recommended by a lower disciplinary body should the hearing panel, after reviewing the evidence presented by all parties, consider the original disciplinary action insufficient.

2.10 Students are afforded the right to representation when dealing with disciplinary matters in the first instance and with respect to appeals; and both are subject to the limitations set out in the related Procedures [See sections 2.10.3., 2.10.4 and 2.17.5].

2.11 No disciplinary action shall be implemented until the time for appeal has elapsed or until the Student has waived in writing the right to appeal, whichever occurs first. The only exceptions to this rule shall be:

- (a) where the disciplinary action would be entered on the academic records of the Student, the Registrar shall be notified by the Disciplinary Authority implementing such disciplinary action, and shall not issue any academic transcripts until the appeal has been disposed of;
- (b) where the disciplinary action relating to academic dishonesty or academic fraud may result in a change to the Student’s transcript, the Registrar shall be notified by the Disciplinary Authority implementing such disciplinary action, and shall not issue any transcripts until the appeal has been disposed of;
- (c) where changes in the Student’s courses and/or program are directly related to the matter under disciplinary consideration, such changes shall not be permitted; and
- (d) where the disciplinary action were not implemented, the safety of members of the University Community would be compromised.

2.12 Related Procedures are set out in the Governing Document entitled Procedures: Student Discipline.

This Policy and the Procedure below are available online at http://umanitoba.ca/admin/governance/governing_documents/students/student_discipline.html.

Student Discipline Procedures

1.0 Reason for Procedures

To set out Procedures secondary to the Bylaw entitled “Student Discipline” in order to provide guidance to individuals charged with discipline authority and, at the same time, to outline the prohibited conduct and the right of appeal.

2.0 Procedures

2.1 General

2.1.1 A student who is the subject of a disciplinary matter (the “Student”) should be informed in writing as early as possible by the Disciplinary Authority dealing with the matter in the first instance that:

- (a) an investigation is proceeding, the nature of the matter being investigated, and that the Student may be subject to disciplinary action;
- (b) the Student may obtain a copy of the Student Discipline Bylaw and Procedures, which includes information on appeal procedures. This document is available from the Office of the University Secretary or the Office of Student Advocacy;
- (c) the Student has a right to appeal, if an appeal is available from the Disciplinary Authority who imposed the disciplinary action.
- (d) the Student may seek advice from the Office of Student Advocacy, University of Manitoba Students’ Union, and Graduate Students’ Association. It is the sole responsibility of the Student to determine the adequacy of the Student’s representation.

2.1.2 If the disciplinary matter relates to a course other than a course offered by the Faculty/School in which the student is registered, the following procedures shall take place:

- (a) the matter shall be dealt with directly by the Department Head; and
- (b) where disciplinary action is found to be warranted the following shall apply:
 - (i) The Department Head shall review the Student’s Academic History to determine whether other acts of Academic Dishonesty and/or Inappropriate Behaviour have occurred previously for this student, and;
 - (ii) The appropriate disciplinary action shall be determined in consultation with the Dean/Director of the Faculty/School in which the student is registered and the Department Head of the Faculty/School offering the course will advise if earlier acts of Academic Dishonesty and/or Inappropriate Behaviour were found.

2.1.3 If the disciplinary matter involves two or more students and they should appeal the following shall take place:

- (a) where possible, each student, shall have a separate hearing panel, with only the Chair being the same in both hearings; and
- (b) the Respondents may bring in relevant information on the other student(s) as it pertains to the appeal. Every effort must be made to protect the identity of the other student(s).

2.1.4 Once a disciplinary action has been implemented, no further disciplinary action may be imposed except:

- (a) as a result of an appeal by the student; or
- (b) in an instance where a student has been found to have committed repeated instances of academic dishonesty. In such an instance the Dean/Director of Registration may impose further disciplinary action.

2.1.5 The failure of the Disciplinary Authority to comply with any or all of the requirements in 2.1.1 shall not affect the validity of further proceedings in connection with the disciplinary matter provided, however, such failure may be considered in further proceedings.

2.1.6 The first level disciplinary authority whose decision is being appealed may be referred to in this document as “the Respondent”.

2.1.7 Students when appealing may be referred to in this document as “the Appellant”.

2.2 Jurisdiction of Disciplinary Authorities

The Jurisdiction of Disciplinary Authorities is set out in Table 1 of Bylaw: Student Discipline.

2.3 Range of Possible Disciplinary Actions

The Disciplinary Actions Available to Disciplinary Authorities are set out in Table 2 of Bylaw: Student Discipline.

2.4 Suspensions and Expulsions

2.4.1 Suspension means any withdrawal of one or more rights or privileges for a definite or indefinite period of time.

2.4.1.1 Students who have been suspended for a definite period of time shall upon the lifting of the suspension, have the rights or privileges suspended, automatically reinstated.

2.4.1.2 Suspension for an indefinite period of time shall be dealt with as follows:

(a) In the case of suspension for an indefinite time by the Executive Director of Enrolment Services, the suspension may be lifted by the Executive Director of Enrolment Services upon consideration at the written request of the Student, after consultation with the Dean/Director of the Faculty or School concerned.

(b) In the case of all other suspensions for an indefinite period of time, the suspension may be lifted by the Disciplinary Authority which imposed the suspension, upon consideration of the written request of the Student.

2.4.2. Expulsion means a withdrawal of all rights or privileges available to students for either a definite or indefinite period of time.

2.4.2.1 In the case of an expulsion for a definite period of time, upon expiration of such time, the Student, to be readmitted, must reapply for admission, through normal channels, to the appropriate authority having jurisdiction over admission.

2.4.2.2 In the case of a Student who has been expelled for an indefinite period of time the student may apply to the Disciplinary Authority that imposed the final penalty for a lifting of the expulsion. If the expulsion is lifted, the Student, in order to be readmitted, must reapply for admission, through normal channels, to the authority having jurisdiction over admission.

2.4.3 A Student may be suspended or expelled by a Disciplinary Authority from the following:

- (a) a particular course;
- (b) courses;
- (c) a department;
- (d) a Faculty/ School;
- (e) the University; or
- (f) a Residence.

2.4.3.1 When a Student is suspended or expelled from the above list (excluding (f)) any academic credits earned by the Student at The University of Manitoba or at another academic institution in an equivalent or related area of study during the period of suspension or expulsion shall not be counted as credit toward any degree or program offered by a department, or a Faculty/School, from which Faculty/School, or from whose courses, the Student has been suspended or expelled unless at the time of the imposition of the suspension or expulsion, the Disciplinary Authority stipulates otherwise.

2.4.4 Where a Disciplinary Authority has suspended or expelled the Student from the University, any academic credits earned by the Student at any academic institution during the period of suspension or expulsion shall not be counted as credit toward any degree or program offered by The University of Manitoba, unless at the time of the imposition of the suspension or expulsion, the Disciplinary Authority stipulates otherwise.

2.4.5 Where the Student has been suspended or expelled from a Faculty/School of the University, any other Faculty/School may refuse to register the Student for any course or courses or refuse to accept the Student as a transfer Student, provided that prior to such refusal, the other Faculty/School has:

- (a) obtained and considered a written report from the Disciplinary Authority that implemented the suspension or expulsion, outlining the circumstances surrounding the disciplinary action;
- (b) provided the Student a copy of the report; and
- (c) given the student an opportunity to respond to the report.

This is not an appealable matter.

2.5 Student Academic History/Transcript with regard to Disciplinary Actions

2.5.1 Disciplinary actions implemented shall not ordinarily be recorded on the Student's academic history/transcript except in the following:

- (a) if the Student is suspended or expelled under sections 6 to 9 of Table 2 inclusive; or
- (b) a reprimand has been ordered recorded on a Student's academic history/transcript under section 20 of Table 2.

2.5.2 A suspension shall appear on the Student's academic history/transcript until such time as the suspension period has elapsed, when it shall be removed upon the written request of the Student to the Registrar.

2.5.3 In the case of suspension for supplying false or misleading information in connection with an application for admission (see sections 10 and 11 of Table 2), any notation on the Student's academic history/transcript may only be removed by the Registrar, for undergraduate students and the Dean, Faculty of Graduate Studies for graduate students upon the written order of the Disciplinary Authority that implemented the disciplinary action (see 2.4.2 of these Procedures).

2.5.4 An expulsion shall appear on the Student's academic history/transcript and may only be removed by the Registrar upon the written order of the Disciplinary Authority that implemented the disciplinary action.

2.5.5 Where a reprimand has been ordered to be recorded on the Student's academic history/transcript (see section 20 of Table 2), the reprimand shall be removed:

- (a) following the elapse of the specified period of time, upon the written request of the Student to the Registrar; or
- (b) earlier, upon a written order from the Disciplinary Authority that implemented the disciplinary action.

2.5.6 For the purposes of this document the term "reprimand" is defined as "to convey stern disapproval to a person by means of recording of action on their student record and transcript".

2.6 Appeals

2.6.1 General

2.6.1.1 A Student has the right to appeal all disciplinary actions except those implemented by the University Discipline Committee or a hearing panel thereof.

2.6.1.2 A Disciplinary Authority to whom an appeal has been made may dispose of the matter in any way authorized to it under Table 1. The resulting disposition may be the same, more severe or less severe than the original disciplinary action and the Student shall be so informed of this possibility prior to the commencement of an appeal hearing.

2.6.1.3 Only the Student who has been the subject of disciplinary action has the right to appeal.

2.6.1.4 When an appeal is heard, a finding that disciplinary action is warranted shall not be implemented unless the Student has been invited to attend the hearing and, if in attendance, is permitted to ask questions and offer an explanation. Every reasonable attempt should be made to schedule the hearing at a time and place that permits the Student's participation.

2.6.1.5 The Student may appear in person and may be represented by another person in accordance with the provisions of Section 2.10.3, 2.10.4, and 2.17.5.

2.6.1.6 If the Appellant, Respondent or their respective representatives are unable to attend the hearing in person, the use of an electronic communication device, such as telephone, may be used with prior consent of the Chair, provided that such means enable all parties to clearly communicate. A request for such a meeting must be made at least one week in advance of the hearing date.

2.6.1.7 A representative designated in writing by the Student, subject to 2.10.3 and 2.17.5, may:

- (a) attend any disciplinary hearing; and
- (b) participate in any disciplinary hearing to the extent of asking questions of anyone in attendance and making submissions to any Disciplinary Authority, including the Local Discipline Committee (the "LDC").

2.7 Notices of Appeal/Disciplinary Authority Response to Appeal

2.7.1 If the Student wishes to appeal a disciplinary action, the Student must deliver the following documents (the "Notice of Appeal") to the appropriate persons or bodies as identified in 2.8 within ten (10) working days as of the date on the letter from the lower body, notifying the Student of the disciplinary action:

- (a) copies of such written materials as the Student wishes considered in connection with the appeal; and
- (b) copies of the letter indicating the lower level decision, if not a first level appeal.

2.7.2 The Student shall clearly indicate in the notice of appeal whether they are appealing the decision on:

- (a) the finding of facts;
- (b) the disposition determined by the disciplinary authority; or
- (c) both (a) and (b).

2.7.3 The lower level appeal body Committees must send a copy of decision letter to next level of appeal body. If an appeal is not received by the next level appeal body by deadline set out in 2.7.1. then the disciplinary action against the student will be implemented.

2.7.4 The time for delivery of a Notice of Appeal may be extended by the person or body to whom the appeal is to be made, or by the Chair of UDC where the appeal is to the UDC. The disciplinary action implemented may be put on hold if the appeal body receiving the next level of appeal deems the lateness acceptable and grants the student permission to proceed with the appeal after deadline.

2.7.5 The Student and the designated representative of the Student shall receive the same notices of hearings held by a LDC and the UDC as the Respondents.

2.7.6 The Respondent will be given ten (10) business days to respond. If no response is received from the Respondent by the date requested by the Office coordinating the appeal, a hearing may be set. If the Respondent had not received permission for an extension, a written request must be submitted to the appropriate Chair to determine whether the Respondent's submission will be accepted.

2.8 Appeal Routes

2.8.1 If the Student wishes to appeal the disciplinary decision of a member of the academic staff (except for suspension from attendance for the balance of the meeting of one class), or the decision of a Department Head, the Notice of Appeal shall be delivered to the appropriate Dean/Director in the Faculty/School offering course(s), the Dean/Director in the Faculty / School of registration with a copy to the academic staff member/department head, as the case may be.

2.8.2 If a Student is appealing within a Faculty/School that does not have Department Heads, then the first level of decision will be the Dean/Director of that respective Faculty/School and the next level of appeal will be the Local Discipline Committee as set out in 2.8.3.

2.8.3 If the Student wishes to appeal the disciplinary decision of a Dean/Director, or the Director of Housing and Student Life, the Notice of Appeal shall be delivered to the appropriate LDC in care of the respective Dean/Director or the Director of Housing and Student Life.

2.8.4 If the Student wishes to appeal the disciplinary decision of the Director of Libraries (other than as a delegate of the President), a delegate of the Director, or an ad hoc committee appointed by the Director, the Notice of Appeal shall be delivered to the Chair of the Senate Committee on Libraries, with a copy to the person or ad hoc committee which made the initial disciplinary decision. Within ten (10) business days of receipt of the Notice of Appeal, the Chair of the Senate Committee on Libraries will appoint a Library Appeals Committee to hear the appeal.

2.8.5 If the Student wishes to appeal the disciplinary decision of any of the following disciplinary authorities, the Notice of Appeal shall be delivered to the UDC in care of the Secretary of the UDC (University Secretary):

- (a) the decision of an LDC or the Library Appeals Committee;
- (b) the decision of the Director of Admissions;
- (c) the decision of the Dean of the Faculty of Graduate Studies in relation to fraudulent documents submitted for admission to the Faculty;
- (d) the decision of the Executive Director of Enrolment Services or the Associate Vice-President (Administration) or an ad hoc committee appointed by either of these persons;
- (e) the decision of the Executive Director of Information Services & Technology (IST);
- (f) the Registrar;
- (g) the Provost of University College;
- (h) the decision of the Vice-President (Administration); or
- (i) the decision of the President or delegate.

2.9 LOCAL DISCIPLINE COMMITTEE (LDC)

2.9.1 Each Faculty/School, and the University Residences under the jurisdiction of the Office of Housing and Student Life shall establish a standing or, from time to time, ad hoc committee to hear and determine disciplinary

matters appealed to it by Students from a decision of the Dean/Director of a Faculty/School, or the Director of Housing and Student Life for the University Residences under the Office of Housing and Student Life's jurisdiction (hereinafter referred to as "the LDC").

2.9.2 In Faculties/Schools the LDC shall be composed of an equal number of academic staff and Students with a minimum of eight (8) members.

2.9.3 In the case of University Residences, the LDC shall be composed of an equal number of residence staff and Students with a minimum of eight (8) members. Members shall be appointed by the Director of Housing and Student Life with the advice of the appropriate Residence Students' Association.

2.9.4 The Chair shall be elected by and from the membership.

2.9.5 A quorum shall be half the members, with a minimum of four (4) members, ensuring at least one Student and one Faculty member are present.

2.9.6 The Chair shall only vote in the case of tie.

2.10 LDC Hearing Procedures

2.10.1 The Student shall be presumed to be innocent until the evidence presented indicates that, on the balance of probabilities disciplinary action is warranted. The LDC, in weighing the balance of probabilities, shall consider the severity of the alleged incident.

2.10.2 The hearing shall be by way of a trial de novo unless the appeal has been made only in relation to the severity of the disciplinary action imposed.

2.10.3 The Student may appear in person and be represented by an advocate from the office of Student Advocacy, a representative from the University of Manitoba Students' Union, a representative from the Graduate Students' Association, a member of the University community not receiving payment for appearing, or a member of the Student's immediate family. It is the student's sole responsibility to determine the adequacy of their representation.

2.10.4 If the Student wishes to have a lawyer present, the lawyer may only be a non-participating observer at hearings of the LDC, but may represent the Student at hearings of the UDC.

2.10.5 A Student who fails to attend a scheduled hearing may have their appeal considered on the basis of their written submission, verbal submission made by the Respondent, or Respondent's representative as required by the Committee, and the presentation of the Student's designated representative, if any.

2.10.5.1 In such a case, the Student shall be advised that the Committee has made a decision regarding the appeal, and that the Student has ten (10) business days to provide reasons for missing the hearing prior to the implementation of the decision. The Chair shall determine whether the hearing should be re-scheduled based on any submission from the Student. A reasonable attempt will be made to reconvene the same members should the hearing be re-scheduled.

2.10.6 The Student and the Student's designated representative, if any, and the relevant Disciplinary Authority, shall be entitled to receive in writing, at least five (5) working days before the date set for the hearing, the information that has been submitted to the LDC hearing panel by both relevant parties in accordance with the Freedom of Information and Protection of Privacy Act ("FIPPA") and the Personal Health Information Act ("PHIA").

2.10.7 Hearings shall be in camera, unless the Student requests in writing at least 48 hours before the hearing that a hearing be open. If the hearing is open, reasonable seating for observers shall be provided, but observers may not participate in the proceedings.

2.10.8 Notwithstanding section 2.10.7, hearings related to discipline under Policy Respectful Work and Learning Environment (Personal Harassment, Sexual Harassment, and/or Human Rights Discrimination or Harassment) shall be closed.

2.10.9 The Student, or the Student's representative, if any, and the relevant Disciplinary Authority shall have the right to challenge for cause any member of the LDC, the validity of the challenge to be judged by the remainder of the LDC. Such cause may include current teacher-student relationship, bias, or any factor likely to prejudice a fair hearing. Any person, who was directly involved in the original Disciplinary Action, either as a principal in the case or as a Disciplinary Authority, shall be automatically removed from any hearing panel regarding the appeal.

2.10.10 The Student, or the Student's designated representative, if any, and the Respondent, or the Respondent's representative, if any, may call witnesses and submit other evidence. The Student, the Student's representative, if any, and the Respondent, or Respondent's representative, if any, are responsible for arranging their own witnesses. If witnesses are to be called, a witness list must be provided by the Student or the Student's representative, if any, in their original appeal package provided to the Chair and a witness list must be provided by the Respondent or the Respondent's representative, if any, with their response to the appeal.

2.10.11 The Student shall not be required to testify, but if the Student elects to do so, then the Student may be cross-examined by the Respondent, or the Respondent's representative, if any.

2.10.12 The Student or the Student's designated representative, if any, and the Respondent, shall have the right to cross-examine witnesses.

2.10.13 Requests for adjournment shall be honoured within reason.

2.10.14 The LDC may consider confidential information from the University Health Service, Counselling Service, University Chaplains and other similar services which are submitted by these services to the LDC at the request of the Student. Such confidential information submitted to the LDC may only be used for the purpose of the appeal.

2.10.15 A decision to uphold or deny an appeal, in whole or in part, and a decision to take different disciplinary action, in whole or in part, requires a simple majority of LDC Committee members present and voting.

2.10.16 The results of the hearing shall be conveyed in writing, in a timely fashion, by the Chair of the LDC to the Student or the Student's designated representative, if any and to the Respondent or the Respondent's designated representative, as the case may be.

2.10.17 If, after hearing all the evidence, the LDC is satisfied on the evidence presented that the Student concerned has violated or committed an infraction of University regulations or policies through an act of commission or omission for which the Student ought to be disciplined, the LDC may dispose of the matter as set out in the column entitled "Deans, Directors or LDC" in Table 2.

2.11 UNIVERSITY DISCIPLINE COMMITTEE (UDC)

2.11.1 Jurisdiction

The UDC and the hearing panels thereof shall exercise Disciplinary Authority on behalf of the Board of Governors on all Students that are appealing a decision from the Disciplinary Authorities that are set out in section 2.8.5 of this document.

2.12 Composition

2.12.1 The UDC shall be composed of 19 members. The 19 shall include:

a) eight academic staff nominated by the Senate Nominating Committee and appointed by the Board of Governors;

b) seven students nominated by the Student Senate Caucus and appointed by the Board of Governors;

c) the President of the University of Manitoba (or designate), as an ex-officio member;

d) the President of the University of Manitoba Students' Union (or designate), as an ex-officio member;

e) the President of the University of Manitoba Graduate Students' Association (or designate), as an ex-officio member; and

f) the Chair appointed pursuant to section 2.12.4. The Chair shall only vote in the event of a tie.

2.12.1.1 Positions for which no nomination had been received from the Student Senate Caucus by September 15th shall be nominated by the Senate Nominating Committee.

2.12.2 The terms of office shall be three years for academic staff, and one year for students, from June 1 to May 31 (academic staff) and October 14, to October 13 (students). A member whose term of office has expired in any year shall continue in office until a successor has been appointed and shall be eligible for reappointment.

2.12.3 A quorum shall be nine (9) the members, where a minimum of one student and one academic are present.

2.12.4 The Chair shall be appointed by the Board of Governors for a three year term.

2.12.5 The Vice-Chair shall be elected from and by the members for a three year term.

2.13 Terms of Reference

2.13.1 To report annually to the President.

2.13.2 To establish procedures, consistent with this bylaw, for hearing panels.

2.13.3 To hear appeals, either as a committee of the whole or through a hearing panel, from decisions of disciplinary authorities.

2.13.4 To review the Student Discipline Bylaw and related Procedures periodically and, if necessary, to recommend changes to it.

2.14 UDC Hearing Panels

2.14.1 When a matter has been appealed to the UDC, the Chair shall either convene the UDC or convene a hearing panel thereof to hear the appeal.

2.14.2 When an appeal is received based on a fine or the amount ordered, the only decision from which an appeal is taken is the amount levied by way of fine or the amount ordered to be paid by way of restitution; then, if such fine or restitution does not exceed \$250.00, the Chair may, at the Chair's discretion, personally decide the matter, or may convene a hearing panel to hear the appeal.

2.14.3 A quorum shall be a minimum of four (4) members, ensuring at least one Student and one Faculty member are present including the Chair.

2.14.4 The Chair may vote only if there is a tie.

2.14.5 UDC members who have a conflict of interest in a particular case, or have a temporary work conflict, or are otherwise unable to sit, may disqualify themselves from hearing an appeal.

2.14.6 Notwithstanding the foregoing, the Chair of the UDC may, in a particular case, require that a larger hearing panel be convened to consider the matter, provided that such a larger hearing panel maintains the representation as set out in section 2.14.3.

2.14.7 The Chair of the UDC may use his/her discretion in determining whether an appeal will be accepted when the appeal is submitted past the deadline as set out in section 2.7.1 of these Procedures: Student Discipline.

2.14.8 The Chair of the UDC may use his/her discretion to reject an appeal if the appeal appears to be clearly outside the jurisdiction of the UDC, (i.e. matters not dealing with discipline nor related disciplinary actions taken by a lower appeal body).

2.14.9 A staff member from the Office of the University Secretary, will serve as Recording Secretary for the hearings.

2.14.10 All members of the UDC and/or Hearing Panel will keep all materials and information used for the appeal in strict confidence and surrender such materials to the Recording Secretary who will have the materials destroyed by way of confidential shredding.

2.15 Responsibilities of Students submitting an Appeal

2.15.1 Students must submit ALL documentation they will rely on for their appeal and must include the following documentation:

(a) A completed and signed UDC appeal application form, with current mailing address and telephone numbers. The form is available at both the Office of Student Advocacy and the Office of the University Secretary.

(b) A copy of the letter from the last Disciplinary Authority (in most cases an LDC), regarding the last appeal indicating their decision.

(c) A copy of the materials submitted at last level of appeal if different from the materials submitted to the UDC.

(d) A letter to the Chair of the UDC clearly outlining the reason for the appeal and the remedy sought.

(e) All relevant documentation the Student will rely on as support for the appeal.

(f) A listing of all resources or witnesses the student wants in attendance at the UDC hearing and their relevance. [The scheduling of witnesses and resource people is the responsibility of the Student.]

(g) All the above documents must be filed within the time set out in section 2.7.1.

2.16 Responsibilities of Respondents involved in an appeal 2.16.1 Respondents must submit the following:

(a) A written response to the Student's appeal;

(b) ALL relevant documentation the Respondents will rely on as support for their position regarding the appeal; and

(c) A listing of all resource people or witnesses they want in attendance at the UDC hearing and their relevance. [The scheduling of witnesses and resource people is the responsibility of the Respondent.]

(d) All the above documents must be filed within the time set out in section 2.7.6.

2.17 UDC Hearing Procedures

2.17.1 The Student shall be presumed to be innocent until the evidence presented indicates that, on the balance of probabilities disciplinary action is warranted. The UDC, in weighing the balance of probabilities, shall consider the severity of the alleged incident.

2.17.2 The hearing before the UDC hearing panel shall be by way of a trial de novo unless the appeal has been made only in relation to the severity of the disciplinary action imposed.

2.17.3 After an appeal hearing has commenced, the appeal may be withdrawn by the appellant only with leave of the UDC hearing panel.

2.17.4 The Student may appear in person and may be represented by any other person in accordance with the provisions of 2.17.5.

2.17.5 The representative may be an advocate from the office of Student Advocacy, a representative from the University of Manitoba Student's Union, a representative from the Graduate Students' Association, a member of the university community not receiving payment for appearing, or of the Student's immediate family or a lawyer. It is the Student's sole responsibility to determine the adequacy of their representation.

2.17.6 A Student who fails to attend a scheduled hearing may have his/her appeal considered on the basis of their written submission, verbal submission made by the Respondent, or Respondent's representative as required by the Committee, and the presentation of the Student's designated representative, if any.

2.17.6.1 In such a case, the Student shall be advised that the Committee has made a decision regarding the appeal, and that the Student has ten (10) days to provide reasons for missing the hearing prior to the implementation of the decision. The Chair shall determine whether the hearing should be re-scheduled based on any submission from the Student. A reasonable attempt will be made to reconvene the same members should the hearing be re-scheduled.

2.17.7 If the Student intends to have a lawyer present at the hearing, the Student shall notify the Chair of the UDC at least seven (7) working days prior to the hearing. In that event, the UDC hearing panel may also retain the services of legal counsel. A rescheduling of the hearing may be required for all parties to retain legal Counsel.

2.17.8 A representative designated in writing by the Student, subject to 2.17.5 and 2.17.7, may:

(a) attend the disciplinary hearing; and

(b) participate in any disciplinary hearing to the extent of asking questions of anyone in attendance and making submissions to the UDC.

2.17.9 Hearings shall be in camera unless the Student requests in writing at least 48 hours before the hearing that a hearing be open. If the hearing is open, reasonable seating for observers shall be provided, but the observers may not participate in the proceedings.

2.17.10 Regardless of section 2.17.9, hearings related to discipline under Policy: Respectful Work and Learning Environment (Personal Harassment, Sexual Harassment, and/or Human Rights Discrimination or Harassment) shall be closed.

2.17.11 The Student and the Student's designated representative, if any, and the relevant Disciplinary Authority, shall be entitled to receive in writing, at least five (5) working days before the date set for the hearing, the information that has been submitted to the LDC hearing panel by both relevant parties in accordance with the Freedom of Information and Protection of Privacy Act ("FIPPA") and the Personal Health Information Act ("PHIA").

2.17.12 The Student, or the Student's representative, if any, and the relevant Disciplinary Authority shall have the right to challenge for cause any member of the UDC hearing panel, the validity of the challenge to be judged by the remainder of the UDC hearing panel if such a challenge is made at this time. Such cause may include current teacher-student relationship, bias, or any other factor likely to prejudice a fair hearing. Any person, who was directly involved in the original Disciplinary Action, either as a principal in the case or as a Disciplinary Authority, shall be automatically removed from any hearing panel regarding the appeal. The Office of the University Secretary after consultation with the Chair will make every reasonable attempt to address any concerns made prior to the hearing date regarding bias by either the Appellant or the Respondent.

2.17.13 The Student or the Student's designated representative, if any, and the Respondent, or the Respondent's representative, if any, shall have the right to cross-examine witnesses.

2.17.14 The Student shall not be required to give testimony but if the Student elects to do so, the Student may be cross-examined.

2.17.15 The Student, or the Student's representative, if any, and the relevant Respondent, or the Respondent's representative, if any, may call witnesses and submit other evidence. The Student, or the Student's representative, if any, and the relevant Respondent, or the Respondent's representative, if any, are responsible for arranging their own witnesses. If witnesses are to be called, a witness list must be provided by the Student or the Student's representative, if any, in their original appeal submission provided to the Chair and a witness list must be provided by the relevant Respondent, or the Respondent's representative, if any, with their response to the appeal.

2.17.16 Requests for adjournment shall be honoured within reason.

2.17.17 The UDC may consider confidential information from the University Health Service, Counselling Service, University Chaplains and other similar services which are submitted by these services to the UDC at the request of the Student. Such confidential information submitted to the UDC may only be used for the purpose of the appeal and will be treated as other documentation submitted for the appeal hearing as set out in 2.14.10

2.17.18 Subject to paragraph 2.17.11, the Student, the Student's representative and the relevant Disciplinary Authority normally shall have the right to receive a copy of any university document that the UDC or hearing panel considers in relation to the appeal. The Chair of the Committee shall make the final determination on this matter.

2.17.19 A decision to uphold or deny an appeal, in whole or in part, and a decision to take different disciplinary action, in whole or in part, requires a simple majority.

2.17.20 Where the Student appeals the disposition of a harassment or human rights complaint and upon the written request of the Chair of the UDC, the Vice-President (Administration) shall forward to the UDC the report of the Investigation Officer for consideration in the disposition of the appeal. Such confidential information submitted to the UDC may only be used for the purpose of the appeal and will be treated as other documentation submitted for the appeal hearing as set out in 2.14.10

2.17.21 The Chair of the UDC or hearing panel shall, after a decision has been made, report the results of that decision in writing to:

- (a) the Student or the designated representative of the Student, if any;
- (b) the Respondent, or the Respondent's representative, if any, from whose decision the appeal has been heard;
- (c) the Dean/Director of the Faculty/School involved; or the Associate Vice-President (Administration), the Director of Housing, and Student Life, Provost of University College, and the Director of IST as the case may be;
- (d) the Registrar;
- (e) the Vice-President (Administration); or
- (f) any others as deemed relevant.

2.17.22 If, after hearing all the evidence, the UDC or the UDC hearing panel is satisfied on the evidence presented that the description of the circumstance of the disciplinary matter does not precisely describe the alleged conduct, the UDC or the UDC hearing panel may dispose of the matter as set out in column entitled "UDC" in Table 2.

2.18 Records of Disciplinary Actions

2.18.1 A permanent record of disciplinary actions taken under the ("Bylaw: Student Discipline" and "Procedures: Student Discipline"), shall be maintained in the Office of the University Secretary who may, at the request of an appropriate Disciplinary Authority, release the information to that authority for consideration when making a subsequent disciplinary decision.

2.19 ANNUAL REPORTS

2.19.1 The Annual Report of the UDC will contain all the disciplinary matters that have occurred on campus from September 1 to the following August 31 of each Calendar year.

2.19.2 Members of the academic staff and Department Heads, who have dealt with a disciplinary matter, shall report to the Dean/Director of the Faculty/School to which each student belongs, setting out the nature of the offence and particulars of the penalty and the student identification number if applicable. The student identification number is only used for administrative purposes to reduce the possibilities of errors in duplicate reporting and will not be included in the annual report.

2.19.3 Disciplinary authorities (Senior Administrators, Deans, Directors and Heads of Administrative Units), except members of the academic staff and department heads, shall report all disciplinary matters considered by or reported to them to the Chair of the UDC by October 1 of each year. The report shall contain the number of disciplinary matters referred to such person or body, the nature of the offences and particulars of the dispositions, and such further matters as may be required by the UDC.

2.19.4 The Recording Secretary of the UDC shall prepare and the Chair shall submit a report to the University President by December 1 in each year setting out both a summary of the reports submitted to the Chair of the UDC as well as particulars of the number, nature and disposition of cases appealed to the.

2.19.5 Members of the University community, shall be kept informed of the nature and disposition of cases dealt with under this Bylaw as the Annual Report shall be presented to the both the Senate and the Board of Governors annually. The names of students disciplined shall not normally be made public.

Inappropriate or Disruptive Student Behaviour

1.0 Reason for Policy

In the event of a student or students exhibiting inappropriate or disruptive behaviour, the following policy can be implemented.

2.0 Policy Statement

2.1 General

Although this policy is directed to dealing with students who exhibit inappropriate or disruptive behaviour, there are some general statements which should be made:

2.1.1 The vast majority of students will complete their academic life at the University acting appropriately and without causing disruptions to their fellow students or to the University. This policy is not directed towards individual students who have a mental illness, provided their behaviour is neither inappropriate nor disruptive.

A staff member may notice that an individual student is exhibiting debilitating stress, even though he/she is not acting disruptively. In that case, the observation should be addressed with the student and, if appropriate, the student should be referred for voluntary counselling.

2.1.2 "Inappropriate or disruptive behaviour is behaviour which persistently interferes with the academic or administrative activities of the University

(and/or) which inhibits the ability of other students to learn and of instructors to teach." --Amanda, G. "Dealing with the Disruptive College Student: Some Theoretical and Practical Consideration", College Health, April 1986.

Such behaviours would include but would not be limited to the following:

- a) threats to the physical safety of the individuals or others;
- b) verbal threats to or abuse of students or University personnel;
- c) recurring and willful damage of University property;
- d) inappropriate or disruptive behaviour as a result of misuse of drugs or alcohol on University property; and
- e) actions which habitually interfere with the learning environment or requires the inordinate time and attention of faculty and staff.

2.1.3 Where individual students act inappropriately or disruptively:

a) The majority of such students will accept personal responsibility for their inappropriate or disruptive behaviour, and will accept appropriate referral for voluntary counselling. For the most part, staff members need only use the "Normal Procedure for Dealing with Inappropriate or Disruptive Behaviour" set out below.

b) Information and input received from professionals in the mental health field and professional practitioners at the University would suggest that the numbers of such students who do not accept personal responsibility or appropriate voluntary counselling are small. Where a student to whom this policy should apply is identified by a staff member, he/she will use part 2 of the "Normal Procedure"; and if appropriate in more extreme cases involving physical or mental harm, he/she should use the "Procedure for More Extreme Behaviour".

c) Where an officer(s) of the University believes that a student is inappropriately involving more than one of the various service and administration offices of the University, he/she shall request the Vice-Provost (Students) to initiate a staff conference to facilitate communication and problem resolution.

d) Information regarding an acute problem of inappropriate or disruptive behaviour which is disclosed during the student application process, should be referred to the Director of Admissions or the Dean of Graduate Studies as appropriate. If the information is of serious concern to the respective Director of Admissions or the Dean of Graduate Studies, he/she may seek the advice of the University Legal Counsel and may initiate a staff conference.

2.2 Normal Procedure for Dealing with Inappropriate Behaviour

When a student acts inappropriately or disruptively, staff members should, where appropriate:

2.2.1 Make timely voluntary counselling referrals through existing support services at the University. Such services include:

- Counselling Service
- Psychological Service Centre,
- University Health Services
- Faculty (of Medicine) Counselling Services

2.2.2 Use the existing Student Discipline By-law and other policies, rules and regulations where additional action is necessary to deal with inappropriate or disruptive behaviour or students.

2.3 Procedure for More Extreme Behaviour

2.3.1 If a staff member is of the opinion that a student is exhibiting a behaviour of a nature or quality that likely will result in:

- a) Serious harm to student,
- b) Serious harm to another person, or
- c) substantial deterioration of the student's health;

The staff member shall, in addition to using the "Normal Procedure", immediately refer the matter to his/her respective Dean, Director, or Administrative Unit Head.

2.3.2 If the respective Dean, Director, or Administrative Unit Head is of the same opinion, he/she shall:

- a) Advise the student to seek professional help; and
- b) Contact the Director of University Health Services if the student refuses to voluntarily seek professional help. The Director of University Health Services or designate shall follow mental health legislation and regulations when determining whether or not involuntary psychiatric assessment is advisable.
- c) In addition to the foregoing procedure, the Campus Police should be contacted immediately if it is deemed necessary for the protection of the student, other persons, or property. It should also be noted that, subject to the Student Discipline By-law, the President may at any time make an order restricting or prohibiting access by a student to any University property (see policy entitled Student Discipline Bylaw).

This policy is available online at http://umanitoba.ca/admin/governance/governing_documents/students/279.html.

Violent or Threatening Behavior

1.0 Reason for Policy

To state clearly the university's refusal to tolerate violence, threats or intimidation and to describe possible consequences of such action or actions.

2.0 Policy Statement

The University of Manitoba is committed to creating and maintaining a safe, positive and productive learning and working environment. Therefore, the University will not tolerate threats, intimidation or violence. Individuals who are found to have engaged in such activities will be subject to disciplinary action which may result in termination of employment, expulsion from educational programs and a ban from university property.

2.1 Definitions

For the purpose of this policy, violent or threatening behavior shall be deemed to include intimidation.

- a) **Threats** include verbal and/or physical actions that create fear or apprehension of bodily harm.
- b) **Intimidation** is defined as conduct or harassment that disrupts the work environment and/or results in a reasonable fear for personal safety.
- c) **Violence** is defined as physical attack(s) that may cause injury and/or verbal attacks that may cause emotional trauma.

This policy is available online at http://umanitoba.ca/admin/governance/governing_documents/community/669.html.

Hold Status

Academic Calendar content:

Students will be placed on “Hold Status” if they incur any type of outstanding obligation (either financial or otherwise) to the university or its associated faculties, schools, colleges or administrative units.

Some typical reasons for holds are:

- Program/course selection must be approved
- U1 student must transit into the Faculty of Arts or Science
- Required Major, Minor, and/or Concentration declaration
- Transcripts or documents required from other institutions
- Unpaid tuition and/ or other university fees
- Outstanding library books and/or fines
- Parking fines
- Pending disciplinary action

Depending on the reason for the hold, limited or no administrative or academic services will be provided to students on Hold Status until the specific obligations have been met.

Students must clear their Holds prior to registration by contacting the appropriate office. Students with outstanding financial obligations to the university will not be permitted to register again until the hold has been cleared or permission to register has been obtained from the Office of the Vice-President (Administration).

Advisor and Program Holds

Students enrolled in some programs are required to discuss their course selections and program status with an advisor prior to registration. Advisor and Program Holds normally only restrict registration activity; other administrative services remain available.

Students can verify whether their program required consultation with an advisor by checking their faculty/school section of the Academic Calendar, or by viewing their Registration Time and Status in Aurora.

More details about being on Hold can be found online at <http://www.umanitoba.ca/student/records/registration/steps/652.html>.

Electronic Communications with Students

Part I

Reason for Policy

1.1 The University of Manitoba (the “University”) is committed to using available technology to communicate among members of the University community. It recognizes an expanding reliance on electronic communication by academic and administrative staff of the University with students due to the convenience, speed, cost-effectiveness, and environmental advantages it provides. This Policy will define the proper use of electronic communications between University academic or administrative staff and students. Electronic communications may include, but are not limited to, electronic mail, electronic bulletin boards, and web sites.

1.2 When communicating by email it is important to ensure that the email is being directed to the intended individual. In an effort to protect confidentiality and privacy in electronic communications and ensure compliance with applicable legislation and policies including *The Freedom of Information and Protection of Privacy Act* (“FIPPA”), *The Personal Health Information Act* (“PHIA”) and the University’s Computer Usage Policy, all official electronic communications must be directed to University of Manitoba email accounts (see section 2.4).

Part II

Policy Content

2.1 The University requires all students to activate an official University email account.

2.2 The University authorizes the use of electronic communication for official communication between university staff and students, subject only to the confidentiality and privacy provisions outlined below.

2.3 All students are expected to comply with established guidelines and procedures that define the proper use of electronic communications as outlined in this policy and in the University’s Use of Computer Facilities Policy.

Provision of University of Manitoba email accounts

2.4 The University will provide all students with an official University email address. University email accounts must be obtained by students through the Claim ID process at: <http://umanitoba.ca/claimid>. The University email account claimed will be the address listed in University directories and contact information available to staff and faculty. The University will direct all official email communications to the official University email account.

Appropriate use of University email

2.5 Certain University electronic communications may be time-critical. Students are responsible for checking their University email account on a regular basis in order to stay current with University communications.

2.6 In general, electronic communications, including email, are not appropriate for transmitting sensitive or confidential information, including personal information, unless an appropriate level of security matches its use for such purposes:

- (a) Confidentiality regarding student records is protected under FIPPA. All use of electronic communication, including use for sensitive or confidential information, must be consistent with the University FIPPA and PHIA Policy;
- (b) Personal Health Information should not be transmitted via electronic communication at any time;
- (c) Email shall not be the sole method for notification of any legal action.

Access to University email

2.7 Students who are not in possession of a home computer or laptop, or do not have access to a computer at work, can use computers available in campus labs or in their local library.

Use of University email for instructional purposes

2.8 Academic staff may determine the extent to which electronic communication will be used in their classes. It is highly recommended that if academic staff have electronic communication requirements and expectations, these are specified in course syllabi, and that all assignments sent electronically (including by email) be accepted only when sent from a University email account. Academic staff may reasonably expect that students are accessing their University email account, and may use electronic communication for their courses accordingly.

This policy can be found online at http://umanitoba.ca/admin/governance/governing_documents/community/electronic_communication_with_students_policy.html.

Final Examinations and Final Grades

Part I

Reason for Policy

1.1 To establish the University of Manitoba's policy relating to final examinations and grades and to oversee the procedures related to final examinations, deferred and supplemental examinations, and final grades.

Use of Terms

1.2 Final Examination: A final examination is a test scheduled within an examination period which serves as the final evaluation of student performance in a course.¹

1.3 Deferred Examination: A deferred examination is a privilege that may be granted to a student:

- (a) who is unexpectedly unable to write a final examination as scheduled; or
- (b) who knows in advance that he or she is unable to write an examination at the scheduled time. Students may request a deferred examination(s) on the grounds that they are unable to write said examination(s) due to:
 - (i) a medical condition; or
 - (ii) participation in an inter-university, provincial, inter-provincial, national or international scholastic or athletic event; or
 - (iii) religious obligations.

Making a false or misleading claim regarding a deferred examination may be considered an offence under the Student Discipline Bylaw. Penalties may range from a failed grade in the course to suspension or expulsion.

(c) Supplemental Examination: A supplemental examination is the re-writing of a final examination and is a privilege offered by some faculties, schools, and academic units to students who have not achieved the minimum result in required courses. Within the conditions established by the student's faculty, a student who is granted a supplemental examination is given the opportunity to rewrite a final examination. The impact of a supplemental examination on the final grade is to be determined by regulations within the faculty.

Part II

Policy Content

2.1 The Senate has determined that each faculty or school or academic unit shall be responsible for establishing regulations governing evaluation procedures for students enrolled in its courses.

2.2 Those relevant items listed under procedures for final examinations, deferred and supplemental examinations, and final grades shall be incorporated into the regulations established by faculties, schools or academic units.

2.3 Faculties, schools, and academic units shall submit regulations and amendments to evaluation procedures to Senate for its approval via the Senate Committee on Instruction and Evaluation.

2.4 The Senate has determined that each faculty or school or academic unit shall adopt a formal policy for the appeal of grades given for term work, in that faculty or school or academic unit, that has been returned or made available to students before the last day of classes. Policies adopted by a faculty or school or academic unit, after review by the Senate Committee on Instruction and Evaluation, shall be forwarded to Senate for information.

¹ University of Western Ontario, Academic Handbook, Issued 2009 03

This Policy and the Procedures below are available online at http://umanitoba.ca/admin/governance/governing_documents/academic/1299.html.

Deferred and Supplemental Examinations Procedures

Part I

Reason for Procedure

1.1 To set out procedures secondary to the Policy entitled "Final Examinations and Final Grades", in connection with deferred examinations and supplemental examinations.

Part II

Procedural Content

Deferred Examinations

2.1 A deferred examination is a privilege that may be granted to a student who is unexpectedly unable to write an examination as scheduled or a student who knows in advance that he or she is unable to write an examination at the scheduled time. Making a false or misleading claim may be considered an offence under the Student Discipline Bylaw. Penalties may range from a failed grade in the course to suspension or expulsion.

2.2 Students who are unable to write an examination due to an unexpected illness must file an application for a deferred examination with the advising office of the faculty, school, or academic unit (including University 1 or Extended Education) in which they are registered, setting out the reasons for the deferral. The application must normally be filed within forty-eight (48) hours of the scheduled date of the missed examination or, in a case where more than one examination was missed, within forty-eight (48) hours of the scheduled date of the last examination missed. The application must be accompanied by a medical certificate or otherwise appropriate documentation certifying the reason for the deferral, the inability of the student to write the examination at the regular scheduled time and, where possible, an indication of the period of incapacity. Based on the evidence, the Dean or Director shall decide whether the application is approved. Based on the student's ongoing incapacity or other exceptional circumstances a deferral may be granted to a student who files an application after the forty-eight (48) hour period has lapsed.

2.3 Students may request a deferred examination(s) on the grounds that they are unable to write said examination(s) due to:

- (a) participation in an inter-university, provincial, inter-provincial, national or international scholastic or athletic event;
- (b) religious obligations; or
- (c) a medical condition.

Students requesting a deferred examination due to a known condition as listed above must file an application normally twenty (20) working days prior to the day of the scheduled examination with the advising office of the faculty, school, or academic unit (including University 1 or Extended Education) in which they are registered.

2.4 Initial approval of all deferred examinations by the student's faculty, school, or academic unit shall be conditional upon verification that the student has completed all required components of the course and that it is mathematically possible for the student to pass the course by writing the final examination. Approval will be rescinded if these conditions are not met.

2.5 Any students requesting a deferred examination(s) on the grounds that said examination(s) conflict(s) with vacation or holiday plans shall not normally be granted a deferral.

2.6 If a student becomes ill or receives word of a family emergency during the course of an examination and is unable to continue, the student must report at once to the Chief Invigilator, hand in the examination, and

indicate either that they wish to submit their examination paper as: (1) completed; or (2) not completed and with the right to request a deferred examination. The Chief Invigilator must record all notifications. Students leaving an examination early in compliance with this section are eligible to apply for a deferred examination under the provisions of section 2.2. Only students who do not complete the examination and who notify the Chief Invigilator of the reason they cannot complete the examination shall be eligible to apply for a deferred examination.

2.7 No faculty, school, or academic unit shall have regulations that compel students to accept deferrals for any or all examinations or examination series.

2.8 When an application for a deferred examination is approved by the faculty, school, or academic unit, the head of the unit in which the course is offered, in consultation with the instructor concerned, shall schedule the deferred examination to take place normally within thirty (30) working days from the end of the examination series from which the examination was deferred, taking into account the following:

(a) If a deferred final examination is granted for a course that is a pre-requisite to another course or courses, students may be permitted to remain registered in those affected courses. However, if the examination is written after the revision deadline and the pre-requisite course is not satisfied, the student will be withdrawn from all courses requiring it. Faculties, schools, and academic units are encouraged to schedule deferred examinations in pre-requisite courses early in a term to ensure that results are available prior to the course revision deadline.

(b) Faculties, schools, and academic units are requested to schedule deferred examinations as soon as possible for potential graduands so that final grades may be available in sufficient time to meet planned graduation deadlines.

2.9 In the event students are unable to write the examination as outlined in section 2.8 the following may take place:

(a) the deferred examination shall be written at the next scheduled examination series in which the course is offered (unless the faculty, school, or academic unit chooses to make other arrangements); subsequent requests for re-deferral may result in the student being denied registration in the current or a future term until all outstanding examination obligations have been completed;

(b) the head of the academic unit in which the course is offered, in consultation with the instructor concerned, may assign a grade without examination. In such cases, the grades shall be assigned on the basis of the term work and assignments. Faculty or School Councils shall establish the procedure by which such a decision will be implemented.

(c) the deferred examination must be written within a time frame that enables the examination to be written and graded, and, if necessary, a supplemental examination to be written and graded, before the start of the next academic term in such cases in which the progression rules of the student's program require the successful completion of an entire academic year before a student is eligible to proceed in the next academic year.

2.10 Students who, for medical reasons, withdraw from a program or receive deferred examination privileges for all final examination series, or who fail to write deferred examinations as scheduled, may be prevented by the faculty, school or academic unit from reregistration until they have established, through appropriate medical consultation, their fitness to resume studies.

Supplemental Examinations

2.11 Supplemental Examinations are offered by some faculties to students who have not achieved the minimum result in required courses. Within the conditions established by the student's faculty, a student who is granted a Supplemental Examination is given the opportunity to rewrite a final examination. The impact of a supplemental examination on the final grade is to be determined by regulations within the faculty.

2.12 The results of supplemental examinations must be reported to the faculty or school council.

Final Examinations Procedures

Part I

Reason for Procedure

1.1 To set out Procedures secondary to the Policy entitled "Final Examinations and Final Grades" in connection with the method of conducting final examinations. A final examination is a test scheduled within an examination period which serves as the final evaluation of student performance in a course¹.

1 University of Western Ontario, Academic Handbook, Issued 2009 03

Part II

Procedural Content

Information Provided to Students

2.1 Within the first week of the academic term, students shall be informed of the method of evaluation to be used in each course, as specified in the Responsibilities of Academic Staff with Regard to Students Policy.

Examination General Regulations

2.2 Any test or tests, which have an aggregate value of more than 20% of the total value of the course may not be scheduled to take place during the fourteen (14) calendar days ending with the last day of classes in the term during the regular session as defined in the University General Calendar, or during the last two (2) classes of Summer Evening and the last three (3) classes for Summer Session (see Responsibilities of Academic Staff with regard to Students Policy).

2.3 No project or assignment may be announced during the periods outlined in section 2.2 unless contained in the course outline or syllabus required to be provided to all students in the course during the first week of classes (see Responsibilities of Academic Staff with Regard to Students Policy).

Final Examinations

2.4 No final examinations or the submission of take-home final examinations shall be scheduled to occur prior to the examination periods as described in the General Calendar except with the expressed joint consent of the Deans and Directors involved.

2.5 The weight of each question shall be clearly indicated on the examination paper.

2.6 The name of the instructor or course coordinator shall be clearly indicated on the examination paper.

2.7 Faculties, schools or academic units electing to use the services of the Registrar's Office shall adhere to the regulations outlined in section 2.8 below.

Regulations for Examinations Administered by the Registrar's Office

2.8 If a faculty, school, or academic unit elects to use the services of the Registrar's Office to schedule and administer examinations, the following regulations shall apply:

(a) Requests for examination scheduling must be submitted five (5) working days prior to the Revision Deadline for the term in which the course is offered.

(b) Examinations shall be of one, two or three hours duration.

(c) The faculty, school, or academic unit shall be responsible for supplying the number of examination invigilators as deemed necessary by the Registrar's Office.

(d) Examination question papers must be submitted to the Registrar's Office ten (10) calendar days in advance of the examination.

(e) The Registrar's Office shall make a record of any issues arising during the conduct of examinations and bring any matters to Senate that it deems to be significant.

(f) The responsibilities of invigilators (see section 2.14-2.16) shall apply for examinations administered by the Registrar's Office.

Regulations for Examinations Administered by Student Accessibility Services

2.9 Examinations administered by Student Accessibility Services are additionally regulated by the Accessibility for Students with Disabilities Policy.

Invigilation of Examination

2.10 The faculty, school, or academic unit shall supply such number of examination invigilators as is necessary. At a minimum, there shall normally be one invigilator for the first sixty (60) students and one additional invigilator for each fifty (50) students thereafter.

2.11 Invigilation of examinations shall normally be carried out by the instructor of record. In addition, university employees appointed as invigilators by a faculty, school, or academic unit may assist.

2.12 An instructor must be available during the whole of his or her examination even though he or she is not invigilating that examination.

2.13 In view of the responsibilities with which a Chief Invigilator has been charged, selection of Chief Invigilators for large examination halls shall ensure that they are persons at a more senior rank than that of teaching assistants.

Responsibilities of Invigilators and Students

2.14 Prior to an Examination

(a) Invigilators are required to report to the Registrar's Office for examinations administered by the Registrar's Office for supervisory duties not later than thirty minutes (one half hour) prior to the scheduled time for each examination. Examination material, supervisory lists, and the name of the invigilator in charge will be distributed.

(b) At each seat in the examination room, the invigilator should place the appropriate material required for the examination.

(c) The time of commencement of the examination shall be announced.

(d) Each student shall display his or her student card and photo identification and shall sign an attendance form.

2.15 Conduct During Examination

(a) Any student departing from accepted procedure during an examination must be reported immediately to the Chief Invigilator.

(b) The Chief Invigilator shall allow the student to continue writing the examination except as noted in subsection 2.15(g).

(c) The Chief Invigilator shall record the nature of the alleged infraction on the form provided by the Registrar's Office.

(d) The Chief Invigilator shall complete the introductory section of the form immediately and shall ask the student to sign at that point in order that the student provides positive identification.

(e) The Chief Invigilator shall advise the student, when the identification portion of the form has been signed, of his or her right to submit a separate report on the circumstances of the incident to the Dean or Director of his or her faculty, school, or academic unit.

(f) The Chief Invigilator shall ask that the student read the form containing full details of the incident by or at the close of the examination. The form, thus completed, shall be sent to the Registrar's Office for distribution to the Dean or Director, to the student and to the invigilators involved in the incident.

(g) Notwithstanding the above, in those cases in which the behaviour of a student is disruptive to others writing the examination, or to the conduct of that examination, the Chief Invigilator may, after due warning, require that student to cease writing the examination and leave the examination hall. For such cases the form provided by the Registrar's Office must be completed, to the extent possible, in the manner outlined in the above paragraph.

(h) The Chief Invigilator shall ensure that no student leaves the room without signing the roll and submitting a script. In addition:

(i) No student shall be permitted to leave the examination room during the first thirty (30) minutes of an examination.

(ii) No student shall be permitted to enter the examination room after at least one other student who is writing the same examination has left the examination room.

(iii) A student who arrives to write an examination more than thirty (30) minutes after the start of the examination will not be permitted to write the examination.

(iv) Any student who, due to late arrival, is not permitted to write an examination will be asked to complete the appropriate form and will then be advised to contact the Office of his or her Dean or Director not later than the next business day to discuss possible alternatives.

(v) No student scheduled to write an examination in a centrally administered location who arrives late for the examination shall be permitted to write longer than the scheduled end-time for that examination. For those examinations not centrally scheduled, flexibility may be allowed at the discretion of the unit administering the examinations, but all students in a given course with commonly examined sections should have equal opportunities to take advantage of whatever flexibility is afforded.

(vi) Should a technical irregularity occur in an examination, such as misprinted information or wrong instruction, invigilators supervising the same examination in other locations must be informed. The Registrar's Office should be contacted immediately should this or other similar problems arise in an examination room.

(vii) If a student becomes ill or receives word of a family emergency during the course of an examination and is unable to continue, the student must report at once to the Chief Invigilator, hand in the examination, and indicate either that they wish to submit their examination paper as: (1) completed; or (2) not completed and with the right to request a deferred examination. The Chief Invigilator must record all notifications. Students leaving an examination early in compliance with this section are eligible to apply for a deferred examination under the provisions outlined in section 2.2 of the Deferred and Supplemental Examinations Procedures. Only students who do not complete the examination and who notify the Chief Invigilator of the reason they cannot complete the examination shall be eligible to apply for a deferred examination.

Note: Documentation verifying the illness may be required.

2.16 At the Close of the Examination

- (a) The time of conclusion of the examination should be announced.
- (b) Every candidate must turn in an examination script before leaving the room to the invigilator located at the exit of the room.
- (c) A count must be made of the scripts by course number and balanced against the total for each course examination indicated on the nominal roll.
- (d) No student may be permitted to re-enter an examination room until all examination scripts have been collected.
- (e) The nominal roll must be returned to the Registrar's Office at the conclusion of the examination session. Examination scripts may be either received by the instructor(s) concerned or be delivered to the Registrar's Office.

Audio Visual Supports

2.17 The use of audio visual supports to display examination or test questions shall be prohibited with either of the following two exceptions:

- (a) Audio visual supports may be used to display examination questions where arrangements have been made to display all questions simultaneously for the entire examination period; or
- (b) In courses where time limited identification is a legitimate and specified part of the examination process, the use of overhead or slide projectors, or other audio visual supports for display purposes shall be permitted.

Examinations using audio visual supports should not be scheduled with other examinations.

Unauthorized Materials in Examinations

2.18 Students are not permitted to access any unauthorized materials during an examination. This includes but is not limited to calculators, books, notes, pencil cases, or any electronic device capable of wireless communication and/or storing information (e.g. computer, dictionary, translator, cell phone, pager, PDA, mp3 units, etc.). However, students may bring in such materials or devices when permission has been given by the instructor.

Security

2.19 Students may store valuables and personal items under the desk or chair of the examination room but may not have access to these items during the examination. Items stowed under the desk or chair must not obstruct the aisles of the examination room. Students must ensure that all items required for the examination are placed on top of the desk prior to the start of the examination.

Posting Examination Answers

2.20 Answers to examination questions shall not be posted prior to the conclusion of the examination.

Student Access to Final Examinations

2.21 In order to allow proper feedback, students shall have an opportunity to read their own final examination script and any comments written on it prior to the deadline for a formal grade appeal, but only in the presence of the instructor or a staff member appointed by a faculty, school, or academic unit.

2.22 Notwithstanding section 2.21 above, there is no obligation upon the faculty, school, or academic unit to make machine-scored examination answer sheets available for consultation by students. It is expected that faculties, schools, and academic units will provide appropriate means of feedback to students in such circumstances and, where practicable, will encourage instructors to discuss selected questions and answers.

Final Grades Procedures**Part I****Reason for Procedure**

1.1 To set out procedures secondary to the Policy entitled "Final Examinations and Final Grades", in connection with:

- (a) Final grades;
- (b) Incomplete grades;
- (c) Continuing grades;
- (d) Appeal of final grades; and
- (e) Grading systems.

Part II**Procedural Content****Final Grades**

2.1 Departments are required, subject to faculty and school regulations, to establish a procedure for the review and approval of final grades prior to submission to the Registrar.

2.2 All final grades must be submitted in accordance with the instructions received from the Registrar.

2.3 Final grades will be released to students by the Registrar's Office as they are submitted by faculties and schools, except where alternate arrangements have been made between the Dean or Director and the Registrar.

2.4 To protect the confidentiality of students' personal and private information, neither faculties, schools, academic units, nor instructors may post or publicly release grades.

Incomplete Grades

2.5 A student who is unable to complete the term work prescribed in a course may apply to the instructor, on or before the End Date for the term in which the course is offered (as set out in the Academic Schedule), for consideration of a grade classification of Incomplete.

2.6 The student is expected to write the final examination if one is scheduled for the course. It is possible to request a deferred examination based upon the conditions stated in the Deferred and Supplemental Examinations Procedures.

2.7 Taking into account the results of the final examination, the value of the term work completed, and the extent of the incomplete term work, the instructor shall calculate the temporary grade using a zero value for incomplete work. The grade code reported will consist of the appropriate letter grade followed by a space followed by the letter "I".

2.8 In addition to the grade, the recommendation should indicate the reason(s) for consideration being given, a description of the outstanding work to be completed, and the date by which the work must be submitted. The following maximum extensions are allowed:

- (a) for courses terminated in April – August 1st
- (b) for courses terminated in August – December 1st
- (c) for courses terminated in December – April 1st

2.9 If the final grade is not reported within one month of the extension deadline, the letter "I" will be dropped and the grade remains as awarded. The student's opportunity to improve the grade will have lapsed.

2.10 In no case will the satisfaction of the Incomplete requirements cause a grade to be lowered.

2.11 When specific circumstances warrant, Deans or Directors may extend the date by which an Incomplete must be cleared. Instructors must formally request such an extension prior to the elapse of the maximum deadline date. In addition, the Registrar's Office must be notified of the extension.

Continuing Grades

2.12 For those graduate level courses which continue beyond the normal academic term, which are being taken by students enrolled in the Faculty of Graduate Studies, the instructor shall recommend that a grade of "CO" be used until such time as a final grade can be established.

Appeal of Term Work

2.13 The appeal of term work returned or made available to students before the last day of classes shall be subject to policies and procedures established by Faculty/School Councils.

Appeal of Final Grades

2.14 A student may enter an appeal, through the Registrar's Office, for assessment of one or more grades. A student wishing to make a final grade appeal must do so by the deadlines set for the following terms and sessions:

- (a) On a Fall Term course grade the deadline is fifteen (15) working days following the first day in January which the University is open.
- (b) On a Winter Term course grade the deadline is fifteen (15) working days after Victoria Day.
- (c) For Summer Session course grades the deadline is thirty (30) working days following the end of the examination period.
- (d) For all other programs the deadline is twenty (20) working days following the end of the examination period.

Applications must be made on a prescribed form obtainable from the Registrar's Office. On payment of the prescribed fee, such appeals shall be forwarded to the Head of the academic unit in which the course is offered.

2.15 Examination scripts are to be held by the teaching unit responsible for the course until six (6) months after the expiration of the appeal period. In individual cases where appeals have been initiated, the holding period will be extended accordingly.

(a) Each faculty, school, or academic unit is responsible for arranging the proper processing of the appeals, and shall report the results of appeals to the Registrar's Office.

(b) Normally the re-evaluation of a grade shall be undertaken by the instructor(s) responsible for the particular course (section) in consultation with at least one other instructor – in the same or related subject area – who shall independently assess the script and/or other relevant material.

(c) In the event that an appealed grade has been awarded on the basis of an examination only, the entire script will be re-read.

(i) Except as noted below, where the grade has been awarded on the basis of an examination in combination with term work, the examination script will be re-read and term mark calculation reviewed.

(ii) In the case of grades awarded solely on the basis of term work, only the calculation will be reviewed.

(iii) In instances where term work has not been returned to students before the last day of classes, that term work shall also be re-read.

(d) Grades subject to appeal may not be lowered.

(e) In cases where appeals have resulted in a change of grade, the application fee will be refunded to the student.

(f) Teaching units shall be responsible for arranging to destroy examination scripts held by them in accordance with this section, ensuring in the process, the confidentiality of the document.

(g) The result of an appeal must be submitted to the Registrar's Office within thirty (30) days of the deadline for a student to submit the appeal being considered. In the event this deadline cannot be met, the academic unit must notify the Registrar's Office with reasons for the delay. In no case shall an appeal be delayed longer than sixty (60) days.

(h) Students who wish to appeal the results of a grade appeal based on procedural grounds must file an appeal with the office the Dean/Director of the teaching unit. A request for a review of appeal procedures must be filed within ten (10) working days of receipt of notification of the result of a Grade Appeal.

Grading Systems

2.16 Faculties and schools may investigate various grading systems in order that a better understanding is reached regarding the relationship between grading systems, evaluation processes, student performance and program objectives. Prior to taking action based on such investigation, the faculty or school must submit its proposal to the Senate Committee on Instruction and Evaluation for its approval.

GENERAL ACADEMIC REGULATIONS

Introduction

This chapter contains the regulations and requirements that apply to all students, regardless of faculty or school.

Each faculty and school has its own supplementary regulations and requirements. These are published in the faculty or school chapters of the Academic Calendar. Some faculties and schools also have additional regulations and requirements governing their programs; these are available from the faculty or school.

It is the responsibility of each student to be familiar with the academic regulations and requirements of the University of Manitoba in general and of the specific academic regulations and requirements of their faculty or school of registration. Accordingly, students are asked to seek the advice of advisors in faculty and school general offices whenever there is any question concerning how specific regulations apply to their situations.

Residence and Written English and Mathematics Requirements

1. Residence Requirements For Graduation

Each faculty and school recommends to the Senate the number of credit hours each student must complete in order to graduate from its programs. Senate also requires each student to complete a minimum number of credit hours at the University of Manitoba -- this is called the "residence requirement."

Unless otherwise stated in faculty and school chapters, the minimum residence requirement of the University of Manitoba is the work normally associated with one year in the case of programs of three years' duration, and two years for programs of four years' duration. Some faculties and schools may have additional residence requirements specified in their program regulations. However, in all cases, the residence requirement is assessed following an appraisal of the educational record of the student applying to transfer credits from another institution or applying to earn credits elsewhere on a letter of permission. The residence requirement is not reduced for students whose "challenge for credit" results in a passing grade.

2. University English and Mathematics Requirements for Undergraduate Students

All students are required to complete, within the first 60 credit hours of their programs, a minimum of one three credit hour course with significant content in written English, and a minimum of one three credit hour course with significant content in mathematics.

Some degree programs have designated specific written English and mathematics courses to fulfil this requirement.

Some degree programs require that the written English and/or mathematics requirements be completed prior to admission.

See the program descriptions in the faculty and school chapters of the Academic Calendar for details.

Exemptions to the Written English and Mathematics Requirement:

- All students with completed baccalaureate degrees and who transfer into any program to which these requirements apply.
- Registered Nurses entering the Bachelor of Nursing Program for Registered Nurses.
- Students admitted before the 1997-98 Regular Session.

- Written English exemption only: Students transferring from Université de Saint-Boniface who have completed a written French requirement (at the university) before transferring to the University of Manitoba will be deemed to have met the written English requirement.

3. Approved English and Mathematics Courses

A complete list of all courses which satisfy the university written English and mathematics requirement is provided below. (When searching for courses in Aurora, students may search Course Attributes for courses that satisfy the written English and Mathematics requirements).

Written English Courses	
AGRI 2030	Technical Communications (3)
ANTH 1520	Critical Cultural Anthropology (3)
ANTH 2020	Relatedness in a Globalizing World (3)
ANTH 2230	Anthropology of Travel and Tourism (3)
ANTH 3330	Sex and Sexualities (3)
ARTS 1110	Introduction to University (3)
ASIA 1420	Asian Civilization to 1500 (3)
ASIA 1430	Asian Civilization from 1500 (3)
CDN 1130	Introduction to Canadian Studies (6)
CATH 1190	Introduction to Catholic Studies (3)
CATH 2010	Literature and Catholic Culture 1 (3)
CATH 2020	Literature and Catholic Culture 2 (3)
ENGL 0930	English Composition (3)
ENGL 0940	Writing about Literature (3)
ENGL 1XXX	All English courses at the 1000 level
ENGL 2XXX	All English courses at the 2000 level
ENGL 3XXX	All English courses at the 3000 level
ENGL 4XXX	All English courses at the 4000 level
ENVR 2270	Environmental Problem Solving and Scientific Thinking (3)
FAAH 2930	Writing about Art (3)
FORS 2000	Introductory Forensic Science
GEOG 2900	Geography of Canadian Prairie Landscapes (3)
Erratum	*Removed Course - 09/14/2023*
GEOG 3580	Landforms (6)
Erratum	*Removed Course - 09/14/2023*
GEOL 3130	Communication Methods in the Geological Sciences (3)
GMGT 1010	Business and Society (3)
GMGT 2010	Business Communications
GPE 2700	Perspectives on Global Political Economy (3)
GRMN 1300	Masterpieces of German Literature in English Translation (3)
GRMN 1310	Love in German Culture in English Translation (3)
GRMN 2120	Introduction to German Culture from 1918 to the Present (3)
GRMN 2130	Introduction to German Culture from the Beginnings to 1918 (3)
GRMN 2500	Special Topics in German in English Translation (3)
GRMN 2510	German Fairy Tales from the Brothers Grimm to Hollywood (3)

ACADEMIC CALENDAR 2015-2016

HIST 1XXX	All History courses at 1000 level
HIST 2XXX	All History courses at 2000 level
HMEC 2000	Research Methods and Presentation (3)
HMEC 2030	Human Ecology: Perspectives and Communication (3)
HYGN 1340	Communication (2) and
HYGN 1350	Community Health (4) and
HYGN 1240	Pre-clinical and Clinical Dental Hygiene (9)
LABR 1260	Working for a Living (3)
LABR 2300	Workers, Employers, and the State (3)
LABR 4510	Labour Studies Field Placement Seminar (3)
LAW 1470	Legal Methods (5)
LAW 2570	Introduction to Advocacy (4)
LING 2740	Introduction to Interpretation Theory (3)
NATV 1200	The Native Peoples of Canada (6)
NATV 1220	The Native Peoples of Canada, Part 1 (3)
NATV 1240	The Native Peoples of Canada, Part 2 (3)
NATV 2020	The Métis of Canada (3)
NATV 2110	Introduction to Aboriginal Community Development (3)
PHIL 2612	A Philosophical History of Science (3)
PHIL 2614	Philosophy of Science (3)
PHIL 2790	Moral Philosophy (6)
PHIL 3220	Feminist Philosophy (3)
POL 1900	Love, Heros and Patriotism in Contemporary Poland (3)
POL 2600	Polish Culture until 1918 (3)
POL 2610	Polish Culture 1918 to the present (3)
POLS 1500	Introduction to Politics (6)
POLS 2000	Introduction to Comparative Politics (6)
POLS 2040	Introduction to International Relations (6)
POLS 2070	Introduction to Canadian Government (6)
POLS 2510	Great Political Thinkers (6)
PSYC 2500	Elements of Ethology (3)
PSYC 3200	Thinking Critically About Psychological Research (3)
PSYC 3380	Nature, Nurture and Behaviour (3)
PSYC 4520	Honours Research Seminar (6)
REHB 1520	Principles of Occupational Therapy (4)
RLGN 1320	Introduction to World Religions (6)
RLGN 1420	Ethics in World Religions (3)
RLGN 1424	Religion and Sexuality (3)
RLGN 1440	Evil in World Religions (3)
RLGN 2036	Introduction to Christianity (3)
RLGN 2140	Introduction to Judaism (3)
RLGN 2160	Introduction to Hebrew Scriptures (3)
RLGN 2170	Introduction to the New Testament (3)
RLGN 2222	The Supernatural in Popular Culture (3)
RLGN 2590	Religion and Social Issues (3)

RLGN 2760	Rabbinic Judaism (3)
RLGN 2770	Contemporary Judaism (3)
RLGN 3280	Hasidism (3)
RUSN 1400	Masterpieces of Russian Literature in Translation (3)
RUSN 2280	Russian Culture until 1900 (3)
RUSN 2290	Russian Culture from 1900 to the Present (3)
RUSN 2310	Exploring Russia Through Film (3)
RUSN 2410	Russian Literature after Stalin (3)
RUSN 2740	Literature and Revolution (3)
RUSN 3770	Tolstoy (3)
RUSN 3980	Women and Russian Literature (3)
SOC 3100	Practicum in Criminological/Sociological Research (6)
SOC 3350	Feminism and Sociological Theory (3)
UKRN 2200	Ukrainian Myths, Rites and Rituals (3)
UKRN 2410	Ukrainian Canadian Cultural Experience (3)
UKRN 2590	Ukrainian Literature and Film (3)
UKRN 2770	Ukrainian Culture until 1900 (3)
UKRN 2780	Ukrainian Culture from 1900 to the Present (3)
UKRN 2820	Holodomor and Holocaust in Ukrainian Literature and Culture (3)
UKRN 3970	Women and Ukrainian Literature (3)
WOMN 1500	Introduction to Women's and Gender Studies in the Humanities (3)
WOMN 1600	Introduction to Women's and Gender Studies in the Social Sciences (3)
WOMN 2560	Women, Science and Technology (3)
WOMN 3330	Sex and Sexualities (3)
WOMN 3520	Transnational Feminisms (3)

Mathematics Courses

FA 1020	Math in Art (3)
GEOG 3810	Quantitative Research Methods in Geography (3)
MATH 1XXX	All Mathematics courses at the 1000 level
MATH 2XXX	All Mathematics courses at the 2000 level
MATH 3XXX	All Mathematics courses at the 3000 level
MATH 4XXX	All Mathematics courses at the 4000 level
MUSC 3230	Acoustics of Music (3)
PHYS 1020	General Physics 1 (3)
PHYS 1030	General Physics 2 (3)
PSYC 2260	Introduction to Research Methods (3)
REHB 2460	Statistics (3)
SOC 2290	Introduction to Research Methods (6)
STAT 1XXX	All Statistics courses at the 1000 level
STAT 2XXX	All Statistics courses at the 2000 level
STAT 3XXX	All Statistics courses at the 3000 level
STAT 4XXX	All Statistics courses at the 4000 level

Course Identification

1. Credit Hours (Cr.Hrs.)

Each faculty and school develops courses for its degree credit programs, subject to Senate approval, and assigns a credit hour value to each course.

The credit hours for a course are expressed as a number associated with the course which indicates its relative weight. There is a correlation between class hours and credit hours (i.e. 6 credit hours = 3 hours a week, two terms; and 3 credit hours = 3 hours a week, one term).

For the purposes of registration, courses taught over both the Fall and Winter Terms have been divided into two parts. The credit hour value of the course are divided equally and applied to each part of the course. For example: for a six credit hour spanned course each of the Fall and Winter Term parts of the course will be assigned the value of three credit hours. Students registering for term spanning courses will receive one grade for the course and only when the second part is completed. The course grade will be applied to both the Fall and Winter parts of the course.

2. Prerequisite and Corequisite Courses

Prerequisite: If a course is prerequisite for a second course, the prerequisite must be met in order to begin the second course. To determine whether or not a course has a prerequisite, see the course descriptions in the chapter of the faculty or school offering the course. Normally, a minimum grade of "C" is required in all courses listed as prerequisites, except as otherwise noted in the course descriptions.

For some courses, the prerequisite may be completed before registering for the second course or may be taken concurrently with the second course. To determine if a course may be taken concurrently, see the course descriptions in the chapter of the faculty or school offering the course.

Corequisite: If a first course is a corequisite for a second course, the first course must be completed in the same term as the second course. To determine if a course has a corequisite, see the course descriptions in the chapter of the faculty or school offering the course.

3. Course Numbers

3.1 First Two to Four Characters

The two, three or four characters in every course number are a shortened version of the subject of the course.

3.2 Last Four Digits

At the University of Manitoba the last four digits of the course number reflect the level of contact with the subject.

For example:

ECON 1220 Principles of Economics Cr.Hrs. 6

ECON is the code for Economics.

1220 indicates that it is an introductory or entry level course.

If the course requires a laboratory, this will be shown following the credit hours immediately following the title.

For example:

BIOL 3242 Biodiversity: Vascular Flora of Manitoba Cr.Hrs. 3 (Lab Required)

The 2000, 3000, 4000 course numbers indicate the second, third, and fourth levels of university contact with a subject.

Numbers in the 5000 range are normally associated with pre-Master's work or courses in the Post Baccalaureate Diploma and the Post-Graduate Medical Education programs.

Courses numbered 6000-8000 are graduate courses of the Faculty of Graduate Studies.

Course numbers in the 9000 series are used to identify courses taken at the University of Winnipeg by students in the University of Manitoba/ University of Winnipeg Joint Master's Programs. The 9000 numbers do not indicate the level of the course taken (see Graduate Calendar or [University of Winnipeg Calendar](#)).

In most cases, some correlation exists between the course number and a student's year of study; that is, students in the third year of a program will generally carry course loads comprised primarily of 3000-level courses.

3.3 Other course numbering information

Courses with numbers that end in 0 or an even number are taught in English, most of which are offered on the Fort Garry or Bannatyne campuses or through Distance and Online Education.

Courses with numbers that end in odd numbers are taught in French at [Université de Saint-Boniface](#).

Grades and Grade Point Average Calculation

Introduction

Final grades in most courses are expressed as letters, ranging from F, to A+ the highest. A grade of D is the lowest passing grade, however the minimum grade required to use a course as credit toward a degree or diploma program may be set higher by a faculty or school. Refer to faculty and school regulations. Each letter grade has an assigned numerical value which is used to calculate grade point averages. Grading scales used to determine the final letter grade may vary between courses and programs.

Some courses are graded on a pass/fail basis and because no numerical value is assigned to these courses, they do not affect grade point averages. Courses graded in this way are clearly identified in course descriptions and program outlines.

1. The Letter grade system

Letter Grade	Grade Point Value	
A+	4.5	Exceptional
A	4.0	Excellent
B+	3.5	Very Good
B	3.0	Good
C+	2.5	Satisfactory
C	2.0	Adequate
D	1.0	Marginal
F	0	Failure
P		Pass
S		Standing

The grade of "D" is regarded as marginal in most courses by all faculties and schools. It contributes to decreasing a term, degree or cumulative Grade Point Average to less than 2.0. Courses graded "D" may be repeated for the purpose of improving a GPA. Note that some faculties and schools consider a grade of "D" as unacceptable and will not apply the course toward the program as credit. In most cases the course will need to be repeated to attain the acceptable grade. Refer to faculty and school regulations.

2. Calculation of Grade Point Average

The University of Manitoba will report cumulative and term grade point averages for all students through Aurora Student.

A complete copy of the Grade Point Averages Policy is available online at: http://umanitoba.ca/admin/governance/governing_documents/academic/701.html

2.1 Quality Points

The quality points for a course are the product of the credit hours for the course and the grade point obtained by the student; e.g., 3 credit hours with a grade of "B" (3.0 points) = 3 credit hours x 3.0 = 9.0 quality points.

2.2 Quality Point Total

The quality point total is the sum of quality points accumulated as students proceed through their program of studies.

2.3 Grade Point Average (GPA)

The grade point average (GPA) is the quality point total divided by the total number of credit hours.

Example:

Course	Credit Hours	Grade	Grade Points	Quality Points
Course 1	3	B	3	9
Course 2	3	B+	3.5	10.5
Course 3	3	C+	2.5	7.5
Course 4	3	B	3	9
Course 5	3	A	4	12
Totals	15			48

Grade point average: 240 Quality Points / 15 Credit Hours = 3.20

2.4 Cumulative Grade Point Average (CGPA)

The CGPA is the grade point average of all courses, institutional or transferred, subject to repeat rules. Separate CGPAs are calculated for courses taken at the same level (non-credit, undergraduate, or graduate). The CGPA is calculated by dividing the quality point total by the total number of credit hours attempted.

2.5 Degree Grade Point Average (DGPA)

The DGPA is the grade point average of all courses acceptable for credit in a student's current degree/program, institutional or transfer, subject to repeat rules. The DGPA is calculated by dividing the Quality Point total by the total number of acceptable credit hours attempted.

2.6 Term Grade Point Average (Term GPA)

The Term GPA is the grade point average of all courses taken during a single term, and is calculated on the basis of all final grades received in the term (eg. Fall, Winter, or Summer terms). Courses completed by means of a Letter of Permission from another institution will not be included in the calculation of Term GPA.

2.7 How Repeated Courses affect Grade Point Averages

When a course has been repeated or an equivalent course is taken, i.e. a course that may not be held for credit with the original course, the last grade achieved is that which will be used in the calculation of the CGPA and DGPA.

Students are normally permitted to repeat the same or equivalent course only once, and are encouraged to review their faculty/school repeat rules.

Admissions criteria and eligibility rules may vary by faculty with respect to inclusion and calculation of grades for repeated courses.

NOTE: Information on credit hours, courses, prerequisites and corequisites, is found in Course Identification section of the General Academic Regulations.

3. Poor grades and program progression

A course in which a "D" standing is obtained may need to be repeated by probationary students in certain faculties or where a minimum grade of "C" is required in a prerequisite subject or to meet degree requirements.

Students in doubt as to the status of their record should consult an advisor in their faculty or school.

For minimum grade levels, especially as they affect progression requirements, see the faculty or school regulations in the Academic Calendar or consult an advisor.

4. Academic Honours

Students qualify for the Honour List (Dean's, Director's, University 1) when they achieve qualifying grade point averages, as specified by the faculty/school or program regulations.

In addition, outstanding academic achievement will qualify students for other honours and awards. These include:

- the University Gold Medal, which is awarded at graduation in each faculty or school to the student with the most outstanding academic record;
- program medals, which are awarded by faculties and schools to the best student graduating from a specific program;
- graduation "with distinction", which is recorded on the transcripts of all students who attain a qualifying grade point average;
- and other medals and prizes that are specific to programs or disciplines.

Academic Evaluation

1. Methods of Evaluation

Within the first week of the academic term, students shall be informed of the method of evaluation to be used in each course, as specified in the Responsibilities of Academic Staff with Regard to Students Policy, found in the University Policies section of the Academic Calendar.

In departments where a course is offered in more than one section, the department offering the course endeavours to provide instruction so that all sections cover similar topics and that all students achieve a similar level of competency in the topic. However, there will be differences in evaluation as well as in teaching style, readings and assignments from one section to another. Students may contact the department for additional information before registration.

1.1 Credit for Term Work

In subjects involving written examinations, laboratories, and term assignments, a student may be required to pass each component separately. If no final examination is scheduled in a course, the student's final grade will be determined on the basis of the method of evaluation as announced in the first week of lectures.

If credit is not given for term work, the student's final grade will be determined entirely by the results of the final written examination. Where the final grade is determined from the results of both term work and final examinations, the method of computing the final grade will be as announced within the first week of classes. Should a student write a deferred examination, term grades earned will normally be taken into account as set out in the immediately preceding paragraph.

1.2 Repeating a Course

A course in which a “D” standing is obtained may need to be repeated by probationary students in certain faculties or where a minimum grade of “C” is required in a prerequisite subject or to meet degree requirements.

Elective courses graded “F” may either be repeated or another elective substituted. All electives in a program must be approved by the faculty or school.

When a course has been repeated, the last grade achieved is that which will be calculated in the GPA. Unless otherwise permitted by a faculty or school, students are normally limited to one repeat of a course.

1.3 Probation and Academic Suspension

Failure to meet minimum levels of performance as specified in the regulations of the faculty or school will result in a student being placed either on probation or academic suspension in accordance with the faculty or school regulations.

A student’s status is determined, following final examinations, at the end of each term (Fall, Winter or Summer terms) or at the end of an academic session as specified in faculty regulations. A student placed on probation is advised to discuss his/her program prior to the next registration with a representative of the dean or director to determine which courses, if any, should be repeated.

A student placed on academic suspension will normally be permitted to apply for re-entry to the faculty or school after one year has elapsed, but reinstatement is not automatic and individual faculty or school regulations must always be consulted.

While on suspension, students are not normally admissible to another faculty or school.

2. Other Forms of Earning Degree Credit

2.1 Letter of Permission for Transfer of Credit

Students in degree programs at this university may take courses at other recognized colleges or universities for transfer of credit provided such courses are approved at least one month prior to the commencement of classes at the other institution by the faculty or school in which they are currently registered. The approval is subject to individual faculty/school regulations and is granted in the form of a Letter of Permission. The student must obtain a Letter of Permission whether or not the course/s being taken are for transfer of credit to the University of Manitoba. Failure to obtain a Letter of Permission may have serious academic implications.

To obtain a Letter of Permission, application must be made to the Registrar’s Office as early as possible and at least one month prior to when required at the other institution.

Each application must be accompanied by the appropriate fee. The fees are for each application and a separate application is required for each session and institution regardless of the number of courses being considered. Students planning to seek permission to take courses elsewhere for transfer of credit to the University of Manitoba are cautioned to check the current Academic Calendar for the residence and degree requirements of the degree programs in which they are enrolled.

Transferred courses will be given assigned credit hour values and grades. The transferred grade will be included in the student’s degree and cumulative GPA.

2.2 Challenge for Credit

The purpose of Challenge for Credit is to provide students of the university with some means of obtaining academic credit in University of Manitoba courses (not otherwise obtainable as a transfer of credit from other institutions) for practical training and experience, or reading and study previously completed. Students who have registered to challenge would normally not attend classes or laboratories. Courses which have previously been taken at the University of Manitoba may not be challenged for credit.

To be eligible to challenge for credit a student must first be admitted to a faculty or school of the University of Manitoba. Eligible students will be required to demonstrate their competence in the courses which they are challenging for credit. Where formal, written examinations are required, these will be generally scheduled during the regular examination sessions in April/May, June, August, or December.

For information regarding requirements, procedures, applications and fees a student should contact the office of the faculty or school in which the student is enrolled, or in the case of new students, the faculty or school to which the new student has been admitted.

2.3 Application of Course Credit when transferring between Programs within the University of Manitoba

When students transfer into program from another faculty or school within the University of Manitoba, some course credits previously earned may be applied to the new program. The credit hour value assigned by the faculty or school that offers the course is used. That is, there can only be one credit weight designated for a course with a particular course number.

3. Academic Appeals

With the exception of decisions on admissions or disciplinary matters, all academic appeals from decisions of faculty or school appeals committees at the University of Manitoba or by the Comité d’appels at Université de Saint-Boniface shall be heard by the Senate Appeals Committee regardless of the institute of registration of the student concerned.

The complete terms of reference for the Senate Committee on Appeals as well as an Appeal Form may be obtained from the Office of the University Secretary, 312 Administration Building or Student Advocacy/Student Resource Services, 519 University Centre.

Final Examinations

These regulations expand on the Responsibilities of Academic Staff with Regards to Students Policy Final Examinations Policy and Procedures found in the University Policies section of this publication.

1. General Examination Regulations

Students (with the exception of students auditing courses) are required to write all final examinations. Those who absent themselves without an acceptable reason will receive a grade classification of “NP” (No Paper) accompanied by a letter grade based on term work completed for the course, using a zero value for incomplete term work and for the final examination. If no credit for term work is involved, a grade of “F” will be assigned. Under certain conditions a student may apply for a deferred examination; see Deferred and Supplemental Examinations.

2. Examination Schedules

For most faculties, schools and colleges, final examinations are normally conducted in December for Fall Term courses; and in April/May for Winter Term and Fall/Winter Term spanned courses. Exact dates for the exam period can be found in the Academic Schedule.

The Schedule of Final Exams is made available by the Registrar's Office approximately one month after the beginning of the term. This schedule is made available on the Registrar's Office Website (umanitoba.ca/registrar) and includes finalized dates and times for each exam. Exam locations are added to the schedule at a later date.

Students must remain available until all examination and test obligations have been fulfilled. Travel plans are not an acceptable reason for missing an exam.

3. Writing Examinations Off-Campus

Students may request to write their exams outside of Winnipeg, at an approved centre within Canada. For distance and online education courses, these requests are made with the Distance & Online Education division of Extended Education; for all other final exams, requests are made with the Registrar's Office. Students are responsible for all costs incurred.

4. Examination Personations

A student who arranges for another individual to undertake or write any nature of examination for and on his/her behalf, as well as the individual who undertakes or writes the examination, will be subject to discipline under the university's Student Discipline Bylaw, which could lead to suspension or expulsion from the university. In addition, the Canadian Criminal Code treats the personation of a candidate at a competitive or qualifying examination held at a university as an offence punishable by summary conviction.

Deferred and Supplemental Examinations

These regulations expand on the Deferred and Supplemental Examinations Procedures found in the University Policies section of this publication.

1. Accepting Standing in Course without Examination

In the event that a student is unable to write a deferred examination as it has been scheduled, a grade may be assigned without examination (see Section 2.9 of the Deferred and Supplemental Examinations Procedures). A student who accepts standing in a course without examination may not, at a later date, request permission to write a deferred examination in the course.

2. Supplemental Examinations

Supplemental Examinations are offered by some faculties to students who have not achieved the minimum result in required courses.

Students who are granted supplemental privileges are normally required to sit the examination within thirty (30) working days from the end of the examination series in which the supplemental grade was received, unless the progression rules of a faculty or school require the successful completion of an entire academic year before a student is eligible to proceed into the next. In this case, students are obliged to sit the examination at the next ensuing examination period.

Appeals of Grades

These regulations expand on the Final Grades Procedures found in the University Policies section of this publication.

1. Appeal of Term Work

Students may formally appeal a grade received for term work provided that the matter has been discussed with the instructor in the first instance in an attempt to resolve the issue without the need of formal appeal. Term work grades normally may be appealed up to ten (10) working days after

the grades for the term work have been made available to the student.

The fee which is charged for each appealed term work grade will be refunded for any grade which is changed as a result of the appeal.

2. Appeal of Final Grades

Final grades are not released to students who are on "Hold Status"; the deadline for appeal of assigned grades will not be extended for students who were unable to access their final grades due to a hold.

Attendance and Withdrawal

1. Attendance at Class and Debarment

Regular attendance is expected of all students in all courses.

An instructor may initiate procedures to debar a student from attending classes and from final examinations and/or from receiving credit where unexcused absences exceed those permitted by the faculty or school regulations.

A student may be debarred from class, laboratories, and examinations by action of the dean/director for persistent non-attendance, failure to produce assignments to the satisfaction of the instructor, and/or unsafe clinical practice or practicum. Students so debarred will have failed that course.

2. Withdrawal from Courses and Programs

2.1 Voluntary Withdrawal

The registration revision period extends two weeks from the first day of classes in both Fall and Winter terms. Courses dropped during this period shall not be regarded as withdrawals and shall not be recorded on official transcripts or student histories. The revision period is prorated for Summer terms and for parts of term.

After the registration revision period ends, voluntary withdrawals (VWs) will be recorded on official transcripts and student histories.

The following dates are deadlines for voluntary withdrawals:

- The Voluntary Withdrawal deadline shall be the 48th teaching day in both Fall and Winter term for those half-courses taught over the whole of each term;
- The Voluntary Withdrawal deadline for full-courses taught over both Fall and Winter term shall be the 48th teaching day of the Winter term; and
- The Voluntary Withdrawal deadline for full-and-half courses taught during Summer terms or during some other special schedule shall be calculated in a similar manner using a pro-rated number of teaching days.

The exact Voluntary Withdrawal dates that apply to courses offered in the current academic session are published in the Academic Schedule.

2.2 Authorized Withdrawal

Subject to the provision of satisfactory documentation to the faculty of registration, Authorized Withdrawals (AWs) may be permitted on medical or compassionate grounds.

2.3 Required Withdrawal from Professional Programs

Senate, at the request of some faculties and schools, has approved bylaws granting them the authority to require a student to withdraw on the basis of unsuitability for the practice of the profession to which the program of study leads.

This right may be exercised at any time throughout the academic year or following the results of examinations at the end of every year.

This right to require a student to withdraw prevails notwithstanding any other provisions in the academic regulations of the particular faculty or school regarding eligibility to proceed or repeat.

Where Senate has approved such a bylaw, that fact is indicated in the Academic Calendar chapter for that faculty or school. A copy of the professional unsuitability bylaw may be obtained from the general office of the faculty or school.

Academic Integrity

1. Plagiarism and Cheating

Plagiarism or any other form of cheating in examinations, term tests or academic work is subject to serious academic penalty (e.g. suspension or expulsion from the faculty or university). Cheating in examinations or tests may take the form of copying from another student or bringing unauthorized materials into the exam room (e.g., crib notes, pagers or cell phones). Exam cheating can also include exam personation. (Please see Exam Personation, found in the Examination Regulations section of the General Academic Regulations). A student found guilty of contributing to cheating in examinations or term assignments is also subject to serious academic penalty.

To plagiarize is to take ideas or words of another person and pass them off as one's own. In short, it is stealing something intangible rather than an object. Plagiarism applies to any written work, in traditional or electronic format, as well as orally or verbally presented work. Obviously it is not necessary to state the source of well known or easily verifiable facts, but students are expected to appropriately acknowledge the sources of ideas and expressions they use in their written work, whether quoted directly or paraphrased. This applies to diagrams, statistical tables and the like, as well as to written material, and materials or information from Internet sources.

To provide adequate and correct documentation is not only an indication of academic honesty but is also a courtesy which enables the reader to consult these sources with ease. Failure to provide appropriate citations constitutes plagiarism. It will also be considered plagiarism and/or cheating if a student submits a term paper written in whole or in part by someone other than him/herself, or copies the answer or answers of another student in any test, examination, or take-home assignment.

Working with other students on assignments, laboratory work, take-home tests, or on-line tests, when this is not permitted by the instructor, can constitute Inappropriate Collaboration and may be subject to penalty under the Student Discipline By-Law.

An assignment which is prepared and submitted for one course should not be used for a different course. This is called "duplicate submission" and represents a form of cheating because course requirements are expected to be fulfilled through original work for each course.

When in doubt about any practice, ask your professor or instructor.

The Student Advocacy Office, 519 University Centre, 474-7423, is a resource available to students dealing with Academic Integrity matters.

Graduation and Convocation

1. Graduation

Students may graduate from the University of Manitoba in May/June, October, and February of each year. (Convocation ceremonies are held in May and October only).

Students are eligible to graduate when they have completed all of the requirements for their degree program in accordance with the regulations described in the chapter General Academic Regulations and the regulations available from the general offices of their faculties and schools.

It is the responsibility of each student to be familiar with the graduation requirements of the program in which they are enrolled. Consultation with academic advisors is advised to ensure that graduation requirements are met.

Please refer to the Registrar's Office website (umanitoba.ca/registrar; click on Graduation and Convocation for answers to frequently asked questions about Graduation).

2. Application for Graduation

Every candidate for a degree, diploma or certificate must make formal application at the beginning of the session in which he/she expects to complete graduation requirements.

Application is to be made through Aurora Student. (Log into Aurora Student; click Enrolment and Academic Records, then Declarations then Declare Graduation Date.)

Deadline to Apply for Fall 2014 Graduation: July 30, 2014

Deadline to Apply for February 2015 Graduation: September 17, 2014

Deadline to Apply for Spring 2015 Graduation: January 19, 2015

3. Changing a Graduation Date

If you need to change your graduation date after you have made your declaration, you must contact the general office of your faculty or school as soon as possible.

4. Receipt of Information about Graduation

After you have declared your graduation, you will be sent a series of e-mails requesting you to verify your full legal name, asking you about your attendance at convocation, providing convocation information, and so on. It is imperative that you activate your University of Manitoba email account and check it regularly.

5. Convocation

Convocation ceremonies are held in May/June and October of each year. Correspondence with students who declare intention to graduate will be by email. Please be sure you have claimed your University of Manitoba computer account.

February graduates are invited to attend the May ceremonies.

Graduating students are encouraged to attend with their families and friends because it is the one ceremonial occasion that marks the successful conclusion of their program of studies.

All prospective graduating students who apply for graduation will be asked to confirm by email their intention to attend Convocation.

Complete details of the time, location, and ceremony arrangements will be included in the material sent by email from the Registrar's Office.

Students who, for any reason, do not attend Convocation will receive their degrees in absentia.

ACADEMIC CALENDAR 2015-2016

The Registrar's Office will hold unclaimed parchments for a maximum of twelve months after graduation when any unclaimed parchments will be destroyed. These will include those not given at Convocation, those that were to be picked up in person but not claimed, those that were mailed but returned to the Registrar's Office by the postal outlet or courier depot, those that were not issued due to a financial hold on a student's records, and those that were reprinted immediately after convocation due to corrections.

It is critical that you update your address, phone number and email through Aurora whenever changes occur. Note that any changes made with the Alumni Association are not reflected in your University of Manitoba student records.

If you do not receive your parchment, it is your responsibility to follow up with the Registrar's Office within a twelve-month period. Any requests for parchments after this time will be processed as replacements; there is a fee charged for replacement parchments.

5.1 Academic Dress

Academic gowns, hoods, and caps are provided by the university as part of the Convocation arrangements.

5.2 Convocation Information

Information on Convocation may be obtained from the Registrar's Office, 400 University Centre.

Personal Information

1. Mailing Address

In order to receive University mail, it is essential that you provide the Registrar's Office with your current address. All mail will be directed to the address you provide. You may change your mailing address and phone number by accessing Aurora Student and then selecting Personal Information.

2. Change of Name

If you have changed your name since you were first admitted or if the name on your record is incomplete or inaccurate, official evidence of the name change or correction must be submitted to the Registrar's Office along with a completed Request for [Change of Name form](#). The University of Manitoba uses your full legal name on its records, transcripts, and graduation documents (a full legal name, for example, includes all names on your birth certificate - first, middle, and last - or on your study permit). Abbreviated names, Anglicized names, or initials should not be used unless they have been proven with appropriate documentation.

ACADEMIC PROGRAMS

Undergraduate Programs Offered

The following is a listing of all degree, diploma and certificate programs offered at the Fort Garry Campus, the Bannatyne Campus and at Université de Saint-Boniface.

Agricultural and Food Sciences, Faculty of

Science in Agribusiness, Bachelor of
 Science in Agriculture, Bachelor of
 Science in Agroecology, Bachelor of
 Science in Food Science, Bachelor of
 Science in Human Nutritional Sciences, Bachelor of
 Science (Textile Sciences), Bachelor of
 Agriculture, Diploma in

Architecture, Faculty of

Environmental Design, Bachelor of

Art, School of

Fine Arts (Honours), Bachelor of
 Fine Arts (Honours) (Art History), Bachelor of
 Fine Arts, Bachelor of
 Fine Arts (Art History), Bachelor of
 Art, Diploma in

Arts, Faculty of

Arts (Honours), Bachelor of
 Arts (Advanced), Bachelor of
 Arts , Bachelor of
 Arts (Integrated Studies), Bachelor of

Université de Saint-Boniface

Please see chapter for programs offered at Université de Saint-Boniface

Education, Faculty of

Education, Bachelor of
 Education, Post-Baccalaureate Diploma in
 Music, Bachelor of/Bachelor of Education (Integrated)

Engineering, Faculty of

Science in Engineering (Biosystems), Bachelor of
 Science in Engineering (Civil), Bachelor of
 Science in Engineering (Computer), Bachelor of
 Science in Engineering (Electrical), Bachelor of
 Science in Engineering (Manufacturing), Bachelor of
 Science in Engineering (Mechanical), Bachelor of

Environment, Earth, & Resources, Clayton H. Riddell Faculty of

Arts in Geography (Honours), Bachelor of
 Arts in Geography (Advanced), Bachelor of
 Arts in Geography, Bachelor of

Environmental Science (Honours), Bachelor of
 Environmental Science (Major), Bachelor of
 Environmental Science, Bachelor of
 Environmental Studies (Honours), Bachelor of
 Environmental Studies (Major), Bachelor of
 Environmental Studies, Bachelor of
 Science in Geological Sciences (Honours), Bachelor of
 Science in Geological Sciences (Major), Bachelor of
 Science in Geological Sciences, Bachelor of
 Science in Physical Geography (Honours), Bachelor of
 Science in Physical Geography (Major), Bachelor of

Extended Education, Division of

Aboriginal Child & Family Services Diploma
 Aboriginal Community Wellness Diploma
 Labour Relations & Workplace Safety, Diploma in

Health Sciences, Faculty of

Dental Hygiene, School of

Science in Dental Hygiene, Bachelor of
 Dental Hygiene, Diploma in

Dentistry, College of

Dental Medicine, Doctor of
 Science in Dentistry, Bachelor of

Medicine, College of

Medicine, Doctor of
 Science in Medicine, Bachelor of
 Human Ecology (Family Social Sciences), Bachelor of
 Health Sciences, Bachelor of
 Health Studies, Bachelor of
 Human Ecology, Bachelor of

Nursing, College of

Nursing, Four-Year Bachelor of
 Nursing, Bachelor of BPRN

Pharmacy, College of

Science in Pharmacy, Bachelor of

Rehabilitation Sciences, College of

Respiratory Therapy, Bachelor of

Human Ecology, Faculty of

Kinesiology & Recreation Management, Faculty of

Kinesiology, Bachelor of
 Physical Education, Bachelor of
 Recreation Mgmt & Community Development, Bachelor of

Law, Faculty of

Juris Doctor

ACADEMIC CALENDAR 2015-2016

Management, Faculty of/I.H. Asper School of Business

Commerce (Honours), Bachelor of

Music, Marcel A. Desautels Faculty of

Jazz Studies, Bachelor of

Music, Bachelor of /Bachelor of Education (Integrated)

Music (Composition), Bachelor of

Music (History), Bachelor of

Music (Performance), Bachelor of

Music, Bachelor of

Performance, Post-Baccalaureate Diploma in

Science, Faculty of

Computer Science (Honours), Bachelor of

Science (Honours), Bachelor of

Science (Major), Bachelor of

Science, Bachelor of

Social Work, Faculty of

Social Work, Bachelor of

Areas of Study

Intro

Each Faculty/School chapter includes a list (where applicable) of Majors, Minors, Concentrations and Focuses which may be included in their degree programs.

Alphabetical Listing of Subjects

Subject	Code	Faculty/School/Colleges	Subject	Code	Faculty/School/Colleges
Accounting	ACC	Management	Biosystems Engineering	BIOE	Agricultural and Food Sciences
Actuarial Studies Warren Centre	ACT	Management	Biotechnology	BTEC	Science
Agribusiness and Ageconomics	ABIZ	Management	Canadian Studies	CDN	Arts
Agroecology	AGEC	Agricultural and Food Sciences	Catholic Studies	CATH	Arts
Agriculture, General	AGRI	Agricultural and Food Sciences	Chemistry	CHEM	Science
Agriculture Diploma	DAGR	Agricultural and Food Sciences	City Planning	CITY	Architecture
Anatomy	ANAT	Medicine	Civil Engineering	CIVL	Engineering
Anesthesia	ANES	Medicine	Classical Studies	CLAS	Arts
Animal Science	ANSC	Agricultural and Food Sciences	Community Health Sciences	CHSC	Medicine
Anthropology	ANTH	Arts	Computer Science	COMP	Science
Applied Mathematics	AMAT	Science	Dental Diagnostic and Surgical	DDSS	Dentistry
Arabic	ARA	Arts	Dental Hygiene	HYGN	Dental Hygiene
Architecture	ARCG	Architecture	Dentistry	DENT	Dentistry
Architecture Interdisciplinary	ARCH	Architecture	Diagnostic Cytology	CYTO	Medical Rehabilitation
Arts Interdisciplinary	ARTS	Arts	Diploma in Agriculture	AGRI	Agricultural and Food Sciences
Asian Studies	ASIA	Arts	Disability Studies	DS	Disability Studies
Biochemistry and Medical Genetics	BGEN	Medicine	Economics	ECON	Arts
Biological Sciences	BIOL	Science	Education Ph.D.	EDUC	Education
			Educational Administration, Foundations and Psychology	EDUA	Education
			Education: Curriculum, Teaching and Learning	EDUB	Education
			Electrical Engineering	ECE	Engineering
			Engineering - Preliminary Year	ENG	Engineering
			English	ENGL	Arts
			Entomology	ENTM	Agricultural and Food Sciences
			Entrepreneurship/Small Business	ENTR	Management
			Environment	ENVR	Environment, Earth, and Resources
			Environment, Earth, and Resources	EER	Environment, Earth, and Resources
			Environmental Architecture	EVAR	Architecture
			Environmental Design	EVDS	Architecture
			Environmental Interior	EVIE	Architecture
			Environment	EVLU	Architecture
			Environmental Landscape and Urbanism	FMLY	Medicine
			Family Social Sciences	FILM	Arts
			Film Studies	FIN	Management
			Finance	FA	Art
			Fine Art General Courses	FNDP	Art
			Fine Art Diploma	FAAH	Art
			Fine Art: Art History	STDO	Art
			Fine Art Studio Courses	FOOD	Agricultural and Food Sciences
			Food Science	FORS	Science
			Forensic Sciences	FREN	Arts
			French	AGRI	Agricultural and Food Sciences
			General Agriculture	HMEC	Medicine
			General Human Ecology	GMGT	Management
			General Management		

Geography	GEOG	Environment, Earth, and Resources	Pharmacy	PHRM	Pharmacy
Geological Sciences	GEOL	Environment, Earth, and Resources	Philosophy	PHIL	Arts Kinesiology and Recreation Management
German	GRMN	Arts	Physical Education Physical Education and	PHED	
Global Political Economy	GPE	Arts			Kinesiology and Recreation Management
Graduate Studies	GRAD	Graduate Studies	Recreation Studies General	PERS	Recreation Management
Greek	GRK	Arts	Physical Therapy	PT	Medical Rehabilitation
Health Studies	HEAL	Medicine	Physics and Astronomy	PHYS	Science
Hebrew	HEB	Arts	Physiology	PHGY	Medicine Agricultural and Food Sciences
History	HIST	Arts Agricultural and Food Sciences	Plant Science	PLNT	
Human Nutritional Sciences Human Resources Manage- ment/ Industrial Relations	HNSC HRIR	Management	Polish Political Studies	POL POLS	Arts Arts
Hungarian	HUNG	Arts	Portuguese	PORT	Arts
Icelandic	ICEL	Arts	Post Graduate Medical Education	PGME	Medicine
Immunology	IMMU	Medicine	Preventive Dental Science	PDSO	Dentistry
Interdisciplinary Management	IDM	Management	Psychiatry	PCTY	Medicine
Interdisciplinary Medicine	IMED	Medicine	Psychology	PSYC	Arts Kinesiology and Recreation Management
Interior Design	IDES	Architecture	Recreation	REC	
International Business	INTB	Management	Religion	RLGN	Arts Environment, Earth, and Resources
Italian	ITLN	Arts	Resource Management	NRI	
Judaic Civilization	JUD	Arts Kinesiology and Recreation Management	Respiratory Therapy	RESP	Medical Rehabilitation
Kinesiology	KIN		Restorative Dentistry	RSTD	Dentistry
Labour Studies	LABR	Arts	Russian	RUSN	Arts
Landscape Architecture	LARC	Architecture	Slavic Studies	SLAV	Arts
Latin	LATN	Arts	Social Work	SWRK	Social Work
Law	LAW	Law	Sociology	SOC	Arts Agricultural and Food Sciences
Linguistics	LING	Arts	Soil Science	SOIL	
Management Information Systems	MIS	Management	Spanish	SPAN	Arts
Management Science	MSCI	Management	Statistics	STAT	Science
Marketing	MKT	Management	Supply Chain Management	SCM	Management
Mathematics	MATH	Science	Surgery	SURG	Medicine Agricultural and Food Sciences
Mechanical Engineering Graduate Mechanical Engineering Undergraduate	MECG MECH	Engineering	Textile Sciences	TXSC	
Medical Microbiology	MMIC	Medicine	Theatre	THTR	Arts
Medical Rehabilitation	REHB	Medical Rehabilitation	Ukrainian Ukrainian Canadian Heritage Studies	UKRN UCHS	Arts Arts
Medicine	MED	Medicine	Undergraduate Medical Education	UGME	Medicine
Microbiology	MBIO	Science	Women's and Gender Studies	WOMN	Arts
Music	MUSC	Music	Yiddish	YDSH	Arts
Native Studies	NATV	Arts			
Nursing	NURS	Nursing			
Occupational Therapy	OT	Medical Rehabilitation			
Operations Management	OPM	Management			
Oral Biology	ORLB	Dentistry			
Pathology	PATH	Medicine			
Peace Studies	PEAC	Graduate Studies			
Pharmacology	PHAC	Medicine			

ADMISSIONS

SECTION 1: WELCOME

You are joining a vibrant community of over 29,000 students and 8,000 academic and support staff members that emphasizes excellence in teaching, learning, and research.

The University of Manitoba is a community of people who study, teach, conduct research, and create music and art, and whose ideas and accomplishments have an impact on our society and culture both here in Manitoba and in the wider world.

The University of Manitoba is the province's largest university and the first to be established in western Canada.

The majority of new University of Manitoba students will enter University 1, an innovative program that was specially designed to provide choice and flexibility. University 1 gives you the opportunity to begin your university studies with a year of personal and academic exploration. Advisors are available to provide academic advice and assistance. During the campus wide orientation that begins your first academic year, you will be introduced to the wide range of campus support services that can help you with all aspects of student life.

If you are joining the University of Manitoba after completing some college or university courses at another institution, you are equally welcome as you continue your studies.

This document, the Undergraduate Calendar, provides the basic information on admission requirements. More specific information on admission requirements and the application process can be found in the applications themselves and their accompanying guides and/or bulletins. These can be downloaded from our website at umanitoba.ca/admissions. In addition, there are advisors in the general offices of all academic units who are ready to answer your questions and to help you understand policies and regulations that affect you.

Again, welcome to the University of Manitoba. You are joining a large community of students and scholars, and when you graduate you will be joining an even larger community of graduates.

The University of Manitoba is honored to provide you with your education.

SECTION 2: AN OVERVIEW OF UNDERGRADUATE ADMISSION

The twenty-two faculties and schools of the University of Manitoba offer over 60 different undergraduate programs. Some of these programs are open to high school graduates, or to mature status applicants, while others require a year or more of university-level studies as preparation for admission.

There are several programs that offer direct entry options for qualified high school graduates, see Section 3: Direct Entry Options for the list of these programs. The majority of high school students applying to the University of Manitoba choose University 1, a first year program designed to provide a foundation for studies in Arts, Science, and the professional disciplines.

Many programs offer only an 'advanced entry' option and accept applications from students who have completed a year or more in university-level studies, either in University 1 (or another program at the University of Manitoba) or at another recognized university or college. These programs are listed in Section 4: Advanced Entry Options.

The programs offering the 'direct entry' option also offer an 'advanced entry' option for students who wish to start in University 1 and then select their degree program in second year.

In addition, students can also apply as Auditing, Visiting, or Special Students (see Section 5: Other Admission Categories). Usually students in these applicant categories will apply to General Studies (Extended Education) where they can take degree credit courses in a variety of disciplines to meet entrance requirements for a future degree application or to meet career development and personal goals.

The main criterion for admission for direct and advanced entry programs is the scholastic achievement of the student. In instances such as the Marcel A. Desautels Faculty of Music and the School of Art, additional criteria designed to assess the student's suitability for education are applied.

Most faculties and schools in the University of Manitoba have enrolment limitations, and a process of selection is applied by the university. In some programs the number of students applying for admission greatly exceeds the number which the university is able to admit. Selection, therefore, is based upon scholastic achievement and suitability for the discipline. In some faculties and schools first consideration is given to residents of Manitoba who are Canadian Citizens or Permanent Residents. A limited number of places may be assigned to Canadian Citizens or Permanent Residents who are resident outside Manitoba or to those who are not Canadian Citizens/Permanent Residents. [Booth University College](#) (approved teaching centre) and [Université de Saint-Boniface](#) (an affiliated college) are not limited in their enrolment, and interested students are directed to those institutions for information.

Many of the first-year level courses in mathematics and the sciences at the University of Manitoba will have high school subject prerequisites. These prerequisites are listed in the course descriptions sections of this calendar.

All applicants whose primary language is not English must fulfil the English language proficiency requirements described in Section 7: English Language Proficiency.

SECTION 3: DIRECT ENTRY OPTIONS

Intro

Comprehensive information on the entrance requirements, application process, and deadlines for each of these programs is found at www.umanitoba.ca/admissions.

The following faculties and schools offer direct entry programs which accept students graduating from Manitoba high schools (or the equivalent in other provinces/countries):

University 1
Faculty of Agricultural & Food Sciences (degree programs)
Faculty of Agricultural & Food Sciences (diploma program)
Faculty of Arts
School of Art (Fine Arts studio degree programs)
School of Art (Fine Arts diploma program)
Asper School of Business
School of Dental Hygiene
Faculty of Engineering
Clayton H. Riddell Faculty of Environment, Earth, & Resources
General Studies (Extended Education)
Faculty of Kinesiology & Recreation Management (except Athletic Therapy)
Marcel A. Desautels Faculty of Music
Faculty of Science

Students applying from high school to a direct entry program must meet two levels of requirements:

- The general entrance requirements
- The specific subject and performance requirements of the program for which admission is sought.

Some University of Manitoba undergraduate courses, particularly mathematics and science courses, will have specific high school courses as prerequisites to register in these courses. These prerequisites may not be required for admission to the direct entry program, but are required for course registration. If students have not completed the necessary high school courses, they can complete a preparatory upgrading course at U of M. See our website for listings of these high school prerequisites.

These programs also accept transfer students; see Section 4: Advanced Entry Options.

3.1 General Entrance Requirements

3.1.1 Manitoba High School Students - General Entrance Requirements

Applicants must present Manitoba high school graduation, with five full credits at the Grade 12 level, in courses designated S (Specialized), G (General), or U (Dual Credit – University), and with a minimum of three of these credits in S or U courses. Manitoba and northwest Ontario (Thunder Bay and west) high school students will be selected on the basis of an average calculated on three courses specified by each faculty or school. Although the remaining courses offered will not be used in the computation of the average, each must bear at least a passing grade.

3.1.2 Other Canadian High School Students - General Entrance Requirements

The following certificates are usually accepted as equivalent to Manitoba high school standing and will, therefore, meet the university's general entrance requirements for students from that region.

Alberta: High school graduation with a minimum overall average of 60 percent on five acceptable Grade 12 credits .

British Columbia: High school graduation with a minimum average of 60 percent or better over four acceptable Grade 12 credits.

New Brunswick: High school graduation with a minimum average of 60 percent over six acceptable Grade 12 credits.

Newfoundland: High school graduation with a minimum average of 60 percent over ten acceptable Grade 12 credits.

Northwest Territories: High school graduation with a minimum average of 60 percent over five acceptable Grade 12 credits.

Nova Scotia: High school graduation with a minimum average of 60 percent over five acceptable Grade 12 credits.

Nunavut: High school graduation with a minimum average of 60 percent over five acceptable Grade 12 credits.

Ontario: High school graduation with a minimum average of 60 percent over six Grade 12 U or M courses.

Prince Edward Island: High school graduation with a minimum average of 60 percent in a university entrance program.

Quebec: First-year CEGEP with satisfactory standing (normally a GPA of 2.0 or better or 65 percent or better).

Saskatchewan: High school graduation with a minimum average of 65 percent on seven acceptable Grade 12 credits.

Yukon Territory: High school graduation with a minimum average of 60 percent or better over four acceptable Grade 12 credits.

3.1.3 Countries and Regions outside Canada - General Entrance Requirements

The following certificates are usually accepted as equivalent to Manitoba high school standing and will, therefore, meet the university's general entrance requirements for students from that region.

Please see www.umanitoba.ca/student/admissions/international/international-program-requirements.html for additional listings.

British-patterned education: (United Kingdom and most Commonwealth countries except as noted separately below) General Certificate of Education, with two subjects at Advanced Level and three at Ordinary Level, or three subjects at Advanced Level and one at the Ordinary Level, with a C overall average; no subject accepted below a D grade. Acceptable alternative: U.K. Higher National Diploma or Certificate.

French-patterned education: (Algeria, Cote d'Ivoire, Cambodia, France, French Guinea, Haiti, Laos, Morocco) Diploma de Bachelier de l'Enseignement du Second Degree (Baccalaureate Parts I and II)

Latin America: (Costa Rica, Guatemala, Honduras, Nicaragua, Peru, Venezuela: all others see individual listings below) first year at a recognized university in the same country

Middle East: (Bahrain, Iran, Iraq, Jordan, Kuwait, Libya, Oman, Qatar, Saudi Arabia, Syria, Sudan, United Arab Emirates, Yemen): all others see individual listing below: national secondary school certificate

Russian-patterned education: (Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Turkmenistan, Uzbekistan) Attestate o Srednem (Polnom) Certificate and complete General Secondary Education

Yugoslavian-patterned education: (Bosnia-Herzegovina, Croatia, Macedonia, Serbia, Slovenia, Yugoslavia) Matura/Secondary School Leaving Diploma

Argentina: Bachillerato or Bachillerato Especializada with a minimum 6 average or the examination Ciclo Basico Comun with a 5 average

Australia: matriculation as defined by the home state university

Bangladesh: Higher Secondary Certificate (HSC) in at least the second division

Brazil: Certificado de Conclusao de Grau or a Diploma de Tecnico de Nivel Medio with a minimum 6.5 average or the examination Concurso Vestibular with a minimum 5 average

China: Senior Middle School Diploma

Czech Republic: Maturitni Zkouska (Maturita)

El Salvador: Bachillerato in the academic specializations only with a minimum 6.5

Ethiopia: first year standing at a recognized university in the same country

Germany: Reifezeugnis

Greece: Apolytirion

Hong Kong: HKDSE/HKCEE Diploma, with at least two HKALE level subjects and three HKCEE level subjects with a minimum overall average of a 'C' and no grade below a 'D'. Two HKASLE level subjects will be held equivalent to one HKALE level subject.

India: second division or higher in one of: All-Indian Senior School Certificate, Higher Secondary Certificate (Pre-Degree, Pre-Professional or Pre-University), Intermediate Certificate, Higher Secondary Certificate Part 2

ACADEMIC CALENDAR 2015-2016

Indonesia: Sekolah Menengah Uman (S.M.U.)

Ireland: (Republic of) Leaving Certificate

Israel: Bagrut Certificate

Italy: Maturita Classica Diploma or Maturita Scientifica Diploma

Japan: Upper Secondary School Diploma

Kenya: Kenya Certificate of Secondary Education (KCSE)

Malaysia: Sijil Tinggi Persekolahan Malaysia (STPM) or MICSS Unified Examination Certificate (UEC)

Mexico: Bachillerato certificate with a minimum 7.0 average

Nigeria: Senior School Certificate with WAEC results

Pakistan: Higher Secondary School Certificate (HSC) in at least the second division

Philippines: first year standing at a recognized institution of higher learning

Poland: Maturity/Swiadectwo Dojrzalosci Certificate

Portugal: first year standing at a recognized university in the same country

Singapore: Government Higher School Certificate (Chinese) with two subjects at the Principal Level and three subjects at the Subsidiary Level

Slovak Republic: Maturity Certificate (Maturitnej Skuske)

Somalia: First year university standing

South Korea: Academic Upper Secondary School Certificate (Immumgye Kodung Hakkyo Choeupchang)

Spain: Titulo de Bachillerato or University Orientation Year

Taiwan: Senior High School Leaving Certificate

Thailand: Mathayom /Maw 6

Ukraine: Atestat pro Povnu Zagalnu Sersdniu Osvitu (Grade 12)

United States of America (and Puerto Rico): complete Grade 12 with a minimum average of C or better on a minimum of five academic Grade 12 subjects

Not Acceptable: The following qualifications by themselves are not acceptable as a basis of admission: GCE (O) levels only; West African School Certificate; Hong Kong Certificate of Education; Ordinary Diploma and Technician Diploma; Malaysian Technical Diploma; U.K. City and Guilds Certificate; U.K. College of Preceptors Licentiate; U.K. Ordinary National Certificate or Diploma; West Indies CXC.

Graduates from international schools overseas will be considered for admission only if they are eligible for admission to a major university of their country of citizenship; or they have successfully completed an internationally examined curriculum such as the GCE or IB diploma, or they have successfully completed the formal graduation requirements of a Canadian provincial ministry of education in an approved institution. (See 3.1.2 for minimum requirements)

3.1.4 International Baccalaureate Students - General Entrance Requirements

To meet the General Requirements, an I.B. student must present three courses at the Higher Level and three courses at the Standard Level, with a minimum score in each subject of four and an overall minimum score of 24. Credit may be granted for selected Higher and/or Standard Level courses with minimum scores of four in specific subject areas; see 6.1 Advanced Standing for High School Students.

3.1.5 Home Schooled Applicants

Home schooled applicants will be considered for admission for University 1 on an individual basis. Contact the Admissions Office for additional information.

3.1.6 Mature Student Status

Mature student status is granted to one who:

- Does not meet the normal entrance requirements;
- Is at least 21 years of age (before May 1 for admission to classes beginning in May; before July 1 for classes beginning in July; before September 30 for the Fall term; and before January 31 for the Winter term, and,
- Is either a Canadian citizen, or a Permanent Resident of Canada.

Mature status students may apply to any of the following direct entry programs: University 1, Engineering, Fine Arts (diploma program), and Music. Members of the Canadian Military are also eligible to apply to General Studies (Extended Education), the Clayton H. Riddell Faculty of Environment, Earth, & Resources, and the Faculties of Arts and Science as mature students. Applicants to Engineering are required to meet the specific high subject requirements of that Faculty, i.e. a minimum of 60% in each of Chemistry 40S, Pre-Calculus Math 40S, and Physics 40S (or the equivalent) plus a minimum 85% average over these subjects.

Applicants who have completed 24 credit hours or more of course work at another post-secondary institution are not normally eligible for mature student status admission. These applicants should apply to one of the 'advanced entry' programs.

Applicants who do not qualify for consideration for admission under the mature status requirements must meet the regular high school entrance requirements applicable to their chosen faculty or school.

Applicants seeking admission under mature student status are encouraged to seek further information from the Admissions Office.

3.2 Specific Subject Requirements and Performance Levels for Admission to Direct Entry Options

In addition to the General Entrance Requirements listed above by Geographic region, applicants must meet the Specific Subject Requirements for their selected program. The requirements are listed for Manitoba high school students, the equivalent from other provinces and countries are acceptable.

Should the number of qualified applicants exceed the number of available positions, the strongest candidates will be selected.

3.2.1 University I

General Entrance Requirements as listed above, plus completion of ONE of the following sets of requirements:

- Set A: One credit of Grade 12 S or U English with a minimum grade of 60%, and a minimum average of 70% over three Grade 12 S or U credits OR
- Set B: One credit of Grade 12 S or U English, with a minimum grade of 60%, and a minimum average of 63-69.9% over three Grade 12 S or U credits OR
- Set C: A minimum average of 70% over three Grade 12 S or U credits, but lacking the Grade 12 S or U English requirement.

International applicants from other countries should qualify under Set A above.

NOTE: Admission under Set B or C will be considered a limited admission to University 1; some registration restrictions and performance standards will apply, and additional academic supports and services will be provided. See the University 1 section of this Calendar for further details on limited admission.

3.2.2 School of Agriculture - Diploma program

General Entrance Requirements as listed above, plus, a minimum average of 60% over the following three courses:

- English 40S
- Mathematics (40S or 45S)
- a science 40S

Applications will also be accepted from students who do not meet these requirements but an interview will be required.

3.2.3 Agriculture & Food Science

Agriculture, Agroecology, Agribusiness, and Food Sciences degree programs

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 60% in each course:

- English 40S
- one of: Pre-Calculus Mathematics 40S or Applied Mathematics 40S
- one of: Chemistry 40S, Physics 40S, Biology 40S, or Computer Science 40S

Human Nutritional Sciences degree programs

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 60% in each course:

- English 40S
- one of: Pre-Calculus Mathematics 40S or Applied Mathematics 40S
- one of: Chemistry 40S, Physics 40S, Biology 40S, or Computer Science 40S

3.2.4 Faculty of Arts

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 60% in each course:

- English 40S
- two additional 40S or U courses

Note: completion of either Applied Mathematics 40S or Pre-Calculus 40S would facilitate registration in courses used to fulfill the University's mathematics requirement for graduation, but is not required for direct entry to Arts.

3.2.5 School of Art (Fine Arts studio degree programs)

General Entrance Requirements as listed above, plus the same specific subject requirements and performance levels as University 1. Portfolios are required from all applicants (www.umanitoba.ca/schools/art). Grade 12 Art is recommended.

3.2.6 School of Art (Fine Arts diploma program)

Candidates should meet the General Entrance Requirements as listed above, plus the same specific subject requirements and performance levels as University 1, but applications for the diploma program will be accepted from students who have not graduated from high school or who do not meet the University 1 requirements. Portfolios are required from all applicants (www.umanitoba.ca/schools/art). Grade 12 Art is recommended.

3.2.7 Asper School of Business

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 60% in each course:

- English 40S
- one of: Pre-Calculus Mathematics 40S (recommended) or Applied Mathematics 40S
- a third 40S course

3.2.8 School of Dental Hygiene

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 60% in each course:

- English 40S
- one of: Pre-Calculus Mathematics 40S or Applied Mathematics 40S
- one of: Chemistry 40S, Physics 40S, Biology 40S, or Computer Science 40S

3.2.9 Engineering

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 60% in each course:

- Pre-Calculus Mathematics 40S
- Chemistry 40S
- Physics 40S

3.2.10 Clayton H. Riddell Faculty of Environment, Earth, and Resources

Environmental Science and Physical Geography Degree Programs

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 60% in each course:

- English 40S
- one of: Pre-Calculus Mathematics 40S or Applied Mathematics 40S
- one of: Chemistry 40S, Physics 40S, Biology 40S, or Computer Science 40S

Geological Science Degree Programs

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 60% in each course:

- Pre-Calculus Mathematics 40S
- Chemistry 40S
- Physics 40S

Environmental Studies and Geography Degree Programs

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 60% in each course:

- English 40S
- two additional 40S or U courses

3.2.11 General Studies (Extended Education)

Candidates should meet the General Entrance Requirements as listed above, plus the specific subject requirements and performance levels as Set A of University 1. High school graduates interested in working towards a University of Manitoba degree should apply to University 1 or one of the other direct entry programs.

3.2.12 College of Medicine (Family Social Sciences)

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 60% in each course:

- English 40S
- one of: Pre-Calculus Mathematics 40S or Applied Mathematics 40S
- one of: Chemistry 40S, Physics 40S, Biology 40S, or Computer Science 40S

3.2.13 Faculty of Kinesiology & Recreation Management

Kinesiology and Physical Education Degree Programs

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 60% in each course:

- English 40S
- one of: Pre-Calculus Mathematics 40S or Applied Mathematics 40S
- one of: Chemistry 40S, Physics 40S, Biology 40S, or Computer Science 40S

Recreation Management and Community Development Degree Programs

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 60% in each course:

- English 40S
- two additional 40S or U courses

Please note that candidates interested in Athletic Therapy must apply as Advanced Entry applicants (see Section 4: Advanced Entry Options).

3.2.14 Marcel A. Desautels Faculty of Music

General Entrance Requirements as listed above, plus the same specific subject requirements and performance levels as University 1. An audition and a theory assessment are required (www.umanitoba.ca/music). Grade 12 Music and a second language at the Grade 12 level are recommended.

3.2.15 Faculty of Science

General Entrance Requirements as listed above, plus a minimum 85% average over the following courses, with no less than 60% in each course:

- English 40S
- one of: Pre-Calculus Mathematics 40S (recommended) or Applied Mathematics 40S
- one of: Biology 40S, Chemistry 40S, Computer Science 40S, or Physics 40S

SECTION 4: ADVANCED ENTRY OPTIONS

Intro

Comprehensive information on the entrance requirements, application process, and deadlines for each of these options is found at www.umanitoba.ca/admissions.

The following faculties and schools offer advanced entry options for applicants with one year (24 credit hours) or more of university-level studies, either in University 1 (or another program) at the University of Manitoba, or at another recognized post-secondary institution.

- Agricultural & Food Sciences (degree programs)
- Architecture (Environmental Design)

- Arts
- Asper School of Business
- Clayton H. Riddell Faculty of Environment, Earth, & Resources
- Dental Hygiene
- Dentistry
- Education
- Engineering
- Fine Arts (Art History)
- Health Studies and Health Sciences
- Kinesiology & Recreation Management
- Law
- Medicine
- Medical Rehabilitation (Respiratory Therapy)
- Nursing
- Pharmacy
- Science
- Social Work

Students with a year or more of course work at the post-secondary level may also apply to any of the following direct entry programs:

- Agricultural & Food Science (diploma program)
- Fine Arts (Studio programs)
- General Studies (Extended Education)
- Marcel A. Desautels Faculty of Music

(Students who have completed 24 credit hours or more of post-secondary institution courses are not normally eligible to apply for admission to University 1.)

Students who have attended university or college, but who have completed less than 24 credit hours of course work at another institution, will normally apply for admission to University 1 (see Section 3.0 Direct Entry Options)

Students applying to an advanced entry option must meet two levels of requirements:

- The minimum performance standard of the University
- The minimum performance standards and specific requirements of the Faculty or School in which admission is sought.

4.1 Minimum Performance Standard of the University

The minimum performance requirement for entry to a post-University 1 level program at any faculty or school at the University of Manitoba is a cumulative grade point average (CGPA) of 2.0 (C). Students who do not meet this requirement may be considered for admission if they have achieved a minimum grade point average (GPA) of 2.0 (C) on all courses acceptable for credit in the faculty or school to which application is made. In this case, students must have at least 24 credit hours acceptable for credit. In addition to this university minimum performance requirement, students must meet any additional entrance requirements, performance levels, and selection criteria stipulated for the faculty or school of application.

Students who are currently on suspension at another post-secondary institution will not normally be considered for admission to the University of Manitoba.

Students are advised that selection processes are competitive and in many cases applicants must present adjusted grade point averages greater than the minimum level stated. See Section 4.2.

4.2 Minimum Performance Standards and Specific Requirements of the Faculty or School

Each faculty and school has its own admission requirements and processes, including minimum performance standards and specific entrance requirements and restrictions, and this information is provided in the Applicant Information Bulletin posted on the University website (www.umanitoba.ca/admissions). The introductory section of each faculty or school chapter provides a general overview of the admissions requirements, but for specific, comprehensive information on the entrance requirements and selection processes, students must review the Faculty's Applicant Information Bulletin posted on the website.

SECTION 5: OTHER ADMISSION CATEGORIES

5.1 Readmission, Continuing and Returning Students

All students who were admitted and who did not follow through with registration must apply for re-admission (www.umanitoba.ca/applynow).

Students who voluntarily withdraw from their first-year of studies must reapply for admission. The only exceptions are students in Agricultural and Food Science, Arts, Clayton H. Riddell Faculty of Environment, Earth, and Resources, General Studies, Science, Social Work, and University 1 who are permitted to reregister without re-applying for admission.

Former students who have attended other institutions since their last registration at the University of Manitoba must apply for re-admission, unless the other institution was attended on a letter of permission.

Students whose past registration was in the following faculties, but who have not been in attendance for one or more years, should seek formal permission to re-register from the office of the dean or director of the faculty or school concerned, to ensure that work previously completed complies with current program requirements: Agricultural and Food Sciences; Arts; General Studies (Extended Education); Engineering; Clayton H. Riddell Faculty of Environment, Earth, and Resources; Science; Social Work; or University 1. Former students of the Faculty of Arts are required to re-apply for admission if they have been away from their studies for ten or more years.

All students who were admitted to the Asper School of Business, Dental Hygiene, Education, Environmental Design, School of Art, Nursing, Music, or Kinesiology & Recreation Management, where there is limited enrolment, and who have not been in attendance for one year or more, must make formal application to re-register to the office of the dean or director before June 1. Their acceptance back into the program will be subject to quota restrictions and compliance with existing program requirements.

Students who wish to change to a different faculty or school, or who are no longer eligible to continue in one program of studies at the University of Manitoba, may apply for admission to another faculty or school by the application deadline date and must meet the entrance requirements of the faculty of choice.

Students wishing to return to their program of studies after serving a period of academic or disciplinary suspension must make a formal request for re-registration to the Dean's or Director's office of their faculty or school. Students currently on suspension from a faculty or school at the University of Manitoba will not normally be eligible for consideration for admission to another faculty or school.

Students who attend another post-secondary institution or another faculty or school at the University after being placed on suspension must submit an application through the Admissions Office to be considered for readmission to the faculty or school of suspension.

Graduates who wish to take further courses in their own faculty, but not towards a degree, must apply for readmission as a "special student."

5.2 Special Students

Special students are those who wish to enrol in a degree credit course for professional or personal interest and who are not seeking to complete a degree. These students apply to General Studies (Extended Education) or to the faculty or school offering the course.

5.3 Visiting Students

Visiting students are students who are registered at another institution who are taking one or more courses at the University of Manitoba on a Letter of Permission from their home university. These students generally apply for admission to General Studies (Extended Education).

5.4 Auditing Students

Auditing students are those who wish to be admitted for the purpose of auditing a course(s) only (not for academic credit). No documentation other than the information requested on the application form is required for admission purposes. Auditing students are not entitled to examination or other evaluation privileges, and in no instance may credit standing be obtained for a course which has been audited. Once admitted, the written consent of the instructor of the course(s) which the student wishes to audit must be presented at the time of registration for approval by the faculty or school. (Students admitted in a category other than auditor may audit courses with the approval of the dean or director, provided written permission of the instructor is presented at registration)

5.5 Students Transiting to Arts or Science from University 1

University 1 students may be admitted to either Arts or Science through a process called 'transiting', and are not required to complete the admission process through the regular application procedures. Students intending to transit to the Faculty of Arts or Science may do so prior to their next regular term of registration subject to the following conditions:

- Students who have completed at least 24 credit hours may choose to transit to the Faculty of Arts or Science.
- Students who have completed 30 credit hours or more in University 1 must choose to transit to Arts or Science, if not admitted to another faculty or school, prior to the next regular term of registration. Students will not normally transit for Summer Session.
- Students who are currently on academic suspension from University 1 will not be eligible for transit to Arts or Science until the period of suspension has been completed.

Upon transit to the Faculty of Arts or Science, a student's next assessment of academic performance will be according to the standards required in Arts and Science. See the chapters for the Faculties of Arts or Science in this Calendar for further details.

SECTION 6: ADMISSION WITH ADVANCED STANDING

Intro

Students who have previously attended a recognized post-secondary institution, including universities, colleges, community and/or technical colleges, and Bible Colleges, who are selected for admission to either a direct entry or an advanced entry program option may qualify for advanced standing. Advanced standing will be granted in compliance with the residence requirements, provided the work completed is part of the requirements of the degree program in which the student wishes to enrol. Some faculties and schools may consider only courses completed within ten (or fewer) years. Credit will be granted only for courses taken at a recognized institution. Standing cannot be determined until official transcripts and complete course descriptions have been received. Since it takes considerable time to have courses evaluated for transfer credit, students are urged to submit their results and course descriptions as early as possible in order that the evaluation process can be completed in time for registration. Students who do not have evaluations completed prior to registration should consult their faculty or school for guidance in selecting courses.

Transfer credit for each individual course will be evaluated by the appropriate University of Manitoba department and transfer credit will be granted subject to program applicability.

Further information on transfer of credit and residence requirement is found in the chapter, General Academic Regulations and Requirements.

Some faculties and schools may have limitations on possible credit taken beyond a specified period; this information is described in their chapters or in the [Applicant Information Bulletin](#).

6.1 Advanced Standing for High School Students

Students who have completed courses in the Advanced Placement program (selected Advanced Placement College Board examinations with a minimum score of four in specific areas) or the International Baccalaureate program (selected Higher and Standard Level courses with minimum scores of 4 in specific subject areas), or who have completed university level courses while in high school (including Challenge for Credit), may [apply for transfer of credit](#) to the program they are entering. Students should consult the Admissions Office for information.

Students admitted on the basis of high school graduation may be denied transfer of credit for any university studies completed between the filing of the application and subsequent registration at the University of Manitoba.

6.2 Students Applying from Bible Colleges

Students who have attended a Bible college will be considered for admission/transfer credit, providing that:

- The Canadian Bible college is a member institution of the Association of Universities and Colleges of Canada (AUCC) or is affiliated with an AUCC member institution (other than as an approved teaching centre), or is accredited by the Association for Biblical Higher Education (ABHE).
- The U.S. Bible college holds regional accreditation in the U.S., or is accredited by ABHE.

Degrees from Bible Colleges will not qualify applicants for admission to second degree or after degree programs, with the exception of holders of approved degrees from Booth College and Providence College who are applying for admission to the After Degree Bachelor of Education program. These degrees may suffice for admission to the After Degree program; contact the Faculty for specific information.

6.3 Graduates of Diploma Schools of Nursing (R.N.)

Graduates of diploma schools of nursing may be considered admissible as regular students to the University of Manitoba. Admission to specific faculties and schools will be with the consent of the dean or director and will be conditional upon the presence of specific subject fields within the program completed. Applicants in this category may be granted advance standing not exceeding the residency policy of the faculty concerned (grades of "C+" or equivalent in individual courses have the potential for credit in a degree program).

6.4 Graduates of Diploma Schools of Psychiatric Nursing (R.P.N.)

Diploma programs in Manitoba may receive credit transfer for professional work completed.

6.5 Canadian Coast Guard College

Graduates of the Canadian Coast Guard College diploma programs with a minimum 2.5 ("C+") average will be considered for admission as regular students to the University of Manitoba, and may be granted up to one year of advance standing, as appropriate to faculties and schools.

6.6 Graduates of Extended Education

Graduates of certificate programs offered under the auspices of the Extended Education Division of the University of Manitoba which require a minimum of 180 contact hours, may be eligible to receive credit towards an undergraduate degree providing they have been admitted to a faculty or school in which transfer of credit is appropriate. A minimum overall average of 2.5 or better must have been achieved to qualify for consideration. The maximum amount of credit which may be transferred will be determined by Extended Education in consultation with the relevant faculty or school.

SECTION 7: DEFINITION OF MANITOBA RESIDENCY

For purposes of undergraduate admission to the University of Manitoba, a Manitoba Resident shall be defined as a Canadian Citizen or Permanent Resident of Canada who, at the application deadline, meets any one of the following four descriptions:

- i. Has graduated from a Manitoba high school
- ii. Has a recognized degree from a university in Manitoba
- iii. Has completed either one year or two consecutive years of full-time academic studies in a recognized program at a university in Manitoba, while physically residing in Manitoba. The duration shall be determined by the program of study and identified in the respective [Applicant Information Bulletin](#) or Supplemental Regulations.
- iv. Has resided continuously in Manitoba for any two year period following high school graduation. The two year residence period shall not be considered broken where the program's admission committee is satisfied that the applicant was temporarily out of the province on vacation, in short-term volunteer work or employment, or as a full-time student.

SECTION 8: ENGLISH LANGUAGE PROFICIENCY

8.1 English Language Proficiency Requirement

English is the language of instruction and communication at the University of Manitoba. Accordingly, an applicant whose primary language is not English, or whose previous education was in another language, must demonstrate a command of English sufficient to meet the demands of classroom instruction, written assignments, and participation in tutorials and discussions.

Canadian Citizens, Permanent Residents and others whose primary language is English are deemed to be proficient in English by virtue of having lived and been educated in a country where English is the primary language (country as determined by the Admissions Office).

Canadian Citizens and Permanent Residents and International (study permit) applicants whose primary language is NOT English must provide evidence of proficiency in English by meeting the University of Manitoba standards as outlined in the following section.

8.2 English Language Proficiency Options

Any applicant who is asked to demonstrate proficiency in the English language may do so by meeting any one of the following options:*

- Achieve a minimum total score of 86 with a recommended minimum of 20 in each component score on the internet-based Test of English as a Foreign Language (TOEFL).
- Achieve a minimum score of 550 with no less than 50 (unscaled) in each of the component scores on the paper-based TOEFL.
- Achieve a minimum total score of 213 with no less than 17 (unscaled) in each component score in the computer-based TOEFL.
- Achieve minimum scores of 4.5 in Reading, 4.5 in Listening and 4.0 in Writing on the Canadian Test of English for Scholars and Trainees (CanTEST).
- Achieve a minimum score of 6.5 based upon the academic module A, or module B, on the International English Language Testing System (IELTS).
- Achieve a minimum score of 80 on the Michigan English Language Assessment Battery (MELAB).
- Achieve a grade of C or higher on the University of Cambridge Certificate of Proficiency in English.
- Achieve a score of 60 or more in the Canadian Academic English Language Assessment (CAEL).
- Achieve a minimum score of 58 in the Pearson Test of English (Academic).
- Achieve a minimum of 65% in the direct-entry English program, also known as the Academic English Program for University and College Entrance (AEPUCE), as taught by the English Language Centre at the University of Manitoba (or equivalent program at the University of Winnipeg or Red River College).
- Successful completion of 30 credit hours within the International College of Manitoba with a minimum 2.0 grade point average.

* Some Faculties may require a specific test or test scores higher than those indicated above.

8.3 English Language Proficiency Waiver

An English language proficiency waiver may be granted to anyone who is a Permanent Resident, Naturalized Canadian, or who is in Canada on a study permit.

Students seeking this exemption must provide supporting documentation and have the information assessed as satisfactorily meeting one of the following:

- Ten consecutive years of residency in Canada, which may include years of study.
- Successful completion of a three-year secondary (high school) program in Canada, or three years of post-secondary education in Canada, or any combination of three years of successful secondary and post-secondary education in Canada.
- Graduation from a Manitoba high school with five credits at the Grade 12 level which include two credits of English at the 40S or U level with an average grade of 75 per cent.
- Achieve a grade of four or better on the International Baccalaureate Higher Level English course, or a grade of four or better on the Advanced Placement English Composition: Literature and Composition.
- Verify conditions equivalent to the above in a country where English is the primary language.

SECTION 9: APPLICATION PROCEDURE

9.1 Applications, Deadlines and Documents

On-line applications and downloadable application material is provided on the university website (www.umanitoba.ca/admissions) and at the Admissions Office, 424 University Centre; telephone (204) 474-8808. All applicants are advised to download the [Applicant Information Bulletin](#) for their chosen faculty/school for a careful review of the entrance requirements and selection process and then to [apply on-line](#) for admission.

Students are encouraged to submit their applications as early as possible to provide enough time for documentation submission and application processing. Students cannot register until a favourable admission decision has been made. Generally faculties and schools do not consider nor issue acceptances to students awaiting supplemental or summer session results. In those faculties and schools which do, applications must be filed in time to meet the deadline date. An admission decision will only be made upon receipt of final examination results.

Application to live in a [campus residence](#) is made separately (see the Student Affairs chapter).

Students who have attended a university other than the University of Manitoba will be required to submit official transcripts of all previous work completed. Transcripts should be submitted at the time of application, or as soon as final results are available, but no later than the deadline date for submission of documents. University of Manitoba transcripts are not required of applicants.

Transfer student applicants who register for further university/college courses subsequent to their application to the University of Manitoba (unless on a Letter of Permission from the University of Manitoba) must submit an official transcript of final grades. Admission status will be reassessed, and unless prior permission has been obtained from the Admissions Office, transfer of credit may be denied.

9.2 Appeals of Admission Decisions

Individuals who wish to have their applications reconsidered should submit their request to the Chair of the Selection Committee. Past experience has shown that most inquiries can be satisfied at this level without further reference. Persons wishing reconsideration of the decision of the Selection Committee shall direct their request to the Chair within ten (10) days of the

mailing of the Committee decision.

Should the student wish to pursue the reconsideration decision of the Selection Committee further, such an appeal will be made in accordance with the Senate committee on Admission Appeals.

Procedures: http://umanitoba.ca/admin/governance/governing_documents/students/286.html

9.3 Application Fraud or Misconduct

Application fraud or misconduct includes:

- Failure to declare attendance at another post-secondary institution;
- Presenting falsified academic documentation or causing or encouraging another person to falsify records through translation or data changes;
- Presenting falsified personal documentation, e.g. using a false name, date of birth, country of origin, etc.;
- Presenting falsified or fictitious reference documentation;
- Cheating on, or having another person write, a standardized entry exam such as, TOEFL, MCAT, LSAT, DAT or GMAT;
- Presenting another person's standardized test score as one's own to falsify a test result; and
- Failure to report suspensions from another post-secondary institution.

The commission of applicant fraud or misconduct may result in acceptance and registration being withdrawn and the applicant disqualified from consideration, not only in the year of application, but in subsequent sessions. If discovered in a subsequent session it may result in dismissal from the university.

9.4 Declaration

All persons seeking admission to the University of Manitoba must sign (or accept) the following declaration on the application for admission form:

"I hereby certify that I have read and understood the instructions and information sheet accompanying any part of this application form and that all statements made in connection with this application are true and complete."

UNIVERSITY 1

University 1 First Year Centre

Program Director: Dr. Jerome Cranston
Campus Address & General Office: 205 Tier Building
Telephone: (204) 474 6209
Fax: (204) 474 7659
Email Address: university_1@umanitoba.ca
Website: umanitoba.ca/U1

Chapter Contents

SECTION 1: UNIVERSITY 1

- 1.1 First Year Study in University 1
- 1.2 The University 1 First Year Centre
- 1.3 ARTS 1110: Introduction to University
- 1.4 Advising Programming

SECTION 2: ADMISSION REQUIREMENTS

- 2.1 Limited Admission
- 2.2 Transfer of Credit
- 2.3 Returning to University 1 After an Extended Leave

SECTION 3: UNIVERSITY 1 ACADEMIC REGULATIONS

- 3.1 Maximum Course Load
- 3.2 Voluntary Withdrawals
- 3.3 Repeating Courses
- 3.4 Laboratory Exemptions
- 3.5 Academic Performance
- 3.6 University 1 Honour List

SECTION 4: UNIVERSITY 1 PROGRAM REQUIREMENTS

- 4.1 Course Selection and Registration
- 4.2 University 1 Curriculum
- 4.3 Transfer to Faculties and Schools Following University 1

SECTION 5: RECOMMENDED INTRODUCTORY COURSES

SECTION 1: UNIVERSITY 1

1.1 First Year Study in University 1

University 1 (U1) is a unique approach to first year university studies. U1 provides students with support and guidance in adjusting to university life and academic expectations, in making decisions about degree planning, and in building the necessary skills and behaviours to achieve academic and personal success. University 1 is the administrative home for most beginning undergraduate students, through the first 30 credit hours of courses, in most University of Manitoba degree programs. University 1 students have the opportunity to design an individualized first year schedule in order to meet the admission requirements of one or more target degree programs. With the support of specially trained registration assistants and academic advisors, University 1 students receive academic advisement through one-to-one advising sessions, group and specialty topic sessions, as well as through online resources. University 1 also administers the ARTS 1110, Introduction to University, course that focuses on skill development in academic writing, research, critical thinking, and study strategies that can be applied in all academic disciplines.

High school graduates, mature students, and transfer students with less than 24 credit hours of post-secondary education, are generally admitted to University 1. Direct entry options also exist for several faculties, schools and colleges. Please refer to the Admissions Chapter of this calendar for details.

The courses taken in University 1 are first year university-level courses that qualify students to enter into their chosen target faculty, school or college and degree program. Students who have completed 30 credit hours while in University 1 will either transit to the Faculty of Arts or the Faculty of Science, or apply to one of the other faculties, schools or colleges at the University of Manitoba, where they will complete the requirements of the degree program of their choice in order to graduate.

1.2 The University 1 First Year Centre

The University 1 First Year Centre is home to registration assistants and professionally trained academic advisors. If you have questions about courses and programs, or challenges arise affecting your academic success, the staff members of the University 1 First Year Centre are available to assist you. Academic advisors typically assist students with degree program planning, course selection, registration issues, academic expectations and skills, personal issues or concerns, and in connecting with other campus resources. Registration assistants serve as a welcoming presence in the First Year Centre and are available to assist students with basic advising needs, registration assistance, as well as provide general information about the university, its policies and procedures, and by making on-campus referrals as needed.

Detailed guidance with regards to first year course selection and program planning can be found in the [First Year Planning Guide](#) on the University 1 website. Additional information about registration is included in Section 4.1 of this chapter.

Newly-admitted students are strongly encouraged to review the First Year Planning Guide prior to consulting with a University 1 academic advisor.

1.3 ARTS 1110: Introduction to University

ARTS 1110, Introduction to University, is a three-credit hour course offered by University 1, designed to help students in the transition from high school, college, or the work-place, to university studies. ARTS 1110 offers a unique combination of educational principles, practical skills, regular assignments, and the support of a group of fellow students. Features of ARTS 1110 include: strategies for academic success; introduction to libraries and research methods; exercises in critical thinking; and instruction and extensive practice in effective writing. ARTS 1110 is available to students who have completed fewer than 60 credit hours of university-level courses. Successful completion of ARTS 1110 satisfies the university's written English (W) requirement.

1.4 Advising Programming

Making the transition to university from high school, from another post-secondary institution, or from the workplace, can seem overwhelming. Online resources, along with individual and group advising services, provide students with the tools and information needed to start their first year off strong and find success as a University of Manitoba student.

Advising opportunities are strategically planned to provide students with useful information when they need it most. Throughout the year, students are provided with a variety of opportunities to strengthen their connection with first year advising services, as well as with the larger campus community. Students are encouraged to seek out information and advice at regular intervals.

All new students are strongly encouraged to visit the First Year Centre to familiarize themselves with available supports and resources at the beginning of their first term at university.

SECTION 2: ADMISSION REQUIREMENTS

Intro

The Admissions chapter of this publication contains general University of Manitoba admission information, rules and regulations.

For current University 1 admission requirements, refer to our [Applicant Information Bulletin](#) on the Admissions website.

Historical admission requirements can be found in the PDF versions of the Undergraduate Academic Calendar: umanitoba.ca/calendar

2.1 Limited Admission

Canadian high school graduates who do not meet the specific academic requirements for admission to University 1 may be admitted under a special Limited Admission category.

Students in this category will have their registration restricted (see section 3.1) and will be provided with additional academic supports and services.

For a full description of the Limited Admission program and requirements, please refer to the University 1 website.

2.2 Transfer of Credit

Students who have completed International Baccalaureate (IB) or Advanced Placement (AP) courses in high school may receive advanced standing for university-level course work, upon request to the [Admissions](#) office.

Students who have completed courses at another post-secondary institution prior to admission to University 1 may receive advanced standing, as outlined in the Transfer Credit section of the Admissions website. Courses completed at another institution 10 years or more before registration in University 1 are not considered for transfer credit.

2.3 Returning to University 1 After an Extended Leave

Students who have been away from University 1 for more than a year are blocked from using Aurora and must consult with a University 1 academic advisor. If the student has not attended another post-secondary institution, they are eligible to return to University 1. The advisor will determine academic progress, registration date and time, and discuss academic plans. Students planning a return to studies are strongly advised to contact a University 1 academic advisor well in advance of the start of registration.

Students who have attended another institution since their last registration in University 1 must typically re-apply for admission. If more than 24 credit hours have been completed, between courses previously taken at U of M and those taken from another institution, the student will not resume studies in University 1 and will be required to apply to a degree program.

Students should consult with an advisor in their intended faculty, school or college for information and advice well in advance of the application deadline, which will vary by faculty, and can be obtained from the [Admissions](#) office.

SECTION 3: UNIVERSITY 1 ACADEMIC REGULATIONS

Intro

Academic regulations which apply to all students are described in the chapters of the Calendar titled 'General Academic Regulations', and 'University Policies'. In addition, faculties, schools and colleges have regulations and requirements that apply specifically to their students.

Please see the specific faculty, school or college chapter(s) in the Calendar for the academic regulations that may apply to courses in which you are registered. University 1 Academic Regulations are described below.

3.1 Maximum Course Load

University 1 students are usually restricted to a maximum of 30 credit hours during the Fall/Winter terms, with a maximum of five courses in each term. Students admitted under the Limited Admission category will be restricted to a maximum of 24 credit hours during the Fall/Winter terms, with a maximum of four courses in each term. In each case, a credit hour overload may be considered for Winter term based on Fall term performance. Contact the [University 1 First Year Centre](#) to discuss course overload requests.

3.2 Voluntary Withdrawals

Students are permitted to withdraw from courses within the deadlines listed for each term in the Academic Schedule. The responsibility for initiating withdrawals rests solely with the student. Voluntary Withdrawals (VWs) must be done by the student using Aurora; non-attendance in courses does not constitute a withdrawal. VWs will not be permitted after the deadlines posted in the Academic Schedule. Students are strongly encouraged to discuss their plans with an academic advisor before withdrawing from courses.

In exceptional circumstances, Authorized Withdrawals may be permitted on presentation of appropriate documentation. Consult a University 1 academic advisor for information.

3.3 Repeating Courses

University 1 students may repeat a course they have previously taken, but they are not required to do so because of a low grade or a Voluntary Withdrawal (VW), unless it is a course required for admission or required once in their target degree program. University 1 students who wish to repeat a course in which they have a final grade must consult with a University 1 academic advisor prior to registration. Students may be eligible for a laboratory exemption in classes they are repeating which include a laboratory component (see Section 3.4 in this chapter).

For courses that have been repeated (i.e. 2nd attempt), only the last grade achieved will be counted towards the students' cumulative Grade Point Average, however, the grades for all courses attempted will be included on the official transcript. In most cases, students will only be given one opportunity to repeat a course in which they have received a final grade. This includes taking a course considered to be equivalent to the course originally attempted.

Students must refer to their target faculty, school or college's Applicant Information Bulletin, found on the [Admissions](#) office website, to determine how repeating a course may affect admission eligibility.

3.4 Laboratory Exemptions

University 1 students who are repeating a course with a laboratory component may qualify for a laboratory exemption. Laboratory exemptions are only granted if the lab portion of the course was passed. Only certain courses (usually courses in the Faculty of Science) offer laboratory exemptions. Students should see the general office of the department offering the course to determine if they are eligible for a laboratory exemption. Students who are eligible for a laboratory exemption should bring written permission from the department offering the course to the [University 1 First Year Centre](#) prior to registration.

3.5 Academic Performance

Grades obtained in University 1 become a part of the student's permanent record and will appear on the student's official transcript. Grades earned while in University 1 will determine admission to most faculties, schools and colleges, and may also qualify a student for the University 1 Honour List (see section 3.6 in this chapter for details). See the General Academic Regulations chapter of the Calendar for a description of how Grade Point Averages (GPAs) are calculated.

Maximum Number of 'F' Grades

All students in University 1 must meet minimum academic performance requirements and will be placed on academic suspension for one year if they have accumulated more than 36 credit hours of 'F' grades, regardless of the origin of the grade (i.e. courses transferred from other programs or institutions will be included) or whether the course has been repeated.

Students who are performing marginally or are at risk of exceeding the 'F' limit will be identified and will be provided with academic advising, strategic referrals, and support services as necessary.

Students placed on academic suspension are not normally permitted to register in any other faculty, school or college at the University of Manitoba or to attend any other post-secondary institution for a period of one calendar year.

Following one year of suspension, the student may return upon application to the Faculty of Arts or the Faculty of Science. Please see the [Faculty of Arts](#) or [Faculty of Science](#) chapters of the Calendar for a complete description of the options available following academic suspension.

3.6 University 1 Honour List

Students who achieve a term GPA of 3.75 or higher on a minimum of 12 credit hours offered by the University of Manitoba will be placed on the University 1 Honour List. The University 1 Honour List will be calculated after each term (Fall, Winter, and Summer); the notation "University 1 Honour List" will be recorded on the student's transcript specific to that term.

SECTION 4: UNIVERSITY 1 PROGRAM REQUIREMENTS

4.1 Course Selection and Registration

First year course requirements, along with course selection and registration information, can be found in the [First Year Planning Guide](#) on the [University 1 website](#).

Students with clear academic and career goals can base course selection on the Focused Approach, a full course load that allows students to complete their programs in the shortest time. Students trying to decide between two or more programs may base their course selection on the Balanced Approach, where entrance requirements to more than one faculty, school or college can be completed at the same time. The widest exploration of options is found in the Sampling Approach, in which students select courses according to individual interests. Students following the Sampling Approach may require additional courses to qualify for admission to the target faculty, school or college that they choose.

New University 1 students should complete the online [Registration Tutorials](#) prior to registering for courses. The tutorials guide students on how to use the university's online course registration system (Aurora). Other registration-related concerns, such as paying fees and obtaining a photo identification card, can be found on the [Registrar's Office website](#).

Information about initial registration and resources, such as the First Year Planning Guide and the online Registration Tutorials will be emailed to students upon admission; beginning in May, for students admitted to University 1 for the Fall term; in the Fall, for students admitted for the Winter term; and in the Spring, for students admitted for the Summer term.

4.2 University 1 Curriculum

University 1 is normally the first 24-30 credit hours of a student's degree program. The University 1 curriculum includes a breadth requirement to ensure that students are exposed to a representative sample of courses. To that end, University 1 students are required to take 6 credit hours of courses from the Faculty of Arts, 6 credit hours of courses from the Faculty of Science, and 6 credit hours of courses from the Faculty of Arts or the Faculty of Science or the Clayton H. Riddell Faculty of Environment, Earth, and Resources. The remaining 12 credit hours of courses are to be chosen from the Recommended Introductory Courses list, found within the [First Year Planning Guide](#).

The University 1 curriculum will normally be fulfilled through the completion of the admission requirements to faculties, schools and colleges, as outlined in this Calendar and in the [First Year Planning Guide](#).

Students may be eligible to enter a faculty, school or college program once they have completed a minimum of 24 credit hours (see Section 4.3 in this chapter). Students who have not completed the University 1 curriculum and who are admitted to faculties, schools and colleges after University 1, will complete any outstanding requirements as part of their degree program.

4.3 Transfer to Faculties, Schools and Colleges Following University 1

Degree programs in target faculties, schools and colleges that admit students directly from University 1 require the completion of either 24 or 30 credit hours, depending on the program. There are often alternative courses that will fulfill admission requirements and, with careful planning, University 1 course selection can qualify students for admission to more than one program.

Applying to Faculties, Schools and Colleges

University 1 students who have met the minimum admission requirements for their target degree program can apply to an [Advanced Entry](#) program for which they have met the first year requirements. Detailed admission information for advanced entry degree programs can be found in each program's Applicant Information Bulletin, available on the Admissions website.

Applications to degree programs in faculties, schools or colleges other than Arts or Science, must be made through the [Admissions website](#).

Transiting to the Faculty of Arts or the Faculty of Science

University 1 students who have completed between 24 and 30 credit hours by the end of the Winter term, who are targeting degree programs in either the Faculty of Arts or the Faculty of Science, do not have to apply for admission; instead, these students are able to [transit](#). The Transit from University 1 function becomes available in Aurora, under the Enrolment and Academic Records tab, each year in mid-June. There is no fee to transit.

Alternatively, students who have completed between 24 and 27 credit hours may elect to remain in University 1 and register for a full course load in the following regular academic year, depending on the requirements of their target degree program.

Students who have completed 30 credit hours by the end of the Winter term are not eligible to remain in University 1 for a second year and are [required](#) to either transit to the Faculty of Arts or the Faculty of Science, or apply to an advanced entry program for which they have admission requirements.

SECTION 5: RECOMMENDED INTRODUCTORY COURSES

Intro

Refer to Section 4 in this chapter for information about choosing courses in University 1. To find a description of the courses on this list, go to the chapter in this Calendar for the Faculty, School, or College that is offering the course. Departments are listed alphabetically within each Faculty, School, or College chapter. Course descriptions are located in the department sections and sorted in numerical order. Note that not all courses listed in this section are offered every year. To determine which courses are offered in the current academic year, refer to the Aurora Class Schedule. Students may be permitted to take courses not on this list with permission of the teaching Faculty, School, or College and University 1. For a list of courses available at Université de Saint-Boniface see a University 1 Academic Advisor or refer to the Aurora [Class Schedule](#).

Course		Credit Hours
Faculty of Agricultural and Food Sciences		
In addition to the courses listed below, students who are registering in University 1 for a second year to complete courses required for entry to Agricultural and Food Sciences may request permission to register in any advanced level Agricultural and Food Sciences courses for which they have the prerequisites, subject to space limitations. Students must first consult a University 1 Academic Advisor.		
Agribusiness		
ABIZ 1000	Introduction to Agribusiness Management	3
ABIZ 1010	Economics of World Food Issues and Policies	3
Entomology		
ENTM 1000	World of Bugs	3
Food Science		
FOOD 1000	Food Safety Today and Tomorrow	3
General Faculty		
AGRI 1500	Natural Resources and Primary Agricultural Production	3
AGRI 1510	Production, Distribution and Utilization of Agricultural Products	3
Human Nutritional Sciences		
HNSC 1200	Food: Facts and Fallacies	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
Plant Science		
PLNT 1000	Urban Agriculture	3

Faculty of Architecture		
EVDS 1600	Introduction to Environmental Design	3
EVDS 1602	Visual Literacy	3
EVDS 1660	History of Culture, Ideas and Environment 1	3
EVDS 1670	History of Culture, Ideas and Environment 2	3
School of Art		
FA 1020	Mathematics in Art	3
FAAH 1030	Introduction to Art 1A	3
FAAH 1040	Introduction to Art 2A	3
STDO 1210	Drawing: Studio 1	3
STDO 1240	Figure Study 1	3
STDO 1250	Drawing: Studio 2	3
STDO 1410	Visual Language	3
STDO 1450	Open Studio 1	3
STDO 1470	Materials Studio	3
STDO 1510	Art Now	3

Faculty of Arts		
In addition to the courses listed below, University 1 students may take any 2000, 3000 and 4000 level Arts courses for which they have the prerequisite, subject to space limitations.		
Anthropology		
ANTH 1210	Human Origins and Antiquity	3
ANTH 1220	Cultural Anthropology	3
ANTH 1520	Critical Cultural Anthropology	3
Asian Studies		
ASIA 1420	Asian Civilizations to 1500	3

ACADEMIC CALENDAR 2015-2016

ASIA 1430	Asian Civilizations from 1500	3
ASIA 1750	Introduction to Korean	6
ASIA 1760	Introduction to Chinese (Mandarin)	6
ASIA 1770	Introduction to Japanese	6
ASIA 1780	Basic Sanskrit	6
ASIA 1790	Basic Hindi-Urdu	6
ASIA 2750	Intermediate Korean	6
ASIA 2760	Intermediate Chinese (Mandarin)	6
ASIA 2770	Intermediate Japanese	6
Canadian Studies		
CDN 1130	Introduction to Canadian Studies	6
Catholic Studies		
CATH 1190	Introduction to Catholic Studies	3
Classics		
	Classical Studies	
CLAS 1270	Introduction to Ancient Greek Culture	3
CLAS 1280	Introduction to Ancient Roman Culture	3
	Greek	
GRK 1010	Introduction to the Reading of Ancient Greek 1	3
GRK 1020	Introduction to the Reading of Ancient Greek 2	3
GRK 1030	New Testament Greek	6
GRK 1060	Introductory Modern Greek 1	3
GRK 1070	Introductory Modern Greek 2	3
GRK 1310	Intermediate Readings in Ancient Greek	3
GRK 1330	The Acts of the Apostles	3
	Latin	
LATN 1080	Introduction to the Reading of Latin 1	3
LATN 1090	Introduction to the Reading of Latin 2	3
LATN 1320	Intermediate Readings in Latin	3
Economics		
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles	3
ECON 1210	Introduction to Canadian Economic Issues and Policies	3
ECON 1220	Introduction to Global Environmental Economic Issues and Policies	3
English, Film, and Theatre		
	English	
ENGL 0930	English Composition (Note: This course is not acceptable for credit in the Faculties of Engineering, Nursing and Pharmacy, towards the teachable major/minor in Education, nor can it be used to meet the Humanities requirement).	3
ENGL 0940	Writing About Literature (Note: This course is not acceptable for credit in the Faculties of Engineering, Nursing and Pharmacy, nor can it be used to meet the Humanities requirement).	3
ENGL 1200	Representative Literary Works	6
ENGL 1300	Literature since 1900	6
ENGL 1340	Introduction to Literary Analysis	3
ENGL 1400	Thematic Approaches to the Study of Literature	3
	Film	
FILM 1290	The Art of the Film 1	3

FILM 1310	Film History	3
	Theatre	
THTR 1220	Introduction to Theatre	6
French, Spanish and Italian		
	French	
FREN 1152	Introductory French 1	3
FREN 1154	Introductory French 2	3
FREN 1190	Francais	6
FREN 1200	French 1	6
FREN 1252	Francais Oral 1	3
	Spanish	
SPAN 1180	Introductory Spanish	6
SPAN 1190	Introductory Spanish 2	3
SPAN 1262	Intermediate Spanish Language and Conversation 1	3
SPAN 1272	Intermediate Spanish Language and Conversation 2	3
SPAN 1280	Spanish for Native Speakers	3
SPAN 1290	Accelerated Intermediate Spanish	6
	Italian	
ITLN 1080	Introductory Italian	6
	Portuguese	
PORT 1170	Introductory Portuguese	6
PORT 1282	Intermediate Portuguese Grammar & Conversation	3
German and Slavic Studies		
	German	
GRMN 1120	Beginning German	6
GRMN 1300	Masterpieces of German Literature in English Translation	3
GRMN 1310	Love in German Culture in English Translation	3
GRMN 2100	Intermediate German	6
GRMN 2120	Introduction to German Culture 1	3
GRMN 2130	Introduction to German Culture 2	3
GRMN 2140	Exploring German Literature	3
	Hungarian	
HUNG 1000	Introduction to Hungarian 1	3
HUNG 1002	Introduction to Hungarian 2	3
	Polish	
POL 1890	Introductory Polish	6
POL 1900	Love, Heroes & Patriotism in Contemporary Poland	3
POL 2600	Polish Culture Until 1918	3
POL 2610	Polish Culture 1918 to the Present	3
POL 2890	Intermediate Polish	6
	Russian	
RUSN 1300	Introductory Russian	6
RUSN 1330	Introductory Russian 2	3
RUSN 1400	Masterpieces of Russian Literature in English Translation	3
RUSN 2280	Russian Culture 1	3
RUSN 2290	Russian Culture 2	3

ACADEMIC CALENDAR 2015-2016

RUSN 2810	Intermediate Russian	6
RUSN 2820	Intermediate Russian 2	3
	Ukrainian	
UKRN 1230	Language Seminar in Ukraine 1	3
UKRN 1310	Introductory Ukrainian	6
UKRN 1320	Introductory Ukrainian 2	3
UKRN 2720	Intermediate Ukrainian	6
UKRN 2730	Intermediate Ukrainian 2	3
UKRN 2770	Ukrainian Culture 1	3
UKRN 2780	Ukrainian Culture 2	3
Global Political Economy		
GPE 1700	Social Justice in the 21 st Century: Global Political Economy and Environmental Change	3
History		
HIST 1200	An Introduction to the History of Western Civilization	6
HIST 1260	New Directions in History: Inquiries into the Cultural Basis of the Modern World	3
HIST 1270	New Directions in History: Inquiries into the Power Relations of the Modern World	3
HIST 1350	An Introduction to the History of Western Civilization to 1500	3
HIST 1360	An Introduction to the History of Western Civilization from 1500	3
HIST 1370	An Introduction to Modern World History: 1500-1800	3
HIST 1380	An Introduction to Modern World History: 1800-Present	3
HIST 1390	History of Colonial Canada: 1500-1885	3
HIST 1400	History of the Canadian Nation since 1867	3
HIST 1420	Asian Civilizations to 1500	3
HIST 1430	Asian Civilizations from 1500	3
HIST 1440	History of Canada	6
HIST 1500	An Introduction to Modern World History: 1500 - Present	6
HIST 2050	South Asia since 1947	3
HIST 2080	The Byzantine Empire and the Slavic World	3
HIST 2130	Emergence of Modern South Asia: 1757-1947	3
HIST 2140	Colonial Latin America	3
HIST 2150	Independent Latin America	3
HIST 2180	The History of Catholicism to 1540	3
HIST 2210	History of Britain, 1485 to the Present	6
HIST 2220	The Shaping of Modern Ireland, 1500 to the Present	6
HIST 2230	History of the United States from 1607	6
HIST 2240	History of Antisemitism and the Holocaust	6
HIST 2250	Social History of the Jews: Antiquity to Present	6
HIST 2280	Aboriginal History of Canada	6
HIST 2282	Inventing Canada	3
HIST 2286	Modern Canada	3
HIST 2288	History of Social Movements in Canada	3
HIST 2350	Europe 1789-1870	3
HIST 2360	Europe 1870-Present	3
HIST 2370	History of Europe since the French Revolution	6
HIST 2380	The Twentieth-Century World	6
HIST 2390	Early Modern Europe, 1450-1789	6

HIST 2400	History of Human Rights and Social Justice in the Modern World	3
HIST 2410	History of India	6
HIST 2420	The Medieval World	6
HIST 2490	History of Russia	6
HIST 2500	History of Africa	6
HIST 2502	The Modern Middle East: A Critical Survey	6
HIST 2520	A History of Germany since the Reformation	6
HIST 2570	Nationalism in Modern Times	3
HIST 2600	Introduction to the Ukraine	3
HIST 2610	Making of Modern Ukraine	3
HIST 2650	Modern China and Japan	6
HIST 2654	History of the People's Republic of China, 1949 – Present	3
HIST 2660	History of the Soviet Union	3
HIST 2670	History of Capitalism	3
HIST 2680	A History of Socialism from the French Revolution to the Present	3
HIST 2720	The World Since 1945	6
HIST 2750	History of the United States from 1607 to 1877	3
HIST 2760	History of the United States from 1877	3
HIST 2820	An Introduction to Historical Method	6
HIST 2840	A History of Russia to 1917	3
HIST 2900	Topics in Social History	6
HIST 2930	The History of the British Isles, 412-1485	6
HIST 2990	The History of Catholicism since 1540	3
Icelandic		
ICEL 1200	Introduction to Icelandic	6
ICEL 1210	Conversational Icelandic	3
ICEL 1300	Introduction to Swedish	3
ICEL 1400	Introduction to Contemporary Culture in Iceland	3
ICEL 1410	Introduction to Culture in Medieval Iceland	3
Interdisciplinary		
ARTS 1110	Introduction to University (Note: This course is not acceptable for credit in the Faculty of Engineering, nor does it satisfy a Humanities or Social Sciences requirement.)	3
ARTS 1160	Leadership: An Interdisciplinary Approach (This course will satisfy the Faculty of Arts' Social Sciences requirement.)	3
Judaic Studies		
Arabic		
ARA 1000	Introductory Arabic	6
ARA 2000	Intermediate Arabic	6
Hebrew		
HEB 1120	Biblical Hebrew	6
HEB 1250	Hebrew 1	6
HEB 1260	Hebrew 2	6
Yiddish		
YDSH 1220	Yiddish	6
Labour Studies		
LABR 1260	Working for a Living	3
LABR 1290	Introduction to the Canadian Labour Movement	3

ACADEMIC CALENDAR 2015-2016

Linguistics		
LING 1200	Introduction to Linguistics	6
LING 1340	Semantics	3
LING 1360	Languages of Canada	3
LING 1380	General Phonetics	3
LING 1420	Language and Gender	3
LING 1440	Rules of English Grammar	3
Native Studies		
NATV 1000	Orientation Course: The Colonizers and the Colonized	3
NATV 1200	The Native Peoples of Canada	6
NATV 1220	The Native Peoples of Canada, Part 1	3
NATV 1240	The Native Peoples of Canada, Part 2	3
Native Languages		
NATV 1250	Introductory Cree 1	3
NATV 1260	Introductory Cree 2	3
NATV 1270	Introductory Ojibway 1	3
NATV 1280	Introductory Ojibway 2	3
NATV 1290	Introductory Inuktitut	3
Philosophy		
PHIL 1200	Introduction to Philosophy	6
PHIL 1290	Critical Thinking	3
PHIL 1320	Introductory Logic	6
Political Studies		
POLS 1000	Democracy and Development	3
POLS 1010	Political Ideas and Ideologies	3
POLS 1040	Global Political Issues	3
POLS 1070	Law, Politics, and Power in Canada	3
POLS 1500	Introduction to Politics	6
Psychology		
PSYC 1200	Introduction to Psychology	6
Religion		
RLGN 1120	Biblical Hebrew	6
RLGN 1320	Introduction to World Religions	6
RLGN 1350	The History of Eastern Christianity	6
RLGN 1390	Readings in Biblical Hebrew 1	3
RLGN 1400	Readings in Biblical Hebrew 2	3
RLGN 1410	Death and Concepts of the Future	3
RLGN 1420	Ethics in World Religions	3
RLGN 1424	Religion and Sexuality	3
RLGN 1430	Food: Religious Concepts and Practices	3
RLGN 1440	Evil in World Religions	3
RLGN 1450	Religion and The Media	3
Sociology		
SOC 1200	Introduction to Sociology	6
Women's and Gender Studies Program		
WOMN 1500	Introduction to Women's and Gender Studies in the Humanities	3

WOMN 1600	Introduction to Women's and Gender Studies in the Social Sciences	3
WOMN 2560	Women, Science and Technology	3
WOMN 2600	Sex, Gender, Space and Place	3

Faculty of Engineering		
In addition to the courses listed below, students who are registering in University 1 for a second year to complete courses required for entry to Engineering may request permission to register in any advanced level Engineering courses for which they have the prerequisites, subject to space limitations. Students must first consult the Faculty of Engineering and a University 1 Academic Advisor.		
ENG 1430	Design in Engineering	3
ENG 1440	Introduction to Statics	3
ENG 1450	Introduction to Electrical and Computer Engineering	3
ENG 1460	Introduction to Thermal Sciences	3

Clayton H. Riddell Faculty of Environment, Earth, and Resources		
In addition to the courses listed below, University 1 students may take any 2000, 3000 and 4000 level Clayton H. Riddell Faculty of Environment, Earth, and Resources courses for which they have the prerequisite, subject to space limitations.		
Environmental Science		
ENVR 1000	Environmental Science 1: Concepts	3
ENVR 2000	Environmental Science 2: Issues	3
General Faculty		
EER 1000	Earth: A User's Guide	3
Geography		
GEOG 1280	Introduction to Human Geography	3
GEOG 1290	Introduction to Physical Geography	3
GEOG 1700	Social Justice in the 21 st Century: Global Political Economy and Environmental Change	3
Geological Sciences		
GEOL 1340	The Dynamic Earth	3
GEOL 1400	Time-Trekker's Travelog: Our Evolving Earth	3
GEOL 1410	Natural Disasters and Global Change	3
GEOL 1420	Exploring the Planets	3

Faculty of Health Sciences		
College of Medicine - Community Health Sciences		
Health Sciences, Health Studies, and Human Ecology		
HEAL 1600	Health and Health Professions	3
Family Social Sciences		
FMLY 1000	Families in Contemporary Canadian Society	3
FMLY 1010	Human Development in the Family	3
FMLY 1012	Introduction to Social Development	3
FMLY 1420	Family Management Principles	3

Faculty of Kinesiology and Recreation Management		
PERS 1200	Physical Activity, Health and Wellness	3
PERS 1300	Introduction to Leisure Travel	3
PERS 1400	Concepts of Recreation and Leisure	3
PERS 1500	Foundations of Physical Education and Kinesiology	3

ACADEMIC CALENDAR 2015-2016

Faculty of Management/I. H. Asper School of Business		
In addition to the courses listed below, students may register in any advanced level Business course for which they have the prerequisites, subject to space limitations.		
Business Administration		
GMGT 1010	Business and Society	3
GMGT 2060	Management and Organizational Theory	3
GMGT 2070	Introduction to Organizational Behaviour	3
Entrepreneurship		
ENTR 2010	Managing the Smaller Business	3
ENTR 2020	Starting a New Business	3
Marketing		
MKT 2210	Fundamentals of Marketing	3

Marcel A. Desautels Faculty of Music		
MUSC 1050	The Well-Tempered Concert-Goer	3
MUSC 1110*	Music Theory 1	3
MUSC 1120*	Music Theory 2	3
MUSC 1280*	Musical Style and Structure 1	3
MUSC 1290*	Musical Style and Structure 2	3
MUSC 1930	Rudiments of Music	3
* Contact the Marcel A. Desautels Faculty of Music for permission to register.		

Faculty of Science		
In addition to the courses listed below, University 1 students may take any 2000, 3000 and 4000 level Science courses for which they have the prerequisite, subject to space limitations.		
Biological Sciences		
BIOL 1000	Biology: Foundations of Life	3
BIOL 1010	Biology: Biological Diversity and Interactions	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interaction	3
BIOL 1300	Economic Plants	3
BIOL 1340	The State of the Earth's Environment: Contemporary Issues	3
BIOL 1410	Anatomy of the Human Body	3
BIOL 1412	Physiology of the Human Body	3
Chemistry		
CHEM 0900	Preparatory Chemistry	0
CHEM 1000	Understanding the World through Chemistry	3
CHEM 1030	Carbon Chemistry in Nature and Society	3
CHEM 1300	University 1 Chemistry: Structure and Modelling in Chemistry	3
CHEM 1310	University 1 Chemistry: An Introduction to Physical Chemistry	3
CHEM 1320	University 1 Chemistry: An Introduction to Organic Chemistry	3
Computer Science		
COMP 1010	Introductory Computer Science 1	3
COMP 1012	Computer Programming for Scientists and Engineers	3
COMP 1020	Introductory Computer Science 2	3
COMP 1260	Introductory Computer Usage 1	3
COMP 1270	Introductory Computer Usage 2	3

Mathematical Sciences		
MATH 0500	Preparing for University Mathematics	0
MATH 1010	Applied Finite Mathematics	3
MATH 1020	Mathematics in Art	3
MATH 1200	Elements of Discrete Mathematics	3
MATH 1210	Techniques of Classical and Linear Algebra	3
MATH 1220	Linear Algebra 1	3
MATH 1230	Differential Calculus	3
MATH 1232	Integral Calculus	3
MATH 1240	Elementary Discrete Mathematics	3
MATH 1300	Vector Geometry and Linear Algebra	3
MATH 1310	Matrices for Management and Social Sciences	3
MATH 1500	Introduction to Calculus	3
MATH 1510	Applied Calculus 1	3
MATH 1520	Introductory Calculus for Management and Social Sciences (Note: This course is not acceptable for credit in the Faculty of Engineering.)	3
MATH 1690	Calculus	6
MATH 1700	Calculus 2	3
MATH 1710	Applied Calculus 2	3
Microbiology		
MBIO 1010	Microbiology 1	3
MBIO 1220	Essentials of Microbiology	3
MBIO 1410	Introduction to Molecular Biology 1	3
Physics and Astronomy		
	Astronomy	
PHYS 1810	General Astronomy 1: Lights, Stars and Planets	3
PHYS 1820	General Astronomy 2: Exotic Stars, Galaxies and Cosmology	3
PHYS 1830	Perspective on the Universe	3
	Physics	
PHYS 0900	Preparing for University Physics	0
PHYS 1020	General Physics 1	3
PHYS 1030	General Physics 2	3
PHYS 1050	Physics 1: Mechanics	3
PHYS 1070	Physics 2: Waves and Modern Physics	3
PHYS 1300	Energy and the Environment	6
Statistics		
STAT 1000	Basic Statistical Analysis 1	3
STAT 2000	Basic Statistical Analysis 2	3
Faculty of Social Work		
SWRK 1310	Introduction to Social Welfare Policy	3
SWRK 2080	Interpersonal Communication Skills	3

FACULTY OF AGRICULTURAL AND FOOD SCIENCES

Faculty of Agricultural and Food Sciences/ School of Agriculture

Dean: Karin Wittenberg

Associate Dean: Jared Carlberg, Martin Scanlon

Campus Address & General Office: 256 Agriculture Building

Telephone: (204) 474-6026

Email Address: agfoodsci@umanitoba.ca

Website: umanitoba.ca/afs/

Academic Staff: Please refer to the Faculty of Agricultural and Food Sciences website at umanitoba.ca/afs/

Chapter Contents

SECTION 1: PROGRAMS OFFERED

- 1.1 Degree/ Diploma Programs Offered
- 1.2 Available Programs, Options, and Minors
- 1.3 Professional Designations

SECTION 2: ADMISSION REQUIREMENTS

- 2.1 Admission Requirements for the Agriculture, Agribusiness, Agroecology, and Food Science Programs
- 2.2 Admission Requirements for the Human Nutritional Sciences Programs
- 2.3 Admission Requirements for the Diploma Program

SECTION 3: FACULTY ACADEMIC REGULATIONS

- 3.1 Academic Regulations for the Agriculture, Agribusiness, Agroecology, and Food Science Programs
- 3.2 Academic Regulations for the Human Nutritional Sciences Programs
 - 3.2.1 Prerequisite, Corequisite, and Course Availability: Definitions
 - 3.2.2 Scholastic Standards
 - 3.2.3 Other Regulations
- 3.3 Academic Regulations for the Diploma Program
- 3.4 Course Availability

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

- 4.1 Agriculture, Agribusiness, Agroecology, and Food Science Programs
 - 4.1.1 Degree Faculty Core
 - 4.1.2 Bachelor of Science (Agriculture)
 - 4.1.3 Bachelor of Science (Agribusiness)
 - 4.1.4 Bachelor of Science (Agroecology)
 - 4.1.5 Bachelor of Science (Food Science)
 - 4.1.6 Biosystems Engineering Program
 - 4.1.7 Bachelor of Science (Textile Sciences)

4.2 Human Nutritional Sciences Programs

- 4.2.1 Faculty Program Requirements
 - 4.2.2 Bachelor of Science (Human Nutritional Sciences)
 - 4.2.2.1 Pre-Professional Preparation
 - 4.2.3 Bachelor of Science (Human Nutritional Sciences) - Second Degree Program
 - 4.2.4 Bachelor of Science (Human Nutritional Sciences) - Agreement with Red River College Culinary Arts Program
- 4.3 Pre-veterinary Program
 - 4.4 Interfaculty Option in Aging
 - 4.5 Minors
 - 4.6 Diploma Program
 - 4.7 Cooperative Education Program
 - 4.8 Internationally Educated Agrologists Post-Baccalaureate Diploma Program (IEAP)

SECTION 5: COURSE DESCRIPTIONS

- 5.1 Degree Course Descriptions
- 5.2 Diploma Course Descriptions

SECTION 1: PROGRAMS OFFERED

1.1 Degree/Diploma Programs Offered

Degree/Diploma	Years to Completion	Total Credit Hours
Bachelor of Science in Agriculture (Agronomy, Animal Systems or Plant Biotechnology Major)	4	120
Bachelor of Science in Agribusiness	4	120
Bachelor of Science in Agroecology	4	120
Bachelor of Science in Food Science (Science or Business Option)	4	120
Bachelor of Science in Human Nutritional Sciences	4	120
Bachelor of Science in Human Nutritional Sciences Second Degree Option	2	60
Bachelor of Science in Human Nutritional Sciences/Red River College Culinary Arts	2	60
Pre-veterinary Program	2*	60
Diploma in Agriculture (Business Management, Crop Management, Livestock Management or General Agriculture Option)	2	93
Internationally Educated Agrologists Post-Baccalaureate Diploma Program (IEAP)	1	25
Bachelor of Science (Textile Sciences) (intake suspended)	4*	120

*Two full years of university training are required for admission to the Western College of Veterinary Medicine (Saskatoon) comprised of 60 credit hours.

Faculty Overview

The Faculty of Agricultural and Food Sciences has earned a reputation for its high-calibre teaching programs and its friendly helpful staff. Students benefit not only from the expertise of staff in the Faculty, but also from the close proximity of other faculties on campus, federal research facilities, and a vibrant Winnipeg-based agricultural community.

Information on the Faculty's History, Vision and Mission Statements, Research, Programs, Centres, and Departments can be found on our website at: umanitoba.ca/afs.

Degree Programs

The B.Sc. degree programs in Agricultural and Food Sciences provide an applied science background for graduates to enter a range of professions. Students can choose degree specializations in Agribusiness, Agriculture (Agronomy, Animal Systems, Plant Biotechnology), Agroecology, Food Science, or Human Nutritional Sciences. One of the focuses of the Faculty is on the agricultural industry with professions concerned with the production, processing and marketing of food and bioresources. However, the agriculture based B.Sc. degree also provides students with the education to tackle a range of career opportunities beyond agriculture. Professional agriculturists hold positions in extension, resource management and conservation, teaching, research and business. Professional food science graduates hold similar positions related to food manufacturing and processing. Professional human nutrition graduates hold positions in dietetics, institutional administration, education, and research. Graduates from the faculty make important contributions to the economy and health of Canada and the world. The faculty also offers a two-year pre-veterinary program for students who plan to take the degree Doctor of Veterinary Medicine.

The two-year Agriculture Diploma program offers a practical education for persons interested in operating a farm or working in an agricultural business. Although many diploma graduates return to family farms after graduating, an increasing number of graduates can be found working for farm supply companies, feed companies, financial institutions and grain handling companies, as well as doing technical work for various government agencies.

The Agriculture Diploma program covers a wide range of agricultural subjects, from production through to marketing and business management. Communication and leadership skills also receive considerable emphasis. The program culminates in assignments and a major project that relate directly to the student's individual farm or business interests. The program extends over two winters. Classes begin in late September and end in early April to accommodate students with obligations to plant and harvest crops.

1.3 Professional Designations

Graduates of the B.Sc. (Agriculture), B.Sc. (Agribusiness), B.Sc. (Agroecology) and B.Sc. (Food Science) degrees are eligible to practice agrology as members of the Manitoba Institute of Agrologists. An agrologist is a "person who is qualified to teach or to practice the science and art of agriculture or to conduct scientific experiments and research in relation thereto." The motto of the profession is Ciba ad Omnes (Food for All). B.Sc. (Food Science) graduates are eligible to become members of the Canadian Institute of Food Science and Technology (CIFST), a professional society associated with the manufacturing, processing and packaging of food.

Graduates from the Human Nutritional Sciences program who have completed the Dietitians of Canada (DC) accredited undergraduate degree with courses as stipulated by DC may apply for a dietetic internship either through Pre-Selection by the Manitoba Partnership Program (MPP) or by application to dietetic internship programs in the final year of their degree or after completion of their degree.

SECTION 2: ADMISSION REQUIREMENTS

Intro

The following is a summary of the admission requirements. Equivalent academic courses completed at recognized universities elsewhere will be considered. All admission requirements, as well as application deadline dates and forms, are included in an applicant information bulletin that is available from the Admissions Office, Enrolment Services, 424 University Centre; this information is also posted on the university's website.

There are two entry options to Agricultural and Food Sciences: Direct entry from high school OR Advanced Entry (transfer from University 1).

Direct Entry: Degree Program High School Prerequisites for all programs except Human Nutritional Sciences (see section 2.2):

High School graduation with 5 credits at the Grade 12 S, G, or U level, with a minimum 85% average over a combination of:

- English 40S,
- Pre-Calculus Math 40S or Applied Math 40S (Recommended Pre-Calculus 40S for B.Sc. (Agribusiness) and B.Sc. (Food Science)), and the Pre-Veterinary Medicine Program.
- one of Biology 40S, Chemistry 40S, Physics 40S or Computer Science 40S
- with no mark less than 60% in each of the above areas.

Advanced Entry Degree Program (transfer from University 1) High School Prerequisites for all programs except Human Nutritional Sciences (see section 2.2):

High school prerequisites for required University 1 courses include:

- Math: Pre-Calculus Math 40S (60%) for Agribusiness and Food Science programs. Pre-Calculus Math (60%) or Applied Math (70%) required for B.Sc. (Agriculture) includes Agronomy, Animal Systems, Plant Biotechnology and B.Sc. (Agroecology).
- Sciences: Biology 40S and Chemistry 40S required for B.Sc. (Agriculture), (Agroecology), and (Food Science). For B.Sc. (Agribusiness), Biology 40S is recommended but not required.
- Pre-Veterinary Medicine Program: Pre-Calculus Math 40S, Biology 40S, Chemistry 40S and Physics 40S.

Students without the prerequisites will need to take the required preparatory courses.

2.1 Admission Requirements for the Agriculture, Agribusiness, Agroecology, and Food Science Programs

Direct Entry (High School Students)

To enter the Faculty directly from high school, you must have 5 credits at the Grade 12 S, G, or U level, with a minimum 85% average over:

- English 40
- Pre-Calculus Math 40S or Applied Math 40S (Pre-Calculus 40S is required for the B.Sc Agribusiness and the B.Sc. Food Science)
- one of Biology 40S, Chemistry 40S, Physics 40S or Computer Science 40S
- with no mark less than 60% in each of the above areas.

If the number of eligible candidates exceeds the available spaces, an academic average higher than the minimum may be required for admission.

Advanced Entry (Transfer Students)

The requirement for admission to the Faculty of Agricultural and Food Sciences is a minimum cumulative grade point average of 2.00 on a minimum of 24 credit hours from University 1 or other University programs. If the number of eligible candidates exceeds the available spaces, a cumulative grade point average higher than the minimum may be required.

It is recommended that students take the following courses in University 1 to allow completion of the degrees in the minimum amount of time.

B.Sc. (Agribusiness)

- Agriculture (9 credit hrs)
 - ABIZ 1000
 - AGRI 1500
 - AGRI 1510
- Biology (6 credit hrs)
 - BIOL 1020 (See Note 1)
 - BIOL 1030 (See Note 1)
- Chemistry (See Note 2)
- Economics (6 credit hrs)

ECON 1010

ECON 1020

- Mathematics (6 credit hrs)

MATH 1300 or MATH 1310

MATH 1500 or MATH 1520 (See Note 3)

- Open Electives (3 credit hrs)

B.Sc. (Agriculture) and B.Sc. (Agroecology)

- Agriculture (6 credit hrs)

AGRI 1500

AGRI 1510

- Biology (6 credit hrs)

BIOL 1020

BIOL 1030

- Chemistry (6 credit hrs)

CHEM 1300

CHEM 1310 or CHEM 1320

- Economics (6 credit hrs)

ECON 1010

ECON 1020

- Mathematics (3 credit hrs)

MATH 1200 or MATH 1210 or MATH 1300 or MATH 1310 or MATH 1500 or MATH 1520

- Open Electives (3 credit hours)

B.Sc. (Food Science)

- Agriculture (6 credit hrs)

AGRI 1500

AGRI 1510

- ABIZ 1000 (See Note 4)

- Biology (6 credit hrs)

BIOL 1020

BIOL 1030

- Chemistry (6 credit hrs)

CHEM 1300

CHEM 1310 and CHEM 1320 (See Note 5)

- Economics (6 credit hrs)

ECON 1010

ECON 1020

- Mathematics (6 credit hrs)

MATH 1300 or MATH 1310 and

MATH 1500 or MATH 1520 (See Note 3)

- Open Electives (nil)

Notes:

1) Students planning to enter the B.Sc. (Agribusiness) degree program are recommended to take BIOL 1020 and BIOL 1030 but may substitute BIOL 1000 and BIOL 1010.

ACADEMIC CALENDAR 2015-2016

- 2) Students planning to enter the B.Sc. (Agribusiness) degree program are not required to take chemistry at the university level.
- 3) Six credit hours of Math courses, consisting of 3 credit hours of MATH 1300 Vectors Geometry and Linear Algebra or MATH 1310 Matrices for Management and Social Sciences and 3 credit hours of MATH 1500 Introduction to Calculus or MATH 1520 Introduction to Calculus for Management and Social Sciences are required for the B.Sc. (Agribusiness) and B.Sc. (Food Sciences) programs.
- 4) ABIZ 1000 is not required for the B.Sc. Food Science (Food Science option). It is required in the B.Sc. Food Science (Business option).
- 5) Both CHEM 1310 and CHEM 1320 are required for the B.Sc. (Food Science) Science Option Program.

Other requirements:

High School Requirements (needed to take courses in our faculty's individual programs but not required for Admission):

	English 40S	Math 40S - Pre-Calculus	Math 40S - Applied	Biology 40S	Chemistry 40S	Physics 40S
B.Sc. Agribusiness	60%	60%		recommended but not required		
B.Sc. Agriculture (Agronomy, Animal Systems, Plant Biotechnology)	60%	60% OR	70%	50%	50%	
B.Sc. Agroecology	60%	60% OR	70%	50%	50%	
B.Sc. Food Science	60%	60%		50%	50%	
B.Sc. Human Nutritional Sciences	60%	50% OR	50%	required for students taking BIOL 1020	50%	
Pre-Veterinary Studies	60%	60% OR	70%	50%	50%	50%

Students are required to take three credit hours of Philosophy in their degree.

The written English and Mathematics requirements are met by completing the required courses in Agriculture.

Applicants who do not meet the above-mentioned course requirements may be eligible for admission. Please contact the Academic Advisor (Degree), Faculty of Agricultural and Food Sciences for further information.

Transfers of Credit

Courses taken outside the Faculty of Agricultural and Food Sciences or outside of the University of Manitoba may also qualify for credit towards the degree if the course content and the student's performance are deemed appropriate by the department concerned. Students should contact the Student Services Office at 204-474-9295 for more information.

2.2 Admission Requirements for the Human Nutritional Sciences Programs

Admission requirements are described on the Undergraduate Admissions website at <http://umanitoba.ca/student/admissions/application/index.html>. Application process information is at <http://umanitoba.ca/student/admissions/application/deadlines/application-process.html>.

General Entrance Requirements to the Faculty of Agricultural and Food Sciences for Human Nutritional Sciences Programs:

A minimum adjusted grade point average (AGPA) of 2.0 in at least 24 credit hours of University 1, including 6 credit hours from Arts and 6 credit hours from Science to total 12 credit hours, plus 12 credit hours of other University 1 courses, for a total of 24 credit hours.

Other requirements for University study

High school prerequisites required for University level courses in certain programs: Mathematics 40S (pre-calculus or applied) and Chemistry 40S are required for the science requirements in Human Nutritional Sciences program. Students planning to take BIOL 1020 for any program must have Biology 40S and any Grade 12 Mathematics course.

Minimum Adjusted GPA for consideration: 2.0.

For students wishing to choose the focused approach for entry to the Faculty of Agricultural and Food Sciences, the course requirements for each of the programs or areas of concentration offered by the Faculty of Agricultural and Food Sciences are described in the Start Book at <http://umanitoba.ca/firstyear/>.

Direct Admission into the Faculty of Agricultural and Food Sciences from High School for Human Nutritional Sciences Programs

To be eligible for admission based on high school, students must have: General Requirements to the University of Manitoba, plus a minimum 85% average over the following, with no less than 60% in each course:

- a. English 40S
- b. Chemistry 40S, Biology 40S, or a Mathematics 40S
- c. A third 40S course

2.3 Admission Requirements for the Diploma Program

Diploma students enter directly to the Agriculture diploma program from high school; University 1 is not required.

Applicants must hold Manitoba high school graduation with a minimum of five Grade 12 credits at the S (Specialized), G (General) or U (Dual Credit-University) level, which include English 40S, Mathematics (40S or 45S) and a Science 40S. The minimum average over these three designated subjects is 60%. If the number of eligible candidates exceeds the available spaces, an academic average higher than the minimum may be required for admission. The equivalent level of studies from other Canadian provinces or other countries will be accepted.

Students without a suitable high school standing may be admitted upon the recommendation of the Diploma Selection Committee. The committee will review each application and interview the applicant. The maturity, scholastic ability and agricultural experience of the applicant will be considered. Please contact the Academic Advisor (Diploma), Faculty of Agricultural and Food Sciences for further information.

Special Consideration Category – Agriculture Diploma

This category is for students whose academic records may not be competitive in the selection process. Such students may apply for Special Consideration only if they meet the criteria for Special Consideration as described below. Only a limited number of applicants may be admitted under the Special Consideration Category. Meeting the eligibility requirements of this category is not a guarantee of admission.

Applicants would be eligible for Special Consideration if they are considered by the Diploma Selection Committee because they either:

- have academic records that are not a true reflection of their academic and intellectual merit because of their exceptional life circumstances (exceptional circumstances include physical, societal, educational, economic, medical, geographical and other obstacles encountered by the applicant), or
- o display skills and attributes in any or all personal, work, or community activities which indicate that they can make a significant contribution to the Agriculture Diploma Program or can make a significant contribution to Manitoba's agri-food industry and/or rural and northern Indigenous communities.

Students who apply for Special Consideration must submit the following documents:

- a) a **typed personal statement** not to exceed 800 words which includes the specific reasons why their application merits consideration within the Special Consideration Category.
- b) a **typed personal resume**.
- c) **three Letters of Recommendation**.

Those candidates who are applying on the basis of exceptional circumstances must submit supporting documentation to verify their exceptional circumstances. (For example, if a student is applying on the basis of exceptional medical circumstances, the student must submit official supporting documentation from a qualified medical professional.)

The Diploma Selection Committee composed of the Director, the Agriculture Diploma Program Academic Advisor and one Instructor, will review the application and supporting documentation. All candidates will be interviewed by the Selection Committee and may be administered an academic skills test. Criteria used when evaluating Special Consideration applicants include the applicant's maturity, scholastic ability, agricultural experience, motivation, leadership, and/or demonstrated initiative relevant to an agricultural career. Up to 10% of admission spaces are available to Special Consideration Candidates recommended by the Diploma Selection Committee.

Transfer of Credit

Courses taken within the degree program in the Faculty of Agricultural and Food Sciences as well as outside the Faculty of Agricultural and Food Sciences or outside of the University of Manitoba may also qualify for credit towards the diploma if the course content and the student's performance are deemed appropriate by the department concerned.

The following Agriculture degree courses can be transferred for credit towards the Ag. Diploma program when a minimum grade of C is obtained:

AGRI 1500 Natural Resources and Primary Agricultural Production (3 credit hours) transferred for credit for DAGR 0420 Introductory Soils and Crops (4 credit hours)

AGRI 1510 Production, Distribution and Utilization of Agricultural Production (3 credit hours) transferred for credit as 4 credit hours as a free elective

AGRI 2030 Technical Communications (3 credit hours) transferred as credit for DAGR 0410 Communications and Learning Skills (4 credit hours)

2.4 Admission Requirements for the Internationally Educated Agrologists Post-Baccalaureate Diploma Program (IEAP)

Individuals interested in the Internationally Educated Agrologists Post-Baccalaureate Diploma Program must meet the following Admission requirements:

1. Have a degree in agriculture from another country
2. Be a permanent resident or Canadian Citizen
3. Have met the English Language Proficiency Requirements
4. Have a valid driver's license
5. Have a letter from the Manitoba Institute of Agrologist (MIA) indicating their application for registration has been accepted.

SECTION 3: FACULTY ACADEMIC REGULATIONS

3.1 Academic Regulations for the Agriculture, Agribusiness, Agroecology, and Food Science Programs

The B.Sc. (Agriculture), B.Sc. (Agribusiness), B.Sc. (Agroecology) and B.Sc.(Food Science) degree programs have the triple objectives of vocational, professional and cultural education. To fulfil the objectives, the degrees are offered in a program of study. Most courses in first year, which are taken in University 1 and some in second year, are prescribed. The remainder of second year courses and all courses in third and fourth years are determined by the program of study, and by the student’s selection of elective courses.

It is strongly recommended that all students plan their coursework for third and fourth years before the end of their second academic year.

The provisions of the chapter, General Academic Regulations and Requirements, and the chapter, University Policies, apply to all students. In addition, the Faculty of Agricultural and Food Sciences has regulations and requirements, published below, that apply specifically to its students. Supplementary academic regulations are on file in the general office. Admission information can be found in the Admissions chapter of this Calendar.

Scholastic Requirements

To obtain a B.Sc. (Agriculture), B.Sc. (Agribusiness), B.Sc. (Agroecology) or B.Sc. (Food Science) degree, a student must pass 120 credit hours normally comprised of 30 hours from University 1 and 90 hours in the Faculty of Agricultural and Food Sciences (i.e., a total of 20 full-courses or the equivalent).

A maximum of 144 credit hours (24 full-courses or the equivalent) may be attempted to obtain the 120 credit hours.

A minimum passing grade of “D” in prescribed courses is required of all students in the faculty.

Elective courses in which passing grades were not obtained need not be repeated.

A student’s Grade Point Average (GPA) will be determined from the number of “effective” courses which apply at a particular stage. The effective courses consist of all courses passed in addition to all failures which have not been cleared or substituted for in the student’s record. Students will normally be assessed once per year in May.

In order to graduate, students must obtain a minimum GPA of 2.0 calculated over a minimum of 120 credit hours before graduation.

Residence Requirements of Degree Program

The residence requirements for the degrees offered by the Faculty of Agricultural and Food Sciences, can be found in the chapter, General Academic Regulations and Policy.

Time Limits and Lapse of Credit

The normal maximum time allowed for the completion of the Agriculture degree programs is ten years from the date of first registration. A candidate for a degree will not be permitted to count toward that degree any courses taken more than ten year prior to the date of awarding the degree.

Probational Standards		
Effective Courses to Date		Minimum GPA
1-10	(0-30 credits)	1.80
11-20	(33-60 credits)	1.85
21-30	(63-90 credits)	1.90
31-40	(93-120 credits)	1.95
40+	(120+credits)	2.00

Academic Suspension Regulations

A student is placed on academic suspension when one of the following occurs:

- When a student fails to obtain 12 Weighted Grade Points in the first year program; or
- When a student fails to meet the probational standards after attempting a minimum of 24 credit hours while on probation; or
- When a student accumulates failures in excess of 24 credit hours.

Re-entry Regulations

A student must remain out of faculty for a period of one year and then apply for re-entry.

The student must complete at least 12 credit hours with a minimum Grade Point Average of 2.50 in courses approved by the faculty in the academic term or session in which reinstatement is being attempted.

The student loses credit for all courses in which a grade of “D” was obtained prior to being reinstated.

The student is given credit for courses in which grades of “C” or better were obtained, as well as the courses attempted for reinstatement.

The student is reinstated and placed in the category of “good academic standing.”

A student who is placed on academic suspension for the second time, will not be permitted reinstatement in the faculty.

Appeals

Appeals of academic assessment of students must be submitted to the general office of the Faculty of Agricultural and Food Sciences within 21 days of the date of notification of the action sent to the student.

Supplemental Exams

Supplemental Exams are not permitted in the Faculty of Agricultural and Food Science Degree Programs.

Re-registration of Returning Degree Students

All degree students who were previously admitted to the Faculty of Agricultural and Food Sciences who have not been in attendance for one or more years must re-register through the Dean's Office. Application for re-registration must take place before July 1 for those students who wish to begin their studies in the Fall term and before November 1 for those students who wish to begin their studies in Winter Term. Students returning to the faculty will be subject to compliance with the current program requirements.

Graduation With Distinction: Degree Programs

The B.Sc. (Agriculture), B.Sc. (Agribusiness), B.Sc. (Agroecology), and the B.Sc. (Food Science) degrees with distinction will be awarded to students who have achieved a minimum degree GPA of 3.75 upon graduation.

Dean's Honour Roll

Students who have completed a minimum of 12 credit hours of study in either the Fall or Winter terms and who achieved a Term GPA of 3.50 or higher will be placed on the Dean's Honour Roll. Graduating students who achieved Dean's Honour Roll status in the previous term but complete less than 12 credit hours in their final term with a Term GPA of 3.5 or greater, will be eligible to remain on the Dean's Honour Roll.

Course Load Limits

A normal "course load" is 30 credit hours during the regular session, with 15 credit hours normally taken in each academic term. A student may attempt a maximum of 39 credit hours during the regular session, with not more than 21 credit hours in an academic term, provided the student is in a good academic standing and has completed at least 24 credit hours in the previous regular session.

University Written English and Mathematics Requirements

All students are required to complete the university written English and Mathematics requirement within the first 60 credit hours of their program. This requirement is described in the chapter, General Academic Regulations and Requirements of this Calendar.

For the degree program in Agriculture, the university written English requirement can be met by AGRI 2030 Technical Communications, or by ENGL 1200, or ENGL 1300. (NOTE: Technical Communications cannot be taken in University 1). The mathematics requirement can be met by completing MATH 1200 or MATH 1210 or MATH 1300 or MATH 1310 or MATH 1500 or MATH 1520.

3.2 Academic Regulations for the Human Nutritional Sciences Programs

The provisions of the chapter, General Academic Regulations and Requirements, and the chapter, University Policies, apply to all students. In addition, the Faculty of Agricultural and Food Sciences has regulations and requirements, published below, that apply specifically to its Human Nutritional Sciences (HNS) students.

3.2.1 Prerequisite, Corequisite, and Course Availability: Definitions

Prerequisite: If a course is prerequisite to a second course, the prerequisite must be met in order to continue in the second course. The department giving the second course may require a minimum grade of 'C' in the first course to register in the second course. Some inactive (legacy) courses may be used as prerequisites. Please check with an Academic Advisor in Agricultural and Food Sciences.

Corequisite: If a first course is a corequisite to a second course, the first course (unless previously completed) must be taken in the same term as the second course.

Course Availability: Not all courses listed in this Calendar are offered every year. Students are referred to the on-line calendar for courses offered in the year. Human Nutritional Sciences (HNSC) courses at the 3000 and 4000 level are available only to students registered in the Faculty of Agricultural and Food Sciences or one of the minors or options associated with the Faculty of Agricultural and Food Sciences or the Faculty of Human Ecology. Courses at the 3000 and 4000 level may be taken with written permission from an Academic Advisor as long as there is space.

3.2.2 Scholastic Standards**Graduation and Grade Point Average**

To graduate, a student must have passed 120 credit hours acceptable for credit in the current degree program and have obtained a minimum of 240 quality points. This is equivalent to a Degree Grade Point Average of 2.0. A pass indicates a grade of 'D' or better. A student's Degree Grade Point Average (DGPA) will be determined from the number of effective courses which apply at a particular stage. The effective courses consist of all courses passed, in addition to all failures which have not been cleared, or substituted for, in the students record. A maximum of 150 credit hours (25 courses or the equivalent) may be attempted in order to obtain the 120 credit hours.

Assessment

The status of each student will be assessed in May of each year in which a student is registered. All Direct Entry students will be assessed formally upon completion of at least 24 credit hours in May of each year using the Faculty of Agricultural and Food Sciences' assessment standards for HNS students. Assessments can include the following comments:

- Faculty minimum met (grade point average meets the standards listed below);
- Dean's Honour (see 3.2.3)
- Academic Warning
- Probationary status (see below)
- Suspension (see below)
- Suspension - all attempts used (see below)

Academic warning indicates a grade point average between the minimum required at the effective credit hours (year) and the DGPA requirement of 2.0.

There is a maximum of 30 credit hours of attempts allowed for each academic program; once those attempts are used (repeated courses, grades of F or D), it is impossible to graduate.

Probationary Standing

HNS students must achieve or exceed the following standards at the specified stages in their academic careers. Failure to obtain the standard results in probation. Once placed on probation, students who fail to meet the appropriate performance level at the next assessment following the next registration will be academically suspended. A student is not permitted to be on probation for two consecutive years.

Assessment Standards		
Effective Credit Hours	Minimum Grade Point Average	
9 – 21 credit hours	< 2.0	Academic Warning
24 – 30 credit hours	1.80	
33 – 60 credit hours	1.85	
63 – 90 credit hours	1.90	
93 – 117 credit hours	1.95	
120+ credit hours	2.0	

Suspension

Suspended HNS students must remain out of the Faculty of Agricultural and Food Sciences for one academic year from the date of suspension and must apply for reinstatement at the Admissions Office no later than May 1.

Where mathematically possible for a suspended student to complete the degree by repeating failed courses, a suspended student shall be automatically reinstated after remaining out of the Faculty for one calendar year, or by achieving a degree GPA above the probationary standard.

Suspension (All Attempts Used)

Where it is mathematically impossible for a student to complete the degree by repeating failed courses, a suspended student, after remaining out of the faculty for one calendar year, may attempt reinstatement. By completing at least 12 credit hours in one term with a minimum 'D' grade in all courses and a term grade point average of at least 2.0, the student will be reinstated. The student will start the program afresh, with previous grades of 'C' or better applicable to the program.

3.2.3 Other Regulations

Part-time Students

The maximum time allowed for completion of the degree is 10 years. After completion of 24 credit hours, part-time students will be evaluated each May and must conform to the minimum performance levels.

Direct Entry

All Direct Entry students will be assessed formally upon completion of at least 24 credit hours in May of each year using the Faculty of Agricultural and Food Sciences' assessment standards for HNS students. Probationary standing is assessed using the criteria listed. Direct Entry students who complete fewer than 24 credit hours by May of their first year will not be formally assessed until the following May. Students who complete 9 - 21 credit hours with a grade point average of less than 2.0 will be placed on academic warning.

Repeating Courses

A student may repeat any course for the purpose of attaining a better grade. The latest registration of a repeated course will count in GPA calculations. There are no supplemental examinations for students who have failed final or deferred examinations.

Challenge for Credit

A student wishing to challenge a course for credit should contact an Academic Advisor. Letter grades are granted upon completion of the course that is challenged for credit. A list of courses for challenge is available in the General Office. An application is required.

Transfer of Credit

See the chapters on Admissions and Academic Regulations and Requirements at the beginning of this Calendar. Students from faculties other than University 1 or from other institutions must make an appointment with an Academic Advisor by the end of their first academic year to arrange for transfer of credit.

Appeals of Academic Regulations

The Faculty Committee on Student Standing considers petitions from students who request special consideration with respect to rules and regulations governing their programs of study and qualification for graduation.

Dean's Honour List

Eligible students who achieve a term Grade Point Average of 3.5 or higher in at least 12 credit hours per term will be included in the Dean's Honour List.

Degree With Distinction

Students who graduate with a degree GPA of 3.75 and higher will receive a degree with distinction.

Work Permit for Study Purposes

International students who are registering for courses or programs that require work placement must obtain a valid Work Permit, in addition to maintaining a valid Study Permit. Work placement includes, but is not limited to, any paid or unpaid practicum, internships, work experience, field placement, and co-op programs that are a required component for the completion of their degree, diploma or certificate. Please contact your program advisor or the International Centre for Students for further information.

Release and Indemnification Forms

In elective courses, students may be required to sign a release form for off-campus activities.

Written English and Mathematics Requirements

The written English and Mathematics requirements are satisfied by required courses HMEC 2000 and STAT 1000 within the Human Nutritional Sciences program. HMEC 2000 will be available to students upon admission to the Human Nutritional Sciences program.

3.3 Academic Regulations for Diploma Program

To qualify for the Diploma in Agriculture a student must have attained a cumulative GPA of at least 2.00 with a minimum grade of "D" in courses totalling 93 credit hours including all those on the prescribed list. Elective courses in which failures were obtained may be substituted for and need not be repeated, except to help meet the requirements of the scholastic standards described previously.

Part-Time vs. Full-Time Status for Students

A student is considered to be equivalent to full-time if at least 60 per cent of the normal full-time course load is attempted in the academic term or session. (A normal full-time course load is usually 48-52 credit hours during the regular session.) A student will be allowed to take a partial course load with the permission of the Director of the School of Agriculture and the payment of pro-rated fees.

Transfers of Credit From Other Programs

The following University of Manitoba, Faculty of Agricultural and Food Sciences degree courses (with a minimum grade of C) can qualify for credit towards the Agriculture Diploma Program:

ABIZ 1000 – Introduction to Agribusiness Management (3 credit hours) transfer for credit for ABIZ 0680 Agribusiness Management (4 credit hours)

AGRI 1500 Natural Resources and Primary Agricultural Production (3 credit hours) transferred for credit for DAGR 0420 Introductory Soils and Crops (4 credit hours)

AGRI 1510 Production, Distribution and Utilization of Agricultural Production (3 credit hours) transferred for credit as 4 credit hours as a free elective.

AGRI 2030 Technical Communications (3 credit hours) transferred as credit for DAGR 0410 Communications and Learning Skills (4 credit hours)

ENTM 1000 – World of Bugs (3 credit hours) transfer for credit as a 3 credit hour free elective.

PLNT 1000 - Urban Agriculture (3 credit hours) transfer for credit as a 3 credit hour free elective.

PLNT 2500 Crop Production (3 credit hours) transfer credit towards PLNT 0410 Cereal and Oilseed Production Practices (4 credit hours)

Courses taken outside the Faculty of Agricultural and Food Sciences or outside of the University of Manitoba can qualify for credit towards the Agriculture Diploma program if the course content and the student's performance are deemed appropriate by the department concerned.

Students who desire to receive such credit should contact the Academic Advisor of the School of Agriculture.

ACADEMIC CALENDAR 2015-2016

Agriculture Diploma to Degree Transfer of Credit Hours

School of Agriculture graduates who have obtained a GPA of 3.0 in the Agriculture Diploma program are eligible for 60 credit hours of transfer into the following degree programs: Bachelor of Science (Agribusiness), Bachelor of Science (Agroecology), Bachelor of Science (Agriculture) – Agronomy or Animal Systems, when transferring into the same academic stream. If students choose to change streams it may not be possible to transfer the entire 60 credit hours due to program requirements; students should contact an Academic Advisor in the Student Services Office for details. Students wishing to enter a degree program without the above qualifications will be evaluated on a course-by- course basis. This transfer articulation is applicable to diploma graduates who have entered the degree program as of September 2005.

Scholastic Standards

To maintain good academic standing a student must maintain a Degree Grade Point Average (DGPA) that meets or exceeds the minimum academic standards described in the table below. The standards are based on the total number of credit hours accumulated while in the Agriculture Diploma program, including courses taken during the term in question. A student who fails to meet the standard is placed on probation or on academic suspension.

Degree Credit Hours	Degree Grade Point Average (DGPA)	
	Probation	Suspension
0 -- 17	---	1.00
18 -- 24	1.80	1.60
25 -- 48	1.90	1.70
Over 48	2.00	1.85

NOTES:

- 1) Degree Credit Hours includes courses passed and failures not removed by supplemental exams or successful reattempts.
- 2) When both a final and supplemental exam are written the higher grade obtained will be used to determine Grade Point Averages.
- 3) A minimum of 18 credit hours must be attempted between successive determinations of standing. The minimum does not apply to students who graduate before completing an additional 18 credit hours.

Probational Standards and Academic Suspension Regulations

Students on probation must improve their academic performance and regain good academic standing to avoid being suspended. Specifically, after an attempt of a minimum of 18 additional credit hours, students on probation are required to equal or exceed the probation standard in order to regain good academic standing, otherwise they will be placed on academic suspension.

A student on academic suspension is not allowed to register for the subsequent term of the regular academic session (a student suspended in January may not be reinstated until the following September; a student suspended in April may not be reinstated until the following January). Reinstatement requires the approval of the Director. Students should contact the Academic Advisor for further instructions. If reinstatement is granted, all courses from the student's previous attempt will be transferred, except those with a grade of "D" or "F" from their last term (the term during which the student was placed on suspension).

Appeals

Appeals of academic assessment of students must be submitted to the Director of the School of Agriculture within 21 days of the date of notification of the action sent to the student.

Supplemental Exams

Any student in good academic standing (i.e., not on probation or suspension; see previous table of Scholastic Standards) is eligible to write one supplemental exam during each academic session in a course in which an "F" was received. The student must have written the final exam. The supplemental exam shall be considered as a replacement for the final exam only, not for term work. The passing grade in supplementals must be at least "C" (2.0). Students are normally required to carry a full-term program in order to be eligible. Accordingly, students who are granted incomplete or deferred status may not be eligible. When both final and supplemental exams are written the higher grade obtained will be used to determine the final grade.

Supplemental Exams will be held in January for courses taken in the first term and in June for courses in the second term.

Time Limits and Lapse of Credit

The normal maximum time allowed for the completion of the Agriculture Diploma is five years from the date of first registration. A candidate for a Diploma in Agriculture will not be permitted to count toward that diploma any courses taken more than five years prior to the date of awarding the diploma.

Students who desire an exemption from this maximum must apply, in writing, to the Director.

Dean's Honour Roll

Students who have completed a minimum of 18 credit hours of study in either the Fall or Winter term and who have achieved a Term GPA of 3.5 or higher will be placed on the Dean's Honour Roll. Graduating students who achieved Dean's Honour Roll status in their final term with a Term GPA of 3.5 or greater, will be eligible to remain on the Dean's Honour Roll.

Agriculture Diploma to Degree Transfer of Credit

School of Agriculture graduates who have obtained a GPA of 3.0 in the Agriculture Diploma program are eligible for 60 credit hours of transfer into the following degree programs: Bachelor of Science (Agribusiness), Bachelor of Science (Agroecology), Bachelor of Science (Agriculture) – Agronomy or Animal Systems, when transferring into the same stream. If students choose to change streams it may not be possible to transfer the entire 60 credit hours due to program requirements; students should contact the Student Services Office for details. The credit hours will be transferred without grades. This transfer articulation is applicable to diploma graduates who have entered the degree program as of September 2005.

Students wishing to enter a degree program without the above qualifications, but having completed some diploma courses, will be evaluated on a course-by-course basis according to the following table:

Course by Course Transfer of Credits Diploma to Degree				
Diploma Course	ch	Minimum grade required	Degree Course	ch
BIOE 0600 Farm Machinery	4	C+	BIOE 2090 Machinery for Ag Production	3
ANSC 0420 Animal Biology & Nutrition ANSC 0670 Beef Production and	4	C+	ANSC 2500 Animal Production	3
PLNT 0750 Forage & Pasture Mgmt ANSC 0680 Dairy Cattle Production & Mgmt and PLNT 0750 Forage & Pasture Mgmt	4+4	C+	ANSC 4520 Ruminant Production Systems Meat	3
ANSC 0600 Animal Health and Welfare and ANSC 0690 Swine Production	4+4	C+	ANSC 4530 Ruminant Production Systems Milk	3
ANSC 0600 Animal Health & Welfare and ANSC 0700 Poultry Production	3+4	C+	ANSC 4540 Monogastric Production Systems	3
ENTM 0620 Pest Mgmt & Farm Insects	3+4	C+	ANSC 4550 Avian Production Systems	3
PLNT 0410 Cereal & Oilseeds	4	C+	ENTM 0010 Unallocated	3
PLNT 0790 Landscape Horticulture and PLNT 0800 Diversification with Horticultural Crops	4	C+	PLNT 2500 Crop Production	3
PLNT 0770 Weed Mgmt SOIL 0420 Soil Productivity & Land Use and DAGR 0420 Intro Soils & Crops	4+4	C+	PLNT 2510 Fundamentals of Horticulture	3
SOIL 0620 Soil Conservation & Mgmt and BIOE 0690 Water Mgmt	4	C+	PLNT 3540 Weed Science	3
ABIZ 0440 Ag Econ & Marketing 1 and ABIZ 0450 Ag Econ & Marketing 2	4+4	C+	SOIL 3600 Soils and Landscapes in Our Environment	3
ABIZ 0730 Financial Risk Mgmt	4+4	C+	SOIL 4510 Soil & Water Mgmt	3
ABIZ 0680 Ag Business Mgmt	4+4	C+	ABIZ 2510 Agricultural Marketing	3
ABIZ 0720 Farm Business Mgmt DAGR 0680 Mgmt Plan I and DAGR 0690 Mgmt Plan Project II	3	C+	ABIZ 3120 Commodity Futures Markets	3
DAGR 0420 Intro Soils & Crops	4	C+	ABIZ 1000 Ag Business Mgmt	3
DAGR 0410 Communications	4	B	ABIZ 3530 Farm Management	3
	3+5	C+	ABIZ 0010 Unallocated	3
	4	C+	AGRI 1500 Natural Resources & Ag Production	3
	4	B	AGRI 2030 Technical Communications	3

Note that courses from the diploma program are transferred to the degree program as a credit only, without the grade carried forward.

The Bachelor of Science (Agriculture) - Plant Biotechnology, and the Bachelor of Science (Food Science) are not part of this articulation. Students should contact the Student Services Office for details on transfer into these programs.

Courses taken outside the Faculty of Agricultural and Food Sciences or outside of the University of Manitoba may also qualify for credit towards the degree if the course content and the student’s performance are deemed appropriate by the department concerned.

Graduation with Distinction

The Diploma in Agriculture with Distinction will be awarded to Diploma students who obtain a cumulative GPA of 3.75 or better with 75 per cent of the courses taken within the Diploma in Agriculture.

3.4 Course Availability

All courses listed in this Calendar are not offered every year. The course(s) offered for the current academic term are published in the Class Schedule.

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

4.1 Agriculture, Agribusiness, Agroecology, and Food Science Programs

In order to fulfil the requirements for a degree in the Faculty of Agricultural and Food Sciences, students must complete five components:

- Faculty Core
- Degree Core
- Program Core
- Restricted Electives
- Free Electives

These requirements are outlined for all four degrees in the sections which follow.

4.1.1 Faculty Core

Course No.		Credit Hours
ABIZ 1000	Introduction to Agribusiness Management (see Note 1)	3
AGRI 1500	Natural Resources and Primary Agricultural Production	3
AGRI 1510	Production, Distribution and Utilization of Agricultural Products	3
AGRI 2030	Technical Communications	3
BIOL 1020	Biology 1: Principles and Themes (See Note 2)	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interactions (See Note 2)	3
CHEM 1300	University 1 Chemistry: Structure and Modelling in Chemistry (see Notes 3 and 4)	3
	and one of the following two courses:	
CHEM 1310	University 1 Chemistry: An Introduction to Physical Chemistry (see Notes 3 and 4)	3
	or	
CHEM 1320	University 1 Chemistry: An Introduction to Organic Chemistry (see Notes 3 and 4)	3
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles	3
MATH 1200	Elements of Discrete Mathematics (See Note 5)	
	or	
MATH 1210	Techniques of Classical and Linear Algebra (See Note 5)	
	or	
MATH 1300	Vector Geometry and Linear Algebra (See Note 5)	
	or	
MATH 1310	Matrices for Management and Social Sciences (See Note 5)	
	or	
MATH 1500	Introduction to Calculus (See Note 5)	
	or	
MATH 1520	Introductory to Calculus for Management and Social Sciences (See Note 5)	3
STAT 1000	Basic Statistical Analysis 1	3
Three credit hours from the following:		
PHIL 1290	Critical Thinking (3)	
PHIL 2740	Ethics and Biomedicine (3)	
PHIL 2750	Ethics and the Environment (3)	
PHIL 2830	Business Ethics (3)	3
Total credit hours		33-39

NOTES:

- 1) ABIZ 1000 is not required for the B.Sc. Food Science (Food Science option). It is required in the B.Sc. Food Science (Business option).
- 2) Students planning to enter the B.Sc. (Agribusiness) degree program are recommended to take BIOL 1020 and BIOL 1030 but may substitute BIOL 1000 and BIOL 1010.

- 3) Students planning to enter the B.Sc. (Agribusiness) degree program are not required to take chemistry at the university level.
- 4) Both CHEM 1310 and CHEM 1320 are required for the B.Sc. (Food Science) Science Option Program.
- 5) Six credit hours of Math courses, consisting of 3 credit hours of MATH 1300 Vector Geometry and Linear Algebra or MATH 1310 Matrices for Management and Social Sciences and 3 credit hours of MATH 1500 Introduction to Calculus or MATH 1520 Introduction to Calculus for Management and Social Sciences are required for the B.Sc. (Agribusiness) and B.Sc. (Food Sciences) programs.

4.1.2 Bachelor of Science (Agriculture) 1

The four year program leading to the B.Sc. (Agriculture) is a professional program which prepares graduates for careers in the public and private sectors related to the production and distribution of agricultural commodities. Graduates will also be prepared to enter directly into a program of graduate studies. In addition to the faculty core courses, all students are required to take the following B.Sc. (Agriculture) degree core requirements and the respective program core courses.

B.Sc. (Agriculture) Degree Core		
Course No.		Credit Hours
AGEC 2370 (BIOL 2300)	Principles of Ecology	3
CHEM 2770 (MBIO 2770)	Elements of Biochemistry 1	3
PLNT 2520 (BIOL 2500)	Genetics	3
Total credit hours		9

Within the B.Sc. (Agriculture) students will elect one of three programs of study or specialties -- Agronomy, Animal Systems or Plant Biotechnology. Students will normally begin the program of study of their choice in second year. A description of each program and their requirements follows.

Agronomy Program

Chair and Program Adviser: D. Flaten
 Office: 307 Ellis Building
 Telephone: (204) 474-6257
 E-mail: Don.Flaten@umanitoba.ca

The Agronomy program will provide an integrated and comprehensive study of the factors and processes associated with the science of crop production and the management and use of land and water resources. The program emphasizes land management and the sustainability of agronomic and horticultural crop systems.

Agronomy Core		
Course No.	Course Name	Credit Hours
ABIZ 2510	Introduction to Agricultural and Food Marketing	3
ANSC 2500	Animal Production	3
BIOL 2242	The Flowering Plants	3
PLNT 2500	Crop Production	3
PLNT 3400 or BIOL 3400	Plant Physiology	3
PLNT 3510	Cropping Systems	3
PLNT 4590	Physiology of Crop Plants	3
SOIL 3600	Soils and Landscapes in Our Environment	3
SOIL 4510	Soil and Water Management	3
SOIL 4520	Soil Fertility	3
Total credit hours		30
Restricted Electives		
Group 1		
Two courses (six credit hours) from the following:		
ENTM 3170	Crop Protection Entomology (3)	
PLNT 3540	Weed Science (3)	
PLNT 4270	Plant Disease Control (3)	6

ACADEMIC CALENDAR 2015-2016

Group 2		
One course (three credit hours) from the following:		
ANSC 4410/PLNT 4410	Grassland Agriculture: Plant, Animal and Environment (3)	
PLNT 2510	Fundamentals of Horticulture (3)	
PLNT 3520	Principles of Plant Improvement (3)	3
Group 3		
One 3000 or 4000 level course (3 credit hours) from SOIL (Soil Science), in addition to those courses that are already part of the Agronomy Core.		3
Group 4		
One course (three credit hours) from the following:		
BIOE 2090	Machinery for Agricultural Production (4)	
BIOE 2222	Precision Agriculture Concepts and Applications (3)	
BIOE 4500	Water Management (3)	
BIOE 4520	Crop Preservation and Handling (3)	3/4
Free Electives		
		27
Suggested Progression of Program:		
Second Year		
Course No.		Credit Hours
ABIZ 1000	Introduction to Agribusiness Management	3
AGRI 2030	Technical Communications	3
BIOL 2242	The Flowering Plants	3
CHEM 2770 (MBIO 2770)	Elements of Biochemistry 1	3
PLNT 2500	Crop Production	3
PLNT 2520	Genetics	3
SOIL 3600	Soils and Landscapes in Our Environment	3
	Free elective(s)	9
Total credit hours		30
Third Year		
ABIZ 2510	Introduction to Agricultural and Food Marketing	3
AGEC 2370 (BIOL 2300)	Principles of Ecology	3
ANSC 2500	Animal Production	3
PLNT 3400 or BIOL 3440	Plant Physiology	3
PLNT 4590	Physiology of Crop Plants	3
STAT 1000	Basic Statistical Analysis 1	3
	Restricted and/or Free Electives	12
Total credit hours		30
Fourth Year		
PLNT 3510	Cropping Systems	3
SOIL 4510	Soil and Water Management	3
SOIL 4520	Soil Fertility	3
	Restricted and/or Free Electives	21
Total credit hours		30

4.1.2 Bachelor of Science (Agriculture) 2**Animal Systems Program**

Chair: M. L. Connor
 Office: 201 Animal Science Building
 Telephone: (204) 474-9219
 Program Advisor: L. Onischuk
 Office: 236 Animal Science Building
 Telephone: (204) 474-9174
 E-mail: Loreen.onischuk@ad.umanitoba.ca

The Animal Systems program will provide an integrated and comprehensive study of the factors and processes associated with the science of animal production. The program will be based on a strong foundation in the scientific disciplines underlying growth and reproduction in animals and how they respond to a range of environmental systems and constraints.

Animal Systems Core		
Course No.	Course Name	Credit Hours
ABIZ 2510	Introduction to Agricultural and Food Marketing	3
ANSC 2500	Animal Production	3
ANSC 2510	Anatomy and Physiology 1: Control Systems	3
ANSC 2520	Anatomy and Physiology 2: Nutrient Utilization	3
ANSC 3500	Principles of Animal Genetics	3
ANSC 3510	Feeds and Feeding	3
ANSC 3520	Animal Reproduction	3
ANSC 3530	The Animal and Its Environment	3
ANSC 4560	Issues in Animal Agriculture	3
CHEM 2780 (MBIO 2780)	Elements of Biochemistry 2	3
PLNT 2500	Crop Production	3
Total credit hours		33
Restricted Electives		
Group 1		
One course (three credit hours) from the following:		
ANSC 4520	Ruminant Production Systems - Meat (3)	
ANSC 4530	Ruminant Production Systems - Milk (3)	3
Group 2		
One course (three credit hours) from the following:		
ANSC 4540	Monogastric Production Systems (3)	
ANSC 4550	Avian Production Systems (3)	3
Group 3		
Two courses (six credit hours) from the following:		
AGEC 4510	Applications in Agroecology (3)	
ANSC 2530	Nutritional Toxicology (1.5) and AGRI 2190 Toxicology Principles (1.5)	
ANSC 2540	Companion Animal Nutrition and Management (3)	
ANSC 4090	Livestock Problems (3)	
ANSC 4220	Animal Science Investigations (3)	
ANSC 4280	Applied Animal Genetics (3)	
ANSC 4410/PLNT 4410	Grassland Agriculture: Plant, Animal and Environment (3)	
ANSC 4500	Animal Health (3)	
ANSC 4510	Domesticated Animal Behaviour (3)	
ANSC 4570	Advanced Applied Animal Nutrition (3)	

ACADEMIC CALENDAR 2015-2016

ENTM 3160	Veterinary and Wildlife Entomology (3)	
FOOD 3500	Processing of Animal Food Products (3)	
PLNT 2530	Plant Biotechnology (3)	6
Group 4		
One course (three credit hours) from the following:		
GMGT 2070	Organizational Behaviour (3)	
HRIR 2440	Human Resource Management (3)	3
Free Electives		
24		
Students are encouraged to take free electives from the following courses:		
ANSC 2530	Nutritional Toxicology (1.5)	
ANSC 4570	Advanced Applied Animal Nutrition (3)	
ANSC 4090	Livestock Problems (3)	
ANSC 4220	Animal Science Investigations (6)	
PLNT 2530	Plant Biotechnology (3)	
AGEC 4510	Applications in Agroecology (3)	
Suggested progression of program:		
Second Year		
Course No.		Credit Hours
ABIZ 1000	Introduction to Agribusiness Management	3
AGRI 2030	Technical Communications	3
ANSC 2500	Animal Production	3
ANSC 2510	Anatomy and Physiology 1	3
ANSC 2520	Anatomy and Physiology 2	3
CHEM 2770 (MBIO 2770)	Elements of Biochemistry 1	3
CHEM 2780 (MBIO 2780)	Elements of Biochemistry 2	3
PLNT 2500	Crop Production	3
PLNT 2520	Genetics	3
	Restricted and free electives	3
Total credit hours		30
Third Year		
ABIZ 2510	Introduction to Agricultural and Food Marketing	3
AGEC 2370 (BIOL 2300)	Principles of Ecology	3
ANSC 3500	Principles of Animal Genetics	3
ANSC 3510	Feeds and Feeding	3
ANSC 3530	The Animal and Its Environment	3
STAT 1000	Basic Statistical Analysis	3
	Restricted and/or Free Electives	12
Total credit hours		30
Fourth Year		
ANSC 3520	Animal Reproduction	3
ANSC 4560	Issues in Animal Agriculture	3
	Restricted Elective - Group 1	3
	Restricted Elective - Group 2	3
	Restricted and/or Free Electives	18
Total credit hours		30

4.1.2 Bachelor of Science (Agriculture) 3

Plant Biotechnology Program

Chair and Program Advisor: C. Stasolla
 Office: 315 Agriculture Building
 Telephone: (204) 474-6098
 E-mail: claudio.stasolla@umanitoba.ca

The Plant Biotechnology Program will provide an integrated and comprehensive study of genetic, physiological and pathological factors and modern technological processes associated with the sciences of plant improvement, production, protection, and utilization. The program will provide an understanding of the biological principles that determine the heredity, growth, and responses of plants and plant pathogens to cultural and environmental factors.

Plant Biotechnology Core		
Course No.		Credit Hours
BIOL 2242	The Flowering Plants	3
BIOL 2260	Biology of Fungi and Lichens	3
BIOL 2520	Cell Biology	3
CHEM 2780 (MBIO 2780)	Elements of Biochemistry 2	3
MBIO 1010	Microbiology 1	3
PLNT 2530	Plant Biotechnology	3
PLNT 3400/BIOL 3400	Plant Physiology	3
PLNT 4600	Issues in Agricultural Biotechnology	3
Total credit hours		24
Restricted Electives		
Group 1		
Two courses (six credit hours) of the following:		
ANSC 2500	Animal Production (3)	
ANSC 4410/PLNT 4410	Grassland Agriculture: Plant, Animal and Environment (3)	
ENTM 3170	Crop Protection Entomology (3)	
PLNT 2500	Crop Production (3)	
PLNT 2510	Fundamentals of Horticulture (3)	
PLNT 3540	Weed Science (3)	6
Group 2		
Five courses (fifteen credit hours) of the following:		
PLNT 3520	Principles of Plant Improvement (3)	
PLNT 3570	Fundamentals of Plant Pathology (3)	
PLNT 4310	Introductory Plant Genomics (3)	
PLNT 4330	Intermediate Plant Genetics (3)	
PLNT 4550	Developmental Plant Biology (3)	
PLNT 4560	Secondary Plant Metabolism (3)	
PLNT 4570	Research Methods in Plant Pathology (3)	
PLNT 4580	Molecular Plant-Microbe Interactions (3)	
PLNT 4590	Physiology of Crop Plants (3)	
PLNT 4610	Bioinformatics (3)	15
Free Electives		
		27

ACADEMIC CALENDAR 2015-2016

Suggested progression of program:		
Second Year		
Course No.		Credit Hours
BIOL 2242	The Flowering Plants	3
BIOL 2260	Biology of Fungi and Lichens	3
CHEM 2770 (MBIO 2770)	Elements of Biochemistry 1	3
CHEM 2780 (MBIO 2780)	Elements of Biochemistry 2	3
BIOL 2520	Cell Biology	3
PLNT 2520	Genetics	3
PLNT 2530	Plant Biotechnology	3
AGRI 2030	Technical Communications	3
	Free and/or restricted electives	6
Total credit hours	30	
Third Year		
STAT 1000	Basic Statistical Analysis 1	3
PLNT 3400/BIOL 3400	Plant Physiology	3
MBIO 1010	Microbiology 1	3
AGEC 2370 (BIOL 2300)	Principles of Ecology	3
ABIZ 1000	Introduction to Agribusiness Management	3
	Free and/or restricted electives	15
Total credit hours	30	
Fourth Year		
PLNT 4600	Issues in Agricultural Biotechnology	3
	Free and/or restricted electives	27
Total credit hours	30	

4.1.3 Bachelor of Science (Agribusiness)

Chair and Program Advisor: G. Johnson
 Office: 358 Agriculture Building
 Telephone: (204) 474-9795
 E-mail: Gary.Johnson@umanitoba.ca

Agribusiness students specialize in the people component of agriculture. This begins with the consumer, ends with the producer and involves all those along the food chain. Food production and distribution is undertaken in a business environment and agribusiness is the study of decision-making within this setting. Graduates gain insight into the agribusiness environment through mastering concepts in economics, finance, marketing and management. In addition to the faculty core courses, all students are required to take the B.Sc. (Agribusiness) degree core requirements. Students in Agribusiness are not required to take University 1 Chemistry as part of the Faculty Core requirement.

Through the choice of restricted electives, students will specialize in either agricultural economics, agribusiness management or international agribusiness. The respective agricultural economics, agribusiness management or international agribusiness options involve selecting restricted electives from courses offered by either the Department of Economics, or the Faculty of Management, or the Faculty of Arts through their cross-disciplinary programs.

Students selecting an option in agricultural economics can declare a minor in economics, and by meeting the additional requirements can qualify for a major in economics as well.

The international agribusiness option involves taking a minor in one of the cross disciplinary programs in the Faculty of Arts. International agribusiness requires knowledge of languages, cultures, and international political history, in addition to the other business skills required by the B.Sc. (Agribusiness) degree.

B.Sc. (Agribusiness) Degree Core Course Requirements		
Course No.		Credit Hours
ABIZ 2510	Introduction to Agricultural and Food Marketing	3
ABIZ 2520	Introduction to Management Science	3
ABIZ 3080	Introduction to Econometrics	3
ABIZ 3510	Economics of Food Policy	3
ABIZ 4500	Agribusiness Strategies Seminar	3
ACC 1100	Introductory Financial Accounting	3
ECON 2010	Microeconomic Theory and Its Applications 1	3
ECON 2020	Macroeconomic Theory and Its Applications 1	3
HRIR 2440	Human Resource Management	3
MATH 1300	Vector Geometry and Linear Algebra	
	or	
MATH 1310	Matrices for Management and Social Sciences	3
	and	
MATH 1500	Introduction to Calculus	
	or	
MATH 1520	Introduction to Calculus for Management and Social Sciences	3
STAT 2000	Basic Statistical Analysis 2	3
Total Credit Hours		36
Restricted Electives		
Group 1		
Three courses (nine credit hours) from the following:		
ABIZ 2390	Introduction to Environmental Economics (3)	
AGEC 2370* (BIOL 2300)*	Principles of Ecology (3)	
ANSC 2500	Animal Production (3)	
PLNT 2500	Crop Production (3)	9
*These courses require BIOL 1020 and BIOL 1030		
Group 2		
Two courses (six credit hours) from the following:		
ABIZ 3120	Commodity Futures Markets (3)	
ABIZ 3530	Farm Management (3)	
ABIZ 3540	Financial Risk Management (3)	
ABIZ 4260	Price Analysis (3)	6
Students must fulfil the requirements of one of the following options:		
Agricultural Economics Option		
At least nine credit hours from the Department of Economics, with three credit hours at the 3000 level.		9
Agribusiness Management Option		
At least nine credit hours from the Faculty of Management		9
International Agribusiness Option		
Minor in Asian Studies or Central and East European Studies or Latin American Studies as defined in the Faculty of Arts chapter of this Calendar under cross-disciplinary programs.		18
Free electives		21-30

ACADEMIC CALENDAR 2015-2016

Students are encouraged to take free electives from the following ten courses:		
ABIZ 1010	Economics of World Food Issues and Policies	
ABIZ 2120	World Agribusiness Study Tour	
ABIZ 2210	Transportation Principles	
ABIZ 3120	Commodity Futures Markets	
ABIZ 3520	Food Distribution and International Merchandising	
ABIZ 3530	Farm Management	
ABIZ 3540	Financial Risk Management	
ABIZ 3550	Environmental Policy	
ABIZ 3560	Agribusiness Portfolio Management	
ABIZ 4120	Intermediate Econometrics	
ABIZ 4260	Price Analysis	

4.1.4 Bachelor of Science (Agroecology)

Chair and Program Advisor: M.Tenuta
 Office: 309 Ellis Building
 Telephone: (204) 290-7827
 E-mail: Mario.Tenuta@umanitoba.ca

The Agroecology program provides students with an understanding of the natural processes in the agroecosystem and the impact of agricultural practices on these processes. The program emphasizes three areas: ecological sciences, agricultural production, and the social and economic implications of environmental management. Students will develop an understanding of how to manage natural and agricultural resources in a manner that enhances economic production while maintaining the integrity of natural and agricultural environments. An undergraduate research project is completed during third and fourth years as part of AGECE 3510 and AGECE 4550. Graduates are prepared for careers at the technical and management levels in government and non-government agencies involved in planning and management of natural and agricultural resources. By appropriate choice of free elective courses, students can prepare for graduate studies.

In addition to the courses prescribed in the faculty core for all students in the Faculty of Agricultural and Food Sciences, the following courses are prescribed for students in the program leading to the B.Sc. Agroecology.

B.Sc. Agroecology Degree Core		
Course No.		Credit Hours
ABIZ 2390 (ECON 2390)	Introduction to Environmental Economics	3
AGECE 2370 (BIOL 2300)	Principles of Ecology	3
AGECE 3510	Agroecology	3
AGECE 4510	Applications in Agroecology	3
AGECE 4550	Project in Agroecology	6
ANSC 2500	Animal Production	3
BIOL 3312	Community Ecology	3
CHEM 2770 (MBIO 277)	Elements of Biochemistry 1	3
PLNT 2500	Crop Production	3
PLNT 2520	Genetics	3
SOIL 3600	Soils and Landscapes in Our Environment	3
Total credit hours		36
Restricted Electives		
Group 1 – Agricultural Science		
Three courses (nine credit hours) of the following:		
From any 2000, 3000 or 4000 level course from -		

ANSC	(Animal Science)	
or		
ENTM	(Entomology)	
or		
PLNT	(Plant Science)	9
Group 2- Land Science		
Six credit hours of the following:		
From any 3000 or 4000 level course from -		
SOIL	(Soil Science)	
or		
GEOG 2250	Introduction to Geographic Information Systems	6
Group 3 – Policy and Economics		
One course (three credit hours) of the following:		
From any 3000 or 4000 level course from -		
ABIZ	(Agribusiness)	3
Free Electives		
		27
Suggested Progression of Program:		
Second Year		
CHEM2770 (MBIO2770)	Elements of Biochemistry 1	3
STAT 1000	Basic Statistical Analysis 1	3
ANSC 2500	Animal Production	3
PLNT 2500	Crop Production	3
ABIZ 1000	Introduction to Agribusiness Management	3
AGRI 2030	Technical Communications	3
AGEC 2370 (BIOL 2300)	Principles of Ecology	3
PLNT 2520	Genetics	3
	Restricted Electives	6
Total credit hours		30
Third Year		
BIOL 3312	Community Ecology	3
SOIL 3600	Soils and Landscapes in Our Environment	3
ABIZ 2390 (ECON 2390)	Introduction to Environmental Economics	3
AGEC 3510	Agroecology	3
	Restricted and/or Free Electives	18
Total credit hours		30
Fourth Year		
AGEC 4510	Applications in Agroecology	3
AGEC 4550	Project in Agroecology	6
	Restricted and/or Free Electives	21
Total credit hours		30

NOTES:

* ENTM 2050 Introductory Entomology is a prerequisite for most courses in entomology. Students contemplating additional entomology courses as free electives are advised to take ENTM 2050 in second year.

ACADEMIC CALENDAR 2015-2016

4.1.5 Bachelor of Science (Food Science)

Program Advisor: A. Hydamaka
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The B.Sc. degree program in Food Science provides the academic foundation of knowledge and skills for the wide range of activities in food science and technology. The degree program is structured in course offerings and content to enhance the competence of graduating students by providing greater emphasis in communications, critical thinking, computer literacy and statistics which are basic requirements of a modern professional environment. The B.Sc. degree program in Food Science is accredited by the Institute of Food Technologists (IFT).

The B.Sc. (Food Science) degree program offers two options: A Science Option and a Business Option. Students will elect one of two options of study. Both Food Science options require students to complete the Faculty Core courses. A description of each program and their requirements follows after the B.Sc. Food Science Degree Core.

B.Sc. Food Science Degree Core		
Course No.		Credit Hours
CHEM 2770	Elements of Biochemistry 1	3
(MBIO 2770)		
FOOD 2500	Food Chemistry	3
FOOD 3010	Food Process 1	3
FOOD 4120	Food Science Seminar	3
FOOD 4150	Food Microbiology 1	3
FOOD 4160	Food Analysis 1	3
FOOD 4200	Quality Control	3
FOOD 4510	Food Product Development	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
MATH 1500	Introduction to Calculus	
or		
MATH 1520	Introduction to Calculus for Management and Social Sciences	3
STAT 2000	Basic Statistical Analysis 2	3
Total credit hours		33

Food Science – Science Option

The principal areas covered are food processing, chemistry, analysis and safety. The Food Science program specifies ten required and a minimum of three restricted elective courses in Food Science. As well, students must select a minimum of three credit hours from a prescribed list of courses in critical thinking and ethics. Twenty-one credit hours of free electives are available and can be selected in Food Science. This will ensure a strong academic base in Food Science and accommodate a satisfactory level of Food Science specialization.

In addition to the courses required for the faculty core and the Food Science Degree Core the following courses are prescribed for the program leading to a B.Sc. in Food Science – Science Option.

Food Science – Science Option Core		
Course No.		Credit Hours
BIOE 3530	Engineering Fundamentals	3
CHEM 1310	University 1 Chemistry – An Introduction to Physical Chemistry*	3
CHEM 1320	University 1 Chemistry – Introduction to Organic Chemistry*	3
FOOD 3210	Food Engineering Fundamentals	3
FOOD 4010	Food Process 2	3
FOOD 4250	Food Analysis 2	3
MBIO 1010	Microbiology 1	3
MKT 2210	Fundamentals of Marketing	3
Total Credit Hours*		21

*Both CHEM 1310 and CHEM 1320 are required for the Food Science-Science Option program. One of these courses will be credited as part of the Faculty Core.

Restricted Electives

Group 1 – Food Safety

One course (three credit hours) from the following:

AGRI 2190	Toxicology Principles (1.5)	
and		
ANSC 2530	Nutritional Toxicology (1.5)	
FOOD 1000	Food Safety, Today and Tomorrow (3)	
FOOD 4310	Introduction to HACCP (3)	
FOOD 4500	Food Safety and Regulations (3)	3

Group 2 - General

Two courses (six credit hours) from the following:

FOOD 3160	Frozen Dairy Products (3)	
FOOD 3170	Cheese and Fermented Milk Products (3)	
FOOD 3220	Grains for Food and Beverage (3)	
FOOD 3500	Processing of Animal Food Products (3)	
FOOD 4230	Food Research (3)	
FOOD 4260	Water Management in Food Processing (3)	
FOOD 4540	Functional Foods and Nutraceuticals (3)	
HNSC 4270	Sensory Evaluation (3)	6
Food Science – Science Option Free Electives		21

Suggested Progression of Program:

Second Year

Course No.		Credit Hours
CHEM 1310	University 1 Chemistry: Introduction to Physical Chemistry**	3
	or	
CHEM 1320	University 1 Chemistry: Introduction to Organic Chemistry**	
CHEM 2770 (MBIO 2770)	Elements of Biochemistry 1	3
STAT 1000	Basic Statistical Analysis 1	3
STAT 2000	Basic Statistical Analysis 2	3
MBIO 1010	Microbiology 1	3
AGRI 2030	Technical Communications	3
FOOD 2500	Food Chemistry	3
	Restricted/and or Free Electives:	9
Total credit hours		30

Third Year

HNSC 1210	Nutrition for Health and Changing Lifestyles	3
BIOE 3530	Engineering Fundamentals	3
FOOD 3210	Food Engineering Fundamentals	3
FOOD 3010	Food Process 1	3
FOOD 4150	Food Microbiology 1	3
FOOD 4160	Food Analysis 1	3
FOOD 4250	Food Analysis 2	
MKT 2210	Fundamentals of Marketing	3
	Restricted and/or Free Electives:	6

ACADEMIC CALENDAR 2015-2016

Total credit hours		30
Fourth Year		
FOOD 4010	Food Process 2	3
FOOD 4120	Food Science Seminar	3
FOOD 4200	Quality Control in Foods	3
FOOD 4510	Food Product Development	3
	Restricted and/or Free Electives:	18
Total credit hours		30

**While both CHEM 1310 and CHEM 1320 are required for the Food Science-Science Option program, normally only one is taken in second year.

Food Science – Business Option

The B.Sc. degree Program in Food Science now offers a Business option which now allows students to specialize in the program. The Business option specifies eight required courses and a minimum of one course from selected groups of Food Science courses plus one course from a selected group of philosophy courses. Additional required courses from Agribusiness and The Faculty of Management provide a level of specialization in economics, finance, marketing and management. There are also twenty-one credit hours (seven courses) available for free electives.

In addition to the courses required for the faculty core and the Food Science Degree Core the following courses are prescribed for the program leading to a B.Sc. in Food Science – Business Option.

Food Science – Business Option Core		
Course No.		Credit Hours
ABIZ 3510	Economics of Food Policy	3
ACC 1100	Introductory Financial Accounting	3
ECON 2010	Microeconomic Theory and Its Applications 1	3
ECON 2020	Macroeconomic Theory and Its Applications 1	3
FOOD 4500	Food Safety and Regulations	3
HRIR 2440	Human Resource Management	3
Total Credit Hours		18
Restricted Electives		
Group 1 - Marketing		
Two courses (six credit hours) from the following:		
ABIZ 2510	Introduction to Agricultural and Food Marketing (3)	
ABIZ 3520	Food Distribution and International Marketing (3)	
MKT 2210	Fundamentals of Marketing (3)	6
Group 2 - General		
One courses (three credit hours) from the following:		
AGRI 2190	Toxicology Principles (1.5)	
and		
ANSC 2530	Nutritional Toxicology (1.5)	
FOOD 1000	Food Safety, Today and Tomorrow (3)	
FOOD 3160	Frozen Dairy Products (3)	
FOOD 3170	Cheese and Fermented Milk Products (3)	
FOOD 3220	Grains for Food and Beverage (3)	
FOOD 3500	Processing of Animal Food Products (3)	
FOOD 4250	Food Analysis (3)	

FOOD 4260	Water Management in Food Processing (3)	
FOOD 4310	Introduction to HACCP (3)	
FOOD 4540	Functional Foods and Nutraceuticals (3)	3
Free Electives		21
Suggested Progression of Program:		
Second Year		
Course No.		Credit Hours
ACC 1100	Introductory Financial Accounting	3
CHEM 2770 (MBIO 2770)	Elements of Biochemistry 1	3
STAT 1000	Basic Statistical Analysis 1	3
STAT 2000	Basic Statistical Analysis 2	3
ABIZ 1000	Introduction to Agribusiness Management	3
AGRI 2030	Technical Communications	3
FOOD 2500	Food Chemistry	3
HRIR 2440	Human Resource Management	3
	Restricted/and or Free Electives:	6
Total credit hours		30
Third Year		
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
ECON 2010	Microeconomic Theory and Its Applications 1	3
ECON 2020	Macroeconomic Theory and Its Applications 1	3
FOOD 3010	Food Process 1	3
FOOD 4150	Food Microbiology 1	3
FOOD 4160	Food Analysis 1	3
	Restricted and/or Free Electives:	12
Total credit hours		30
Fourth Year		
ABIZ 3510	Economics of Food Policy	3
FOOD 4120	Food Science Seminar	3
FOOD 4200	Quality Control in Foods	3
FOOD 4500	Food Safety and Regulations	3
FOOD 4510	Food Product Development	3
	Restricted and/or Free Electives:	15
Total credit hours		30

4.1.6 Biosystems Engineering

Head: D. Mann
 Office: E2-376 EITC (Engineering Building)
 Telephone: (204) 474-6033

Students in the Bachelor of Science degree in Biosystems Engineering must be admitted to the Faculty of Engineering. The Biosystems Engineering program is outlined in the Faculty of Engineering chapter of this Calendar.

The courses below are for students studying in the various majors in Agricultural and Food Sciences and for non-Agriculture students with a special interest in the subjects.

Course No.		Credit Hours
BIOE 2090	Machinery for Agricultural Production	4

ACADEMIC CALENDAR 2015-2016

BIOE 2222	Precision Agriculture Concepts and Applications	4
BIOE 3530	Engineering Fundamentals	3
BIOE 4500	Water Management	3
BIOE 4520	Crop Preservation and Handling	3

4.1.7 Textile Sciences

Dean: Dr. Karin Wittenberg
 Campus Address/General Office: 256 Agriculture Building
 Telephone: (204) 474- 6026
 Campus Address/General Office: 256 Agriculture Building

"On March 17, 2015, the Board of Governors, on recommendation of Senate, approved the merger of the Department of Textile Sciences to the Department of Biosystems Engineering, Faculty of Agricultural and Food Sciences. Accordingly, effective the Fall 2015 academic term, all associated programs in Textile Sciences will become part of the Faculty of Agricultural and Food Sciences.

As outlined in the proposal submitted to Senate in March 2015, the implementation process will need to be flexible to best facilitate the appropriate approvals of any identified adjustments or changes, where required. In the interim and until such time that a review is completed and the required approval(s) received, the Textile Sciences programs- as listed above- will continue to be governed by current Faculty of Human Ecology academic regulations and the Textile Sciences program regulations."

Program/Degree	Years to Complete	*Total Credit Hours
Bachelor of Science (Textile Sciences) (intake suspended)	4*	120

Program	Minor Availability	Options	Streams
Textile Sciences	Yes: Textile Sciences Minor		Product Development Textile Development
		Interfaculty Option in Aging	

Textile Sciences Streams

Product Development Stream

Textile Development Stream: Engineering Sciences Option; Exercise and Sports Science Option; Microbiological Sciences Option

Acting Head: Wen Zhong

Intake to this program has been suspended.

Students Admitted in September 2012 or Later

4.4.1 Product Development Stream

Course No.	Credit Hours	
CHEM 1000	Understanding the World through Chemistry	3
or		
CHEM 1300	University 1: Structure and Modelling in Chemistry	
ECON 1210	Introduction to Canadian Economic Issues and Policies	3
ECON 1220	Introduction to Global and Environmental Economic Issues and Policies	3
FMLY 1010	Human Development in the Family	3
HEAL 2600	Integration of Health Determinants of Individuals	3
HMEC 2000	Research Methods and Presentation	3
HMEC 3000	Introduction to Social Epidemiology	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
PERS 1200	Physical Activity, Health and Wellness	3

PSYC 1200	Introduction to Psychology	6
or		
SOC 1200	Introduction to Sociology	
STAT 1000	Basic Statistical Analysis 1	3
TXSC 1600	Textiles for Living	3
TXSC 1610	Textiles, Products, and Consumers	3
TXSC 2500	Preparation for Product Development	1
TXSC 2600	Textiles for Apparel End Uses	3
TXSC 2610	Textiles for Non Apparel End Uses	3
TXSC 2620	Consumer and Organizational Behaviour toward Textile Products	3
TXSC 2630	Pattern Development in an Industrial Environment	3
TXSC 3600	Global Apparel and Textiles Trade	3
TXSC 3610	Product Standards and Specifications	3
TXSC 3620	Evaluation of Textile Performance	3
TXSC 3630	Line Planning and Visual Communication	3
TXSC 3640	Pattern Development in a Computer Aided Design Environment	3
TXSC 3650	Production of Textile Products	3
TXSC 4610	Integrative Project	6
TXSC 4620	Colour Management	3
TXSC 4630	Quality Assurance Systems	3
	Department Electives	9
	Free Electives	27

4.4.2 Textile Development Stream

Course No.	Credit Hours	
CHEM 1300	University 1: Structure and Modelling in Chemistry	3
CHEM 1310	University 1: An Introduction to Physical Chemistry	3
CHEM 2210	Introductory Organic Chemistry 1: Structure and Function	3
CHEM 2220	Introductory Organic Chemistry 2: Reactivity and Synthesis	3
FMLY 1010	Human Development in the Family	3
HEAL 2600	Integration of Health Determinants of Individuals	3
HMEC 2000	Research Methods and Presentation	3
HMEC 3000	Introduction to Social Epidemiology	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
PERS 1200	Physical Activity, Health and Wellness	3
PSYC 1200	Introduction to Psychology	6
or		
SOC 1200	Introduction to Sociology	
STAT 1000	Basic Statistical Analysis 1	3
STAT 2000	Basic Statistical Analysis 2	3
TXSC 1600	Textiles for Living	3
TXSC 1610	Textiles, Products, and Consumers	3
TXSC 2600	Textiles for Apparel End Uses	3
TXSC 2610	Textiles for Non Apparel End Uses	3
TXSC 2620	Consumer and Organizational Behaviour toward Textile Products	3

ACADEMIC CALENDAR 2015-2016

TXSC 3500	Textiles for the Healthcare Sector	3
TXSC 3610	Product Standards and Specifications	3
TXSC 3620	Evaluation of Textile Performance	3
TXSC 4500	Advanced Textiles for the Healthcare Sector	3
TXSC 4610	Integrative Project	6
TXSC 4620	Colour Management	3
TXSC 4630	Quality Assurance Systems	3

Engineering Sciences Option

ENG 1430	Design in Engineering	4
or		
ENG 1440	Introduction to Statics	4
	Choose 24 credit hours from the following list of Engineering courses:	24
BIOE 2580	Biosystems Engineering Design Trilogy 1	4
BIOE 3590	Mechanics of Materials in Biosystems	4
CIVL 2800	Solid Mechanics	4
ENG 1430	Design in Engineering	4
ENG 1440	Introduction to Statics	4
MECH 2270	Principles of Engineering Materials	4
MECH 2290	Manufacturing Engineering	3
MECH 2300	Introduction to Production and Manufacturing	3
MECH 3540	Modern Engineering Materials	4
	Department Electives	3
	Free electives	12

Microbiological Sciences Option

BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interaction	3
MBIO 1010	Microbiology 1	3
MBIO 2360	Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy	3
MBIO 2370	Biochemistry 2: Catabolism, Synthesis, and Information Pathways	3
MBIO 3010	Mechanism of Microbial Disease	3
	Department Electives	3
	Free electives	15

Exercise and Sports Science Option

BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function	3
	and Interaction	
KIN 2320	Human Anatomy	3
KIN 2330	Biomechanics	3
KIN 3470	Exercise Physiology	3
BIOL 1412	Physiology of the Human Body	3
	Textile Sciences Department Electives	3
	Free electives	18

A minor in Textile Sciences is offered by Textile Sciences. Students must complete 18 credit hours, distributed as follows: A maximum of six (6) credit hours in Textile Sciences at the 1000 level, and at least three (3) credit hours in Textile Sciences at the 2000 level, and at least three (3) credit hours in Textile Sciences at the 3000 or 4000 level, with no more than 6 credit hours at the 1000 level.

Students must check with their home Faculties to see if the Textile Sciences minor is available in their programs.

4.2 Human Nutritional Sciences Programs

Department Head: J. House

Students majoring in Human Nutritional Sciences will choose the Nutrition Option, the Foods Option, the Food Industry Option, or will be admitted to the second degree in Human Nutritional Sciences or the Human Nutritional Sciences/Red River College Culinary Arts Program.

The educational requirements to qualify for a dietetic internship and membership with the College of Dietitians of Manitoba (CDM) or dietetic colleges in other Canadian provinces may be met within the Nutrition Option with the recommended selection of courses. Students can apply for a dietetic internship during the program (see application requirements and procedures for Pre-Selection by the Manitoba Partnership Program), in the third or final year of their degree or after completion of their degree. Internships are awarded competitively by external institutions. Review the section on academic requirements for eligibility to apply for a dietetic internship for students admitted in September, 2007 and later. Those who plan to enter Human Nutritional Sciences are advised that Applied Math or Pre-Calculus Mathematics 40S and Chemistry 40S are prerequisites to CHEM 1300 University 1: Structure and Modeling in Chemistry. Before entering continuing years in the Faculty of Agricultural and Food Sciences, the overall program must be planned with academic advising advice.

All returning students in the Faculty of Agricultural and Food Sciences must submit a program plan for the succeeding year before the start of registration.

4.2.1 Program Requirements

The following are the guidelines for the program requirements for HNS students. The courses outlined for each program in the sections which follow, meets these basic requirements.

Students admitted in September 2012 or later: All students complete a core of 9 credit hours consisting of:

Course Number	Course Name
HEAL 2600	Integration of Health Determinants of Individuals
HMEC 2000	Research Methods and Presentation
HMEC 3000	Introduction to Social Epidemiology

Students admitted between September 2005 and September 2012 are urged to seek academic advising assistance for advice regarding completion of core course requirements.

Electives

Courses within each program fall into one of two categories:

- Department electives must be chosen from within the program department (HNSC designation).
- Free electives may be chosen from within or outside the Faculty of Agricultural and Food Sciences

4.2.2 Bachelor of Science (Human Nutritional Sciences)

Students admitted in September 2010 or later must register for at least one HNSC course (3 credit hours) in order to stay in the Human Nutritional Sciences program.

Students Admitted in September 2012 or Later		
Course Number	Course Name	Credit Hours
Courses to be taken by all Human Nutritional Sciences students		
CHEM 1300	University 1: Structure and Modeling in Chemistry	3
CHEM 1320	University 1: Introduction to Organic Chemistry (See Note 1)	3
CHEM 2770	Elements of Biochemistry 1 (See Note 2)	3
CHEM 2780	Elements of Biochemistry 2 (See Note 3)	3
FOOD 4150	Food Microbiology	3
HMEC 2000	Research Methods and Presentation	3
HMEC 3000	Introduction to Social Epidemiology	3
HEAL 2600	Integration of Health Determinants of Individuals	3
HNSC 1200	Food: Facts and Fallacies	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
HNSC 2130	Nutrition through the Life Cycle	3
HNSC 2140	Basic Principles of Human Nutrition	3
HNSC 2150	Composition, Functional and Nutritional Properties of Foods	3
HNSC 2160	Food Preparation and Preservation	3

ACADEMIC CALENDAR 2015-2016

HNSC 3330	Ingredient Technology for Designed Foods	3
HNSC 4160	Seminar in Foods and Nutrition	3
HNSC 4290*	Food, Nutrition and Health Policies	3
PSYC 1200 <i>or</i> SOC 1200	Introduction to Psychology <i>or</i> Introduction to Sociology <i>or</i> combination of the 2 areas	6
STAT 1000	Basic Statistical Analysis 1	3
STAT 2000	Basic Statistical Analysis 2	3
BIOL 1410	Anatomy of the Human Body <i>or</i>	3
BIOL 1020 and BIOL 1030	Biology 1 and 2 (if BIOL 1 and 2 are taken, the additional 3 credit hours are considered to be free electives)	3 – 6
BIOL 1412	Physiology of the Human Body (See Note 4)	3
All students must select one of the following options to complete the degree program:		
Nutrition Option		
HNSC 3300	Vitamins and Minerals in Human Health	3
HNSC 3310	Macronutrients and Human Health	3
HNSC 3320	Nutrition Education and Dietary Change	3
HNSC 4320 <i>or</i> HNSC 4300	Nutritional Management of Disease States <i>or</i> Community Nutrition Intervention	3
	Department Electives	15
	Free Electives	24
Foods Option		
HNSC 3300 <i>or</i> HNSC 3310	Vitamins and Minerals in Human Health <i>or</i> Macronutrients and Human Health	3
HNSC 3260	Food Quality Evaluation	3
HNSC 3350	Culture and Food Patterns	3
HNSC 4270	Sensory Evaluation of Food	3
HNSC 4280	Food Product Development	3
MKT 2210	Fundamentals of Marketing	3
	Program Electives (See Note 5)	9
	Free Electives	24
Food Industry Option		
FOOD 4310	Introduction to HACCP	3
GMGT 1010	Business and Society	3
HNSC 3260	Food Quality Behaviour	3
HNSC 3300 <i>or</i> HNSC 3310	Vitamins and Minerals in Human Health <i>or</i> Macronutrients and Human Health	3
HNSC 4280	Food Product Development	3
HNSC 4364	Foods Industry Option Practicum	6
MKT 2210	Fundamentals of Marketing	3
*NOTE:	HNSC 4290 is not a requirement for students in the Food Industry Option	
	Electives (see Advising information for suggested electives)	15
Students in the Food Industry Option must complete one of the following concentrations (15 credit hours). Select 15 credit hours of course work from one of the lists that follow.		
Quality Assurance Concentration		15
AGRI 2190	Toxicology Principles	1.5
AGRI 2530	Nutritional Toxicology	1.5
FOOD 4160	Food Analysis 1	3
FOOD 4250	Food Analysis 2	3
FOOD 4500	Food Safety and Regulations	3

HNSC 4270	Sensory Evaluation of Food	3
STAT 3000	Applied Linear Statistical Models	3
STAT 3170	Statistical Quality Control	3
Food Product Development Concentration		15
FOOD 4160	Food Analysis 1	3
FOOD 4250	Food Analysis 2	3
FOOD 4500	Food Safety and Regulations	3
One of: FOOD 3160, FOOD 3170, or FOOD 3200	Frozen Dairy Product, Cheese and Milk Products, or Baking Science	3
HNSC 4270	Sensory Evaluation of Food	3
HNSC 4290	Food, Nutrition and Health Policies	3
HNSC 4540	Functional Foods and Nutraceuticals	3
STAT 3000	Applied Linear Statistical Models	3
Food Industry Management Concentration		15
ACC 1100	Introductory Financial Accounting	3
GMGT 2060	Management and Organization Theory	3
GMGT 3010	Management Decision-Making	3
HRIR 2440	Human Resource Management	3
MKT 3220	Marketing Research	3
HNSC 3342	Management for Food and Nutrition Professionals	3
GMGT 3xxx	3000 level	3

4.2.2.1 Pre-Professional Preparation

Students in the Human Nutritional Sciences program can complete the entrance requirements for several professional programs as part of the degree.

A. Dietetics Focus: Academic requirements for eligibility to enter a dietetic internship.

1. Courses required in addition to the Human Nutritional Sciences program:

Course Number	Course Name	Credit Hours	Placement in Program
GMGT 1010	Business and Society	3	Free Elective
HNSC 3342	Management for Food and Nutrition Professionals	3	Department Elective
HNSC 4140	Quantity Food Production and Management	3	Department Elective
HNSC 4xxx	One of HNSC 4300, HNSC 4310, HNSC 4362 or HNSC 4340	3 – 6	Department Elective

2. Entry into a dietetic internship is competitive. It is strongly recommended that students seek advice from the Department on all aspects of preparing an application to an internship.

i. Students admitted prior to September 2007:

Students admitted prior to September, 2007 will follow regulations regarding dietetic internship applications in the final year of their degrees (information available on the Agricultural and Food Sciences web site and from the Dean's Office).

ii. Students admitted for September 2007 or later:

Students admitted to the Department of Human Nutritional Sciences in September, 2007 or later, will be eligible to apply to be pre-selected by the Manitoba Partnership Dietetic Education Program (MPP) after completion of 60 – 90 credit hours. Details of the pre-selection process and the academic rating selection criteria will be published by the MPP and a link is available on the Faculty of Agricultural and Food Sciences' web site. If students are not pre-selected by the MPP, there are other opportunities to apply in the final year of degree for internships following degree completion.

3. For those intending to apply for a dietetic internship, the second degree's Dietetics Preparation program meets the course requirements in Human Nutritional Sciences, but not all the other supporting course requirements, for example, psychology/sociology, humanities or social sciences, microbiology, research methods, communication arts, basic principles of management. Check with an Academic Advisor to review the supporting course requirements from previous academic work.

B. Medicine or Dentistry: Eligibility for entry into the program Doctor of Medicine or the program Doctor of Dental Medicine at the University of Manitoba.

Courses required in addition to, or as part of, the Human Nutritional Sciences program (additional courses can be taken as electives in the program):

ACADEMIC CALENDAR 2015-2016

Course Number	Course Name	Credit Hours	Placement in Program
CHEM 1310	Introduction to Physical Chemistry	3	Replaces CHEM 1320
BIOL 1030 (Note: Prerequisite for BIOL 1030 is BIOL 1020)	Biology 2	3	Required
CHEM 2210 (Cannot be held with CHEM 1320 in the same program; prerequisite for CHEM 2370)	Introduction to Organic Chemistry 1: Structure and Function	3	Free Elective
CHEM/MBIO 2360	Biochemistry 1: Bio-molecules and an Introduction to Metabolic Energy	3	Required; replaces CHEM 2770 in the Human Nutritional Sciences program
CHEM/MBIO 2370	Biochemistry 2: Catabolism, Synthesis and Information Pathways	3	Required; replaces CHEM 2780 in the Human Nutritional Sciences program
MCAT Preparation	Refer to Admissions Bulletin/Medicine Website		Electives
Humanities Requirement	Refer to Admissions Bulletin/Medicine Website		

C. Master of Physician Assistant Studies:

This program requires completion of a 4 year degree (120 credit hours) including Human Anatomy, Human Physiology, and Biochemistry. Information regarding specific course numbers is found on the Faculty of Medicine's website.

D. Law: Eligibility for entry into the program Bachelor of Laws at the University of Manitoba.

1. The Human Nutritional Sciences program meets the entrance requirements of the Faculty of Law.

NOTES:

1. Under required courses, students can take either CHEM 1320 (University 1: Introduction to Organic Chemistry) or CHEM 1310 (University 1: Introduction to Physical Chemistry). CHEM 1320 may not be held with CHEM 2210.

2. Under required courses, students can take either CHEM/MBIO 2770 (Elements of Biochemistry 1) or CHEM/MBIO 2360 (Biochemistry 1: Bio-molecules and an Introduction to Metabolic Energy).

3. Under required courses, students can take either CHEM/MBIO 2780 (Elements of Biochemistry 2) or CHEM/MBIO 2370 (Biochemistry 2: Catabolism, Synthesis, and Information Pathways).

4. Under required courses, students can take either BIOL 1412 (Physiology of the Human Body) or BIOL 2410 (Human Physiology 1) and BIOL 2420 (Human Physiology 2). Note that students selecting BIOL 1020 and 1030 are not required to complete BIOL 1410, and will decrease electives to 12 credit hours. The selection of BIOL 1020 and 1030 will have more options with regard to taking higher level Biology courses as electives.

5. Nine credit hours of courses from either the Asper School of Business and/or from 3rd and 4th year courses in the Department of Food Science.

6. For students who do not take CHEM 2210 and CHEM 2220, CHEM 1320 is preferred.

4.2.3 Bachelor of Science (Human Nutritional Sciences) - Second Degree Program

Required Courses -- 45 Credit Hours

Refer to information in section 4.2.2.1 about applying for a Dietetic internship. Students must complete 60 credit hours while enrolled in the second degree program. If any of the required courses have been completed in the previous degree, free electives must be chosen to meet the 60 credit hour requirement. Students are not required to satisfy the Written English requirement.

Course No.	Course Name	Credit Hours
CHEM 1300	University 1: Structure and Modeling in Chemistry (see note 1)	3
CHEM 1320	University 1: Introduction to Organic Chemistry (see note 1)	3
CHEM 2770	Elements of Biochemistry 1 (see note 2)	3
CHEM 2780	Elements of Biochemistry 2 (see note 3)	3
HNSC 2140	Basic Principles of Human Nutrition	3
HNSC 2160	Principles of Food Preparation and Preservation	3
HNSC 3300	Vitamins and Minerals in Human Health	3
HNSC 3310	Macronutrients and Human Health	3
HNSC 3320	Nutrition Education and Dietary Change	3
HNSC 3330	Ingredient Technology for Designed Foods	3
HNSC 4290	Food, Nutrition and Health Policies	3
STAT 1000	Basic Statistical Analysis 1	3
STAT 2000	Basic Statistical Analysis 2	3
BIOL 1410 <i>or</i> BIOL 1020 and BIOL 1030	Anatomy of the Human Body <i>or</i> Biology 1 and Biology 2 (see note 4)	3-6
BIOL 1412	Physiology of the Human Body (see note 4)	3

Free Elective Courses - 6 credit hours. If additional courses are required as prerequisites, they will be considered free electives.

Elective Courses – 9 credit hours from Human Nutritional Sciences (choose one of options A, B, or C):

Course No.	Course Name	Credit Hours
A. Dietetics Preparation		
HNSC 3342	Management for Food and Nutrition Professionals	3
HNSC 4140	Quantity Food Production and Management	3
HNSC 4320	Nutrition Management of Disease States	3
B. Human Nutrition		
HNSC 4320 <i>or</i> HNSC 4300	Nutrition Management of Disease States <i>or</i> Community Nutrition Intervention	3
	Choose 6 credit hours from:	6
HNSC 4300, HNSC 4310, HNSC 4340, <i>or</i> HNSC 4350	Community Nutrition Intervention, Nutrition and the Elderly, Maternal and Child Nutrition, <i>or</i> Nutrition in Exercise and Sport	
C. Foods		
HNSC 2150	Composition, Functional and Nutritional Properties of Foods	3
HNSC 3260	Food Quality Evaluation	3
HNSC 4540	Functional Foods and Nutraceuticals	3

NOTES:

- Under required courses, students can take either CHEM 1320 (University 1: An Introduction to Organic Chemistry), or CHEM 1310 (University 1: An Introduction to Physical Chemistry). Students can take CHEM 2210 (Introduction to Organic Chemistry 1: Structure and Function) and CHEM 2220 (Introduction to Organic Chemistry 2: Reactivity and Synthesis) instead of CHEM 1300 and CHEM 1310 or CHEM 1320. For students who do not take CHEM 2210 and CHEM 2220, CHEM 1320 is preferred.
- Under required courses, students can take either CHEM/MBIO 2770 (Elements of Biochemistry1) or CHEM/MBIO 2360 (Biochemistry 1: Bio-molecules and in Introduction to Metabolic Energy).
- Under required courses, students can take either CHEM/MBIO 2780 (Elements of Biochemistry 2) or CHEM/ MBIO 2370 (Biochemistry 2: Catabolism, Synthesis, and Information Pathways).
- Under required courses, students can take either BIOL 1412 (Physiology of the Human Body) or BIOL 2410 (Human Physiology 1) and BIOL 2412 (Human Physiology 2). Note that students selecting BIOL 1020 and 1030 are not required to complete BIOL 1410, and will decrease electives to 3 credit hours. The selection of BIOL 1020 and 1030 will have more options with regard to taking higher level Biology courses as electives.
- If BIOL 1020 and BIOL 1030 are taken, the additional 3 credit hours are considered to be free electives.

ACADEMIC CALENDAR 2015-2016

4.2.4 Bachelor of Science (Human Nutritional Sciences) - Agreement with Red River College Culinary Arts Program

Course Number	Course Name	Credit Hours
Required Courses		
CHEM 1300	Structure & Modeling in Chemistry	3
CHEM 1320 or CHEM 1310	Introduction to Organic Chemistry or Introduction to Physical Chemistry	3
CHEM 2770	Elements of Biochemistry 1 (see note 2)	3
CHEM 2780	Elements of Biochemistry 2 (see note 2)	3
STAT 1000	Basic Statistical Analysis 1	3
STAT 2000	Basic Statistical Analysis 2	3
BIOL 1410 or BIOL 1020 and BIOL 1030	Anatomy of the Human Body or Biology 1 and Biology 2 (see note 1)	3 – 6
BIOL 1412	Physiology of the Human Body (see note 1)	3
HMEC 2000	Research Methods and Presentation	3
HNSC 2140	Basic Principles of Human Nutrition	3
HNSC 2150	Composition, Functional and Nutritional Properties of Food	3
HNSC 3300	Vitamins and Minerals in Human Health	3
HNSC 3310	Macronutrients and Human Health	3
HNSC 3320	Nutrition Education and Dietary Change (see note 5)	3
HNSC 3330	Ingredient Technology for Designed Foods	3
HNSC 4290	Food, Nutrition and Health Policies	3
HNS Courses for Area of Emphasis (6 credit hours from A or B)		
Choose one from A or B:		
A. Human Nutrition		
HNSC 4300 or HNSC 4320	Community Nutrition Intervention or Nutrition Management of Disease States	3
HNSC 4310 or HNSC 4340 or HNSC 4350	Nutrition and the Elderly or Maternal Nutrition or Nutrition Exercise and Sport	3
B. Foods		
HNSC 3260	Food Quality Evaluation	3
HNSC 4540	Functional Foods and Nutraceuticals	3
Electives		6

Notes:

- Students must take BIOL 1410 Anatomy of the Human Body or BIOL 1020 Biology 1 and BIOL 1030 Biology 2, AND require BIOL 1412 Physiology of the Human Body (3 credits) in order to take HNSC 3310 Macronutrients & Human Health and HNSC 3300 Vitamins and Minerals in Human Health. Free electives must be used to meet this requirement for BIOL 1412, if BIOL 1020 and BIOL 1030 are taken. Students can take either BIOL 1412 or BIOL 2410 and BIOL 2420.
- Students can take either CHEM/MBIO 2770 (Elements of Biochemistry 1) or CHEM/MBIO 2360 (Biochemistry 1: Bio-molecules and an Introduction to Metabolic Energy). Students can take either CHEM/MBIO 2780 (Elements of Biochemistry 2) or CHEM/MBIO 2370 (Biochemistry 2: Catabolism, Synthesis, and Information Pathways).
- PSYC/SOC 1200 & HNSC 2130 prerequisites are waived in this program for HNSC 3320. HNSC 2140 must be completed before registering for this course.

4.3 Pre-Veterinary Program

A pre-veterinary program is offered to students who plan to take the degree Doctor of Veterinary Medicine. Pre-veterinary students whose academic standing is acceptable may be admitted to the Western College of Veterinary Medicine (WCVM), University of Saskatchewan. Acceptance into the Western College of Veterinary Medicine from the pre-veterinary program at the University of Manitoba is normally restricted to residents of Manitoba. Students from outside Manitoba may be accepted as residents of their own province or country. Students entering the pre-veterinary program are responsible for establishing their residence status.

Western College of Veterinary Medicine, Saskatoon

Two full years of university training are required for admission comprised of 60 credit hours during which credit must be secured in the number of courses considered a standard load in the curriculum in which they are obtained. The deadline for applications is December.

The program of Pre-Veterinary study must include six (6) credit hours of: English*, three (3) credit hours in Physics, Biochemistry, Microbiology, six (6) credit hours of Mathematics or Statistics; nine (9) credit hours in Biology or Zoology (including three (3) credit hours in genetics), Chemistry (including three (3) credit hours in organic chemistry); plus electives sufficient to complete two full years. (*This requirement can also be met by taking AGRI 2030 Technical Communications, and one half course in philosophy.)

The following program is designed to meet the above requirements within the constraints of present course offerings. Some modifications may be possible.

First Year/University 1		
Course No.		Credit Hours
CHEM 1300	University 1 Chemistry: Structure and Modelling in Chemistry	3
CHEM 1320	University 1 Chemistry: An Introduction to Organic Chemistry	3
MATH 1200	Elements of Discrete Mathematics	3
	or	
MATH 1210	Techniques of Classical and Linear Algebra	
MATH 1300	Vector Geometry and Linear Algebra	3
	Or	
MATH 1310	Matrices for Management and Social Sciences	
	Or	
MATH 1500	Introduction to Calculus	
	Or	
MATH 1520	Introductory Calculus for Management and Social Sciences	
AGRI 1500	Natural Resources and Primary Agricultural Production	3
AGRI 1510	Production, Distribution and Utilization of Agricultural Products	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, function and Interactions	3
ENGL 1200*	Representative Literary Works (6)	6
	Or	
ENGL 1300*	Literature Since 1900 (6)	
	Elective	3
Total credit hours		30
NOTE: * In place of ENGL 1200 or ENGL 1300, Technical Communications (AGRI 2030) may be taken in second year; and one of the following Philosophy courses: PHIL 1290, PHIL 2740, PHIL 2750, PHIL 2830.		
Second Year		
CHEM 1310	University 1 Chemistry: An Introduction to Physical Chemistry	3
CHEM 2770 (MBIO 2770)	Elements of Biochemistry 1	3
CHEM 2780 (MBIO 2780)	Elements of Biochemistry 2	3
PHYS 1020	General Physics 1	3
STAT 1000	Basic Statistical Analysis	3
PLNT 2520 (BIOL 2500)	Genetics	3
MBIO 1010	Microbiology 1	3
	Electives	9
Total credit hours		30

Please note:

The courses outlined here relate to the entrance requirements for WCVM. Students intending to apply to a different Veterinary College should consult with that College and the Animal Systems Advisor.

4.4 Interfaculty Option in Aging

An Option in Aging is offered by and in the following faculties, schools and colleges: Arts, Nursing, Kinesiology and Recreation Management, and Social Work.

To complete the option, students in the General Human Ecology , Textile Sciences Program and Human Nutritional Sciences Program must complete each of the following requirements:

Interfaculty Option in Aging		
Required Courses (6 credit hours):	HMEC 2650 or REC 2650 or SWRK 2650 The Social Aspects of Aging	KIN 2610 or NURS 2610 Health and Physical Aspects of Aging
At least six (6) credit hours of discipline-specific (professional) applied work in the student's department of registration	Human Ecology Courses: FMLY 4300 HMEC 4090 Agricultural and Food Sciences Course: HNSC 4362	Application is required for all field placement or practicum courses.
Six (6) credit hours of aging-related courses from participating units (other courses are available from the participating faculties)	Human Ecology Courses: FMLY 3220 FMLY 3240 FMLY 4220 Agricultural and Food Sciences Courses: HNSC 2130 HNSC 4310	

Upon completion of these requirements, a comment will be added to the student's transcript.

4.5 Minors

Minors for students in the Agriculture, Agribusiness, Agroecology, and Food Science Programs

As part of the electives portion of their programs, students may declare and complete a Minor from departments in which a Minor is offered. Course requirements are outlined in sections below. Minors are also available in the Faculties of Arts, Environment, Human Ecology, and Science and can be found within the departmental sections of each of these faculties. A Management Minor is offered by the Asper School of Business; Agriculture, Agroecology and Food Science students may complete this minor (this minor is not available to Agribusiness students). The Minor consists of 18 credit hours of Management courses. Students must meet prerequisites for all courses. Completion of a Minor is optional. It should be noted that planning for completion of a Minor should be done early in the program, ideally before 90 credit hours have been completed, due to restricted opportunities for courses later in the program.

Minors for students in the Human Nutritional Sciences Programs

Students in the Human Nutritional Sciences programs may declare and complete a Minor from any department or interdisciplinary program in which a Minor is offered. Information about Minors in faculties other than Agricultural and Food Sciences is found in the appropriate departmental/school/faculty program offerings in the Undergraduate Calendar.

Completion of the Minor is entirely optional. Students may not, however, declare both their Major and Minor from the same department/interdisciplinary program. No course may be used as part of a Human Nutritional Sciences program and also be part of a prescribed Minor. For example, if a course in Chemistry is part of a student's degree requirements, it cannot be used as part of a Minor in another program. Completion of a Minor may require that a student take more than the minimum number of credit hours for graduation.

Minors offered by the Faculty of Agricultural and Food Sciences

Animal Systems

Students may obtain a minor in Animal Systems (18 credit hours) by completing ANSC 2500 Animal Production plus an additional 15 credit hours in Animal Science courses.

Crop Protection

Students may obtain a minor in Crop Protection (18 credit hours) by completing ENTM 3170 Crop Protection Entomology or ENTM 3190 Introduction to Applied Entomology, PLNT 3540 Weed Science, PLNT 3570 Fundamentals of Plant Pathology, PLNT 4270 Plant Disease Control, plus 6 credit hours from the following list of courses: AGRI 2180 Introductory Toxicology, BIOE 4520 Crop Preservation and Handling, ENTM 2050 Introductory Entomology, PLNT 3510 Cropping Systems, PLNT 3520 Principles of Plant Improvement, PLNT 4570 Research Methods in Plant Pathology, PLNT 4580 Molecular Plant-Microbe Interactions, SOIL 3520 Pesticides: Environment, Economics and Ethics.

Entomology

Students may obtain a minor in Entomology (18 credit hours) by completing ENTM 2050 Introductory Entomology plus an additional 15 credit hours in Entomology courses. Many courses are offered in alternating years, so students should consult the Department Head of Entomology to plan their program.

Food Science

Students may obtain a minor in Food Science (18 credit hours) by completing FOOD 1000 Food Safety Today and Tomorrow and FOOD 2500 Food Chemistry plus an additional 12 credit hours in FOOD courses excluding FOOD 4230 Food Research and FOOD 4120 Food Science Seminar.

Plant Biotechnology

Students may obtain a minor in Plant Biotechnology (18 credit hours) by completing PLNT 2530 Plant Biotechnology plus an additional 15 credit hours from the following list of courses: PLNT 3140 Introductory Cytogenetics, PLNT 3520 Principles of Plant Improvement, PLNT 3570 Fundamentals of Plant Pathology, PLNT 4330 Intermediate Plant Genetics, PLNT 4310 Introductory Plant Genomics, PLNT 4550 Developmental Plant Biology, PLNT 4560 Secondary Plant Metabolism, PLNT 4570 Research Methods in Plant Pathology, PLNT 4580 Molecular Plant-Microbe Interactions, PLNT 4590 Physiology of Crop Plants, PLNT 4600 Issues in Agricultural Biotechnology, PLNT 4610 Bioinformatics.

Soil Science

Students may obtain a minor in Soil Science (18 credit hours) by completing SOIL 3600 Soils and Landscapes in our Environment plus an additional 15 credit hours from the following list of courses: SOIL 3060 Introduction to Agrometeorology, SOIL 3520 Pesticides: Environment, Economics and Ethics, SOIL 3610 Field Methods in Land Resource Science, SOIL 4060 Physical Properties of Soils, SOIL 4130 Soil Chemistry and Mineralogy, SOIL 4400 Soil Ecology, SOIL 4500 Remediation of Contaminated Land, SOIL 4510 Soil and Water Management, SOIL 4520 Soil Fertility.

Human Nutrition and Metabolism

Students may obtain a minor in Human Nutrition and Metabolism (18 credit hours) by completing the following courses: HNSC 1200 Food: Facts and Fallacies, HNSC 1210 Nutrition for Health and Changing Lifestyles, HNSC 2140 Basic Principles of Human Nutrition, HNSC 3300 Vitamins and Minerals in Human Health, HNSC 3310 Macronutrients and Human Health, and HNSC 4120 Senior Thesis or HNSC 4540 Functional Foods and Nutraceuticals.

4.6 Diploma in Agriculture

Director: Michele Rogalsky
 School of Agriculture
Office: 160 Agriculture Building
Telephone: (204) 474-9295

The core curriculum of prescribed courses, common to all students, provides a broad yet integrated education in the production, management and marketing of agricultural products and the principles of managing a business. Students are taught to use this knowledge to evaluate the technical and economic feasibility of a variety of alternative agricultural practices.

Within the program, students are able to specialize in areas of interest. Options are available in Business Management, Crop Management, Livestock Management and General Agriculture. These options are chosen by the student during the first term, first year.

Prescribed Courses for all Students in these options		
First Year, Fall Term		
Course No.		Credit Hours
BIOE 0600	Farm Machinery	4
ANSC 0420	Animal Biology and Nutrition	4
ABIZ 0440	Agricultural Economics and Marketing 1	4
ABIZ 0460	Financial Management 1	4
DAGR 0410	Communication and Learning Skills	4
DAGR 0420	Introduction to Soils and Crops	4
DAGR 0680	Management Planning Project 1	
Total credit hours		24
First Year, Spring Term		
PLNT 0410	Cereal and Oilseed Production Practices	4
SOIL 0420	Soil Productivity and Land Use	4

ACADEMIC CALENDAR 2015-2016

ABIZ 0470	Financial Management 2	4
DAGR 0680	Management Planning Project 1 ¹	3
Total credit hours		15
+ 3 courses, according to option*		
¹ continuation of course from fall term		
Second Year		
ABIZ 0450	Agricultural Economics and Marketing 2	4
ENTM 0620	Pest Management and Farm Insects	4
DAGR 0690	Management Planning Project 2	5
Total credit hours		13
+ courses, according to option*		
Total credit hours for prescribed courses		52
Total credit hours for prescribed courses for option		18-24
Total credit hours of free electives		17-23
Total credit hours for Agriculture Diploma		93

NOTE:

*These additional courses will consist of those required within an option plus free electives, in accordance with the four options described below:

Options

In order to accommodate a modest level of specialization, the students will be required to elect one of four options by the end of first term, first year. Each of these four options has a series of required courses. However, within each option there are also unrestricted electives available to the student who wishes to blend training available in two or more option areas to increase the degree of specialization.

Business Management Option

This option offers a more in-depth education in business management to those people who intend to manage farms or work as employees, managers and/or business owners in the agricultural service sector (agricultural lending, fertilizer, feed and chemical sales, etc.).

Prescribed Courses for Business Management Option		
Course No.		Credit Hours
ABIZ 0720	Farm Business Management	4
ABIZ 0690	Agricultural Finance and Credit	4
Plus at least two of the following:		
ABIZ 0680	Agribusiness Management	4
ABIZ 0710	Agricultural Policy	3
ABIZ 0730	Financial Risk Management	3
Plus one Biosystems Engineering course:		
BIOE 0400	Farm Power	4
BIOE 0710	Materials Handling and Electrical Controls	3
BIOE 0690	Water Management	4
BIOE 0700	Agricultural Buildings and Environments	4
Total prescribed credit hours, within option.		18-19
Plus 22-23 credit hours of electives, to complete 93 credit hours within the program.		

Crop Management Option

This option emphasizes soil and crop management. It is designed for people who plan to manage farms where crops are the primary farm enterprise or for those who are interested in careers in industries or businesses that provide services to these types of farms (e.g. crop supply businesses).

Prescribed Courses for Crop Management Option		
Course No.		Credit Hours
PLNT 0770	Weed Management	4
PLNT 0780	Plant Disease Management	4
SOIL 0620	Soil Conservation and Management	4
SOIL 0630	Soil Fertility	4
Plus at least one of the following:		

PLNT 0750	Forage and Pasture Management	4
PLNT 0760	Special Crops	4
PLNT 0800	Diversification With Horticultural Crops	4
PLNT 0820	Organic Crop Production on the Prairies	3
Plus one Biosystems Engineering course:		
BIOE 0400	Farm Power	4
BIOE 0710	Materials Handling and Electrical Controls	3
BIOE 0690	Water Management	4
Total prescribed credit hours, within option		22-24
Plus 17-19 credit hours of electives, to complete 93 credit hours in the program.		

Livestock Management Option

This option emphasizes the principles of livestock production, with some degree of specialized attention to beef, dairy, swine, poultry or horse production. It is designed for people who plan to manage farms where livestock production is the primary enterprise or for those who are interested in the agricultural service industries that support livestock production (e.g. feed suppliers).

Prescribed Courses for Livestock Management Option		
Course No.		Credit Hours
ANSC 0600	Animal Health and Welfare	3
PLNT 0750	Forage and Pasture Management	4
Plus at least one of the following:		
ANSC 0670	Beef Cattle Production and Management	4
ANSC 0680	Dairy Cattle Production and Management	4
Plus at least one of the following:		
ANSC 0690	Swine Production and Management	4
ANSC 0700	Poultry Production and Management	4
ANSC 0730	Horse Production and Management	3
Plus one Biosystems Engineering course:		
BIOE 0710	Materials Handling and Electrical Controls	3
BIOE 0700	Agricultural Buildings and Environments	4
Total prescribed credit hours, within option		17-19
Plus 22-24 credit hours of electives to complete 93 credit hours in the program.		

General Agriculture Option

This option exposes the student to crop and livestock production, business management and biosystems engineering beyond the exposure contained in the core curriculum. It is designed for those people who intend to manage diversified farm operations and for those who desire a general education in applied agricultural science.

Prescribed Courses for General Agriculture Option		
Course No.		Credit Hours
At least one of the following:		
ANSC 0670	Beef Cattle Production and Management	4
ANSC 0680	Dairy Cattle Production and Management	4
ANSC 0690	Swine Production and Management	4
ANSC 0700	Poultry Production and Management	4
ANSC 0730	Horse Production and Management	3
Plus at least one of the following:		
PLNT 0750	Forage and Pasture Management	4
PLNT 0760	Special Crops	4
PLNT 0800	Diversification with Horticultural Crops	4
PLNT 0820	Organic Crop Production on the Prairies	3
Plus at least one of the following:		
SOIL 0620	Soil Conservation and Management	4
SOIL 0630	Soil Fertility	4
Plus at least one of the following:		
ABIZ 0680	Agribusiness Management	4
ABIZ 0720	Farm Business Management	4

ACADEMIC CALENDAR 2015-2016

Plus one Biosystems Engineering course:		
BIOE 0400	Farm Power	4
BIOE 0710	Materials Handling and Electrical Controls	3
BIOE 0690	Water Management	4
BIOE 0700	Agricultural Buildings and Environments	4
Total prescribed credit hours, within option		17-20
Plus 21-24 credit hours of electives, to complete 93 credit hours in the program.		

4.7 Cooperative Education Program

Cooperative Education/Job Placement Officer: Laura Lazo
Office: 271 Agriculture Building
Telephone: (204) 474-6943
Email: Laura.Lazo@umanitoba.ca

Cooperative Education is a process of learning, which formally integrates the student's academic study with work experience in employer organizations. Work-related experience is found in industry, government and the farming profession. The work terms provide the students with practical experience, help to finance their education and provide guidance for further career specialization. All regulations governing regular Faculty of Agricultural and Food Sciences degree and diploma programs apply to the Cooperative Education Program. This program is not available to students in Human Nutritional Sciences.

Academic Term Requirements

Once having been accepted into the Cooperative Education program there are three requirements for completion of the Work Term(s). Failure to do any of them in a timely fashion will result in a failing grade. Please note the Degree Program requires three four month work terms and the Diploma Program requires one five month Work Term. Please see each program's "Employment Term Requirements" for details.

Part way through the work term, the Cooperative Education Coordinator will contact the student for a work site evaluation. During the evaluation both the student and employer will be interviewed and a work-performance evaluation conducted. The student will need to make him/herself available for the interview.

Two weeks after the end of the work term, a work term report is due and must be submitted to the Cooperative Education Coordinator. Both content and format will be marked. (Details as to format and what is required in the report can be found in "Guidelines for Cooperative Education Work Term Report" which can be obtained from the Cooperative Education Coordinator.)

Also, two weeks after the end of the work term, a post employment review is required to be submitted to the Cooperative Education Coordinator.

For Degree the student's program chair will assign each participating student a faculty advisor. For Diploma, the Director of the School of Agriculture, in consultation with the Academic Advisor, will assign each participating student a faculty advisor. The faculty advisor will be responsible for 1) advising the student in regards of the fit of the coop work term in his/her course progression, 2) evaluating the student's work term report and 3) assigning the student a grade based on the report, the employer's evaluation and Cooperative Education Coordinator's site evaluation. Grades of "Pass" or "Fail" will be assigned. Students successfully completing the three work term(s) will have their "Cooperative Education Option" acknowledged on their graduation parchment.

Degree Program

Note: Not available to Human Nutritional Sciences students.

Admission: To be considered for admission in the Cooperative Education Program, an undergraduate degree student must have a minimum GPA of 2.5, have completed at least 75 credit hours of study by the end of the academic year of application but still need to complete 21 credit hours in their last year of academic study.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Education Program. Acceptance into the program is dependant upon the student receiving a job placement through the Cooperative Education Office.

Employment Term Requirements: The Cooperative Education Program consists of up to three four-month coop work terms, each with a course designation, conducted over twelve months with a faculty approved employer. The student will receive one credit for each completed work term. Students are required to register in the appropriate employment term course within set dead-lines and pay the fee prior to starting the employment term. Preferably, each employment term will be completed with a different employer. While on a work term, a cooperative education student is not permitted to take more that six hours of academic credit and may not take more than one course at a time.

Diploma Program

Admission: To be considered for admission in the Cooperative Education Program, a first year diploma student must have a minimum GPA of 2.5, and have completed at least 47 credit hours of studies by the end of the academic year of application.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Education Program. Acceptance into the program is dependant upon the student receiving a job placement through the Cooperative Education Office.

Employment Term Requirements: The Cooperative Education Program is a five month program between the first and second year with a faculty-approved employer. The student will receive two credits for completing the Cooperative Education Program. Students are required to register in the em-

ployment term course and pay the fee prior to starting the employment term.

4.8 Internationally Educated Agrologists Post-Baccalaureate Diploma

The Faculty of Agricultural and Food Sciences currently offers the Internationally Educated Agrologists Post-Baccalaureate Diploma Program (IEAP).

The IEAP is a pathway for Internationally Educated Agrologists (IEAs) to gain formal recognition of their non-Canadian credentials by the Manitoba Institute of Agrologists (MIA), the professional regulatory body for Agrologists in Manitoba.

The program facilitates the intergration of foreign-trained agrologists into the Canadian agriculture sector, through a one-year program of coursework and work experience. The program also stresses the importance of essential skills and professional branding by Canadian Standards.

The program assists new Manitobans with an agricultural degree from outside of Canada to achieve meaningful work in their field, and to help the Manitoba agricultural industry discover new talent.

Admission requirements:

Applicants must:

1. Have a degree in agriculture from another country
2. Be a permanent resident or Canadian citizen
3. Have met the English Language Proficiency Requirements
4. Have a valid driver's license, and
5. Have a letter from the Manitoba Institute of Agrologists (MIA) indicating their application for registration has been accepted.

SECTION 5: COURSE DESCRIPTIONS

Agribusiness -ABIZ 0 Level

ABIZ 0440 Agricultural Economics & Marketing 1 Cr.Hrs. 4

(Formerly 061.044) Introduction to key economic concepts and business principles and their application to Canadian agribusiness.

ABIZ 0450 Agricultural Economics & Marketing 2 Cr.Hrs. 4

(Formerly 061.045) The application of economic analysis in the study of marketing: concepts, policy, practices and institutions. Prerequisite: ABIZ 0440 (or 061.044).

ABIZ 0460 Financial Management 1 Cr.Hrs. 4

(Formerly 061.046) Study of accounting principles and financial information for the preparation and presentation of financial statements to facilitate the management of farms and agricultural businesses.

ABIZ 0470 Financial Management 2 Cr.Hrs. 4

(Formerly 061.047) Study of analysis of financial statements and financial information by decision makers managing the finances of farms and agricultural businesses. Prerequisite: ABIZ 0460 (or 061.046).

ABIZ 0680 Agribusiness Management Cr.Hrs. 4

(Formerly 061.068) The application of economic, accounting and management principles to organizing, operating and managing an agribusiness.

ABIZ 0690 Agricultural Finance and Credit Cr.Hrs. 4

(Formerly 061.069) Application of financial management concepts in evaluating investment options and risk in farm and agribusiness decision-making. Prerequisite: ABIZ 0460 (or 061.046).

ABIZ 0710 Agricultural Policy Cr.Hrs. 3

(Formerly 061.071) Review of agriculture, international trade and food safety policies affecting the production and distribution of agricultural commodities and food products.

ABIZ 0720 Farm Business Management Cr.Hrs. 4

(Formerly 061.072) Application of decision making principles in terms of farm production, finance, and marketing. Prerequisites ABIZ 0470 (or 61.047).

ABIZ 0730 Financial Risk Management Cr.Hrs. 3

(Formerly 061.073) Various approaches to managing market risk will be studied. This includes forward pricing, hedging and options along with insurance, diversification and technology to manage production risk. Prerequisites: ABIZ 0470 (or 061.047) or 061.047); or Pre- or Corequisite: ABIZ 0450 (061.045).

ABIZ 0740 Special Topics in Business Management Cr.Hrs. 3

(Formerly 061.074) Selected topics of current interest in Business Management. Prerequisite: written consent of Director of the School of Agriculture.

Agribusiness and Agricultural Economics-ABIZ 1000 Level

ABIZ 1000 Introduction to Agribusiness Management Cr.Hrs. 3

(Formerly 061.100) Introduction to management principles applied to agribusiness. Topics covered will include cooperative and corporate organizations, financial analysis, marketing and planning. All students will prepare a business plan. Students will use spreadsheet skills with respect to processing information and preparing forecasts. Not to be held with the former 061.100 or 061.250.

ABIZ 1010 Economics of World Food Issues and Policies Cr.Hrs. 3

(Formerly 061.101) Determinants of global food consumption, production and the factors underpinning food security and malnutrition. The importance of international trade in balancing countries' supply and demand for food, examination of trade barriers and institutions facilitating trade. Not to be held with the former 061.210.

Agribusiness and Agricultural Economics-ABIZ 2000 Level

ABIZ 2210 Transportation Principles Cr.Hrs. 3

Formerly 061.221) Demand forecasting, cost analysis, regulation of carriers, role of transport in economic development, project appraisal, and transport planning. Not to be held with the former 061.351 or 018.354. Also offered as SCM 2210 by the Department of Supply Chain Management.

ABIZ 2390 Introduction to Environmental Economics Cr.Hrs. 3

(Formerly 061.239) Economics of management of water, air and land resources quality, and the economics of conservation. The economic implications of environmental standards, licensing criteria and pollution charges will be illustrated by current issues. Students may not hold credit for both ABIZ 2390 (061.239) and ECON 2390 (or 018.239) Prerequisite: [A grade of "C" or better in ECON 1010 or ECON 1011 or the former ECON 1200 (or 018.120) or the former ECON 1201 (018.120)] or [a grade of "C" or better in both ECON 1210 (or ECON 1211 or the former 018.1210 and ECON 1220 (or ECON 1221 or the former 018.122)].

ABIZ 2510 Introduction to Agricultural and Food Marketing Cr.Hrs. 3

(Formerly 061.251) Economic principles and institutions involved in the Canadian agricultural and food marketing system. Farm and Agribusiness applications. Prerequisite: [A grade of "C" or better in ECON 1010 or ECON 1011 or the former ECON 1200 (018.1200) or the former ECON 1201 (018.120)] or [a grade of "C" or better in both ECON 1210 (or ECON 1211 or the former 018.121) and ECON 1220 (or ECON 1221 or the former 018.122)].

ABIZ 2520 Introduction to Management Sciences Cr.Hrs. 3

(Formerly 061.252) An introduction to management science techniques and models. Topics include linear programming, distribution problems, decision theory and queuing models. Students may not hold credit for ABIZ 2520 and SCM 2150 (or 164.215 or 027.215) or 061.414. Prerequisites: MATH 1680 (or 136.168), or MATH 1300 (or 136.130 or 136.131) and MATH 1500 (or 136.150 or 136.152). Pre-Co requisite STAT 1000 (or 005.100) or equivalent.

Agribusiness and Agricultural Economics-ABIZ 3000 Level

ABIZ 3080 Introduction to Econometrics Cr.Hrs. 3

(Formerly 061.308) The application of statistical tools, especially regression analysis for estimating economic relationships and testing economic hypotheses through the use of spreadsheets and data sets. Students may not hold credit for both ABIZ 3080 and the former 018.344. Prerequisite: STAT 2000 (or 005.200) or equivalent, or a grade of "C" in ECON 3170 (or 018.317) and ECON 1010 and ECON 1020 or the former ECON 1200. Also offered as ECON 3180 by the Department of Economics.

ABIZ 3120 Commodity Futures Markets Cr.Hrs. 3

(Formerly 061.312) Theory and economic functions of commodity markets including futures and options markets. The roles of the various participants; the determination of inter-temporal prices and various aspects of hedging will be studied. Prerequisites: [A grade of "C" or better in ECON 1010 or ECON 1011 or the former ECON 1200 (018.120) or the former 1201 (018.120)] or [a grade of "C" or better in both ECON 1210 (or ECON 1211 or the former 018.121) and ECON 1200 (or ECON 1221 or the former 018.122) and STAT 2000 (or 005.200)].

ABIZ 3510 Economics of Food Policy Cr.Hrs. 3

Economics of market intervention; trade policy analysis, and agricultural protection, exports, subsidies, tariffs, quotas; intermediate versus final goods; currency exchange rates and agricultural trade policy; trade agreements. Not to be held with 061.350, 061.418 or ABIZ 3500. Prerequisites: ECON 2450 (or 018.245) and ECON 2470 (or 018.247).

ABIZ 3520 Food Distribution and International Merchandising (3-0-0-0) Cr.Hrs. 3

(Formerly 061.352) An introduction to management concepts and their application to domestic and international merchandising. Prerequisites: (ABIZ 1000 (or 061.100) or 061.250), and (ABIZ 2510 (or 061.251) or MKT 2210 (or 118.221)).

ABIZ 3530 Farm Management Cr.Hrs. 3

(Formerly 061.353) Management decisions and business planning as they relate to farm production, marketing and financing activities. Identifying potential markets; comparative advantage analysis; organizational form and contractual requirements; alternative marketing and production strategies; financing production and marketing activities; develop farm business plan. Prerequisite: ABIZ 1000 (or 061.100) or 061.250.

ABIZ 3540 Financial Risk Management Cr.Hrs. 3

(Formerly 061.354) Risk expected returns and valuation of capital; capital budgeting and dealing with risk; derivative securities and financial risk management; agricultural production and management of risk; agricultural risk management and public policy. Prerequisites: STAT 1000 (or 005.100) and [ABIZ 1000 (or 061.100 or 061.250) or ABIZ 2510 (or 061.251)].

ABIZ 3550 Environmental Policy Cr.Hrs. 3

(Formerly 061.355) Environmental policy development and enactment in Canada; federal and provincial review processes; socio-political aspects of policy development; chemical and pesticide licensing procedures and environmental effects monitoring; environmental policy and sustainability; case studies; discussion of various policies; ethics of development, preservation and conservation; environmental risk management. Prerequisite: ABIZ 2390 (or 061.239) or ECON 2390 (or 018.239).

ABIZ 3560 Agribusiness Portfolio Management Cr.Hrs. 3

(Formerly 061.356) The application of portfolio management to agribusiness, including asset allocation, portfolio construction and analysis, and operation of investment instruments and capital markets. Includes Canadian Securities Course. Prerequisite: Major in Agribusiness or Accounting and/or Finance, with 60 credit hours, ACC 1100 (or 009.110) and ECON 1010 OR ECON 1020 or the former ECON 1200 (or 018.120), or permission from instructor. Recommended G.P.A. of 2.80 or higher

Agribusiness and Agricultural Economics-ABIZ 4000 Level**ABIZ 4120 Intermediate Econometrics Cr.Hrs. 3**

(Formerly 061.412) A course in applied econometrics that explores the regression model and how it may be applied. Special emphasis is placed on violations to the assumptions of least squares, specification error, and applying the model to production, marketing, forecasting and other applications. Prerequisite: Written consent of instructor; this course assumes students have had a sound background in economic theory (e.g. micro and macro), as well as single variable calculus, linear algebra, and basic statistics. ABIZ 3080 (or 061.308) or ECON 3180 (or 018.318) is highly recommended. Also offered as ECON 4120 by the Department of Economics.

ABIZ 4240 Agricultural Economics Special Project Cr.Hrs. 3

(Formerly 061.424) Students will undertake a project to analyze an applied problem and present results in a research and/or extension paper. A list of relevant readings will be assigned. Permission of the Department Head required.

ABIZ 4260 Price Analysis Cr.Hrs. 3

Theory and methods of price analysis, commodity markets and the demand and supply factors that underpin seasonal, cyclical and secular changes in commodity prices. Prerequisites: ECON 2450 (or 018.245 or 018.270) and [ABIZ 3080 (or 061.308) or ECON 3180 (or 018.318)]. Not to be held with ABIZ 4250 (formerly 061.425) or the former 061.404

ABIZ 4500 Agribusiness Strategies Seminar Cr.Hrs. 3

(Formerly 061.450) This course will provide participants with insights into management strategies and decision-making, as well as the responsibilities, tensions and pressures encountered by senior management. Some classes will include participation by senior management followed by a debriefing session. Students must have completed 90 credit hours towards a degree in Agribusiness, or permission of the Department.

Agriculture-AGRI 1000 Level**AGRI 1010 Business Communication Cr.Hrs. 3**

Strengthen the thinking, writing, speaking and listening skills required by IEAP students to succeed in the agricultural, food science or agri-business world. Students will develop an understanding of cultural influence in communication tasks used in academic and workplace settings. Prerequisite: Must be enrolled in the Internationally Educated Agrolologists Program.

AGRI 1500 Natural Resources and Primary Agricultural Production Cr.Hrs. 3

(Formerly 065.150) Introduces students to natural resources and climate, primary production of crops and livestock, production and resource economics and rural society. A model of the entire agri-food system will be used to show interrelationships among disciplines, processes, etc.

AGRI 1510 Production, Distribution and Utilization of Agricultural Products Cr.Hrs. 3

(Formerly 065.151) Introduction to the aspects of agriculture that follow primary production and includes confined animal production and a presentation of a model of the entire agrifood system. Special emphasis on processing, marketing, transportation and food safety. Laboratory sessions will use small groups to examine problem based case studies.

Agriculture-AGRI 2000 Level**AGRI 2030 Technical Communications Cr.Hrs. 3**

(Formerly 065.203) Lectures and workshops to develop written and oral communication skills for preparing and presenting scientific and technical reports. Basic composition skills, communication graphics and job interview techniques are included. Prerequisite: 24 credit hours of University.

AGRI 2180 Introductory Toxicology Cr.Hrs. 3

(Formerly 065.218) A survey of general principles underlying the effects of toxic substances on biological systems, including history, scope and applications of toxicology, the mechanisms of toxic action, and some major types of toxicants. Not to be held with BIOL 2380 formerly BOTN 2180 (or 001.218), BOTN 2190 (or 001.219), ENVR 2180 (or 128.218), ENVR 2190 (or 128.219), ZOOL 2180 (or 022.218), ZOOL 2190 (or 022.219), and the former 001.337. Prerequisite: BIOL 1020 (C) and BIOL 1030 (C) or the former 071.125 (C) and CHEM 1310 (or 002.131 or 002.128) or CHEM 1320 (or 002.132).

AGRI 2190 Toxicology Principles Cr.Hrs. 1.5

(Formerly 065.219) A survey of general principles underlying the effects of toxic substances on biological systems, including the history, scope and applications of toxicology, the mechanisms of toxic action. Not to be held with BIOL 2380 or the former BOTN 2180 (or 001.218), BOTN 2190 (or 001.219), ENVR 2180 (or 128.218), ENVR 2190 (or 128.219), ZOOL 2180 (or 022.218), ZOOL 2190 (or 022.219), AGRI 2180 (or 065.218) and the former 001.337. Prerequisite: BIOL 1020 (C) and BIOL 1030 (C) or the former 071.125 (C) and CHEM 1310 (or 002.131 or 002.128) or CHEM 1320 (or 002.132).

AGRI 2200 Principles of Plant and Animal Physiology for Engineers Cr.Hrs. 4

(Formerly 065.220) Plant and animal physiology as affected by environment for use in the design of agricultural machines, structures and food processes for biological products; models of simulation of plant and animal growth. Prerequisite: BIOE 2590 (or 034.259) or the former 071.201

Agriculture-AGRI 3000 Level

AGRI 3030 Modern Topics in Agriculture 1 Cr.Hrs. 3

(Formerly 065.303) An interdisciplinary course including topical national and international issues in agriculture. The course will vary from year to year to provide material of current interest in a wide variety of subject areas. Student participation by means of seminars will be encouraged.

AGRI 3040 Modern Topics in Agriculture 2 Cr.Hrs. 3

(Formerly 065.304) Similar to AGRI 3030 (or 065.303).

Agriculture-AGRI 4000 Level

AGRI 4000 Practising the Profession of Agrology 1 Cr.Hrs. 3

Introduction to the profession of Agrology in Manitoba with an emphasis on understanding the structure of the agriculture industry, the agriculture network and how it functions. Laboratory sessions will focus on guest speakers and tours of companies and agencies in the agriculture industry. Prerequisite: Must be enrolled into the Internationally Educated Agrologists Program (IEAP).

AGRI 4010 Practising the Profession of Agrology II Cr.Hrs. 3

This course will cover the role of a practising agrologist in Manitoba, with an emphasis on professional ethics and responsibilities, regulations of the agriculture profession in Canada, and the culture of the work environment. Laboratory sessions focus on guest speakers and tours of companies and agencies in the agriculture industry. Prerequisite: Students must be enrolled in the Internationally Educated Agrologists Program.

AGRI 4550 Agriculture Cooperative Education Work Term 1 Cr.Hrs. 1

(Formerly 065.455) Special four-month work assignment in business, industry, government or research for cooperative education students. Requires submission of a written report covering the work completed during the four-month professional assignment.

AGRI 4560 Agriculture Cooperative Education Work Term 2 Cr.Hrs. 1

(Formerly 065.456) Special four-month work assignment in business, industry, government or research for cooperative education students. Requires submission of a written report covering the work completed during the four-month professional assignment.

AGRI 4570 Agriculture Cooperative Education Work Term 3 Cr.Hrs. 1

(Formerly 065.457) Special four-month work assignment in business, industry, government or research for cooperative education students. Requires submission of a written report covering the work completed during the four-month professional assignment.

Agroecology-AGEC 2000 Level

AGEC 2370 Principles of Ecology Cr.Hrs. 3

(Formerly 065.237) Principles of ecology at the individual, population, community, and ecosystem levels. This course is also given in the Faculty of Science as BIOL 2300 (formerly BOTN 2370 or ZOO 2370). It is the normal prerequisite to other courses in ecology. Not to be held with BIOL 2390 (formerly BOTN 2280 or 001.228) or ZOO 2290 or BIOL 3260 (formerly BOTN 2291 or 022.229, or BOTN 3280 formerly BOTN 2370 or BOTN 2371 (or 001.237), or ZOO 2370 or ZOO 2371 (or 022.237). Prerequisite: A grade of "C" in BIOL 1020 or BIOL 1021 and BIOL 1030 or BIOL 1031 or the former 071.125. Pre- or co-requisite: STAT 1000 or STAT 1001.

Agroecology-AGEC 3000 Level

AGEC 3510 Agroecology Cr.Hrs. 3

(Formerly 065.351) Examination of how ecological principles and processes apply to, and function in, managed ecosystems, with emphasis on agricultural ecosystems. Influence of agricultural practices on populations and ecosystem function. Ecological concepts as tools in managing systems. Pre- or co-requisite: AGEC 2370 (or 065.237) or BIOL 2300 (formerly BOTN

2370 or 001.237 or ZOO 2370 or 022.237).

Agroecology-AGEC 4000 Level

AGEC 4510 Applications in Agroecology Cr.Hrs. 3

(Formerly 065.451) Integration of information on ecological principles, agricultural production technology and environmental and socio-economic issues through in-depth studies of issues and problems in agro ecology. Prerequisite: AGEC 3510 (or 065.351).

AGEC 4550 Project in Agroecology Cr.Hrs. 6

Independent research project on an Agroecological topic. Students perform research and meet regularly with advisors. Progress reports are required, and final results are presented in written and verbal reports. Classes are held on professional topics. Not to be held with AGEC 4540 (or 065.454). Prerequisite: AGEC 3510 (or 065.351).

Animal Science-ANSC 0 Level

ANSC 0420 Animal Biology and Nutrition Cr.Hrs. 4

(Formerly 035.042) An introduction to animal structure and function. Genetics, growth and reproduction will be related to animal production. Further, the digestive systems of various livestock species will be studied and related to types of feedstuffs that each species can utilize. The general function of nutrients within animals will also be discussed. Nutrient content of feedstuffs and application to nutrient requirements will be discussed.

ANSC 0600 Animal Health and Welfare Cr.Hrs. 3

(Formerly 035.060) This course will discuss the common livestock and poultry diseases of the prairie provinces. Emphasis will be placed on prevention through management and health programs but treatment of specific diseases will be addressed. Animal welfare as it relates to commercial animal production will be discussed. Prerequisite: ANSC 0420 (or 035.042) or equivalent.

ANSC 0670 Beef Cattle Production and Management Cr.Hrs. 4

(Formerly 035.067) Beef cattle industry; the types of beef cattle enterprises and factors affecting profitability of production. Application of principles of nutrition, genetics and physiology in the management of beef cattle enterprises. Prerequisite: ANSC 0420 (or 035.042) or equivalent.

ANSC 0680 Dairy Cattle Production and Management Cr.Hrs. 4

(Formerly 035.068) A study of current production practices in Canada's dairy industry with focus on nutrition, reproduction, genetics, health, replacement rearing and marketing. Prerequisite: ANSC 0420 (or 035.042) or equivalent.

ANSC 0690 Swine Production and Management Cr.Hrs. 4

(Formerly 035.069) Swine industry; the types of swine enterprises and factors affecting profitability of production. Application of principles of nutrition, genetics and physiology in the management of swine. Prerequisite: ANSC 0420 (or 035.042) or equivalent.

ANSC 0700 Poultry Production and Management Cr.Hrs. 4

(Formerly 035.070) The poultry industry; marketing system, breeding, hatchery practices, management and feeding of large scale turkey and chicken enterprises. Prerequisite: ANSC 0420 (or 035.042) or equivalent.

ANSC 0720 Special Topics in Livestock Management Cr.Hrs. 3

(Formerly 035.072) Selected topics of current interest in livestock management. Prerequisite: Written consent of Director of the School of Agriculture.

ANSC 0730 Horse Production and Management Cr.Hrs. 3

(Formerly 035.073) Principles of horse production, including genetics and breeding, reproductive management, nutrition and health. Applications to major sections of the horse industry. Prerequisite: ANSC 0420 (or 035.042) or equivalent.

Animal Science-ANSC 2000 Level**ANSC 2500 Animal Production Cr.Hrs. 3**

(Formerly 035.250) Built on concepts introduced in AGRI 1500 and AGRI 1510, by elaborating on the basic essentials of animal production. Prerequisites: AGRI 1500 (or 065.150) and AGRI 1510 (or 065.151).

ANSC 2510 Anatomy and Physiology 1: Control Systems Cr.Hrs. 3

(Formerly 035.251) Will deal with the structure, functions and interactions of the coordinating/regulatory systems in the animal body; including the nervous, muscular, cardiovascular, respiratory, renal and endocrine systems. Co requisite: CHEM 2770 (or 002.277) or MBIO 2770 (or 060.277) or CHEM 2360 (or 002.236) or MBIO 2360 (or 060.236).

ANSC 2520 Anatomy and Physiology 2: Nutrient Utilization Cr.Hrs. 3

(Formerly 035.252) The digestion, absorption and utilization of nutrients by farmed species. Basic characteristics of the digestive system, aspects of regulation of feed intake and rates of passage, intermediary metabolism of nutrients, growth and development, health and other factors influencing nutrient utilization. Prerequisite: ANSC 2510 (or 035.251). Co requisite: CHEM 2780 (or 002.278) or MBIO 2780 (or 060.278), or CHEM 2370 (or 002.237) or MBIO 2370 (or 060.237).

ANSC 2530 Nutritional Toxicology Cr.Hrs. 1.5

(Formerly 035.253) The Science of dietary toxins and their interrelationships with nutrition: mode of action and metabolism of toxic chemicals that occur in food and animal feedstuffs. Prerequisite: AGRI 2190 (or 065.219)

ANSC 2540 Companion animal nutrition and management Cr.Hrs. 3

Course material will cover the functional anatomy, genetics, nutrition, reproduction, behavior, and diseases of non-equine companion animals and ornamental fish. Pre-or Co requisite; CHEM 2770 or MBIO 2770 or CHEM 2360 or MBIO 2360 or consent of instructor.

Animal Science- ANSC 3000 Level**ANSC 3500 Principles of Animal Genetics Cr.Hrs. 3**

(Formerly 035.350) Topics discussed will include population genetics, quantitative variation, selection and mating systems with particular reference to domestic species. Prerequisite: PLNT 2520 (or 039.252).

ANSC 3510 Feeds and Feeding Cr.Hrs. 3

(Formerly 035.351) A detailed discussion of feedstuffs used for domestic animals, animal nutrient requirements, ration balancing, feedstuff processing and feed safety. Prerequisite: ANSC 2520 (or 035.252).

ANSC 3520 Animal Reproduction Cr.Hrs. 3

(Formerly 035.352) The comparative anatomy and physiology of reproduction of farmed animals will be emphasized. Focus will be on the natural synchronization of reproductive processes and the potential to regulate and improve reproductive efficiency. Prerequisite: ANSC 2510 (or 035.251).

ANSC 3530 The Animal and Its Environment Cr.Hrs. 3

(Formerly 035.353) Deals with how the animal is influenced by its environment to affect health, welfare and performances. Principles of farmed animal behavior, welfare and behavioral management, health, and facility design and modification will be considered in the context of animal/environment interactions. Co requisite: ANSC 2520 (or 035.252).

Animal Science-ANSC 4000 Level**ANSC 4090 Livestock Problems Cr.Hrs. 3**

(Formerly 035.409) A minor thesis on livestock problems, prepared by the student under direction. (For Animal Systems Majors only). Prerequisite: Consent of department head.

ANSC 4220 Animal Science Investigations Cr.Hrs. 6

(Formerly 035.422) Minor research on some problem in animal science. Instruction and supervision in setting up the project, in collecting and processing data, and in writing the report. (For fourth-year students in Animal Systems Major only.) Prerequisite: Consent of Department Head.

ANSC 4240 Mathematical modeling of biological systems Cr.Hrs. 3

Lectures and computer based laboratory exercises will be used to discuss mathematical modeling methods applied to biological systems taking aspects of animal science as a model to develop modeling techniques. Prerequisite: MATH 1500 or MATH 1520 or Equivalent.

ANSC 4280 Applied Animal Genetics Cr.Hrs. 3

(Formerly 035.428) Application of principles of animal breeding. Modern methods, techniques, and programs for genetic improvement of cattle, sheep, and swine. Prerequisite: ANSC 3500 (or 035.350).

ANSC 4410 Grassland Agriculture: Plant, Animal and Environment Cr. Hrs. 3

(Formerly 035.441) Inter-relationships between the biological components of grassland agriculture as they relate to forage production on the Canadian Prairies. Topics include utilization by wild and domestic animals, plant community relationships and role of forages in multiple land use planning. This course also given in Plant Science as PLNT 4410.

ANSC 4500 Animal Health Cr.Hrs. 3

(Formerly 035.450) Responses of basic animal functions to challenge by potentially pathogenic organisms, genetic or metabolic disorders, and toxicants will be discussed. Strategies for prevention and treatment will be outlined. Offered in 2005-2006 and alternate years thereafter. Prerequisite: ANSC 2520 (or 035.252).

ANSC 4510 Domesticated Animal Behaviour Cr.Hrs. 3

(Formerly 035.451) An awareness and understanding of normal behaviors of animals will be emphasized. Relationships between behavior, welfare and management will be explored. Emphasis will be on farmed animals but companion animals, wild animals and laboratory species will also be discussed. Prerequisite: ANSC 2520 (or 035.252) or consent of the instructor. Offered in 2006-07 and alternate years thereafter.

ANSC 4520 Ruminant Production Systems-Meat Cr.Hrs. 3

(Formerly 035.452) To provide an appreciation of the industry in terms of size, complexity and relationship to the economy and give an understanding of the breeding, feeding, management and marketing strategies for modern ruminant production systems. Open only to students holding at least 60 credit hours. Prerequisite: ANSC 2500 (or 035.250).

ANSC 4530 Ruminant Production Systems-Milk Cr.Hrs. 3

(Formerly 035.453) Will describe the industry in terms of size, complexity and relationship to the economy and give an understanding of the breeding, feeding, management and marketing practices in a modern system for milk production. Open only to students holding at least 60 credit hours. Prerequisite: ANSC 2500 (or 035.250).

ANSC 4540 Monogastric Production Systems Cr.Hrs. 3

(Formerly 035.454) Describes the swine industry in terms of size, complexity and relationship to the economy and gives an understanding of the breeding, feeding, management and marketing practices in a modern production unit. Outlines other monogastric production systems of relevance to the agriculture industry. Open only to students holding at least 60 credit hours. Prerequisite: ANSC 2500 (or 035.250).

ANSC 4550 Avian Production Systems Cr.Hrs. 3

(Formerly 035.455) Describes the various avian systems in terms of size, complexity, and relationship to the economy and gives an understanding of the management and marketing practices in the usual poultry systems. Open only to students holding at least 60 credit hours. Prerequisite: ANSC 2500 (or 035.250).

ANSC 4560 Issues in Animal Agriculture Cr.Hrs. 3

(Formerly 035.456) Through a combination of lectures and independent group learning activities students will develop an appreciation of the scope and complexities of current issues facing the animal industry and integrate knowledge accumulated through the Animal Systems Program using case study problems and group project work.

ANSC 4570 Advanced Applied Animal Nutrition Cr.Hrs. 3

(Formerly 035.457) An advanced study of theoretical and applied aspects of monogastric and ruminant nutrition. A laboratory component will provide training in current techniques in feed analyses and computer modeling. Offered in 2005-2006 and alternate years thereafter. Prerequisite: ANSC 3510 (or 035.351)

Biosystems Engineering Course Descriptions-0 Level

BIOE 0222 Precision Agriculture Cr.Hrs. 4

Precision agriculture is a philosophy of agricultural management that has been enabled by modern technology. This course will examine both the technology and the techniques that can be used to improve the efficiency of agricultural operations by decreasing costs, increasing profits, and decreasing hazards to the environment.

BIOE 0400 Farm Power Cr.Hrs. 4

(Formerly 034.040) Basic operating principles of electric motors and gasoline, diesel, and LPG engines with emphasis on fuels, fuel systems, ignition systems, lubrication, and power transmission. Dynamometer tests for efficiency, traction, tractor testing, and power cost estimating.

BIOE 0600 Farm Machinery Cr.Hrs. 4

(Formerly 034.060) Operating principles of basic farm implements with emphasis on seed cleaning, seeding, tillage, haying, and harvest machines including their selection, adjustment, efficiency, and cost of operation with respect to test data.

BIOE 0690 Water Management Cr.Hrs. 4

(Formerly 034.069) Surveying including use of the level instrument and steel tape, agricultural drainage, dugouts and wells for farm water supply, irrigation, pump selection, the Water Rights Act.

BIOE 0700 Agricultural Buildings and Environments Cr.Hrs. 4

(Formerly 034.070) Factors that impact the practicality of farm buildings. Components of buildings, including materials and construction techniques. Techniques of maintaining building environments to facilitate production and/or storage.

BIOE 0710 Materials Handling and Electrical Controls Cr.Hrs. 3

Fundamental concepts and systems approach to storing, conditioning, moving, processing, and metering of agricultural produce. Principles and practices of fans, grain drying, dust control, and electrical supply. Students may not hold credit for BIOE 0710 and the former 034.066.

Biosystems Engineering Course Descriptions-2000 Level

BIOE 2090 Machinery for Agricultural Production Cr.Hrs. 4

(Formerly 034.209) Farm machinery selection. Machine performance. Ownership and operating costs. Analysis of machine functions for safety and efficiency.

BIOE 2110 Transport Phenomena Cr.Hrs. 3

(Formerly 034.211) Principles of heat transfer, solar radiation, psychometrics, molecular diffusion, mass transfer and refrigeration and their application to biosystems. Prerequisite: ENG 1460 (or 130.112).

BIOE 2222 Precision Agriculture Concepts and Applications Cr.Hrs. 4

Precision agriculture is a philosophy of agricultural management that has been enabled by modern technology. This course examines the technology and the techniques of precision agriculture including GPS, GIS, variable rate technologies, and yield monitoring that can be used to improve the efficiency of agricultural operations by decreasing costs, increasing profits, and decreasing hazards to the environment.

BIOE 2480 Impact of Engineering on the Environment Cr.Hrs. 3

Students will gain an understanding of overall sustainability of industrial activities, life-cycle and risk assessment techniques for sustainability, and design improvements to enhance environmental performance of engineered systems. This course will introduce basic methodologies for conducting environmental impact assessments, including physical, chemical, ecological, social and economic impacts. May not be held with the former BIOE 4480. Registration restricted to Biosystems Engineering students.

BIOE 2580 Biosystems Engineering Design Trilogy 1 Cr.Hrs. 4

(Formerly 034.258) Biosystems Engineering and its place in the professions of engineering and agronomy. Design concepts, with an emphasis on team building and technical communication skills. Philosophy of project planning. Preparation of a conceptual design by teams in response to design assignment submitted by industry. Written report presented orally. Prerequisite: ENG 1430 OR THE FORMER ENG 1400 (OR 130.140).

BIOE 2590 Biology for Engineers Cr.Hrs. 3

(Formerly 034.259) Provide theories and principles of Biology to engineering students and present applications of biological principles to engineering problems. Fundamental theories involved in cell structure and function, metabolism, genetics and heredity, bacteria and virus structure and function, plant and animal structure and function are covered. An introduction to animal and plant physiology is also provided. Laboratory sessions and term assignments focus on the engineering applications of these basic theories and principles to provide a good understanding of the role of Biology in Engineering. Prerequisite: CHEM 1300 (or 002.130).

BIOE 2600 Plant and Animal Physiology for Engineers Cr.Hrs. 4

Plant and animal physiology as affected by environment for use in the design of agricultural machines, structures, and food processes for biological products; models of simulation of plant and animal growth. Prerequisite: BIOE 2590. May not be held with the former AGRI 2200.

Biosystems Engineering Course Descriptions-3000 Level

BIOE 3270 Instrumentation and Measurement for Biosystems Cr.Hrs. 4

(Formerly 034.327) Basic instrumentation for measuring electrical and non-electrical quantities associated with biosystems engineering and industry; transducers for automatic control. Prerequisites: [MATH 2132 (or the former MATH 2110 (or 136.211))] and [ENG 1450 or the former ENG 1180 (130.118)].

BIOE 3320 Engineering Properties of Biological Materials Cr.Hrs. 4

Engineering properties of biological and interacting materials within the system. Relationship between composition, structure, and properties of plant, animal, and human tissues. Definition and measurement of mechanical, thermal, electromagnetic, chemical and biological properties and their variability. Use of these properties in engineering calculations. Prerequisites: Math 2130 (or Math 2100 or 136.210), CIVL 2800 (or 23.280) or MECH 2222 (or Mech 2220 or 025.222) BIOE 2580 (or 034.258). Not to be held with the former 034.323.

BIOE 3400 Design of Structural Components in Machines Cr.Hrs. 4

Design of structural components in machines; designing for axial tension and compression, connections for axial loadings, pinned trusses, bending, torsion, and combined loads; designing for welded connections; use of fluid power to enable movement of structural components. Students will use the computer as a design tool. Prerequisite: CIVL 2800 or MECH 2222. Not to be held with BIOE 4530.

BIOE 3530 Engineering Fundamentals Cr.Hrs. 3

(Formerly 034.353) Principles of heat transfer, steam, psychometrics, fluid mechanics, material balances, electricity and refrigeration. Cannot be held for credit in the Faculty of Engineering. Not to be held with the former 034.329. Prerequisite: [MATH 1300 or equivalent] and [MATH 1500 or equivalent] or the former MATH 1680 (136.168).

BIOE 3580 Biosystems Engineering Design Trilogy 2 Cr.Hrs. 4

(Formerly 034.358) Advanced design concepts associated with Biosystems Engineering, with emphasis on the principles of safety and human factors engineering. Theory of project planning. Preparation of a preliminary design by design teams in response to a design assignment submitted by industry. Written report with engineering drawings presented orally. Prerequisites: BIOE 2580 (or 034.258 or 034.214). Not to be held with the former 034.326.

BIOE 3590 Mechanics of Materials in Biosystems Cr.Hrs. 4

(Formerly 034.359) In this course students will be exposed to both the theory and physical behaviour of materials when subjected to loads. The course will be delivered using a combination of lectures and hands-on labs. The materials presented include a wide range of design biosystems engineers may be involved with, including plastics, bone, wood, concrete, steel, other biological materials and composites. Prerequisite: CIVL 2800 (or 023.280), or consent of instructor. Not to be with the former 034.324

Biosystems Engineering Course Descriptions-4000 Level**BIOE 4240 Graduation Project Cr.Hrs. 3**

Either an independent or a directed study including at least one of: a comprehensive literature review, an experimental research project, or an engineering design problem. The project is to be concluded by a formal report or thesis. Prerequisites: BIOE 3270 (034.327) or approval of department.

BIOE 4390 Unit Operations 1 Cr.Hrs. 4

Equipment and systems used in handling, mixing, size reduction, separation and size enlargement of value-added food products. Prerequisites: CIVL 2790 (or 023.279) or MECH 2262 (or 025.226). Corequisites: BIOE 3320 (or 034.332 or 034.323), BIOE 3270 (or 034.327).

BIOE 4412 Design of Light-Frame Building Systems Cr.Hrs. 4

Light-frame buildings as a structural and environmental system; structural loads in building systems; energy (heat), moisture and air contaminants in building systems; built-environment for building occupants. Hands-on labs of constructing small-scale structures for students to gain an understanding of building construction techniques. Prerequisites: BIOE 2110 (034.211) and BIOE 3590 (034.359).

BIOE 4414 Imaging and Spectroscopy for Biosystems Cr.Hrs. 4

The purpose of this course is to familiarize senior Biosystems Engineering students with the fundamentals of imaging and spectroscopy for biosystems. Techniques of image acquisition, storage, processing, and pattern recognition will be taught. Various spectroscopy techniques and their applicability to biological materials will be discussed. Analysis of data using statistical, artificial neural networks and chemometric methods will be covered. Offered in alternate years. Prerequisite: BIOE 3270 (034.327)

BIOE 4416 Topics in Biosystems Engineering Cr.Hrs. 3

This course will cover contemporary topics in Biosystems Engineering. The specific topics and a detailed outline will be available at the time of registration. Prerequisite: Permission of the department.

BIOE 4420 Crop Preservation Cr.Hrs. 4

(Formerly 034.442) Biological and physical deterioration during storage. Methods of preserving and storing cereals, oilseeds, and other agricultural crops. Prerequisite: BIOE 2110 (or 034.211).

BIOE 4440 Bioprocessing for Biorefining Cr.Hrs. 4

This course will provide students with an understanding of the principles involved in the design of proper conditions for processing of biomaterials for production of high-quality biofuels and bioproducts. The content of this course is built on the principles of physics, transport phenomena, thermodynamics, reaction, kinetics, fermentation, and industrial unit operations. Prerequisite: BIOE 2110 (or 034.211). Pre- or corequisite: BIOE 3320 (or 034.332 or 034.323)

BIOE 4460 Air Pollution Assessment and Management Cr.Hrs. 4

Air pollutant sources and characteristics, their impact on the environment, their behaviour in the atmosphere. Methods of sampling and measurement and the basic technological alternatives available for separation/removal and control. Particular problems of regional interest are discussed. Corequisites: CIVL 2790 (or 023.279) or MECH 2262 (or MECH 2260 or 025.226).

BIOE 4480 Environmental Impact Assessment Cr.Hrs. 4

(Formerly 034.448) Basic methodologies for conducting impact assessments, including physical, chemical and ecological impacts. Prerequisite: BIOE 2590 or CIVL 3690.

BIOE 4500 Water Management Cr.Hrs. 3

(Formerly 034.450) Introduction to the design of irrigation and drainage systems. Topics in irrigation include sprinklers, laterals, mainline and pumps. Drainage topics cover both the surface and subsurface systems. Analysis of precipitation and runoff. Environmental impacts of water management. Offered alternate years.

BIOE 4520 Crop Preservation and Handling Cr.Hrs. 3

(Formerly 034.452) Interaction of biological and physical factors related to methods of preserving, storing, and handling cereals, oilseeds, and other agricultural crops. Offered alternate years.

BIOE 4530 Analysis and Design of Biomachinery Cr.Hrs. 4

Design of machines for bioprocessing; traction mechanics and tractor chassis mechanics; power transmission components; functional requirements for field and process machines; fluid power hydraulics. Prerequisite: BIOE 2580 (or 034.258).

BIOE 4560 Structural Design in Wood Cr.Hrs. 4

(Formerly 034.456) Design using wood as a structural material in light-frame buildings. Consideration of design constraints associated with sawn lumber as well as based composite materials. Emphasis on use of computer based design aids. Prerequisites: CIVL 3770 (or 023.377) or BIOE 3590 (034.359) or 034.324.

BIOE 4580 Biosystems Engineering Design Trilogy 3 Cr.Hrs. 4

(Formerly 034.458) Advanced design concepts, with emphasis on the principle of quality control. Application of project planning techniques. Principles of owning and operating an engineering consulting company. Preparation of a final design by design teams in response to a design assignment submitted by industry. Written report with cost of services rendered, presented orally. Prerequisite: BIOE 3580 (or 034.358) or 034.326. Not to be held with the former 034.413.

BIOE 4590 Management of By-Products from Animal Production Cr. Hrs. 4

Topics covered include solid and liquid manure, manure characteristics, manure collection, storage, land application and utilization, biological treatment, design of equipment and facilities for manure handling. Environment issues, such as odour and water pollution associated with manure management will also be discussed. Prerequisites: CIVL 2790 (or 023.279) or MECH 2262 (or MECH 2260 or 025.226).

BIOE 4600 Design of Water Management Systems Cr.Hrs. 4

(Formerly 034.460) To introduce the basic theoretical principles in the design of irrigation and drainage systems. Topics covered include the determination of irrigation depth and interval, evapotranspiration, measurement and analysis of precipitation, design of sprinkler and drip irrigation systems, selection of pumps, surface and subsurface drainage design, water quality issues, salinity management, and the environmental impact of water management practices. Corequisite: SOIL 4060 (or 040.406) or CIVL 3730 (or 023.373) or consent of instructor.

BIOE 4610 Design of Assistive Technology Devices Cr.Hrs. 4

(Formerly 034.461) Application and design of technology for individuals with disabilities; emphasizing the development of the requisite knowledge, skills, and attitudes to evaluate, design, and implement client-centred assistive technology. A multi-disciplinary approach to learning and applying knowledge will be emphasized with engineering and medical rehabilitation students collaborating on a design project. Prerequisite: BIOL 1412 (or ZOOL 1330 or 022.133).

BIOE 4620 Remediation Engineering Cr.Hrs. 4

The theoretical basis for the engineering design of different remediation technologies to treat contaminated soil and groundwater will be introduced. Methods for site characterization, monitoring of progress in remediation, and modeling of the remediation process will be presented. Different methods such as soil washing, air sparging, bioremediation, phytoremediation, constructed wetlands, electrokinetic remediation, reactive barriers will be discussed. Prerequisite: CIVL 2790 (or 023.279) or MECH 2262 (or MECH 2260 or 025.226).

BIOE 4630 Pollution Prevention Practices Cr.Hrs. 4

To give students an understanding of pollution prevention as it relates to solids and hazardous waste management, air and water pollution, energy usage, and resource depletion. To evaluate practices on improved manufacturing operations, present fundamentals of pollution prevention economics, examine waste minimization incentives, design improvements to existing systems, and investigate overall sustainability of industrial practices. Prerequisite: CIVL 2790 (or 023.279) or MECH 2262 (or MECH 2260 or 025.226).

BIOE 4640 Bioengineering Applications in Medicine Cr.Hrs. 4

This course surveys bioengineering applications and medicine from a clinical engineering perspective. Topics include: clinical engineering practice; device development legislation; biomedical sensors; biosensors; biomaterials and biocompatibility; as well as the principles of and design for medical imaging equipment. Prerequisites: BIOL 1410 (or ZOOL 1320 or 022.132) and BIOL 1412 (or ZOOL 1330 or 022.133) and BIOE 3320 (0343.332).

BIOE 4700 Alternative Building Design Cr.Hrs. 4

This course will provide students with experience in the design of structures that utilize natural and green building materials and techniques. Students will get hands-on lab experience with various natural building materials such as straw, straw light clay, cob and stackwall. Prerequisites: BIOE 3590 (or 034.359) or CIVL 3770 (or 023.377).

Entomology Course Descriptions-0 Level

ENTM 0610 Beekeeping Cr.Hrs. 2

(Formerly 038.061) Introduction to beekeeping that includes economics and marketing of honey and beeswax, equipment and its construction, pollen and nectar plants, pollination, management systems, diseases and pests, honey handling, package bees, wintering of bees, etc.

ENTM 0620 Pest Management and Farm Insects Cr.Hrs. 4
(Formerly 038.062) Characteristics, damage, and identification; insecticide use and safety; life histories and control of common Manitoba livestock, field and farmyard insects. General principles of pest management in agriculture will also be discussed.

Entomology Course Descriptions-1000 Level

ENTM 1000 World of Bugs Cr.Hrs. 3

A survey of insect biology and life styles with emphasis on insect diversity and human-insect interactions.

Entomology Course Descriptions-2000 Level

ENTM 2050 Introductory Entomology Cr.Hrs. 3

(Formerly 038.205) A basic course for students requiring a foundation in entomology. The anatomy, life history, identification, adaptations, and relations of insects to humans are examined along with methods of collecting and preserving insect specimens. Students may not hold credit in ENTM 2050 (or 038.205) and the former 038.315 or 022.349.

Entomology Course Descriptions-3000 Level

ENTM 3160 Veterinary and Wildlife Entomology Cr.Hrs. 3

(Formerly 038.316) An introduction to the insects and their relatives that affect domestic animals, pets and wildlife. Special consideration is given to life histories, insect/host interaction, evolutionary relationships, impact on host vertebrates and pest management. Not all courses are offered every year. Please contact the department regarding course availability.

ENTM 3162 Manitoba's Insect Fauna Cr.Hrs. 3

A collection of insects is required. Emphasis is placed on collecting techniques, specimen preparation, diversity of species collected, organization and curatorial skills, and accuracy of identification. Students should contact instructors in April preceding registration in this course. Prerequisite: ENTM 2050.

ENTM 3170 Crop Protection Entomology Cr.Hrs. 3

(Formerly 038.317) A course for students requiring a foundation in entomology and knowledge of major insect pest groups in Western Canada. The pests and principles for their control (chemical, cultural, mechanical, physical and biological methods) are explored with emphasis on the entire ecosystem. Students may not hold credit in ENTM 3170 and 038.413 or 038.431.

ENTM 3180 Field Techniques in Entomology Cr.Hrs. 3

A field course to provide a foundation in field sampling and collection techniques for insects in natural and agroecosystems. The course is run at the University of Manitoba Star lake research station near Whiteshell MB. Transportation to and from the University and accommodations are included. Six day intensive field-based course. Prerequisites: none.

ENTM 3190 Introduction to Applied Entomology Cr.Hrs. 3

A course providing a foundation in applied entomology covering topics including: basic insect biology, insect pest management, insect biodiversity and the biological services provided by insects. Online lecture presentations, weekly readings and online laboratories. Prerequisites: none. May not be held with ENTM 3170.

Entomology Course Descriptions-4000 Level**ENTM 4000 Topics in Entomology Cr.Hrs. 3**

A Course of assigned readings and literature review essays for students in the minor in Entomology program. Prerequisite ENTM 2050 (or 038.205) and consent of department head.

ENTM 4250 Pesticide Toxicology Cr.Hrs. 3

(Formerly 038.425) Action, behaviour, and fate of pesticides in target and non-target species and in the environment. Past, present, and future chemical control agents will be discussed on the basis of chemical and biochemical knowledge. Prerequisite: A course in biochemistry. Not all courses are offered every year. Please contact the department regarding course availability.

ENTM 4280 Aquatic Entomology Cr.Hrs. 3

(Formerly 038.428) Adaptations and significance of insects to aquatic habitats, with emphasis on identification. Aquatic insects as indicator species of pollution and their response to chemical pesticide application. A collection of aquatic insects is required. Prerequisites: ENTM 2050 (or 038.205); AGEC 2370 (or 065.237) or BIOL 2300 (formerly ZOOL 2370 or 022.237) or BOTN 2370 (or 001.237); or consent of instructor. Not all courses are offered every year. Please contact the department regarding course availability.

ENTM 4320 Pollination Biology Cr.Hrs. 3

(Formerly 038.432) The biology, ecology of social, semisocial and solitary insect pollinators and their ecological interactions with entomophilous plants. Not all courses are offered every year. Please contact the department regarding course availability.

ENTM 4500 Insect Taxonomy and Morphology Cr.Hrs. 3

(Formerly 038.450) Study of insect structure combined with evolution of insect orders. Modern concepts of subspecies, species and higher taxa. Collection required (contact instructor for details in April/May of preceding year.) Students may not hold credit for ENTM 4500 (or 038.450) and the former 038.412. Prerequisite: ENTM 2050 (or 038.205) or consent of instructor.

ENTM 4520 Physiological Ecology of Insects Cr.Hrs. 3

(Formerly 038.452) The effect of environmental factors such as temperature, moisture, light and other organisms on the physiology and ecology of insects. Prerequisite: ENTM 2050 (or 038.205) or consent of instructor. Not all courses are offered every year. Please contact the department regarding course availability.

Food Science Course Descriptions-1000 Level**FOOD 1000 Food Safety Today and Tomorrow Cr.Hrs. 3**

(Formerly 078.100) A contemporary examination of the safety of the food supply - where, how and why problems may arise and what is and can be done to consistently achieve high quality, safe food. Controversial issues (residues, organic, biotechnology, irradiation) will be discussed in a balanced manner, and prospects for the future presented.

Food Science Course Descriptions-2000 Level**FOOD 2500 Food Chemistry Cr.Hrs. 3**

(Formerly 078.250) The chemical components of food. Chemical problems and chemical changes which exist uniquely in foods. Prerequisite: CHEM 2770 (or 002.277) or MBIO 2770 (or 060.277) or CHEM 2360 (or 002.236) or MBIO 2360 (or 060.236). Not to be held with the former 078.422.

Food Science Course Descriptions-3000 Level**FOOD 3010 Food Process 1 Cr.Hrs. 3**

(Formerly 078.301) The basic principles and practices of the major techniques used in food processing and preservation are covered. Emphasis is placed on thermal processing, drying, evaporation, chilling, freezing, separation, packaging and sanitation. Also preservation by salting, smoking,

microwave, radiation and chemical techniques is presented. Critical issues in food regulations are introduced. Prerequisite: any MATH course at the 1000 level.

FOOD 3160 Frozen Dairy Products Cr.Hrs. 3

(Formerly 078.316) Technology of frozen dairy products, including selection and processing of materials and handling of products. Standards and quality control programs for major dairy products will be covered. Offered in 2006-07 and alternate years thereafter.

FOOD 3170 Cheese and Fermented Milk Products Cr.Hrs. 3

(Formerly 078.317) Selection and evaluation of raw materials and lactic cultures are covered. Processing, packaging and distribution of cheddar and cottage cheese, cultured milk, cream and yogurt are studied. Offered in 2005-2006 and alternate years thereafter.

FOOD 3200 Baking Science and Technology Cr.Hrs. 3

(Formerly 078.320) The science and technology of transforming wheat into quality baked foods. Focus will be on the biophysical and biochemical basis for the functionality of intrinsic wheat constituents, e.g. starch, and gluten proteins, and extrinsic ingredients, e.g. yeast, chemical leaveners, fats, oxidants, enzymes and other improvers. Principles of product formulations and modern processing techniques used to add value to wheat as diverse foods will also be covered. Prerequisite: CHEM 2770 (or 002.277) or MBIO 2770 (or 060.277).

FOOD 3210 Food Engineering Fundamentals Cr.Hrs. 3

(Formerly 078.321) Applications of engineering fundamentals to unit operations in the food industry. Prerequisite: BIOE 3530 (or 034.353).

FOOD 3220 Grains for Food and Beverage Cr.Hrs. 3

The science and technology behind the functionality of major Canadian cereal grains and grain legumes for food and beverage. Grains covered include wheat, barley, oats, peas, beans, and lentils in the context of their processing into products such as bread, pasta and beer, and foods high in dietary fibre. Details are presented on the differing physical and chemical attributes of grains to make quality products with focus on the roles of protein, starch, and non-starch polysaccharides. Prerequisite: FOOD 2500 or equivalent.

FOOD 3500 Processing of Animal Food Products Cr.Hrs. 3

(Formerly 078.350) Processing of materials of animal origin will be studied with emphasis on product quality and safety. Impact of initial characteristics as well as processing technologies will be discussed in relation to nutritive value, convenience, functionality, aesthetic factors and food safety. Prerequisite: CHEM 2770 (or 002.277) or MBIO 2770 (or 060.277) or CHEM 2360 (or 002.236) or MBIO 2360 (or 060.236). Offered in 2006-2007 and alternate years thereafter.

Food Science Course Descriptions-4000 Level**FOOD 4010 Food Process 2 Cr.Hrs. 3**

(Formerly 078.401) The processing of specific food groups is covered. The functions and changes in the primary chemical components (carbohydrates, proteins and lipids) of the commodities receive special consideration. New technologies including thermal/nonthermal processing, radiation, extrusion, minimal processing and other advanced processing methods will be studied. Prerequisite: FOOD 3010 (or 078.301).

FOOD 4120 Food Science Seminar Cr.Hrs. 3

(Formerly 078.412) Written and verbal presentations of selected topics of current interest in the food science area. Should be taken in fourth year.

FOOD 4150 Food Microbiology 1 Cr.Hrs. 3

(Formerly 078.415) Relationships of microorganisms to processing and spoilage of food.

FOOD 4160 Food Analysis 1 Cr.Hrs. 3

(Formerly 078.416) This course exposes students to the principles, methods, and techniques of qualitative and quantitative physical, chemical and biological analyses of foods. Major emphasis is placed on understanding the basic principles of classical and instrumental methods of analysis. Criteria for the choice of various analytical methods, methods for treating data and sampling techniques will be studied. Prerequisite: FOOD 2500 (or 078.250).

FOOD 4200 Quality Control in Foods Cr.Hrs. 3

(Formerly 078.420) Fundamentals of quality control and their industrial application through physical, chemical, microbiological, statistical and sensory methods will be studied. Statistical process control (SPC) will be mainly covered; required background knowledge of statistics will be reviewed briefly. Prerequisite: FOOD 3010 (or 078.301).

FOOD 4230 Food Research Cr.Hrs. 3

(Formerly 078.423) Research interests and aptitudes of students are developed through specific project assignments related to the food industry. Prerequisite: Permission of Department Head required.

FOOD 4240 Analysis of Water and Wastes Cr.Hrs. 3

(Formerly 078.424) Introduction to the principles and application of the standard methods employed in the analysis of water and wastes in the food processing industry.

FOOD 4250 Food Analysis 2 Cr.Hrs. 3

(Formerly 078.425) Advanced techniques employed in the physico-chemical analysis of food products as preparation for research, development, and inspection roles in government and in industry. Prerequisite: FOOD 4160 (or 078.416).

FOOD 4260 Water Management in Food Processing Cr.Hrs. 3

The course is devoted to the management of water and wastewater in food processing. The roles of water in food processing, recycle and reuse opportunities, treatment options for water and wastewater are presented. The course also discusses water stewardship in relation to food processing, water and wastewater regulations and implication for HACCP and ISO. Laboratory sessions are designed for the student to become familiar with Standard Methods for the Examination of Water and Wastewater.

FOOD 4310 Introduction to HACCP Cr.Hrs. 3

(Formerly 078.431) This course will cover the principles related to hazard analysis and critical control points (HACCP), a food safety and self-inspection system that is widely endorsed internationally by industry, consumer and regulatory groups. HACCP examines chemical, physical and biological hazards and identifies critical control points involved in producing, manufacturing and processing food products. Prerequisite or co requisite: FOOD 4150 (or 078.415) or consent of instructor.

FOOD 4500 Food Safety and Regulations Cr.Hrs. 3

(Formerly 078.450) Current food safety issues; government, industry and consumers' role in organizing a safe food supply system; food laws and regulations in Canada and internationally. Preventative measures to increase food safety and sanitation will also be covered. Offered in 2005-2006 and alternate years thereafter. Prerequisites: FOOD 4150 (or 078.415) or FOOD 4300 (or 078.430).

FOOD 4510 Food Product Development Cr.Hrs. 3

(Formerly 078.451) This course will allow the student to gain an understanding of the product development procedure as it relates to the food industry. Emphasis will be on application of basic knowledge of foods and food processing in designing a new product. Prerequisites: MKT 2210 (or 118.221), STAT 2000 (or 005.200) or equivalent, FOOD 3010 (or 078.301) or consent of instructor. Cannot be held with HNSC 4280 (or 030.428).

FOOD 4540 Functional Foods and Nutraceuticals Cr.Hrs. 3

(Formerly 078.454) The course will examine the bioactive components of functional foods and nutraceuticals, their sources, chemistry, process technology, efficacy, safety and regulation. Prerequisite: CHEM 2770 (or 002.277) or MIBO 2770 (or 060.277) or MBIO 2360 (or 060.236) or CHEM 2360 (or 002.236).

Human Nutritional Sciences Course Descriptions-1000 Level

HNSC 1100 Nutrition for Healthy Living Cr.Hrs. 3

An introduction to nutrition and practical approaches for healthy diet and disease prevention. Prerequisites: Enrollment in the Aboriginal Community Wellness Diploma program. Not to be held with HNSC 1210

HNSC 1200 Food: Facts and Fallacies Cr.Hrs. 3

(Formerly 030.120) This course will present facts and fallacies about food from harvest to market forms. Emphasis will be placed on technological development, consumer concerns and factors affecting nutritional quality. Current issues related to food safety and nutritional trends will also be discussed. Not to be held with 030.119.

HNSC 1210 Nutrition for Health and Changing Lifestyles Cr.Hrs. 3

(Formerly 030.121) This course addresses the relationship between nutrition and health. The focus is on healthy eating and on strategies for modifying food patterns within the context of lifestyle and culture. Not to be held with 030.117 or 030.323 or HNSC 1100.

Human Nutritional Sciences Course Descriptions- 2000 Level

HNSC 2130 Nutrition Through the Life Cycle Cr.Hrs. 3

(Formerly 030.213) Examination of nutritional needs throughout the life cycle, the nutritional concerns of different age groups and the development of healthy eating practices. Not to be held with 030.304. Prerequisite: HNSC 1210 (030.121).

HNSC 2140 Basic Principles of Human Nutrition Cr.Hrs. 3

(Formerly 030.214) The scientific principles underlying nutrient function and dietary requirements. Prerequisites: A grade of C or higher in [CHEM 2770 or MBIO 2770 (002.277 or 060.277) or CHEM 2360 or MBIO 2360 (002.236 or 060.236)] and [HNSC 1210 (030.121) and HNSC 1200 (030.120)] or [FOOD 2500 (078.250)]. Not to be held with the former 030.325.

HNSC 2150 Composition, Functional and Nutritional Properties of Foods Cr.Hrs. 3

(Formerly 030.215) Food composition, food market forms, food composition data for nutritional assessment and labelling. Prerequisites: HNSC 1200 (030.120) and HNSC 1210 (030.121) and [CHEM 1320 or CHEM 1310 (002.132 or 002.131)].

HNSC 2160 Principles of Food Preparation and Preservation Cr.Hrs. 3

(Lab Required)(Formerly 030.216) Food preparation, preservation, handling and storage; quality and safety implications; scientific basis for culinary practice; use and application of equipment. Prerequisite: HNSC 1200 (030.120) and [CHEM 1320 or CHEM 1310 (002.132 or 002.131)]. Not to be held with 030.211 or 030.324.

HNSC 2170 Nutrition for Health Professionals Cr.Hrs. 2

An examination of the fundamentals of nutrition and the relationship between nutrition and health within the context of the health professions. The focus is on nutritional strategies used to promote health and in the treatment of common health conditions. May not be held with HYG 2370, or the former ORLB 2150, ORLB 2330, or the former PHRM 2420. This course is restricted to students registered in Nursing or Pharmacy.

Human Nutritional Sciences Course Descriptions-3000 Level**HNSC 3260 Food Quality Evaluation Cr.Hrs. 3**

(Formerly 030.326) Discussion of quality concepts and quality assurance principles for food applications, and of methods for evaluation of sensory, chemical and physical aspects of quality. The course will include food industry visits and demonstrations of food testing techniques. Prerequisites: [HNSC 2160 (030.216) or FOOD 3010 (078.301)] and STAT 2000 (005.200).

HNSC 3300 Vitamins and Minerals in Human Health Cr.Hrs. 3

(Formerly 030.330) The physiological importance of vitamins and minerals in the human body, including factors affecting dietary requirements, metabolism and roles in disease progression and prevention. Prerequisites: [CHEM 2780 or MBIO 2780 (002.278 or 060.278) or CHEM 2370 or MBIO 2370 (002.237 or 060.237)] and HNSC 2140 (030.214) and [BIOL 1412 or 2420 (ZOOL 1330 or 2540, 022.133 or 022.254)]. Not to be held with the former 030.426.

HNSC 3310 Macronutrients and Human Health Cr.Hrs. 3

(Formerly 030.331) Macronutrient functions and metabolic roles in human health, including the prevention and pathogenesis of various diseases. Prerequisites: [CHEM 2780 or MBIO 2780 (002.278 or 060.278) or CHEM 2370 or MBIO 2370 (002.237 or 060.237)] and [HNSC 2140 (030.214) and [BIOL 1412 or 2420 (ZOOL 1330 or 2540, 022.133 or 022.254)]. Not to be held with former 030.325.

HNSC 3320 Nutrition Education and Dietary Change Cr.Hrs. 3

Formerly 030.332) Theoretical and practical aspects influencing dietary change at the individual and population level, with emphasis on nutritional education. Prerequisites: [PSYC 1200 (017.120) or SOC 1200 (077.120)] and HNSC 2130 (030.213) and HNSC 2140 (030.214)

HNSC 3330 Ingredient Technology for Designed Foods Cr.Hrs. 3

(Formerly 030.333) Chemical and functional properties of ingredients and their application in designed foods: low fat, low calorie, high fibre, high energy and innovative food products. Prerequisites: [CHEM 2780 or MBIO 2780 (002.278 or 060.278) or CHEM 2370 or MBIO 2370 (002.237 or 060.237) and HNSC 2150 (030.215)] or [CHEM 2220 (002.222) and FOOD 2500 (078.250)].

HNSC 3342 Management for Food and Nutrition Professionals Cr.Hrs. 3

Management strategies and cost control principles as applied to food and nutrition organizations. Topics include leadership, organizational design, teamwork, human resource management, performance improvement, cost management, and the interpretation of financial statements. Not to be held with HNSC 3340 (030.334). Prerequisites: HNSC 2150 and HNSC 2160 (030.215 and 030.216) and GMGT 1010.

HNSC 3350 Culture and Food Patterns Cr.Hrs. 3

(Lab Required) A study of the cultural, sociological and psychological aspects of food patterns and behaviour. Not to be held with 030.329. Prerequisites: [PSYC 1200 (017.120) or SOC 1200 (077.120)] and HNSC 1200 (030.120) and HNSC 1210 (030.121).

HNSC 3870 Food Geographies Cr.Hrs. 3

This course provides a critical examination of the geographies of food at a variety of scales, from the body to the global. The course focuses on themes in three interconnected areas: 1) food production and the global food system from farm to plate including agribusiness and alternative food production and distribution models; 2) food consumption habits and beliefs and foodways as geographically contingent material culture; and 3) food (in) security and its relationship to health and wellbeing. This course is cross-listed with GEOG 3870. Prerequisites: A grade of "C" or better in GEOG 1280, GEOG 1281, GEOG 1200 or HNSC 1200, or permission of the department head.

Human Nutritional Sciences Course Descriptions-4000 Level**HNSC 4120 Senior Thesis Cr.Hrs. 3**

The preparation and presentation of a report based on a survey of the literature or on a laboratory investigation of an approved topic. Prerequisites: Students must be registered in their final year of Human Nutritional Sciences program or the Minor in Human Nutrition and Metabolism. Application required. Enrolment limited. Not to be held with HNSC 4122 or HNSC 4600.

HNSC 4122 Research Project in Human Nutritional Sciences Cr.Hrs. 6

A research project in any aspect of human nutritional sciences, chosen in consultation with the supervising faculty member. A written report and a poster or oral presentation required at the end of the project. Students must be registered in their final year of Human Nutritional Sciences program. Application required. Enrolment limited. May not be held with HNSC 4120 (030.412) OR HNSC 4600.

HNSC 4140 Quantity Food Production and Management Cr.Hrs. 3

(Lab Required)(Formerly 030.414) Menu planning. Food costing. Experience in standard methods of institutional food production and service. Prerequisites: HNSC 3340 or HNSC 3342 (030.334) and HNSC 2160 (030.216) or consent of instructor. Additionally, students must complete the Food Handlers Certificate Program and must submit the form to the Department by June 15th in order to be permitted to enter HNSC 4140.

HNSC 4160 Seminar in Foods and Nutrition Cr.Hrs. 3

(Formerly 030.416) A critical study of research in the field of foods and nutrition; oral and written reports required. Restricted to 4th year majors in the Department. Prerequisites: completion of 84 credit hours in the HNS program and HMEC 2000 or HMEC 3100 (028.310).

HNSC 4260 Selected Topics in Human Nutrition Cr.Hrs. 3

(Formerly 030.426) Recent developments in human nutrition research. Prerequisite: consent of instructor.

HNSC 4270 Sensory Evaluation of Food Cr.Hrs. 3

(Lab Required)(Formerly 030.427) Sensory perception, principles of the sensory analysis of food, requirements for sensory testing, test methods, selection and training of panelists, statistical analysis and interpretation of data. Prerequisites: [HNSC 2160 (030.216) or FOOD 3010 (078.301) or ENTM 3240 (038.324)] and STAT 2000 (005.200) or equivalent.

HNSC 4280 Food Product Development Cr.Hrs. 3

(Formerly 030.428) This course focuses on food industry product development procedures. Emphasis will be on application of basic knowledge of foods and food processing in designing a new product. Prerequisites: MKT 2210 (118.221) and STAT 2000 (005.200) and [one of FOOD 3010 (078.301) or HNSC 3330 (030.333)]. Not to be held with FOOD 4510 (078.451).

HNSC 4290 Food, Nutrition and Health Policies Cr.Hrs. 3

(Formerly 030.429) Principles and applications of policies, regulations and legislation in the areas of food and health that address nutrition and health problems of populations. Not to be held with the former 030.328. Prerequisites: HMEC 2000(or 2050 or 028.205) and HNSC 2130 or 2140 (030.213 or 030.214) and HNSC 2150 (030.215) and STAT 2000 (005.200).

HNSC 4300 Community Nutrition Intervention Cr.Hrs. 3

(Formerly 030.430) Principles of planning and evaluating nutrition related interventions. Examples of community needs assessments, program planning strategies and types of program evaluation will be examined. Not to be held with 030.411. Prerequisite: HNSC 3320 (030.332).

HNSC 4310 Nutrition and the Elderly Cr.Hrs. 3

(Formerly 030.431) The role of nutrition in health promotion and disease prevention during aging. Prerequisites: HNSC 3310 (030.331) and HNSC 3320 (030.332). Prerequisite or corequisite: HNSC 3300 (030.330). Offered in alternate years, opposite HNSC 4340.

HNSC 4320 Nutrition Management of Disease States Cr.Hrs. 3
(Lab Required)(Formerly 030.432) Nutritional assessment and dietary management of acute and chronic disease states. Prerequisite or corequisite: HNSC 3300 (030.330) and HNSC 3310 (030.331) and HNSC 3320 (030.332). Not to be held with 030.423 or 030.424.

HNSC 4340 Maternal and Child Nutrition Cr.Hrs. 3
(Formerly 030.434) The role of nutrition in normal human development from conception through childhood. Prerequisites: HNSC 3310 (030.331) and HNSC 3320 (030.332). Prerequisite or corequisite: HNSC 3300 (030.330). Offered in alternate years opposite HNSC 4310.

HNSC 4350 Nutrition in Exercise and Sport Cr.Hrs. 3
(Formerly 030.435) The application of nutritional regimens to meet exercise requirements and improve athletic performance. Current practices and recommendations for different types of sports will be examined. Prerequisites: [HNSC 1210 (030.121)] and [PHED 3430 (057.343), or KIN 3470, or PHED 3470] or [ZOO 1330 (002.1330)]

HNSC 4362 Nutrition Option Practicum Cr.Hrs. 6
Practical applications of nutrition principles in a variety of public service and research applications. Prerequisites: completion of 84 credit hours in the Human Nutritional Sciences program with two of the following courses: HNSC 3300, HNSC 3310, HNSC 3320, and HNSC 3330. Application to the department is required. Limited enrolment.

HNSC 4364 Foods Industry Option Practicum Cr.Hrs. 6
This course involves supervised application of food quality, safety, and management principles in a commercial or government setting. Requirements include 280 hours of work related to the field experience. Prerequisites: Completion of 84 credit hours in Human Nutritional Sciences, including the following courses from the Food Industry Option: HNSC 3260, HNSC 3330, FOOD 4150 and GMGT 1010. Application to department is required. Limited enrolment.

HNSC 4540 Functional Foods and Nutraceuticals Cr.Hrs. 3
(Formerly 030.454) This course will examine the bioactive components of functional foods and nutraceuticals, their sources, chemistry, process technology, efficacy, safety and regulation. Prerequisite: [CHEM 2770 or MBIO 2770 (002.277 or 060.277) or CHEM 2360 or MBIO 2360 (002.236 or 060.236)]. Not to be held with FOOD 4540 (078.454).

HNSC 4600 Practice-based Research in Human Nutritional Sciences Cr. Hrs. 3
A practice-based research project relevant to dietetic practice. Prerequisite: Registration in the 4th year of the Human Nutritional Sciences program and any two of HNSC 3300, HNSC 3320 & HNSC 3330, and instructor permission required. Enrolment limited to students pre-selected by the Manitoba Partnership Dietetic Education Program. Not to be held with HNSC 4120 or HNSC 4122

Plant Science Course Descriptions-0 Level

PLNT 0410 Cereal and Oilseed Production Practices Cr.Hrs. 4
(Formerly 039.041) Production practices for wheat (spring and winter), barley, oats, rye, triticale, canola and flax will be discussed, including tillage, seeding, fertility, pest control, harvesting, rotation and utilization. Prerequisite: DAGR 0420 (or 065.042).

PLNT 0750 Forage and Pasture Management Cr.Hrs. 4
(Formerly 039.075) For forage crops and the continuum of improved and unimproved pasture land a discussion of production practices including: choice of species and cultivars of forage crops, cultural management including tillage practices, pest control, forage harvesting, grazing management and seed production. Prerequisite: DAGR 0420 (or 065.042).

PLNT 0760 Special Crops Cr.Hrs. 4
(Formerly 039.076) Production practices of special crops for Manitoba including: quality and grade, crop and cultivar selection, cultural requirements including tillage, pest control, fertility requirements, harvesting, rotation and utilization. Prerequisite: DAGR 0420 (or 065.042).

PLNT 0770 Weed Management Cr.Hrs. 4
(Formerly 039.077) General principles of pest management and pesticide use safety as they relate to weed control. Economic importance, principles of cultural, biological and chemical weed control, weed identification, introduction to herbicides and factors influencing their use and selectivity. Prerequisite: DAGR 0420 (or 065.042).

PLNT 0780 Plant Disease Management Cr.Hrs. 4
(Formerly 039.078) General principles of pest management and pesticide use safety as they relate to plant disease control. Discussion of diseases attacking field and horticultural crops in the prairies including: disease symptoms, cycles, prevention and control. Prerequisite: DAGR 0420 (or 065.042).

PLNT 0790 Landscape Horticulture Cr.Hrs. 4
(Formerly 039.079) Principles of the production and use of horticultural plants in the rural and urban landscape including the establishment and value of shelterbelts. Topics include basic plant propagation, the principles of choosing and establishing ornamental trees, shrubs, herbaceous perennials, annuals, lawns, and multi-use fruit-bearing plants in the landscape, and development of a landscape plan.

PLNT 0800 Diversification with Horticultural Crops Cr.Hrs. 4
(Formerly 039.080) Principles of the production and unique characteristics of horticultural crops including potato, vegetable, fruit, herb, spice, and nutraceutical. The potential for diversifying into and adding value to these alternate crops is examined.

PLNT 0810 Special Topics in Crop Management Cr.Hrs. 3
(Formerly 039.081) Selected topics of current interest in Crop Management. Prerequisite: written consent of the Director of the School of Agriculture.

PLNT 0820 Organic Crop Production on the Prairies Cr.Hrs. 3
(Formerly 039.082) Management principles and practices involved in the production of organic field and forage crops with a focus on the Canadian Prairie Region. Prerequisites: DAGR 0420 (or 065.042), PLNT 0410 (or 039.041), SOIL 0420 (or 040.042), and ENTM 0620 (or 038.062) or consent of the instructor.

Plant Science Course Descriptions-1000 Level

PLNT 1000 Urban Agriculture Cr.Hrs. 3
Urban environments and their importance for food production, increasing biodiversity, and reducing pollution are presented. Topics include principles of vegetable, fruit and herb production, landscape plants, and utilization of natural systems for composting, water management and reduced pesticide use. Benefits to environment, community development, and human health are discussed.

Plant Science Course Descriptions-2000 Level

PLNT 2500 Crop Production Cr.Hrs. 3
(Formerly 039.250) An introduction to the principles and practices of crop production in Canada. Topics will include physiological processes and factors affecting plant yield, plant improvement, seed production, and production of the major cereal, oilseed, forage and special crops. Prerequisite: AGRI 1500 (or 065.150).

PLNT 2510 Fundamentals of Horticulture Cr.Hrs. 3

(Formerly 039.251) Principles of the culture, marketing, and utilization of fruits, vegetables, and ornamentals, their contribution to the economy and well-being of consumers, and impact of horticultural activities on the environment. Prerequisites: BIOL 1020 and BIOL 1030 or the former 071.125; AGRI 1500 (or 065.150); or consent of instructor. This course is offered in alternate years.

PLNT 2520 Genetics Cr.Hrs. 3

(Formerly 039.252) Basic principles of genetics and their practical application in the areas of DNA structure and function, genome organization and genetic analysis. Laboratory sessions provide practical experience in solving genetic problems and conducting genetic investigations. Not to be held with BIOL 2500 or the former BOTN 2460 (or 001.246). Prerequisite: a minimum grade of "C" in BIOL 1020 and BIOL 1030 or the former 071.125.

PLNT 2530 Plant Biotechnology Cr.Hrs. 3

(Formerly 039.253) An introduction to current biotechnological techniques, including recombinant DNA, plant tissue culture, plant transformation and regeneration. A background to the techniques as well as a discussion of their applications in current biology and crop production will be examined. A laboratory will provide first hand experience with many of the techniques. Not to be held with the former 039.450. Prerequisites: CHEM 2360 (or 002.236) or MBIO 2360 (or 060.236) or CHEM 2770 (or 002.277) or MBIO 2770 (or 060.277) and PLNT 2520 (or 039.252) or BIOL 2500 or the former BOTN 2460 (or 001.246).

Plant Science Course Descriptions-3000 Level**PLNT 3140 Introductory Cytogenetics Cr.Hrs. 3**

(Formerly 039.314) An introduction to the structure and function of eukaryotic genomes, from the gene to the chromosome. Topics include the cell cycle, meiosis, chromatin, chromosome and genome organization, karyotyping, changes in chromosome number and structure, physical mapping and chromosome evolution. Labs cover use of the microscope, meiosis, chromosome staining and banding, and bioinformatic analysis of chromosomes. Prerequisites: PLNT 2520 (or 039.252) or BIOL 2500 or the former BOTN 2460 (or 001.246).

PLNT 3400 Plant Physiology Cr.Hrs. 3

(Lab required) (Formerly PLNT 3500). An integrative view of major physiological processes in plants, spanning the biochemical, cellular, tissue, organ and whole plant levels of organization. The focus will be on photosynthesis, respiration, plant water relations, plant mineral nutrition, and the role of hormonal and extrinsic factors in the regulation of plant growth. This course is taught together with BIOL 3400. Students may not hold credit for both BIOL 3400 and PLNT 3400. Not to be held with the former BIOL 3450 or BOTN 2020 (or 001.202) or PLNT 3500. Prerequisites: BIOL 1030 or the former 071.125; CHEM 2770 (or 002.277) or MBIO 2770 (or 060.277) or CHEM 2360 (or 002.236) or MBIO 2360 (or 060.236); BIOL 2242 or the former BOTN 2010 (or 001.201) or the former 001.230 or consent of instructor.

PLNT 3510 Cropping Systems Cr.Hrs. 3

(Formerly 039.351) Examination and analysis of sustainable prairie cropping systems. Emphasis will be placed on integrated systems that optimize the benefits of crop rotation, and conserve soil, water and wildlife resources. Conventional, traditional and alternative crop production systems will be discussed. Includes a limited number of tutorials to allow for field tours and guest speakers. Prerequisite: PLNT 2500 (or 039.250).

PLNT 3520 Principles of Plant Improvement Cr.Hrs. 3

(Formerly 039.352) Basic objectives, principles, and methods of plant genetic improvement. Traditional and modern plant breeding, genetic resources, selection, and applications of tissue culture, genetic engineering and molecular markers to plant improvement. Prerequisite: PLNT 2520 (or 039.252) or BIOL 2500 or the former BOTN 2460 (or 001.246).

PLNT 3540 Weed Science Cr.Hrs. 3

(Formerly 039.354) Identification, biology and ecology of weeds of agricultural importance in western Canada, including principles of cultural, mechanical, biological and chemical control. Topics include weed interference, effects of rotational and management practices on weed species composition, herbicide selectivity and mechanism of action, and emerging control technologies. Prerequisites: BIOL 1020 and BIOL 1030 or the former 071.125; AGRI 1500 (or 065.150); or consent of instructor.

PLNT 3560 Organic Crop Production on the Prairies Cr.Hrs. 3

(Formerly 039.356) Management principles and practices involved in the production of organic field and forage crops with a focus on the Canadian Prairie region. Also available in online delivered format. Prerequisites: PLNT 2500 (or 039.250) and SOIL 3600 (or 040.360) or the former 040.351 or consent of instructor.

PLNT 3570 Fundamentals of Plant Pathology Cr.Hrs. 3

(Formerly 039.357) An introduction to the science of plant pathology. Topics include causal agents of diseases, symptoms and diagnoses, modes of infections and spread, mechanisms in disease and control, effects of the environment on disease development, and methods of disease control. This course is a prerequisite for more advanced courses in plant pathology. Prerequisite: BIOL 2260 or the former BOTN 2210 (or 001.221).

Plant Science Course Descriptions-4000 Level**PLNT 4270 Plant Disease Control Cr.Hrs. 3**

(Formerly 039.427) Diseases attacking field crops and horticultural plants: recognition of symptoms, methods of prevention, alleviation, and control. Prerequisite: PLNT 2500 (or 039.250) or consent of instructor.

PLNT 4310 Introductory Plant Genomics Cr.Hrs. 3

An introduction to basic technologies in plant genomics. Topics include DNA sequencing, molecular marker detection, genome sequencing, gene expression analysis, gene mapping and functional analysis. A laboratory will provide hands-on experience with several genomic techniques. Not to be held with the former PLNT 4540 (or 039.454). Prerequisites: PLNT 2520 (or 039.252) OR BIOL 2500 or the former BOTN 2460 (or 001.246) or consent of instructor.

PLNT 4330 Intermediate Plant Genetics Cr.Hrs. 3

Formerly 039.433) A study of gene behaviour as related to genetic analyses of data from plant populations; multiple allelic systems and polygenic inheritance of quantitative traits; extra-chromosomal inheritance and the significance of cytoplasmic influence. Examples will be drawn from experimental data where available. Prerequisite: PLNT 2520 (or 039.252) or BIOL 2500 or the former BOTN 2460 (or 001.246).

PLNT 4380 Plant Science Thesis Cr.Hrs. 6

(Formerly 039.438) An independent research project under the supervision of a staff member. A thesis including a literature review, methods, results and discussion is required. Enrollment limited. Open only to students in their 4th year. Not to be held with SOIL 4080 (or 040.408). Prerequisite: Consent of department head.

PLNT 4410 Grassland Agriculture: Plant, Animal and Environment Cr.Hrs. 3

(Formerly 039.441) Inter-relationships between the biological components of grassland agriculture as they relate to forage production on the Canadian Prairies. Topics include utilization by wild and domestic animals, plant community relationships and role of forages in multiple land use planning. This course also offered in Animal Science as ANSC 4410.

PLNT 4550 Developmental Plant Biology Cr.Hrs. 3

(Formerly 039.455) An introduction to mechanisms regulating morphogenesis and plant growth and development. Emphasis will be on experimental approaches used to investigate pattern formation at sub cellular,

cellular, tissue and organ levels. A heavy tissue culture component in the lab will implement the lecture topics and will provide new insights into ways to study plant development in vitro. Prerequisite: PLNT 3400 or BIOL 3400 or the former PLNT 3500 (or 039.350).

PLNT 4570 Research Methods in Plant Pathology Cr.Hrs. 3

(Formerly 039.457) Course will provide practical training in plant pathology and will cover plant disease diagnosis, pathogen isolation, identification, inoculation, and storage. Molecular techniques currently used in the study of plant pathogens will be covered. The laboratory component aims at preparing students for a professional career in plant protection and research in plant pathology. Prerequisite: PLNT 3570 (or 039.357) or consent of instructor.

PLNT 4580 Molecular Plant-Microbe Interactions Cr.Hrs. 3

(Formerly 039.458) Course will cover general principles and mechanisms related to plant-pathogen interactions, such as in gene-to-gene and toxin models. Emphasis will be on biochemical/molecular mechanisms of plant-microbe recognition, pathogenesis, and plant reactions to infections. Both beneficial and deleterious associations will be covered. Prerequisite: PLNT 3570 (or 039.357). This course is offered in alternate years.

PLNT 4590 Physiology of Crop Plants Cr.Hrs. 3

Concepts dealing with the physiological response of crop plants to the environment from the time of seed germination through to reproduction. Students may not hold credit with the former 039.452. Prerequisites: PLNT 3400 (or the former PLNT 3500) or BIOL 3400 (or the former BIOL 3450) or consent of instructor.

PLNT 4600 Issues in Agricultural Biotechnology Cr.Hrs. 3

By lecture, group discussion, individual/group projects selected topics related to the introduction and application of modern biotechnologies in agriculture will be examined. Acquiring a critical appreciation of the multidimensional issues associated with the application of biotechnology will be the goal. Students must have completed 84 credit hours towards a degree, or permission of instructor. Prerequisite: PLNT 2530 (or 039.253).

PLNT 4610 Bioinformatics Cr.Hrs. 3

An introduction to the theory, strategies, and practice of data management and analysis in molecular biology. Topics include DNA and protein sequence analysis, biological databases, genomic mapping, and analysis of gene expression data. The course will include problem-solving exercises using Unix server-based software. Prerequisites: PLNT 2530 (039.253) or the former 039.450 or PLNT 3140 (039.314) or MBIO 3410 (060.341) or PLNT 4310 or the former PLNT 4540 or consent of instructor.

Soil Science Course Descriptions-0 Level

SOIL 0420 Soil Productivity and Land Use Cr.Hrs. 4

(Formerly 040.042) Soil classification systems; soils of Manitoba and their properties; soil productivity and its maintenance; soil fertility and testing, fertilizer recommendations; environmental concerns. Prerequisite: DAGR 0420 (or 065.042).

SOIL 0620 Soil Conservation and Management Cr.Hrs. 4

(Formerly 040.062) Land capability for agriculture; storage, use of water and water use efficiency; saline and alkaline soils; soil acidity; soil erosion and conservation; tillage, cropping systems and rotations; fate of biosolids, pesticides. Prerequisite: SOIL 0420 (or 040.042).

SOIL 0630 Soil Fertility Cr.Hrs. 4

(Formerly 040.063) Soil nutrients and their behavior; evaluation of soil fertility including soil testing for precision agriculture; crop response to fertilizers; manufacture, properties, reactions and applications of fertilizer. Prerequisite: SOIL 0420 (or 040.042).

Soil Science Course Descriptions-3000 Level

SOIL 3060 Introduction to Agrometeorology Cr.Hrs. 3

(Formerly 040.306) Basic description and discussion of properties of the atmosphere, radiation, temperature, effect of temperature on plant growth, climate and animal response, water, evapotranspiration, insect adaptation, activity in relation to climate, climatic data.

SOIL 3520 Pesticides: Environment, Economics and Ethics Cr.Hrs. 3

(Formerly 040.352) A comprehensive examination of the benefits and risks of pesticide use. Topics include: Characteristics of pesticide products and formulations used in Western Canada; History, practice, successes and failures in the use of pesticides in agriculture; Pesticide use for protecting human health; Pesticide fate processes in air, soil and aquatic environments; Economical and environmental impact of pesticide application drift; Atmospheric pesticide contamination; Pesticide surface and groundwater contamination; Pesticide toxicity to organisms, including humans; Pesticide residues in food; Pesticide regulations; Pesticide risk indicators; Alternatives to pesticides. Not to be held with 040.411, 038.454 or 040.454.

SOIL 3600 Soils and Landscapes in Our Environment Cr.Hrs. 3

(Formerly 040.360) Discover why soil is an essential resource. Explore the roles of soils and landscapes within natural and agricultural ecosystems by learning the fundamental biological, chemical and physical properties and processes; soil and landscape classification and evaluation. Not to be held with 040.350 or 040.351.

SOIL 3610 Field Methods in Land Resource Science Cr.Hrs. 3

This course provides students with training in field methods used in soil science and related sciences (hydrology, meteorology, ecology, geomorphology, and environmental science). Students participate in a biophysical survey of a field site and in a study of the management, assessment and monitoring of land resources. Prerequisite: SOIL 3600

Soil Science Course Descriptions-4000 Level

SOIL 4060 Physical Properties of Soils Cr.Hrs. 3

(Formerly 040.406) Physical properties of soils and their relation to plant growth. Topics discussed include particle size distribution, soil water, soil structure, soil temperature, and soil aeration. Prerequisite: SOIL 3600 (or 040.360) or 040.350 or 040.351 or BIOE 2110 or consent of instructor.

SOIL 4130 Soil Chemistry and Mineralogy Cr.Hrs. 3

(Formerly 040.413) Composition of soil materials. Reactions of nutrients and contaminants with soil organic matter, silicate clays, oxides and other soil constituents which affect their mobility and bioavailability. Prerequisite: SOIL 3600 (or 040.360) or 040.350 or 040.351 or consent of instructor.

SOIL 4400 SOIL ECOLOGY Cr.Hrs. 3

Explore the application of soil biology to diversity in agro ecosystems, response of soil organisms to management, mediation of important environmental issues, and promotion of human health. Appreciate the vast array of soil organisms and their functions in soil ecosystems, understand cycling of nutrients by soil organisms, and discover quantitative methodology in determining soil biochemical processes. The laboratory provides hands-on experience in observing, quantifying and isolating soil organisms and the biochemical processes they conduct. Prerequisite: AGECE 2370 or Biol 2300 or SOIL 3600.

SOIL 4500 Remediation of Contaminated Land Cr.Hrs. 3

(Formerly 040.450) Physical, chemical and biological approaches to remediation of land including; nature of contaminants, procedures for assessing the extent of the impact, consequences to the environment, approaches to remediation and case studies of contaminant remediation. Prerequisite: SOIL 3600 (or 040.360) or 040.350 or 040.351 or consent of the instructor.

SOIL 4510 Soil and Water Management Cr.Hrs. 3

(Formerly 040.451) Topics include: capability of land for agriculture; storage, movement and use of water; saline and alkaline soils; soil conservation including erosion; sustainability of soil organic matter; effect and fate of soil amendments. Prerequisite: SOIL 3600 (or 040.360) or 040.350 or 040.351.

SOIL 4520 Soil Fertility Cr.Hrs. 3

(Formerly 040.452) Forms and behaviour of plants nutrients in soil; soil fertility evaluation and management, including fertilizer sources and practices. Prerequisite: SOIL 3600 (or 040.360) or 040.350 or 040.351.

Textile Sciences Course Descriptions-1000 Level**TXSC 1600 Textiles for Living Cr.Hrs. 3**

(Lab Required)(Formerly 064.160) This course covers the fundamental knowledge of textiles in a product development context. It includes properties of fibres, yarns and fabrics; characteristics of natural and manufactured fibres; chemical structures of the most commonly used natural and manufactured fibres for apparel and non-apparel end uses; woven, knitted, and non-woven structures; and dyeing and printing. Not to be held with 064.102.

TXSC 1610 Textiles, Product, and Consumers Cr.Hrs. 3

(Formerly 064.161) This course covers the structure and characteristics of the natural and manufactured fibre sectors; downstream industries which transform natural or manufactured fibres into intermediate goods; the manufacturing industry which transforms intermediate supplies to final products; and the retailing industry which distributes final textile products to consumers or organizations.

Textile Sciences Course Descriptions-2000 Level**TXSC 2420 History of Textiles Cr.Hrs. 3**

(Formerly 064.242) Development and diffusion of textile fibres, fabrics, and finishes from prehistoric times to present. May not hold with 064.332.

TXSC 2500 Preparation for Product Development Cr.Hrs. 1

Designed for students with little or no background in textile product assembly or for students who require a refresher course. This course provides an orientation to textile product assembly equipment, construction, techniques, and terminology. Students must pass this course before they will be permitted to continue in TXSC 2630. For Textile Sciences students only. NOTE: The credit associated with this course will not be counted toward the minimum credit hour requirements of the Textile Sciences degree. (Pass/fail grade).

TXSC 2600 Textiles for Apparel End Uses Cr.Hrs. 3

(Formerly 064.260) Theories of product development and their applications to creating textile products for apparel end uses including fashion apparel; apparel for consumers throughout the lifespan, including childhood, young adults, older adults; apparel for consumers with disabilities; apparel for professional sports and recreation; and apparel for the healthcare sector. Prerequisites: [064.102] or [a minimum grade of C in TXSC 1600 (064.160) and TXSC 1610 (064.161) and 3 credit hours of 1000-level chemistry].

TXSC 2610 Textiles for Non Apparel End Uses Cr.Hrs. 3

(Formerly 064.261) Product development theories from engineering and management perspectives to illustrate the development of textile fibres, fabrics, and products for the industrial and healthcare sectors. Industrial uses of textiles include the automotive and the aerospace industries. End uses for the healthcare sector include textiles or textile products for rehabilitation, protection from bacteria, healing of wounds, and implantable textiles. Assessment of selected fabric properties such as strength, flammability, colourfastness and air permeability will be introduced. Prerequisites: [064.102] or [a minimum grade of C in TXSC 1600 (064.160) and TXSC 1610 (064.161) and 3 credit hours of 1000-level chemistry].

TXSC 2620 Consumer and Organizational Behaviour Toward Textile Products Cr.Hrs. 3

(Formerly 064.262) Theories and practices of consumer and organizational decision making with respect to textile products. Prerequisites: TXSC 2600 (064.260) or TXSC 2610 (064.261). Not to be held with MKT 3230 (118.323).

TXSC 2630 Pattern Development in an Industrial Environment Cr.Hrs. 3

(Lab Required)(Formerly 064.263) This course covers the process of communicating product design through pattern development. Students will learn the terminologies of pattern development, techniques of pattern development and manipulation, and the importance of anthropometry in creating apparel to suit its end uses. Prerequisite: TXSC 2500; TXSC 2600 (064.260). Not to be held with the former 064.348.

Textile Sciences Course Descriptions-3000 Level**TXSC 3470 SELECTED TOPICS Cr.Hrs. 3**

(Formerly 064.347) Directed study in a specific area of clothing and/or textiles. Prerequisite: consent of instructor and 60 credit hours in the Clothing and Textiles program.

TXSC 3500 Textiles for the Healthcare Sector Cr.Hrs. 3

(Formerly 064.350) This course covers the recent developments of a range of technical textiles for the healthcare sector, including implantable textiles, barrier fabrics, and smart textiles. Prerequisite: TXSC 2610 (064.261) and [HMEC 2050 (028.205) or any 2000-level or 3000-level research method course] and CHEM 1000 (001.100) or CHEM 1300 (002.130). Not to be held with 064.347 which was offered from September 2004 to September 2005/2006.

TXSC 3600 Global Apparel and Textiles Trade Cr.Hrs. 3

(Formerly 064.360) Covers the role of apparel and textiles trade in economic growth and development of industrialized, transitional, and developing nations. It will take into account the evolution of trade relations among apparel and textile producing countries and regions. Prerequisite: [TXSC 2620 (064.262)] and [ECON 1010 and 1020 (ECON 1200 (018.120) or ECON 1210 (018.121)] and [ECON 1220 (018.122)] and [HMEC 2000 or HMEC 2050 (028.205)]. Not to be held with the former 064.340.

TXSC 3610 Product Standards and Specifications Cr.Hrs. 3

(Formerly 064.361) Challenge students to apply their knowledge and skills gained in TXSC 2600, TXSC 2610 and TXSC 2620 to develop textiles and textile product standards and specifications for various forms of product development (e.g., private label, national brands, licensed goods) where there are no known precedents. Students will learn the process of developing product standards by working on case studies. Textile products will include apparel and non-apparel end uses. Prerequisites: TXSC 3620 (064.362) and [HMEC 2000 or HMEC 2050 (028.205)]. Not to be held with 064.220 or 064.221 or 064.337.

TXSC 3620 Evaluation of Textile Performance Cr.Hrs. 3

(Lab Required)(Formerly 064.362) Covers the serviceability of textile products for apparel and non apparel end uses. Students will learn to carry out commonly used textile testing methods for assessing durability, comfort, aesthetic properties and safety. Prerequisites: TXSC 2600 (064.260) and TXSC 2610 (064.261). Not to be held with the former 064.220 or 064.221 or 064.337.

TXSC 3630 Line Planning and Visual Communication Cr.Hrs. 3

(Formerly 064.363) Covers the steps in developing a line of textile products for apparel and home furnishings end uses and the techniques of communicating product information to relevant members of the supply chain. Students will learn manual methods and computer aided design solutions to communicate product concepts. Prerequisite: TXSC 2630 (064.263). Not to be held with the former 064.225.

TXSC 3640 Pattern Development in a Computer Aided Design Environment Cr.Hrs. 3

(Formerly 064.364) This course is a continuation of TXSC 2630. It covers advanced pattern manipulations using an industrial computer aided design system. Prerequisite: TXSC 2630 (064.263) and TXSC 3650 (064.365). Not to be held with 064.349.

TXSC 3650 Production of Textile Products Cr.Hrs. 3

(Formerly 064.365) Covers the role of production in the product development process. Students will learn the terminology which meets industrial standards, the most commonly used production techniques for apparel and non apparel products, time studies, costing, development of specifications, manufacturing systems, and selected test methods for quality management. Prerequisites: TXSC 2630 and [HMEC 2000 or HMEC 2050 (028.205)]. Not to be held with 064.224 and 064.342

TXSC 3700 Special Topics in Textile Sciences Cr.Hrs. 6

This course will vary from year to year depending on the trends within the textile/apparel complex. Students will be given the opportunity to study a detailed area of textile sciences through a field experience or travel study. Prerequisite: Permission of the instructor.

Textile Sciences Course Descriptions-4000 Level

TXSC 4210 Seminar in Clothing and Textiles Cr.Hrs. 3

(Formerly 064.421) Critical study of literature and other information sources in the field of clothing and textiles. Oral and written reports required. Restricted to fourth year majors in the department.

TXSC 4260 Textile and Apparel Marketing Cr.Hrs. 3

(Formerly 064.426) Application of marketing in the textile industries. Prerequisites: 064.340 and MKTG 2210 (118.221).

TXSC 4310 PRACTICUM Cr.Hrs. 3

(Formerly 064.431) Supervised practical experience in the clothing and textile field in an appropriate off-campus setting. Prerequisite: completed 84 credit hours in the Clothing and Textiles program. GPA is considered; limited enrolment.

TXSC 4320 Selected Topics in Clothing and Textiles I Cr.Hrs. 3

(Formerly 064.432) Directed study in a specific area of clothing and/or textiles. Prerequisite: Consent of instructor and 84 credit hours in the Clothing and Textiles program.

TXSC 4340 SENIOR PROJECT Cr.Hrs. 3

(Formerly 064.434) Independent study on an approved topic in a) marketing, production or design of apparel, b) history of costume and textiles, c) sociopsychological aspects of clothing, or d) textile performance, preservation and use. A detailed proposal for the study must be submitted in order to register. Prerequisite: completed 84 credit hours in the Clothing and Textile program and consent of department head.

TXSC 4500 Advanced Textiles for the Healthcare Sector Cr.Hrs. 3

Covers the latest developments in technical textiles for the healthcare sector and the measurement of attributes which are essential to the performance of textiles for medical or healthcare end uses. Prerequisites: A grade of "C" or better in: [TXSC 2600 (064.260)] and [TXSC 2610 (064.261)] and [TXSC 3620 (064.362)] and [TXSC 3500 (064.350)].

TXSC 4600 The Information Age and the Textiles Supply Chain Cr.Hrs. 3

Covers the evolution of the textile complex from a production orientation to a logistics orientation; the role of information technology in creating or enhancing competitive advantage; the range of technologies used by the textile complex to communicate design, production, and management information throughout the supply chain; decision making process executives go through to decide which types of technology to purchase, how to implement them within the firm, the financial implications, the effects on

business-to-business communication, and the effects on business-to-consumer communication. Prerequisite: TXSC 3600.

TXSC 4610 Integrative Project Cr.Hrs. 6

This is a required course in which students are required to demonstrate their ability to integrate the skills and knowledge accumulated in the program. Specifically, students will solve a specific textile or product development problem which may originate from the students' interests, developed in collaboration with academic staff, or community-based. Prerequisite: TXSC 3610 (064.361) and TXSC 3630 (064.363) and TXSC 3640 (064.364). Not to be held with the former 064.430 or TXSC 4340 (064.434) or TXSC 4210 (064.421) or TXSC 4310 (064.431).

TXSC 4620 Colour Management Cr.Hrs. 3

Covers the basic concepts and principles of colour science, the process of determining seasonal colour palette, colour specification systems, colour notation systems, commercial colour identification systems, the colour approval process in industrial, institutional, and consumer goods settings, colour measurement, and interpretation of colour data. Students will learn the process of preserving colour integrity throughout the supply chain. Prerequisites: TXSC 3610 (064.361). Not to be held with the former 064.339 or 064.430.

TXSC 4630 Quality Assurance Systems Cr.Hrs. 3

Covers the concept of total quality management; the role of total quality management in apparel and textiles; the role of standard setting agencies in developing standards of product and service quality; management systems such as ISO 9000 and case studies of textiles and apparel firms which have adopted these systems. Students will learn by solving a series of problems presented to them in the format of case studies. Prerequisites: TXSC 3650 and TXSC 4620. Not to be held with 064.220 or 064.221 or 064.337.

5.2. Diploma in Agriculture Course Descriptions

DAGR 0410 Communication and Learning Skills Cr.Hrs. 4

(Formerly 065.041) A course designed to improve learning skills and abilities in written and oral communication.

DAGR 0420 Introductory Soils and Crops Cr.Hrs. 4

(Formerly 065.042) Topics covered will include soil forming factors; soil characteristics, climate, nutrient supply and crop production, biology of crop plants, crop establishment and protection, harvest management, farming systems and crop rotations.

DAGR 0610 Advanced Communication and Rural Leadership Cr.Hrs. 3

(Formerly 065.061) A course designed to improve leadership potential and understanding of the rural community.

DAGR 0630 Special Project Cr.Hrs. 3

(Formerly 065.063) This project allows a student to make practical application of scientific knowledge acquired during the first year and/or to intensify the study of a topic of particular interest. A satisfactory report is required to qualify for credit. Students who intend to register for this course must obtain approval from the Director before the end of their first year.

DAGR 0660 Special Topics in General Agriculture Cr.Hrs. 3

(Formerly 065.066) Selected topics of current interest in General Agriculture. Prerequisite: Written consent of Director of the School of Agriculture.

DAGR 0680 Management Planning Project 1 Cr.Hrs. 3

(Formerly 065.068) Development of an objectives-driven plan that deals with production, personnel, marketing and financial management of a farm or off-farm business. Students may not hold credit for DAGR 0680 (or 065.068) and the former 065.064.

DAGR 0690 Management Planning Project 2 Cr.Hrs. 5

(Formerly 065.069) Refinement of the plan developed in Management Planning Project 1 with emphasis on generating and analyzing a complete set of financial statements for a farm or off-farm business. Presentation of the management plan, in both written and verbal form. On-site visits will be used to illustrate and reinforce management principles and practices and address issues raised in class. Students may not hold credit for DAGR 0690 (or 065.069) and the former 065.065. Prerequisite: DAGR 0680 (or 065.068).

DAGR 0730 Case Studies in Institutional Lending 1 Cr.Hrs. 4

(Formerly 041.073) Case studies will provide a primary look at assessing loan applications and determining financial need, production feasibility and repayment. Students will analyze lending portfolios and the management of various enterprises. Prerequisite: ABIZ 0470 (or 061.047). Pre- or Co requisite: ABIZ 0450 (or 061.045).

DAGR 0760 Agricultural Law Cr.Hrs. 3

(Formerly 041.076) Discussion of the complexity of the agriculture industry and the laws affecting it. The course will illustrate laws critical for effective planning and the making of sound management decisions respecting the farm operations and agribusinesses. Topics include the Manitoba and Canadian legal systems, major laws affecting agriculture, and resolution of issues in Canadian agriculture. Offered in 2005-2006 and alternate years thereafter.

DAGR 0780 Succession and Estate Planning Cr.Hrs. 2

(Formerly 041.078) An in-depth look at the legal requirements necessary for asset transfer and farm continuity. Topics include wills, asset divisions, tax planning, savings and opportunities.

DAGR 0830 Agriculture Cooperative Education Work Term Cr.Hrs. 2

Special five-month work assignment in business, industry, government or research for cooperative education students in the diploma program. Requires submission of a written report covering the work completed during the professional assignment.

FACULTY OF ARCHITECTURE

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Chapter Contents

SECTION 1: DEGREE PROGRAMS OFFERED

- 1.1 Available Options
- 1.2 Available Streams

SECTION 2: ADMISSION REQUIREMENTS

- 2.1 Bachelor of Environmental Design Degree Admission Requirements
- 2.2 Bachelor of Environmental Design Degree Architecture Master Preparation Option Admission Requirements

SECTION 3: FACULTY ACADEMIC REGULATIONS

- 3.1 Undergraduate Scholastic Standards
- 3.2 Supplementary Regulations
- 3.3 Dean's Honor List

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

- 4.1 Bachelor of Environmental Design Degree
- 4.2 Bachelor of Environmental Design Architecture Master Preparation Option

SECTION 5: COURSE DESCRIPTIONS

SECTION 1: DEGREE PROGRAMS OFFERED

Program/Degree	Years to Complete	Total Credit Hours
Bachelor of Environmental Design	4	129
Bachelor of Environmental Design: Architecture Masters Preparation Option (requires completion of previous degree)	2	66

1.1 Available Options

The Bachelor of Environmental Design Degree Program has been reformed to require students to declare a specific Program Option after the second year of studies (ED2) in the Environmental Design Program. Of the approximately 100 students moving into the third year of studies (ED3), admission into the Options will be divided equally. Students will be required to rank their Program Options in order of preference (1st, 2nd, 3rd choice). The selection of students into these Options will be based on the GPA, a Portfolio and Statement of Intent. Students entering the Program should be aware that entry into the Options will be assigned on a competitive basis, and that not all students may be successfully placed in their first choice. Students who have not completed 2nd year studios or who still have more than 1 three credit hour lecture course to complete will not be eligible for admission into the Option years.

Architecture Option

The Architecture Option offers a program of studies that focuses on transforming the lessons of history, technology, culture, the environment, and regional and social aspirations into a program for architecture. Students have the academic freedom, one of the program's highlights, to experiment with ideas and methods as they develop their own personal and critical approaches to architectural design. The sequential design studios and supporting courses cover a wide spectrum of investigations ranging in scale from urban design to individual buildings to their construction details, examining the impact of all of these on the environment.

Interior Environments Option

The Interior Environments Option provides an opportunity to study the design of interior spaces within the context of architecture and to investigate the design of objects within the contexts of the human body and interior spaces. Students enrol in a series of design studios and courses to explore the impact of interior environments on human beings and vice versa. The impact of technology – especially sustainable strategies – on buildings and their inhabitants is also studied.

Landscape + Urbanism Option

The departments of Landscape Architecture and City Planning offer a joint option in Landscape + Urbanism for students who have a broad interest in understanding and shaping human settlement and habitat. Design studios and supporting courses recognize that we live in an increasingly globalized world where issues of natural resource depletion, climate change and the demand for sustainable development are paramount. Design and planning issues are addressed within the social, economic, and political contexts that drive development and of the cultural and ecological forces that create the built environment.

1.2 Available Streams (ED AMP only)

ED AMP students entering either Stream One or Stream Two of the program will enter into the Architecture Option years three (ED AMP 1's) or four (ED AMP 2's) as outlined above.

SECTION 2: ADMISSION REQUIREMENTS

2.1 Bachelor of Environmental Design (B.Env.D)

To be considered for admission into the Bachelor of Environmental Design Program an applicant must have completed 30 credit hours of university-level coursework with an overall minimum adjusted grade point average of 2.50. For a detailed outline of the admission requirements please see our web site at umanitoba.ca/environmentaldesign.

2.2 Bachelor of Environmental Design - Architecture Master Preparation Option (AMP)

Enrollment in the Environmental Design Master Preparation Option is competitive and limited. Students will be admitted on the basis of an annual selection process. Applicants satisfying the minimum academic requirements are eligible for consideration at the discretion of the Department of Architecture Admissions Selection Committee. For a detailed list of the admission requirements please see our web site at umanitoba.ca/architecture.

SECTION 3: FACULTY ACADEMIC REGULATIONS

3.1 Undergraduate Scholastic Standards

A Grade Point Average (GPA) of 2.00 is required as an acceptable standard of performance.

A minimum grade of 'C' is required to pass all courses offered by the Environmental Design Program and by the Departments within the Faculty. All courses offered by the Environmental Design Program stipulate a grade of "C" in the prerequisite course(s).

To be eligible for the degree of Bachelor of Environmental Design a student is required to complete a minimum of two full academic years of studies in the Environmental Design Program including Years 3 and 4.

3.2 Supplementary Regulations

Special regulations governing admission, attendance, withdrawals, examinations, grading procedures and curriculum requirements are on file in the general office of the Environmental Design Program, Faculty of Architecture.

3.3 Dean's Honour List

Students who achieve a term GPA of 4.0 or better, while registered in 80 per cent of a full course load will be included in the Dean's Honour List for the Faculty of Architecture.

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

4.1 Bachelor of Environmental Design

The Bachelor of Environmental Design Degree is a four year program of studies consisting of two years of common 'Foundation Studies' (ED1/U1 and ED2) followed by two years of 'pre-professional' 'Intermediate Studies' (ED3 and ED4). The third and fourth years are referred to as the 'Option Years' and include Architecture, Interior Environments, and Landscape + Urbanism. Typically students entering the Environmental Design Program are admitted after completion of the admission requirements.

			Foundation Studies		
Apply to University 1			ED1 / U1		
Apply to Environmental Design Program			ED2		
			Intermediate Studies (Option Years)		
Apply to Option	ED 3 Arch Option	or	ED 3 IE Option	or	ED 3 L + U Option
	ED 4 Arch Option	or	ED 4 IE Option	or	ED 4 L + U Option

The Foundation Studies of the Environmental Design Program provide a solid grounding in the basic knowledge and language shared by all of the environmental design disciplines. It also provides opportunity to develop interdisciplinary perspectives through the other academic units in the University of Manitoba. Students come to understand the holistic nature of environmental design and, at an early stage, begin to establish a rich and multidisciplinary dialogue with their peers in the Faculty of Architecture. It also enables students to discover their strengths and interests relating to a particular environmental design discipline.

The Intermediate Studies of the Environmental Design Program provide opportunities to pursue a specific professional design discipline including Architecture, City Planning, Interior Design and Landscape Architecture. The third and fourth years are spent studying in the Option Years where students are exposed to, and challenged by, academic and professional design theories and practices specific to a particular design discipline.

ACADEMIC CALENDAR 2015-2016

Overall, the curriculum is structured around a design studio sequence that provides a forum for exploring the complex relationships between humans and the natural and built environments that constitute the places and artifacts of cultural production. Over a four year period, a student will develop the necessary knowledge and skills to pursue work in a wide variety of design practices.

The Options are an important curriculum link to the graduate programs. Students holding a B.Env.D degree are eligible to apply to the graduate departments of Architecture, City Planning, Interior Design and Landscape Architecture and to other graduate programs globally. Students who have completed a design degree may be eligible to apply to the graduate program. Interested students should consult the Graduate Calendar, Faculty of Architecture.

In order to be eligible for the Bachelor of Environmental Design Degree students must complete ED2, ED3 and ED4 (total 99 credit hours). Admission enrollment is limited to 100 students on a competitive basis.

FOUNDATION STUDIES (Years 1 and 2)	
Year 1/Option 1 Admissions Requirement	
Course No.	Credit Hours
EVDS 1600 Introduction to Environmental Design	3
EVDS 1602 Visual Literacy	3
EVDS 1660 History of Culture, Ideas and Environment 1	3
EVDS 1670 History of Culture, Ideas and Environment 2	3
Faculty of Arts	3
Faculty of Arts	3
Faculty of Science	3
Faculty of Science	3
Faculty of Arts or Science	3
Faculty of Arts or Science	3
Total Credit Hours	30
Year 2	
EVDS 2100 Urban Media Lab (Pre-Fall)	3
EVDS 2600 Tectonic Precedent	3
EVDS 2200 Ecology and Design	3
EVDS 2300 Materials, Structures and Assemblies	3
EVDS 2702 Natural and Human Systems	3
EVDS 2400 Visual Media 1	3
EVDS 2800 Visual Media 2	3
EVDS 2500 Design Studio 1	6
EVDS 2900 Design Studio 2	6
Total Credit Hours	33
INTERMEDIATE STUDIES (Option Years 3 and 4)	
Year 3: Architecture Option	
EVAR 3000 Pre-Modern Architectural History and Theory 1	3
EVAR 3002 Pre-Modern Architectural History and Theory 2	3
EVAR 3004 Architectural Technology 1- Structural and Sustainable Use of Materials	3
EVAR 3006 Architectural Technology 2 – Building Construction, Structures and Envelopes	3
EVAR 3008 Architecture Design Studio 1	9
EVAR 3010 Architecture Design Studio 2	9
EVAR 3014 Drawing: Freehand & Digital	3
Total Credit Hours	33
Year 4: Architecture Option	
EVAR 4000 Modern Architectural History and Theory 1	3
EVAR 4006 Modern Architectural History and Theory 2	3
EVAR 4002 Architectural Technology 3 - Building Systems	3
EVAR 4008 Architectural Technology 4 - Comprehensive Design Technology Report	3
EVAR 4004 Architecture Design Studio 3	9
EVAR 4010 Architecture Design Studio 4	9
Elective	3
Total Credit Hours	33

Year 3: Interior Environments Option	
EVIE 3002 Interior Design History and Theory 1	3
EVIE 3004 Materials, Assemblies and Detailing	3
EVIE 3006 Interior Design Media	3
EVIE 3008 Interior Design Studio 3.1	6
EVIE 3010 Interior Design Studio 3.2	6
EVIE 3012 Interior Light and Colour	3
EVIE 4006 Design Methods and Processes	3
EVIE 4008 Digital Media (Winter 2014)	3
Elective	3
Total Credit Hours	33
Year 4: Interior Environments Option	
EVIE 3000 Field Studies or Elective*	3
EVIE 4002 Indoor Systems 1	3
EVIE 4004 Indoor Systems 2	3
EVIE 4006 Design Methods and Processes	3
EVIE 4008 Digital Media (Fall 2013)	3
EVIE 4010 Interior Design Studio 4.1	6
EVIE 4012 Interior Design Studio 4.2	6
EVIE 4014 Advanced Interior Design Media	3
Elective*	3
Total Credit Hours	33
*Please note: All students in 4th Year IE Option must do 6 credit hours of Elective courses. EVIE 3000 can be used as three hours towards this requirement but enrolment is limited	
Year 3: Landscape + Urbanism Option	
EVLU 3000 History of Designed Environments	3
EVLU 3002 Site Planning	3
EVLU 3004 Ecology + Design 2	3
EVLU 3006 Studio 3: Dwelling / Precinct / Everyday Life	9
EVLU 3008 Studio 4: Networks and Infrastructure	9
EVLU 3010 Landscape + Urbanism Theory	3
EVLU 3012 Site Morphology and Grading	3
Total Credit Hours	33
Year 4: Landscape + Urbanism Option	
EVLU 4000 Philosophy, Ethics and Aesthetics	3
EVLU 4002 Construction Materials (Alternate 1)*	3
EVLU 4004 Inquiry by Design (Alternate 2)* - not offered	3
EVLU 4006 Special Topics in Community Design (Alternate 3)*	3
EVLU 4008 Plants, Ecosystems and Design (Alternate 4)*	3
EVLU 4010 Community Design Process and Method (Alternate 5)*	3
EVLU 4012 Studio 5: Possible Urbanism(s)	9
EVLU 4014 Studio 6: Emergent Futures	9
EVLU 4016 History of Landscape + Urbanism	3
EVLU 4018 Principles of Urban Design	3
Total Credit Hours	33
*Students must complete at least 2 of the 6 courses designated with an Asterisk. Students progressing to the Master of Landscape Architecture at the University of Manitoba are required to take courses EVLU 4002 Construction Materials and EVLU 4008 Plants, Ecosystems and Design in their 4th year.	

4.2 Bachelor of Environmental Design - Architecture Master Preparation Option (AMP)

This program is for applicants who have a recognized three or four year undergraduate degree in either a non-design discipline (such as Fine Art, Engineering, Science, Philosophy, Theatre, Psychology, Music, Film, English, History, Art History, Urban Studies, Geography, Commerce, etc)

OR

a design-related discipline (such as Interior Design, Landscape Architecture, Industrial Design, etc.) and wish to eventually apply to the graduate Master of Architecture Program.

General Eligibility: All applicants must meet the general admission and entrance requirements set by the Department of Architecture. The entry level into the program will be determined by the Department of Architecture Admissions Committee's evaluation of the individual's application and supporting documents.

ED Architecture Master Preparation One (ED AMP 1): (For those with a background in one of the following: Fine Art, Industrial Design, Engineering, Science, Philosophy, Theatre, Psychology, Music, Film, English, History, Art History, Urban Studies, Geography, Commerce, etc.) For applicants who have little or no formal design education with a minimum three-year undergraduate bachelors degree in any disciplinary field from a recognized college or university. A minimum GPA of 3.0 or equivalent B in the last two full years (60 credit hours) of study is required. Upon successful completion of this two-year program students will be eligible to receive an Environmental Design undergraduate degree.

ED Architecture Master Preparation Two (ED AMP 2): (For those with a background in one of the following: Interior Design, Interior Architecture or Landscape Architecture) For applicants who already have a three or four-year undergraduate bachelors degree in a design- of-the-environment related field from a recognized college or university. A minimum GPA of 3.0 or equivalent B in the last two full years (60 credit hours) of study is required. These applicants are considered on a case-by-case basis for placement into the second and final year of the undergraduate Architecture Master Preparation Option but will be ineligible to receive the Environmental Design degree.

NOTE: Upon successful completion of the undergraduate ED Architecture Master Preparation Option (ED AMP 1 and ED AMP 2), students who wish to continue into the Master of Architecture Program must officially apply for graduate admissions. Evaluation is based on the student's progress in either the one or two-year ED Architecture Master Preparation Option, as evidenced in a portfolio submission, GPA and a Faculty of Graduate Studies application.

Please refer to the following for Architecture Master Preparation (AMP) Information and Application Package:

<http://www.umanitoba.ca/student/admissions/application/programs/architecture-application.html>

Course Sequence

PRE TERM

EVAR 3012 Arch Tech Prep (pre term block course)	3
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Year 3

EVAR 3000 Pre-Modern Architectural History and Theory 1	3
EVAR 3002 Pre-Modern Architectural History and Theory 2	3
EVAR 3004 Architectural Technology 1 - Structural and Sustainable use of Materials	3
EVAR 3006 Architectural Technology 2 - Building Construction, Structures and Envelopes	3
EVAR 3008 Architecture Design Studio 1	9
EVAR 3010 Architecture Design Studio 2	9
EVAR 3014 Drawing: Freehand & Digital	3
Total Credit Hours	33

Year 4

EVAR 4000 Modern Architectural History and Theory 1	3
EVAR 4006 Modern Architectural History and Theory 2	3
EVAR 4002 Architectural Technology 3 – Building Systems	3
EVAR 4008 Architectural Technology 4 – Comprehensive Technology Report	3
EVAR 4004 Architecture Design Studio 3	9
EVAR 4010 Architecture Design Studio 4	9
Elective	3
Total Credit Hours	33

Electives

University credit courses may be taken as electives. They may come from the Faculties of Arts, Science, Engineering, Fine Arts, Management, Agricultural and Food Sciences among others, or with the permission of the Department of Architecture in special circumstances.

Supplies and Expenses

The Faculty of Architecture has an Information Technology Program Fee of \$400.00 for all enrolling students. The Information Technology Program Fee includes \$100.00 to go to a technology endowment fund. Remaining funds will be expended on current technology items of direct benefit to students.

The Faculty of Architecture offers Field Studies in Years 3 and 4 either as stand alone courses or in conjunction with a design studio offering. These may be regional, national or international. All related costs are to be borne by the students. A valid passport is required. Visas may also be required.

Please refer to the Faculty of Architecture website to note laptop computer and software specifications.

In addition to tuition, student fees, and related expenses, the estimated cost of materials, equipment, and textbooks for students in Environmental Design After Degree is approximately \$7,000 per year.

SECTION 5: COURSE DESCRIPTIONS

Environmental Design Course Descriptions-1000 Level

EVDS 1600 Introduction to Environmental Design Cr.Hrs. 3
(Formerly 079.160) An introduction to the philosophy and pragmatics of design and designing processes and methods. The focus will be on design as a creative, aesthetic and scientific endeavor, and will examine the challenges and roles of environmental designers in society. Available to non-Environmental Design students only.

EVDS 1602 Visual Literacy Cr.Hrs. 3
This course examines the contemporary visual environment, its critical historical influences, and more recent cultural impacts. Optics, the structure of images, and the importance of materiality will be examined through various modes of cultural production including emerging media and information networks.

EVDS 1660 History of Culture, Ideas and Environment 1 Cr.Hrs. 3
(Formerly 079.166) A brief history of the western creative imagination, part 1. Interdisciplinary survey of cultural periods and key works from the Foundations of Civilization to the Enlightenment, including literary readings, film screenings, and illustrated lectures and discussions. Available to non-Environmental Design students only.

EVDS 1670 History of Culture, Ideas and Environment 2 Cr.Hrs. 3
(Formerly 079.167) A brief history of the western creative imagination, part 2. Interdisciplinary survey of cultural periods and key works from the 19th to the 21st centuries, including literary readings, film screenings, and illustrated lectures and discussion. Prerequisite: EVDS 1660 (or 079.166). Available to non-Environmental Design students only.

EVDS 1680 Environmental Technology Cr.Hrs. 3
(Formerly 079.168) An examination of the scientific principles embodied in the natural laws which govern the science of building, landscape and environmental design in the context of sustainable development. Factors of climate, geology and natural resource systems are introduced. Co requisite: EVDS 1630.

Environmental Design Course Descriptions-2000 Level

EVDS 2100 Urban Media Lab Cr.Hrs. 3
An introduction to visual methods of representation and related media including drawing, photography and video. The intention is to critically engage the urban and suburban contexts as a laboratory for investigating cultural values, aesthetic issues, design principles, and representational techniques, 'prerequisite' to undertaking design studio work.

EVDS 2200 Ecology and Design Cr.Hrs. 3
An examination of principles of Ecology and Design works in which these tenets are considered, engaged, and/or demonstrated. Topics fundamental to the science of Ecology will theoretically structure the course content. Emphasis will be placed on understanding the forces and systems working within and between natural, social and human environments.

EVDS 2300 Materials, Structures and Assemblies Cr.Hrs. 3
This course provides an introduction to applied statics, construction materials and construction system assemblies for landscape, building, and interior constructions. Construction material properties and applications, including impacts on resource depletion and on sustainable building practices will be introduced along with basic strategies and methods to analyze and calculate forces in simple structures.

EVDS 2400 Visual Media 1 Cr.Hrs. 3
An introduction to technical and free-hand drawing processes and techniques, and in various media - to develop, to express, and to communicate design intentions. The focus will be directed to abstract and concrete methods of representation. Emphasis will be placed on the integral relationship between thinking, drawing, and making in relation to critically observing the world at large, and in relation to design studio work.

EVDS 2500 Design Studio 1 Cr.Hrs. 6
Introduction to the elements and principles of visual and spatial design, design process and techniques, requisite methods of representation and communication, and design intentions. Studio work will explore different ways of space and form-making, beginning at the site of the body, in both abstract and environmental contexts.

EVDS 2600 Tectonic Precedent Cr.Hrs. 3
An examination of seminal built works of environmental design, at a range of scales, from the 19th and 20th centuries, with an emphasis on examples that are representative of diverse positions of key issues in contemporary design practice. Methodologically, this course endeavours to critically evaluate the relationships between perception, intention, and making through the exploration of the material and tectonic nature of the work(s).

EVDS 2690 Design Since 1800 Cr.Hrs. 3
(Formerly 079.269) An examination of key architectural treatises of the 19th and 20th centuries that are representative of the predominant ideals of their time and the influence they have had in the construction of the built environment. Pre-requisite EVDS 1670 (or 079.167)

EVDS 2702 Natural and Human Systems Cr.Hrs. 3
An application of the scientific principles embodied in the natural laws which govern environmental design. Aspects of the bio-physical factors, energy, human physiology and perception, comfort, and resource management are reviewed in the context of sustainable planning and design practices.

EVDS 2800 Visual Media 2 Cr.Hrs. 3
This course bridges technical and freehand drawing introduced in Visual Media 1, with computer/digital media. This course advances contemporary digital media in relation to emerging modes of 2, 3, and 4 dimensional modes of representation, in the context of design studio work, and in relation to graphic standards associated with professional design practice.

EVDS 2900 Design Studio 2 Cr.Hrs. 6
An exploration of the fundamental relationships between space, form and order in the context of the built environment, from body to place. Pedagogical emphasis will be directed towards design process, cultural intentions, and environmental accountability.

Environmental Design Course Descriptions-3000 Level

EVDS 3250 Advanced Computing in Environmental Design Cr.Hrs. 3
(Formerly 079.325) Advanced Computing in Environmental Design builds upon skills obtained in the introductory course. The advanced course provides an opportunity for students to explore detailed applications of computational technologies in design & planning. Prerequisite EVDS 2800 or EVDS 2650 (079.265).

EVDS 3710 Special Topics Cr.Hrs. 3
(Formerly 079.371) Independent study related to environmental design. Content may vary according to the interest of the community, students, profession, and the faculty. Written consent of the instructor(s) and program coordinator required

EVDS 3740 Introduction to AutoCad in Design Cr.Hrs. 3

(Formerly 079.374) The course will familiarize the student with the Auto-Cad program. The course content begins at an introductory level and will progress to a level which will prepare the student for work within a professional office. The course will explore the use of AutoCad for the creation of presentation drawings as well as working drawings. Prerequisite: EVDS 2800 or ARCH 6370 or written permission of Instructor.

Environmental Design Architecture Course Descriptions-3000 Level**EVAR 3000 Pre-Modern Architectural History and Theory I Cr.Hrs. 3**

Provides a historical and theoretical understanding of early Greek, Roman, Gothic and non-western architectural topics and their influence. Content is explored using primary texts where possible, and through critical analysis of selected topics. May not be held for credit with the former EVDS 2690, EVDS 2610, ARCH 6320 or ARCH 6420.

EVAR 3002 Pre-Modern Architectural History and Theory II Cr.Hrs. 3

Provides a historical and theoretical understanding of Gothic and Renaissance architectural topics and their influence, up to the work of Claude Perrault. Content is explored using primary texts where possible, and through critical analysis of selected topics. May not be held for credit with EVDS 2620 or ARCH 6340.

EVAR 3004 ARCH TECH 1 Cr.Hrs. 3

Construction materials and structural theory in the analysis and design of simple wood-frame, masonry and light steel construction; fundamental passive energy systems and design strategies for material and energy reduction. May not be held for credit with EVDS 1690 or ARCH 6480.

EVAR 3006 Architectural Technology 2-Building Construction, Structures & Envelopes Cr.Hrs. 3

Architectural, environmental and technical aspects of construction focusing on low-rise and medium sized wood, steel and masonry construction including issues of material production/manufacturing, soils, foundation, envelope systems, basic mechanical systems and their integration and acoustic concerns. May not be held for credit with the former EVDS 2670, EVDS 2700, ARCH 6520 or ARCH 6530

EVAR 3008 Architecture Design Studio 1 Cr.Hrs. 9

An architectural study of the human condition in relation to the natural and built environment through design oriented research exploration, analysis, evaluation and interpretation of a selected subject of inquiry. Various ways of seeing and making are applied as tools for critical thinking to align content with modes of representation. May not be held for credit with former EVDS 2630 or ARCH 6380.

EVAR 3010 Architecture Design Studio 2 Cr.Hrs. 9

Building upon first term explorations, architectural propositions are developed that seek to clarify relations between human inhabitation and the physical environment in a regional context. Design principles influenced by programmatic, theoretical, historical, technological material and environmental criteria are examined. Prerequisite: EVAR 3008. May not be held for credit with former EVDS 2640 or ARCH 6390.

EVAR 3012 Architecture Technology Preparation: Structural Concepts Cr.Hrs. 3

A preparatory block course introducing the fundamentals of structural concepts in architecture that prepares students for the foundation technology courses in architecture. May not be held for credit with EVDS 2300 (or former EVDS 1690), EVDS 1700 or ARCH 6480.

EVAR 3014 Drawing: Freehand/Digital Cr.Hrs. 3

An introduction to drawing skills that allows students to become articulate in proposing and studying architecture through drawing. The course covers a range of media. May not be held for credit with the former ARCH 6532 or ARCH 6370

Environmental Design Architecture Course Descriptions-4000 Level**EVAR 4000 Modern Architectural History and Theory I Cr.Hrs. 3**

Provides a historical and theoretical understanding of the origins of modernity in architecture. Content is explored using primary texts where possible, and through critical analysis of selected topics. May not be held for credit with former EVAR 3700, EVAR 3470, ARCH 6460 or ARCH 6450.

EVAR 4002 Architectural Technology 3-Building Systems Cr.Hrs. 3

Integrated building systems focusing on multi-story steel and concrete construction including: passive and active heating, cooling, and ventilation methods, strategies and designs, electrical, water, communication, security, fire protection, and vertical transportation systems; and building code constraints. May not be held for credit with the former EVAR 3560, EVAR 3570, ARCH 6500 or ARCH 6510.

EVAR 4004 Architecture Design Studio 3 Cr.Hrs. 9

This studio focuses on the broader cultural implications of social interaction and the collective inhabitation of the built and natural environments. Architecture design explorations are influenced by a thorough examination of programmatic, theoretical, historical, technological, material and environmental criteria. May not be held for credit with the former EVAR 3680 or ARCH 6400

EVAR 4006 Modern Architectural History and Theory II Cr.Hrs. 3

Provides an historical and theoretical understanding of 20th century topics in architecture (western and non-western). Content is explored using primary texts where possible, and through critical analysis of selected topics, May not be held with the former EVAR 3330, EVAR 3480, ARCH 6440 or ARCH 6470.

EVAR 4008 Arch Tech 4: Comprehensive Design Technology Report Cr.Hrs. 3

A technical knowledge project-based course integrating with Arch Studio 4. Comprehensive technology issues include: site; material; energy; structures; construction; sustainability; environmental factors; building code; life safety. Student's work will include analysis, technical drawings and calculations. Corequisite: EVAR 4010 Arch Studio 4

EVAR 4010 Architecture Design Studio 4 Cr.Hrs. 9

The previous terms investigations are further developed and synthesized into a comprehensively designed environment. Architectural propositions seek to clarify specific relations between details and the overall design, through the integration of complex social, cultural, programmatic, theoretical, historical, technological, material and environmental principles, systems and criteria. Prerequisite: EVAR 4004 Architecture Design Studio 3. May not be held with the former EVAR 3690 or ARCH 6410. Corequisite: EVAR 4008 Arch Tech 4.

Environmental Design Interior Environment Course Descriptions-3000 Level**EVIE 3000 Field Studies Cr.Hrs. 3**

This course introduces students to the field of Interior Design through firsthand experience and study of innovative and significant examples of historic and contemporary work from interior design and related fields, in a major design center. The course consists of lectures and a field trip. Location may vary from year to year.

EVIE 3002 Interior Design History and Theory 1 Cr.Hrs. 3

Examination of concepts, theories and writings related to the development of Interior Design as a discipline, to Modernism. Not to be held for credit with the former EVIE 3650.

EVIE 3004 Materials, Assemblies and Detailing Cr.Hrs. 3

Workshop and lecture course on materials, joinery and invention. Review of the principles of framing, bracing, and tension applied to casegoods and furniture; exploration of a variety of soft and hard materials and con-

structions with an emphasis on sustainability. Not to be held for credit with the former EVIE 3630. Prerequisite: EVDS 2200.

EVIE 3006 Interior Design Media Cr.Hrs. 3

This course develops a student's ability to use drawing as a reflective, problem-solving, designing and visual communication tool; techniques for representing volume, depth and scale, and interfaces with digital photography and media are a focus.

EVIE 3008 Interior Design Studio 3.1 Cr.Hrs. 6

Interior Design studio exploring the body as the primary reference in design, and the semantic and cultural meanings of objects and architectural elements as mediators of space. Integration of drawing, design and making through projects.

EVIE 3010 Interior Design Studio 3.2 Cr.Hrs. 6

An in-depth investigation, by design, of the nature of interiors including the physical and perceptual, spatial elements and order, human involvement and experience. Exploration and development of spatial solutions using a variety of visual media. Not to be held for credit with the former EVIE 3680.

EVIE 3012 Interior Light and Colour Cr.Hrs. 3

This course examines interior lighting and colour theories and concepts emphasizing human and ecological issues, exploration of spatial design strategies and practices. Not to be held for credit with the former EVIE 3610.

EVIE 3014 Human Factors and Environmental Experience Cr.Hrs. 3

Theoretical and practical issues related to human characteristics, needs, behaviours, and interactions with and within the built interior environment.

EVIE 3016 Topics in Interior Design Cr.Hrs. 3

This course will explore topics at the cutting edge of interior design, examining political, economic, sociological and technological influences on current and future directions in interior design; examination of current research, writing, projects and works from related and diverse fields.

EVIE 3670 Digital Design Media Cr.Hrs. 3

(Formerly 079.367) An intermediate level computer applications elective focused on design, representation and communications. Specific course content to be determined by the areas of specialization available to the faculty and department on a yearly basis. Pre-requisite EVDS 2650 (or 079.265).

EVIE 3680 Design Studio 5 Cr.Hrs. 6

(Formerly 079.368) Arch., C.P.: Studies in the principles, vocabularies and methods of approach to architectural and environmental design. Studio work with specific projects to exercise the analytical, the conceptual and the developmental stages of design. Prerequisite: EVIE 2640 (or 079.264).

EVIE 3690 DESIGN STUDIO 6 Cr.Hrs. 6

(formerly 079.369) Studio projects which explore and elaborate systems of meaning in interior place making in the public realm; developing strategies and processes in the design of transitional interior environments. Pre-requisite EVIE 3680 (or 079.368).

Environmental Design Interior Environment Course Descriptions-4000 Level

EVIE 4000 Interior Design History and Theory 2 Cr.Hrs. 3

Examinations of concepts, theories and writings related to the development of interior Design as a discipline and profession, from Modernism to the present day. Prerequisite: EVIE 3002 Interior Design History and Theory 1. Not to be held for credit with the former EVIE 3660.

EVIE 4002 Indoor Systems 1 Cr.Hrs. 3

In-depth, whole building examination of various integrated active and passive environmental controls systems. Focus on working with existing commercial building construction and environmental systems when integrating new interior design and ecological concepts and strategies. Introduction to building performance assessment, construction drawings and schedules. Prerequisite: EVIE 3004 and EVIE 3012. Corequisite: EVIE 4010. Not to be held for credit with the former EVIE 3620.

EVIE 4004 Indoor Systems 2 Cr.Hrs. 3

Broad exploration of a variety of contemporary and innovative building technologies and their integration with interior design. Focus on ecological, new building construction concepts and measure, delivered in the context of integrated design team processes and building systems innovation. Integration and coordination of interior architectural elements with active and passive building systems. Prerequisite: EVIE 4002.

EVIE 4006 Design Methods and Processes Cr.Hrs. 3

Development of knowledge and abilities to collect, analyze, synthesize, interpret, and apply information for the purpose of identifying and solving interior design problems. Not to be held for credit with the former EVIE 3640.

EVIE 4008 Digital Media (AutoCAD) Cr.Hrs. 3

This course focuses on the creation of two-dimensional architectural working drawings in a set of construction documents through the use of advanced features in CAD. Students will learn the concepts of formatting units, text, dimensions, multi-leaders, and layouts, using both non-annotative and annotative scaling techniques. How to use CAD software in a three-dimensional environment to create realistic shapes is also included. May not be held with EVIE 3670.

EVIE 4010 Interior Design Studio 4.1 Cr.Hrs. 6

Projects that explore the interaction between urban context, programmatic requirements and design concepts; integration of building technology and three-dimensional spatial development; development of communication skills and methods. Not to be held with the former EVIE 3690. Prerequisite: EVIE 3010. Corequisite: EVIE 4002.

EVIE 4012 Interior Design Studio 4.2 Cr.Hrs. 6

Design studio with the potential for collaboration, exploring regional and global influences, communication technology, history and temporality in the design of interior environments.

EVIE 4014 Advanced Interior Design Media Cr.Hrs. 3

Focus on the concepts of building information modeling (BIM), parametric design, analysis, and construction documentation using current software. Demonstrates effect of this type of software on presentation and construction documentation through the use of intelligent building components and interdependent views of the building model, including acquisition of statistical and other quantitative information. Pre- or corequisite: EVIE 4008 or consent of instructor.

Environmental Design, Landscape + Urbanism Course Descriptions-3000 Level

EVLU 3000 History of Designed Environments Cr.Hrs. 3

A critical examination and appraisal of design for dwelling in the context of settlement with emphasis on representation of diverse positions on key issues in design practice. Studies will include consideration of cross-cultural precedents and lessons from around the world.

EVLU 3002 Site Planning Cr.Hrs. 3

An investigation of the relationship between natural and cultural processes in the formation of the built environment, including a review of the methods and strategies employed for site programming, inventory, analysis, and development at different scales of intervention.

EVLU 3004 Ecology and Design 2 Cr.Hrs. 3

This course will focus on an examination of ecological and technological perspectives on the planning, design and making of the physical environment. This will include a meshing of prediction and advocacy concerning new models of sustainable urbanization, focusing on green technology and infrastructure. Key theories and their application to landscapes at varied scales will be considered along with salient literature, current issues, design precedents and potentials for creative expression and interpretation. Prerequisite EVDS 2200.

EVLU 3006 Studio 3: Dwelling/ Precinct/ Everyday Life Cr.Hrs. 9

A studio/lecture course that examines the notion of dwelling through spatial design with a concentration at the scale of the precinct in the private to semi-private realm focusing on the needs of the individual, on spatial qualities, materials, and site design detail. Theoretical, analytical, conceptual, design, planning and communication skills in landscape + urbanism will be developed and applied in distinct projects. Emphasis is on habitat by design, issues of contested space, ecological design and sustainability. May include a mandatory field studies trip; location and cost to be determined on a yearly basis.

EVLU 3008 Studio 4: Networks and Infrastructure Cr.Hrs. 9

A critical exploration of analytical, conceptual, and developmental aspects of design of the public realm in an experimental studio setting. Social, political, economic, communication, and ecological networks will be studied at the scale of neighborhood and community in the urban realm.

EVLU 3010 Landscape and Urbanism Theory Cr.Hrs. 3

An examination through lectures, readings, seminars and essay assignments, of twentieth and twenty first century philosophical thinking, which has been influential in the theory and practice of landscape architecture, planning and urbanism. Emphasis is on ideas, paradigms, and manifestos. This will include a study of the social, political, religious, cultural, technological, and aesthetic forces behind landscape and urbanism, and the forms that these forces have generated.

EVLU 3012 Site Morphology and Grading Cr.Hrs. 3

An examination of the means and methods used to create landscapes that are shaped by earthwork grading. This will include the study of the forces, principles, and techniques in the modelling and manipulation of the ground plane and the resolution of cultural, ecological and hydrological design considerations implicit in landform design.

EVLU 3014 Placemaking Fundamentals Cr.Hrs. 3

An introduction to placemaking as an integrated community-based application of landscape and urbanism concepts, based on topical themes, such as the Great Neighbourhood or Edens Lost and Found.

Environmental Design, Landscape + Urbanism Course Descriptions- 4000 Level**EVLU 4000 Philosophy, Ethics and Aesthetics Cr.Hrs. 3**

An examination of philosophical issues and debates regarding ethics and aesthetics, and their influence and potential upon urban design and urban form in the past and present, and to speculate upon the future. Prerequisite: EVLU 3010.

EVLU 4002 Construction Materials Cr.Hrs. 3

A comprehensive introduction to construction materials, methods and processes. Examination of regulatory issues of human safety and techniques for communicating construction proposals with application to how this information is incorporated into contracts. Field trips to nurseries, quarries, lumber yards, and urban sites where students can observe materials transformed to comply with the requirements of designers. Prerequisite: EVLU 3012.

EVLU 4004 Inquiry by Environmental Design: Researching Space-Place Transformation Cr.Hrs. 3

An exploration of the design/research relationship, from a critical and creative thinking perspective will be the core of this course, viewing design and research as linked forms of inquiry into space-place transformation. A focus will be on design/research methods and approaches appropriate to informing and investigating designed environments and community design contexts.

EVLU 4006 Special Topics in Community Design Cr.Hrs. 3

This course will involve a critical examination of specific topics such as: health and community design; inner city environments; and Canadian community planning and design, and its contexts.

EVLU 4008 Plants, Ecosystems and Design Cr.Hrs. 3

The examination of cultural and technical aspects of designing with plants will be explored in an urban context through field investigations, lectures, seminars and assignments. Issues of plant identification, planting design types, their application to contemporary landscape architecture, technical requirements, planting details and ecological intergration in the urban environment will be included.

EVLU 4010 Community Design Process and Method: Advanced Placemaking Cr.Hrs. 3

An introduction to the integration of perception, intention and placemaking associated with manifestations of community, especially communities of interest, and systems of 'communities of communities'. A consideration of the relationship of space-place transformation and placemaking, via participatory design processes will be examined as part of a critical design and planning process.

EVLU 4012 Studio 5: Possible Urbanism(s) Cr.Hrs. 9

A radical exploration of analytical, conceptual, and socio-political aspects of urban public place in an experimental studio setting. An emphasis will be placed on design as mediation between competition demands. The studio incorporates the theory and application of three dimensional simulation technology in design.

EVLU 4014 Studio 6: Emergent Futures Cr.Hrs. 9

This studio integrates planning and design from the scale of urban infrastructure through to design detail in the context of landscape and urbanism. An emphasis is placed on the challenges of relevant equitable environmental and social design in the post-industrial world. The studio incorporates the theory and application of CAD and GIS technology in design.

EVLU 4016 History of Landscape and Urbanism Cr.Hrs. 3

An historical survey of human made landscapes and urban settlement form, patterns, and types, including major themes and movements. Prerequisite: EVLU 3000.

EVLU 4018 Principles of Urban Design Cr.Hrs. 3

This course will examine urban design principles, practices, and applications including political and social systems, and their impacts on the contemporary urban condition.

SCHOOL OF ART

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Chapter Contents

SECTION 1: DEGREE AND DIPLOMA PROGRAMS OFFERED

SECTION 2: ADMISSION REQUIREMENTS

- 2.1 Admission Requirements: Studio Programs
- 2.2 Admission Requirements: Art History Programs
- 2.3 Additional Admission Categories

SECTION 3: FACULTY ACADEMIC REGULATIONS

- 3.1 Scholastic Standards
- 3.2 University Written English and Mathematics Requirement
- 3.3 Attendance
- 3.4 Voluntary Withdrawal Policy
- 3.5 Residency Requirement
- 3.6 Dean's Honour List
- 3.7 Academic Dishonesty and Inappropriate Behaviour Policy

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

- 4.1 Bachelor of Fine Arts - Studio Programs
- 4.2 Diploma in Art Program
- 4.3 Bachelor of Fine Arts – Art History Programs
- 4.4 Elective Subjects and Academic Requirements

SECTION 5: COURSE DESCRIPTIONS

SECTION 1: DEGREE AND DIPLOMA PROGRAMS OFFERED

Program/Degree	Years to complete	Total Credit Hours
BFA General Studio	3*	93
BFA Honours Studio	4*	123
Diploma in Art	4*	93
BFA Art History General	3**	90
BFA Art History Honours	4**	120

* Admission is by direct entry from high school with portfolio or through University 1 with portfolio.

** This includes 24 to 30 credit hours of study in University 1 before admission to Art History. No portfolio required.

SECTION 2: ADMISSION REQUIREMENTS

The following is a summary of admission requirements in the School of Art. There is an annual admission quota and admission is competitive.

Entry requirements to the University of Manitoba are listed in the Admissions chapter of this Calendar.

All admission requirements, as well as application deadline dates and forms, are included in an applicant information bulletin available from the Admissions Office, Enrolment Services, 424 University Centre; this information is also posted on the School of Art's website under "[Undergraduate Admission Information](#)".

An acceptance deposit of \$100 is required and will be credited towards tuition when registration is complete.

2.1 Admission Requirements: Studio Programs

Bachelor of Fine Arts – General Studio Program

Initially, all students wishing to complete a Fine Arts studio degree must be admitted to the Bachelor of Fine Arts General Program. Admission to the Bachelor of Fine Arts General Program is directly from high school or from University 1. Grade 12 Art is recommended. In addition to academic standing in high school or University 1, each applicant must submit a portfolio. Information about the admission and portfolio requirements is available on the School of Art website under "[Undergraduate Admission Information](#)".

Bachelor of Fine Arts – Honours Studio Program

To transfer to the BFA Honours Program, a student must have completed 63 credit hours in the Bachelor of Fine Arts General Program and have a minimum grade point average of 2.5 (C+). Students who wish to transfer to the BFA Honours Program must contact the Student Advisor in the School of Art.

Diploma in Art

Admission to the Diploma in Art requires a high school diploma. Applicants must submit a portfolio and satisfy high school course requirements as described in the application bulletin available from the Admissions Office.

2.2 Admission Requirements: Art History Programs

Bachelor of Fine Arts Art History - General Program

Initially, all students wishing to complete a Fine Arts Art History degree must be admitted to the Bachelor of Fine Arts Art History General Program. No portfolio is required. To be admitted to this program students must first complete 24-30 credit hours in University 1, including 12 credit hours from the list that follows, and achieve a minimum degree GPA of 2.5.

- FAAH 1030 Introduction to Art 1A (3)
- FAAH 1040 Introduction to Art 2A (3)
- English Literature: ENGL 1310 Literary Topics (3); or ENGL 1200 Representative Literature (6); or ENGL 1300 Twentieth Century Literature (6).
- HIST 1200 or PHIL 1200 or 1510 or ASIA 1420 and ASIA 1430 (6)
- FA 1020, Math in Art or MATH 1020 or any other course that meets the University of Manitoba Math requirement (3)
- A language course - French, German, or Italian recommended (6)
- Science or Social Science elective (6)

NOTE: If only 24 credit hours are completed in year one, the student must take an additional 6 credit hours elsewhere in the program.

Bachelor of Fine Arts Art History - Honours Program

To transfer to the Art History Honours program, a student must successfully complete 69 credit hours of study in the Art History General Program, with a degree GPA of 2.5. Students who wish to transfer to the BFA Art History Honours program must contact the Student Advisor in the School of Art.

2.3 Additional Admission Categories

Mature Students: A mature student is eligible to enter the School of Art as a student in the Diploma in Art program. A Diploma student may transfer into the Bachelor of Fine Arts General Studio Program after completing 24 credit hours in the Diploma Program.

Transfer Students: A student seeking transfer to the School of Art from another faculty at the University of Manitoba should contact the School of Art Student Advisor regarding transfer of credit. Academic courses completed at other institutions will be assessed for equivalency only after a student is admitted to the School and paid the deposit. The maximum transferable to the B.F.A. General Program is 30 credit hours. The maximum transferable to the B.F.A. Honours Program is 60 credit hours.

Special Students: A special student is someone who is permitted by the Director of the School of Art to take courses for interest and whose basis of admission is normally possession of a first Fine Arts degree. The student should check with the School of Art Student Advisor first about the application; the student's course choice is dependent on previous courses taken as pre-requisites and space availability in the class.

Audit Students: Art history courses may be audited with the permission of the instructor. Studio courses cannot be audited.

Visiting Students: A visiting student can take courses in the School of Art on a letter of permission from the home university. The specific courses for which permission is granted must be listed in the Letter of Permission.

SECTION 3: FACULTY ACADEMIC AND OTHER REGULATIONS

The provisions of the chapter General Academic Regulations and Requirements University Policies apply to all students. In addition, the School of Art has the following regulations and requirements.

Students should be aware that some studio mediums will have health and safety concerns. Faculty and instructors will, for each course that they teach, provide all students with the necessary health and safety instructions for that class.

3.1 Scholastic Standards

General Scholastic Standards for all Degree and Diploma Programs:

A minimum grade of "C" is required in all School of Art courses unless otherwise stated. For courses taken in other faculties, the minimum passing grade is "D".

All students are automatically assessed by Aurora Student at the end of each term, for those students with a term GPA below 2.0, an Academic Warning will appear on their record.

Students who fall below the minimum GPA required in their program of study will be placed on probation at the end of an academic year. Students must clear the probationary status by the end of the next academic year or may be required to withdraw permanently from the School of Art.

Studio Programs:

Students in the BFA General degree must maintain a minimum Degree GPA of 2.0.

Students in the Diploma Program and BFA Honours degree must maintain a minimum Degree GPA of 2.5.

Students in BFA Honours Studio must obtain a minimum grade of B for STDO 4810 (Senior Studio 1), STDO 4820 (Senior Studio 2), STDO 4910 (Honours Seminar 1) and STDO 4920 (Honours Seminar 2).

Studio First Class Honours:

Students admitted to the School of Art prior to September 2014 upon completion of the requirements for the BFA Honours Program, a student who achieves a degree GPA of 3.5 in courses applicable to the last two years of the Honours program will be awarded the BFA Honours Degree First Class.

Students admitted to the School of Art in September 2014 and thereafter who graduate with a B.F.A.(Honours) degree will have their degree granted with "First Class Honours" if they obtain a Degree Grade Point Average of 3.75 or better in all courses required for graduation in the program.

Art History Programs:

Students in the BFA Art History General degree must maintain a minimum Degree GPA of 2.0.

Students in the BFA Art History Honours degree must maintain a minimum Degree GPA of 2.5.

Art History First Class Honours:

Students admitted to the School of Art prior to September 2014 upon completion of the requirements for a BFA Art History Honours Program, a student who achieves a degree GPA of 3.75 in courses taken in the last two years will be awarded BFA Art History Honours Degree First Class.

Students admitted to the School of Art in September 2014 and thereafter who graduate with a B.F.A. Art History (Honours) degree will have their degree granted with "First Class Honours" if they obtain a Degree Grade Point Average of 3.75 or better in all courses required for graduation in the program.

Field Trip Policy

The Field Trips are a requirement for all School of Art programs. It is the student's responsibility to acquire all necessary travel documentation at least three months prior to departure. This includes a valid passport, and for international students, a travel visa for the United States. Students under the age of eighteen require written parental or guardian permission. Students with questions should check with [Canada Border Services Agency](#) to determine the correct documentation required for their citizenship status.

Exemption is granted only on compassionate, medical or legal grounds. In case of accommodation, the student must register for the field trip and pay the fee and an alternate assignment must be completed successfully for credit.

3.2 University Written English and Mathematics Requirement

Students in the BFA Studio and Art History Programs are required to complete, within the first 60 credit hours of their programs, the Written English and Mathematics requirements.

The School of Art accepts all courses from any department with a "W" designation to fulfill the Written English Requirement for BFA Studio General/Honours Students. Students in the studio programs are recommended to take FAAH 2930, Writing About Art to fulfil the "W" Requirement. Art History General and Art History Honours Degree Programs require three credit hours of any English Literature.

The Mathematics requirement for all Studio and Art History Degree Programs in the School of Art can be met through FA 1020 Mathematics in Art, or any other university course designated as satisfying the mathematics requirement.

Students in the Diploma Program do not need to fulfil the Written English or Mathematics requirement.

Refer to the chapter on General Academic Regulations and Requirements of this Calendar for the complete Written English and Mathematics policy.

3.3 Attendance

The School of Art supports and follows the University of Manitoba policies on attendance and withdrawal found in the General Calendar (General Academic Regulations - Attendance and Withdrawal) which states that regular attendance is expected of all students in all courses. Students who fail to attend class but do not withdraw by each term's stated Voluntary Withdrawal deadline will receive a grade of F.

3.4 Voluntary Withdrawal Policy

Refer to the general policy on voluntary withdrawal from programs and courses in the chapter, General Academic Regulations and Requirements.

3.5 Residency Requirement

Studio Programs:

A student in the BFA General Studio degree may take up to 30 credit hours applicable to the program at another institution allowable for transfer. All Senior Studio courses must be taken at this University.

3.6 Dean's Honour List

Students registered in a minimum of 9 credit hours within a single term and who achieve a Term Grade Point Average of 3.3 or better will receive the notation of "Dean's Honour List" on their transcript for that term.

3.7 Academic Dishonesty and Inappropriate Behaviour Policy

The School of Art supports and follows the University of Manitoba policies on academic dishonesty found in the General Calendar (General Academic Regulations, Academic Dishonesty).

The School of Art will follow the University of Manitoba's policies on inappropriate behavior, "Student Discipline Bylaw", found in the General Calendar (University Policies, Student Discipline Bylaw).

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

The School of Art offers degrees that cover the history, theory, and techniques of art. Students may also take elective courses outside the School of Art. These programs provide a general cultural background as well as the technical education necessary to become an educator, or a professional creative artist in fine art or applied fields. The programs reflect the assumption that in a time of fluctuating cultural values, technical training alone is not sufficient for significant work in any branch of the arts.

The first two years offer basic instruction in the fundamental principles of drawing, design and representation. In the fine arts studio electives in second year, the student selects courses that provide specialization in one or more of the following: ceramics, drawing, graphic design, painting, photography, print media, sculpture and video.

The School of Art offers a General and an Honours Degree Program in Studio. In order to be transferred from the General Degree to the Honours Degree Programs, a student must have completed 63 credit hours and have a minimum grade point average of 2.5 (C). The Student Advisor will be able to transfer the student from General to Honours.

In order to be eligible to do the final fourth year Honours year (the Senior Studio and Honours Seminar courses), students in the Honours Degree must have completed 15 credit hours of Studio courses at the 3000 level and have successfully passed a minimum of 94 credit hours.

The school reserves the right to retain temporarily or permanently any work done by students in fulfilment of course requirements.

BFA General Degree (93 credit hours)		
YEAR 1 (33 credit hours)	YEAR 2 (30 credit hours)	YEAR 3 (30 credit hours)
STDO 1210, STDO 1240, STDO 1410, STDO 1510, FA 1990, FAAH 1030, STDO 1250, STDO 1450, STDO 1470, FAAH 1040	FAAH 2080	FA 3440, FAAH 3202, FAAH 3212
3 credit hours - Written English Requirement ^{1,2}	15 credit hours in Fine Arts Studio Electives	15 credit hours in Fine Arts Studio Electives ⁴
3 credit hours - Mathematics Requirement ^{1,3}	6 credit hours in Art History Electives	3 credit hours in Art History Electives
	6 credit hours in Academic Electives ⁵	6 credit hours in Academic Electives ⁵

BFA Honours Degree (123 credit hours)			
YEAR 1 (33 credit hours)	YEAR 2 (30 credit hours)	YEAR 3 (30 credit hours)	YEAR 4 (30 credit hours)
STDO 1210, STDO 1240, STDO 1410, STDO 1510, FA 1990, FAAH 1030, STDO 1250, STDO 1450, STDO 1470, FAAH 1040	FAAH 2080	FA 3440, FAAH 3202, FAAH 3212	STDO 4810, STDO 4820, STDO 4910, STDO 4920
3 credit hours - Written English Requirement ^{1,2}	15 credit hours in Fine Arts Studio Electives	15 credit hours in Fine ⁴ Arts Studio Electives	6 credit hours of Fine Arts Studio Electives
3 credit hours - Mathematics Requirement ^{1,3}	6 credit hours in Art History Electives	3 credit hours in Art History Electives	6 credit hours of Academic Electives
	6 credit hours in Academic Electives ⁵	6 credit hours in Academic Electives ⁵	

Notes:

1. Students are recommended to complete these requirements in the first 60 credit hours of their program.
2. The School of Art offers FAAH 2930 - Writing About Art, to fulfil this requirement. See the General Academic Regulations section of the Undergraduate Calendar for a full list of courses that meet this requirement.
3. The School of Art offers FA 1020 - Mathematics in Art, to fulfil this requirement. See the General Academic Regulations section of the Undergraduate Calendar for a full list of courses that meet this requirement.
4. Students wishing to pursue the BFA Honours program should be advised that a minimum of 15 credit hours of 3000 level studio courses must be taken to be eligible to register for STDO 4810 and STDO 4910
5. Students are permitted to take any courses to fulfill the Academic Elective requirement. This includes courses taught by the School of Art such as Studio or Art History courses or courses taught by other faculties.

ACADEMIC CALENDAR 2015-2016

4.2 Diploma in Art Program

The Diploma in Art is a four-year program, essentially technical in nature, which prepares students for careers as practising artists in either the fine or applied fields. Beginning in Fall 2014 a minimum of 93 credit hours are required for the Diploma in Art. Students admitted to Diploma Program in the School of Art prior to September 2014 should contact the School of Art Office for more information.

Diploma in Art (93 credit hours)			
YEAR 1 (27 credit hours)	YEAR 2 (27 credit hours)	YEAR 3 (27 credit hours)	Year 4 (12)
STDO 1210, STDO 1240, STDO 1410, STDO 1510, FA 1990, FAAH 1030, STDO 1250, STDO 1450, STDO 1470, FAAH 1040	Choose 24 credit hours from the following courses: STDO 2210, STDO 2220, STDO 2230, STDO 2250, STDO 2400, STDO 2500, STDO 2502, STDO 2510, STDO 2512, STDO 2520, STDO 2522, STDO 2610, STDO 2630, STDO 2640 3 credit hours in Fine Arts Studio Electives	FA 3440 (0 credit hours), Choose 24 credit hours from the following courses: STDO 3330, STDO 3370, STDO 3420, STDO 3460, STDO 3480, STDO 3830, STDO 3840 3 credit hours in Fine Arts Studio Electives	Choose 12 credit hours from the following courses: STDO 4450, STDO 4520, STDO 4530, STDO 4550, STDO 4700

4.3 Bachelor of Fine Arts - Art History Programs

The Art History program at the School of Art offers students an opportunity to consider, in a cultural context, both Western and non-Western artistic traditions with an emphasis on the former from the Renaissance to the present. While all courses acknowledge methodological issues, the program also offers courses in art theory and criticism at the second- and third-year levels. Students enrolled in this program broaden their knowledge of art production with studio electives.

Program Requirements:

BFA Art History General Degree (90 credit hours)			
YEAR 1 (30 credit hours)	YEAR 2 (30 credit hours)	YEAR 3 (30 credit hours)	
University 1 FAAH 1030, FAAH 1040 3 credit hours - English Literature Requirement ^{1,2} 3 credit hours - Mathematics Requirement ^{1,3} 6 credit hours - Language Requirement (French, German, or Italian recommended) 6 credit hours – Social Science or Science Elective Choose 6 credit hours from the following courses: HIST 1200, PHIL 1200, ASIA 1420 and ASIA 1430	FA 1990 9 credit hours of 1000 level studio courses ⁴ 6 credit hours in Academic or Studio Electives ^{4,5} 15 credit hours from the following courses: CLAS 2670, CLAS 2680, FAAH 1100, FAAH 2060, FAAH 2070, FAAH 2080, FAAH, 2090, FAAH 2110	FA 3440, FAAH 3212 Studio Electives (9 credit hours at the 1000 level or 6 credit hours at the 2000 level) ^{4,6} Art History Electives 15 or 18 credit hours (dependent on the whether 100 level or 200 level studio electives have been chosen.) One of the following courses: FAAH 3260 or FAAH 3270	

BFA Art History Honours Degree (120 credit hours)			
YEAR 1 (30 credit hours)	YEAR 2 (30 credit hours)	YEAR 3 (30 credit hours)	YEAR 4 (30 credit hours)
University 1 FAAH 1030, FAAH 1040 3 credit hours - English Literature Requirement ^{1,2} 3 credit hours - Mathematics Requirement ^{1,3} 6 credit hours - Language Requirement (French, German, or Italian recommended) 6 credit hours – Social Science or Science Elective Choose 6 credit hours from the following courses: HIST 1200, PHIL 1200, ASIA 1420 and ASIA 1430	FA 1990 9 credit hours of 1000 level studio courses ⁴ 6 credit hours in Academic or Studio Electives ^{4,5} 15 credit hours from the following courses: CLAS 2670, CLAS 2680, FAAH 1100, FAAH 2060, FAAH 2070, FAAH 2080, FAAH, 2090, FAAH 2110	FA 3440, FAAH 3212 Studio Electives (9 credit hours at the 1000 level or 6 credit hours at the 2000 level) ^{4,6} Art History Electives 15 or 18 credit hours (dependent on the whether 1000 level or 2000 level studio electives have been chosen.) One of the following courses: FAAH 3260 or FAAH 3270	18 credit hours of Art History Electives 12 Other Academic or Studio Electives (Honours Students wishing to take more than the 18 credit hours of Art History courses listed above may use their Academic Electives to do so.) ⁴

NOTES:

1. Students are recommended to complete these requirements in the first 60 credit hours of their program.
2. The School of Art offers FA 1020 - Mathematics in Art, to fulfil this requirement. See the General Academic Regulations section of the Undergraduate Calendar for a full list of courses that meet this requirement.
3. The English Literature Requirement can be fulfilled by any course taught by the English Department under the course code ENGL.
4. Studio Electives can be fulfilled by any course taught by the School of Art under the course code STDO except STDO 1510 – Art Now which is not considered a Studio Elective course for the purposes of this program.
5. Academic Electives can be fulfilled by courses from departments outside of the School of Art.
6. Most 2000 level studio courses will require completion of a minimum 21 credit hours of 1000 level studio courses therefore students should be advised that this component is normally fulfilled by 9 credit hours of 1000 level courses.

4.4 Elective Subjects and Academic Requirements

In addition to the Art History courses in the School of Art, the following courses from other faculties fulfil the Art History elective requirement. Not all courses are offered every year.		
CLAS 2670	Greek Art and Archaeology	3
CLAS 2680	Roman Art and Archaeology	3
RLGN 2570	Indian Religious Art and Architecture	3
TXSC 2420	History of Textiles	3

SECTION 5: COURSE DESCRIPTIONS

Fine Arts Course Descriptions- Fine Arts-1000 Level

FA 1020 Mathematics in Art Cr.Hrs. 3

(Formerly 054.102) Specific theory, structuring systems, and mathematical methods and principles used in works of art from various historical periods and contexts will be explored in relation to Euclidean and non-Euclidean geometries. Topics include linear perspective; shapes, patterns, balance and symmetry; ratio, proportion, and harmony; and order, dynamics, and chaos. The course will be one half art and one half mathematics, team-taught by faculty from the School of Art and the Department of Mathematics. This course is also given in the Department of Mathematics as MATH 1020. This is a terminal course and may not be used as a prerequisite for other Mathematics courses. This course cannot be used as part of an Honours, Major, General or Minor program in the mathematical sciences. Not available to any student already holding a grade of "C" or better in any Mathematics courses with the exception of MATH 1010 (136.101), MATH 1190, MATH 1191 (136.119). Not to be taken concurrently with any other Mathematics course with the exception of MATH 1010, MATH 1190, or MATH 1191. Not to be held for credit with MATH 1020 (136.102). No prerequisite.

FA 1990 First Year Field Trip Cr.Hrs. 0

(Formerly 054.199) A field trip conducted by members of faculty. When the field trips are destined for the United States, students requiring a visa should make arrangements to obtain the visa at least 90 days before field trip departure date. A field trip exemption is not grantable except under extreme/extraordinary/visa issues circumstances. The field trip is required for a BFA General Degree and the Diploma program. Students unable to obtain a visa should contact their student advisor.

Fine Arts Course Descriptions-Fine Arts-3000 Level

FA 3440 Field Trip Cr.Hrs. 0

(Formerly 054.344) A field trip conducted by members of faculty. When the Field Trips are destined for the United States, students requiring a visa should make arrangements to obtain the visa at least 90 days before field trip departure date. A field trip exemption is not grantable except under extreme/extraordinary/visa issues circumstances. The field trip is required for a BFA General Degree and the diploma program. Students unable to obtain a visa should contact their student advisor. Prerequisite: First Year Field Trip. This course is graded pass/fail.

Fine Arts Course Descriptions-Fine Arts Art History-1000 Level

FAAH 1030 Introduction to Art 1A Cr.Hrs. 3

(Formerly 054.103) A basic study/survey of world art history and theory to the early Renaissance. May not be held for credit with FAAH 1050 (or 054.105) or the previous 054.124 or 054.130. (Formerly first half of 054.124) This course is a prerequisite to further study in art history and theory of art.

FAAH 1040 Introduction to Art 2A Cr.Hrs. 3

(Formerly 054.104) A basic study/survey of world art history and theory from the Renaissance to the present. May not be held for credit with FAAH 1060 (or 054.106) or the previous 054.124 or 054.130 or 054.104.

FAAH 1100 Survey of Asian Art Cr.Hrs. 3

An introductory survey of the arts of India, China and Japan from prehistory to the present. May not be held with FAAH 2100 (or 054.210 or 054.247 or 054.248).

Fine Arts Course Descriptions-Fine Arts Art History-2000 Level

FAAH 2060 Medieval to Early Renaissance Art and Architecture Cr.Hrs. 3

(Formerly 054.206) An introduction to the study of Medieval art and architecture in Europe, from the very beginnings of a specifically Christian artistic tradition to the beginning of the Renaissance. Prerequisite: FAAH 1030 (or 054.103). May not be held with 054.206.

FAAH 2070 Renaissance to Baroque Art and Architecture Cr.Hrs. 3

(Formerly 054.207) An introduction to the study of Renaissance art and architecture up to the Baroque in the context of the social, political and economic circumstances of this time. Prerequisite: FAAH 1040 (or 054.104) or written permission of the instructor. May not be held with 054.207.

FAAH 2080 Modern to Contemporary Art Cr.Hrs. 3

(Formerly 054.208) A study of the major movements, themes, and media of Western Art from the late 18th century to the present. Prerequisite: FAAH 1040 (or 054.104). May not be held with 054.208.

FAAH 2090 Art of the North American Aboriginal Peoples Cr.Hrs. 3

(Formerly 054.209) A study of the art and artifacts of the indigenous peoples of North America (other than the Inuit). No prerequisite. May not be held for credit with the previous 054.373.

FAAH 2110 Women and Art Cr.Hrs. 3

(Formerly 054.211) This art history course will examine the aesthetics, ideology and social conditions that have shaped women's relationships to the visual arts and to art history, as artists, as patrons, and as subject matter. No prerequisite.

FAAH 2910 Field Studies in Art History I Cr.Hrs. 3

(Formerly 054.291) This off-campus travel course will provide students with the opportunity to study firsthand the art and architecture of a particular city or region in a broad cultural context. Course location may vary from year to year. Offered during Summer Session only. Prerequisite: Written permission of instructor.

FAAH 2920 Field Studies in Art History 2 Cr.Hrs. 3

(Formerly 054.292) This off-campus travel course will provide students with the opportunity to study firsthand the art and architecture of a particular city or region in a broad cultural context. Course location may vary from year to year. Offered during Summer Session only. Prerequisite: Written permission of instructor.

FAAH 2930 Writing about Art Cr.Hrs. 3

This course is designed to give students in Art History and Studio programs the opportunity to develop their writing skills with a focus on academic and critical writing on both historical and contemporary art. The practical needs of professional artists will also be covered. Prerequisites: FAAH 1030 or FAAH 1040 or FAAH 1100. May not be held with FA 2620.

Fine Arts Course Descriptions-Fine Arts Art History-3000 Level

FAAH 3130 Topics in Medieval Art and Architecture Cr.Hrs. 3

(Formerly 054.313) Significant topics in Medieval art and architectural history. Topic will vary from year to year. Prerequisite: FAAH 2060 (or 054.206) or written permission of the instructor.

FAAH 3140 Topics in Renaissance and Baroque Art and Architecture Cr.Hrs. 3

(Formerly 054.314) Significant topics in Renaissance and Baroque art and architectural history. Topic will vary from year to year. Prerequisite: FAAH 2070 (or 054.207) or written permission of the instructor.

FAAH 3150 Topics in 18th and 19th Century Art Cr.Hrs. 3

(Formerly 054.315) Significant topics in 18th and 19th century art history. Topic will vary from year to year. Prerequisite: FAAH 2070 (or 054.207) or FAAH 2080 (or 054.208) or written permission of the instructor.

FAAH 3160 Topics in 20th Century Art Cr.Hrs. 3

(Formerly 054.316) Significant topics in 20th century art history. Topic will change from year to year. Prerequisite: FAAH 2080 (or 054.208) or written permission of the instructor.

FAAH 3180 History of Photography Cr.Hrs. 3

(Formerly 054.318) The development of photography from its origins to the present. May not be held for credit with the 054.318. Prerequisite: FAAH 1040 (or 054.104) or written permission of the instructor.

FAAH 3190 History of Ceramics Cr.Hrs. 3

(Formerly 054.319) This course will examine the history of ceramics, extending from prehistory in Asia to recent work in Europe, the United States and Canada. No prerequisite, or written permission of instructor, but STDO 2330 (Ceramics 1) will be helpful. May not be held with 054.319.

FAAH 3200 Art in New Media Cr.Hrs. 3

(Formerly 054.320) This course will consider art produced in non-traditional media during the Modern era, i.e. since the 18th century, with emphasis on developments during the 20th century and particularly the last 40 years. Prerequisite: FAAH 1040 or written permission of the instructor. May not be held with 054.320.

FAAH 3202 Contemporary Art History Cr.Hrs. 3

This course will consider the art history of the past few decades with an emphasis on recent and contemporary developments. Prerequisite: FAAH 2080 (054.208) or written permission of the instructor.

FAAH 3212 Introduction to The Theory of Art Cr.Hrs. 3

This lecture course is an introduction to major theoretical and critical approaches to art. The course will explore theories regarding formal aspects of art as well as social, cultural and ideological concerns, historically significant critical movements, and issues of production, exhibition and reception. May not be held with FAAH 3210. Prerequisites: FAAH 1030 and FAAH 1040; or FAAH 1050 and FAAH 1060.

FAAH 3220 Topics in Aboriginal Art Cr.Hrs. 3

(Formerly 054.322) This course will cover significant topics in the art of the North American Aboriginal peoples, including the Inuit. Topic will vary from year to year. Prerequisite: FAAH 2090 (or 054.209) or FAAH 3430 (or 054.343), as appropriate, or written permission of the instructor.

FAAH 3230 Chinese Art and Architecture Cr.Hrs. 3

(Formerly 054.323) A survey of the art and architecture of China beginning with the Shang-Yin Period (2000 BCE) and continuing to the present. May not be held for credit with the previous 054.247 or 054.323. Prerequisite: FAAH 2100 (or 054.210) or FAAH 1100 or written permission of the instructor.

FAAH 3240 Japanese Art and Architecture Cr.Hrs. 3

(Formerly 054.324) A survey of the art and architecture of Japan beginning with the Jomon Period (300 BCE to 300 CE) and continuing through the Heisei Period (1989 - present). May not be held for credit with the 054.248 or 054.324. Prerequisite: FAAH 2100 (or 054.210) or FAAH 1100 or written permission of the instructor.

FAAH 3250 Topics in Art History Cr.Hrs. 3

(Formerly 054.325) This course will vary from year to year depending on the needs of students and the interests and availability of instructors. May not be taken for credit with a course equivalent to the topic currently offered. Prerequisite: Any 2nd year course or written permission of instructor.

FAAH 3260 Canadian Art and Architecture to World War 2 Cr.Hrs. 3

(Formerly 054.326) A study of Canadian art up to World War 2. Prerequisite: FAAH 1040 or written permission of the instructor. Not to be held with 054.326.

FAAH 3270 Canadian Art Since World War 2 Cr.Hrs. 3

(Formerly 054.327) A study of Canadian art from World War 2 to the present. Prerequisite: FAAH 1040 or written permission of the instructor. Not to be held with 054.327.

FAAH 3280 Early Byzantine Art and Architecture Cr.Hrs. 3

(Formerly 054.328) A study of the origin and evolution of early Byzantine Art and Architecture. Prerequisite: FAAH 1030 and FAAH 1040 or FAAH 2060 or written permission of the instructor. Not to be held with 054.328.

FAAH 3290 Later Byzantine Art and Architecture Cr.Hrs. 3

(Formerly 054.329) A study of later Byzantine Art and Architecture to the end of the Middle Ages. Special emphasis will be placed on the influence of Byzantine art on the modern traditions of Eastern Europe. Prerequisite: FAAH 3280, or (FAAH 1030 and FAAH 1040), or FAAH 2060, or written permission of the instructor. May not be held with 054.329 or 054.387.

FAAH 3430 Inuit Art Cr.Hrs. 3

(Formerly 054.343) The history and analysis of Inuit Art. Prerequisite: FAAH 1030 and FAAH 1040 or FAAH 2090; or written permission of the instructor. Not to be held with 054.358 or 054.343.

FAAH 3590 Islamic Art and Architecture Cr.Hrs. 3

(Formerly 054.359) A contextual and thematic study of Islamic art and architecture beginning in the 7th century and continuing through the present. Prerequisites: FAAH 1030 and FAAH 1040 or FAAH 2100 (or 054.210) or FAAH 1100. May not be held with 054.359.

FAAH 3780 Twentieth Century American Art Until 1950 Cr.Hrs. 3

(Formerly 054.378) Realism, modernism, and regionalism are among the topics given special emphasis in this study of late 19th and 20th century American art. Prerequisite: one 2000-level in the appropriate area as defined by the instructor, or written permission of the instructor.

FAAH 3930 Introduction to Curatorial Studies Cr.Hrs. 3

A survey introduction to the theory and practice of art display and gallery collecting. Prerequisite: FAAH 2080 or by permission of the instructor.

FAAH 3940 History of Visual Communication Cr.Hrs. 3

A concentration of the advent of Modernism in visual communication and subsequent graphic design movements in the twentieth century. Prerequisites: STDO 2660 or [FAAH 1030 and FAAH 1040]. May not be held with STDO 3960.

Fine Arts Course Descriptions-Fine Arts Art History-4000 Level**FAAH 4060 Seminar in Art Theory and Criticism Cr.Hrs. 3**

(Formerly 054.406) A seminar treating selected topics in the theory and criticism of art. Prerequisite: either FAAH 3210 (or 054.321); the former 054.257, 054.340, or 054.380; or written permission of the instructor.

FAAH 4070 Seminar in Art History 1 Cr.Hrs. 3

(Formerly 054.407) Seminar treating special topics in Art History. May not be taken for credit if the topic is the same as that previously offered in 054.447, 054.465, 054.466, 054.474, 054.475, 054.476, or 054.483. Prerequisite: one 300-level in the appropriate area as defined by the instructor, or written permission of the instructor.

FAAH 4090 Seminar on Contemporary Issues in Art Cr.Hrs. 3

(Formerly 054.409) A seminar treating contemporary issues in art. The topic varies from year to year. Prerequisite: one 3000-level course in the appropriate area as defined by the instructor, or written permission of the instructor.

FAAH 4250 Seminar on Curatorial Studies Cr.Hrs. 3

Students receive hands-on experience within a critical context of curating an exhibition. Instructional methods include seminar format and practicum in School of Art Gallery. Prerequisites: FAAH 3930 and one 3000-level Art History course or by permission of the instructor.

FAAH 4710 Directed Study 1 Cr.Hrs. 3

(Formerly 054.471) Directed study in art history. Prerequisite: Written permission of instructor and director.

FAAH 4720 Directed Study 2 Cr.Hrs. 3

(Formerly 054.472) Directed study in art history. Prerequisite: Written permission of instructor and director.

Fine Arts Course Descriptions-Fine Arts Studio Courses-1000 Level

STDO 1210 Drawing: Studio 1 Cr.Hrs. 3

Students are introduced to key concepts and competencies used in contemporary drawing practice. Prerequisite for further study in fine arts studio courses. May not be held with STDO 1200 (054.120).

STDO 1240 Figure Study 1 Cr.Hrs. 3

Traditional and experimental approaches to rendering the figure, culminating in the production of a portfolio of drawings. Prerequisite to further study in the Fine Arts Studio courses. May not be held with STDO 1200 (054.120) or STDO 1230.

STDO 1250 Drawing: Studio 2 Cr.Hrs. 3

Building on competencies developed in STDO 1210 Drawing: Studio 1, students integrate individual research with methods and materials of contemporary drawing. Prerequisite for further study in fine arts studio courses. May not be held with STDO 1200 (054.120). Prerequisite: STDO 1210.

STDO 1410 Visual Language Cr.Hrs. 3

An introduction to communication in contemporary visual art through traditional and experimental 2D and 3D modes. Prerequisite for further study in fine arts studio courses. May not be held with STDO 1200 (054.120) or STDO 1220 (054.122).

STDO 1450 Open Studio 1 Cr.Hrs. 3

Expanding concepts and ideas developed in Visual Language, students investigate the nature of contemporary art and design. Prerequisite for further study in fine arts studio courses. May not hold with STDO 1200 (054.120) or STDO 1220 (054.122). Prerequisite: STDO 1410.

STDO 1470 Materials Studio Cr.Hrs. 3

Students choose among individual studio area modules to learn material technologies used in art, facilitating students' ability to work in School of Art workshops. Prerequisite for further study in fine arts studio courses. May not be held with STDO 1220 (054.122). Prerequisite: STDO 1410.

STDO 1510 Art Now Cr.Hrs. 3

Introduction to current activities in art practices through gallery talks/visits, journal writing, formal critique methods and research methodology. It supports FA 1990 (Field Trip) which all first year BFA students must take. Pre-requisite to further study in Fine Arts Studio courses. May not be held with STDO 1200 (054.120), STDO 1220 (054.122) or STDO 1430.

Fine Arts Course Descriptions-Fine Arts Studio Courses-2000 Level

STDO 2210 Sculpture 1 Cr.Hrs. 6

(Formerly 054.221) This course introduces materials, processes and ideas informing the making of contemporary sculptural practices. Prerequisites: Successful completion of 21 credit hours of 1000-level STDO courses. May not be held with 054.221.

STDO 2220 Painting 1 Cr.Hrs. 6

(Formerly 054.222) Basic instruction in oil painting and pictorial composition. Prerequisite: Successful completion of 21 credit hours at 1000-level STDO courses. May not be held with 054.222.

STDO 2230 Ceramics 1 Cr.Hrs. 6

(Formerly 054.223) Introduction to ceramic art, including contemporary processes, techniques, and history. Prerequisite: Successful completion of 21 credit hours at 1000-level STDO courses. May not be held with 054.223.

STDO 2250 Drawing 1 Cr.Hrs. 6

Creative use of drawing with emphasis on the human figure. Prerequisites: Successful completion of 21 credit hours at 1000-level STDO courses. May not be held with STDO 2240 (054.224) or (054.220).

STDO 2400 Photography 1 Cr.Hrs. 6

(Formerly 054.240) Introduction to the camera and photographic techniques with problems in creative visual expression. Prerequisite: Successful completion of 21 credit hours at 1000-level STDO courses. May not be held with 054.240.

STDO 2460 Digital Photography 1 Cr.Hrs. 6

This is a Studio course introducing the basic technical foundation and critical understanding of contemporary photo-based image production. Pre-requisites: Successful completion of 21 credit hours at 1000-level STDO courses. May not be held with STDO 2450.

STDO 2500 Printmaking Intaglio A Cr.Hrs. 3

An introduction to the basic techniques in Intaglio. Prerequisites: Successful completion of 21 credit hours at 1000-level STDO courses.

STDO 2502 Printmaking Intaglio B Cr.Hrs. 3

A continuation in the basic techniques in Intaglio. Prerequisites: STDO 2500 or 054.255 or STDO 2550.

STDO 2510 Printmaking Silkscreen A Cr.Hrs. 3

An introduction to the basic techniques in Silkscreen. Prerequisites: Successful completion of 21 credit hours at 1000-level STDO courses.

STDO 2512 Printmaking Silkscreen B Cr.Hrs. 3

A continuation in the basic techniques in Silkscreen. Prerequisites: STDO 2510 or 054.255 or STDO 2550.

STDO 2520 Printmaking Lithography A Cr.Hrs. 3

An introduction to the basic techniques in Lithography. Prerequisites: Successful completion of 21 credit hours at 1000-level STDO courses.

STDO 2522 Printmaking Lithography B Cr.Hrs. 3

A continuation in the basic techniques in Lithography. Prerequisites: STDO 2520 or 054.255 or STDO 2550.

STDO 2530 Relief and Monoprints Cr.Hrs. 3

This course introduces the student to working in a printshop environment, using various mediums and methods of creating works on paper. Projects are structured to explore traditional and experimental approaches to monoprinting and relief printmaking. Technical proficiency and skill will require practice and attention to detail. Prerequisites: Successful completion of 21 credit hours at 1000-level STDO courses.

STDO 2610 Video 1 Cr.Hrs. 6

(Formerly 054.261) The creative use of video as an art medium. Prerequisite: Successful completion of 21 credit hours at 1000-level STDO courses. May not be held with 054.261.

STDO 2630 Design Studio 1 Cr.Hrs. 3

(Formerly 054.263) An introduction to the creative use of design elements and principles applied to problems in Graphic Design. Prerequisite: Successful completion of 21 credit hours at 1000-level STDO course. May not be held with 054.263.

STDO 2640 Design Studio 2 Cr.Hrs. 3

(Formerly 054.264) A continuation of the investigation of the creative use of advanced design elements and principles applied to problems in Graphic Design. The course provides a grounding in the concepts, techniques and skills required to solve specific problems, develop a personal design process and acquire a deeper understanding of visual media. Prerequisite: STDO 2630 (or 054.263).

STDO 2650 Digital Design Technology Cr.Hrs. 3

(Formerly 054.265) This course is an introduction to the computer as a creative tool and to explore industry standard software for use in the creative graphic design applications. Prerequisite: Successful completion of 21 credit hours at 1000-level STDO courses. May not be held with 054.265.

STDO 2670 Design Theory and Criticism 1 Cr.Hrs. 3

(Formerly 054.267) An introduction to the nature of the design process and the principles of visual perception and visual language with a focus on the cultural and commercial roles of visual communication design practice. Prerequisite: Successful completion of 21 credit hours at 1000-level STDO courses and FAAH 1030 (or 054.103) and FAAH 1040 (or 054.104).

STDO 2680 Special Topics Cr.Hrs. 3

(Formerly 054.268) Selected projects in Fine Art Studio of current interest. Prerequisite: Written permission of instructor and director

STDO 2690 Special Topics in Studio Practice 1 Cr.Hrs. 3

Individual three credit hour courses offered in multiple discipline areas. Courses will provide opportunities for skill building, conceptual development and depth of topics of interest. Pre-requisites: twenty-one credit hours of 1000-level Studio courses or written permission of the instructor.

STDO 2712 Interdisciplinary Studio 1 Cr.Hrs. 3

Complementary to 2000-level Studio practice courses. Students will engage in discussion, readings and practical studio work. May not hold with the former STDO 2710. Pre-requisites: Twenty-one credit hours at 1000-level Studio courses.

STDO 2740 Open Media Cr.Hrs. 6

This interdisciplinary studio course encourages the research, creation, and presentation of works of a diverse nature. Prerequisites: Successful completion of 21 credit hours at 1000 level STDO courses.

Fine Arts Course Descriptions-Fine Arts Studio Courses-3000 Level**STDO 3330 Advanced Drawing 2 Cr.Hrs. 6**

(Formerly 054.333) An upper level drawing course with an emphasis on finished drawings and experimental techniques. Prerequisite: STDO 2250.

STDO 3370 Advanced Ceramics Cr.Hrs. 6

(Formerly 054.337) Continuation of Ceramics 1 (STDO 2230). Prerequisite: STDO 2230 (or 054.223).

STDO 3420 Advanced Painting Cr.Hrs. 6

(Formerly 054.342) Continuation of Painting 1 (STDO 2220) with increasing emphasis on painting techniques, theory, and use of expressive idioms. Prerequisite: STDO 2220 (or 054.222).

STDO 3460 Advanced Sculpture Cr.Hrs. 6

(Formerly 054.346) Continuation of Sculpture 1 (STDO 2210), with emphasis on one of modeling, carving, or construction. Prerequisite: STDO 2210 (or 054.221).

STDO 3480 Advanced Photography 1 Cr.Hrs. 6

(Formerly 054.348) Continuation of Photography 1 (STDO 2400) or Digital Photography (STDO 2450), with emphasis on print quality and personal imagery. Prerequisite: STDO 2400 (or 054.240) or STDO 2450.

STDO 3490 Photography 2 Cr.Hrs. 9

(Formerly 054.349) Advanced instruction toward individual expression. (Major course) Prerequisite: a grade of "C+" or better in STDO 2400 (or 054.240) or STDO 2450.

STDO 3670 Special Topics Cr.Hrs. 6

(Formerly 054.367) Projects of an unusual nature. Click on View "Timetable" to see current offerings. Prerequisite: written permission of instructor and director.

STDO 3680 Special Topics in Studio Practice 2 Cr.Hrs. 3

Individual three credit hour courses offered in multiple discipline areas. Courses will provide opportunities for skill building, conceptual development and depth on topics of interest. Pre-requisites: will vary depending on the course.

STDO 3830 Advanced Printmaking A Cr.Hrs. 3

(Formerly 054.383) An upper level print media course allowing students to develop work in one or more of the print process. May not be held with the former 054.345 or 054.383. Prerequisite: Successful completion with a minimum of a grade of "C" in one of the following courses: STDO 2500, STDO 2502, STDO 2510, STDO 2515, STDO 2520, STDO 2522 or STDO 2530.

STDO 3840 Advanced Printmaking B Cr.Hrs. 3

(Formerly 054.384) An upper level print media course allowing students to develop work in one or more of the print processes. May not be held with 054.345 or 054.384. Prerequisite: a grade of C in STDO 3830 (or 054.383).

STDO 3910 Design Studio 4 Cr.Hrs. 3

This course builds on students' abilities to solve graphic design problems in visual communications as developed in Design Studio 3, and to increase the repertoire of design problems typically encountered in professional practice. Prerequisite: STDO 3920. May not be held with STDO 3940, 054.347, 054.366.

STDO 3920 Design Studio 3 Cr.Hrs. 3

This course builds on students' abilities to solve graphic design problems in visual communications as developed in Design Studio 1, and to increase the repertoire of design problems typically encountered in professional practice. Prerequisite: C+ or better in STDO 2630 and STDO 2640. May not be held with: 054.228, 054.347, 054.366, or STDO 3930.

STDO 3950 New Media Design Cr.Hrs. 3

(Formerly 054.395) An exploration of the 'new media' revolution within a critical graphic design context. The course is also an introduction to the tools and principles of new media content creation and information architecture. Prerequisite: STDO 2650 (or 054.265).

STDO 3972 Interdisciplinary Studio 2 Cr.Hrs. 3

Complementary to 2000-level and 3000-level Studio practice courses. Students will engage in discussion, readings, and practical studio work. May not hold with the former STDO 3970. Pre-requisites: twenty-one credit hours of 1000-level Studio courses.

Fine Arts Course Descriptions-Fine Arts Studio Courses-4000 Level**STDO 4450 Advanced Drawing 3 Cr.Hrs. 6**

(Formerly 054.445) Advanced individual instruction in creative drawing. Prerequisite: STDO 3330 (or 054.333) or STDO 3630 (or 054.363).

STDO 4520 Advanced Ceramics 2 Cr.Hrs. 6

(Formerly 054.452) Individual instruction (Ceramics) with concentration in the areas most relevant to the student's creative development. Prerequisite: STDO 3370 (or 054.337) or STDO 3620 (or 054.362).

STDO 4530 Advanced Painting 2 Cr.Hrs. 6

(Formerly 054.453) Individual instruction with concentration in the areas most relevant to the student's creative development. Prerequisite: STDO 3420 (or 054.342) or STDO 3600 (or 054.360).

STDO 4550 Advanced Sculpture 2 Cr.Hrs. 6

(Formerly 054.455) Individual instruction with concentration in the areas most relevant to the student's creative development. Prerequisite: STDO 3460 (or 054.346) or STDO 3650 (or 054.365).

STDO 4570 Advanced Printmaking 2A Cr.Hrs. 3

(Formerly 054.457) Continuation of Advanced Printmaking 2. Students may not hold credit for both STDO 4540 (or 054.454) and STDO 4570 (or 054.457). Prerequisite: one of the former 054.345, the former 054.364, STDO 3830 (or 054.383) and STDO 3840 (or 054.384), or STDO 3890 (or 054.389) and STDO 3900 (or 054.390).

STDO 4610 Advanced Printmaking 2B Cr.Hrs. 3

(Formerly 054.461) Continuation of Advanced Printmaking 2A. Students may not hold credit for both STDO 4540 (or 054.454) and STDO 4610 (or 054.461). Prerequisite: STDO 4570 (or 054.457).

STDO 4700 Advanced Photography 2 Cr.Hrs. 6

(Formerly 054.470) Advanced individual instruction in creative photography. Prerequisite: STDO 3480 (or 054.348) or STDO 3490 (or 054.349).

STDO 4810 Senior Studio 1 Cr.Hrs. 6

Students develop and complete a self-directed program of Studio work. Regular peer and faculty review of Studio program of work. Taught by individual faculty or two-faculty teams. May not hold with STDO 4880 or 054.488. Open only to students in fourth year Honours. Pre-requisite: 15 credit hours of 3000 level Studio courses. Co-requisite: STDO 4910.

STDO 4820 Senior Studio 2 Cr.Hrs. 6

Taken after Senior Studio 1 (STDO 4810) students develop and complete their self-directed program of Studio work. Regular peer and faculty review of Studio program of work. Taught by individual faculty or two-faculty teams. Open only to students in fourth year of Honours program. Pre-requisite: STDO 4810. Corequisite: STDO 4920. May not be held with STDO 4880 or 054.488.

STDO 4870 Production and Professional Practice Cr.Hrs. 3

(Formerly 054.487) An examination of the technologies and techniques of visual communication production with a focus on the concepts of business and production management. This studio course is a part of the graphic design area sequence. Prerequisite: STDO 3920 (or STDO 3930, or 054.3930, STDO 3910 (or STDO 3940, or 054.394), and STDO 3950 (or 054.395).

STDO 4910 Honours Seminar 1 Cr.Hrs. 3

This Seminar is taken in the fourth year of the Bachelor of Fine Arts Honours Degree as the first of two Honours Seminar courses and taken concurrently with Senior Studio 1 and Senior Studio 2. Issues of professional practice are examined against contemporary art theory. Students document their work and create artist statements and interact with visiting artists. Prerequisites: 15 credit hours of 3000-level Studio courses. Co-requisite: STDO 4810. May not be held with STDO 4890 or 054.489.

STDO 4920 Honours Seminar 2 Cr.Hrs. 3

A continuation of STDO 4910, Honours Seminar 1. Issues of professional practice are examined against contemporary art theory. Students document their work and create artists statements and interact with visiting artists. Co-requisite: STDO 4820. Pre-requisite: STDO 4910. May not be held with STDO 4890 (054.489).

FACULTY OF ARTS

Dean: Jeffery Taylor

Associate Dean: Steven Lecce (Undergraduate), Louise Renéé (Undergraduate), Greg Smith (Graduate), Robert Hoppa (Research)

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Academic Staff: For complete listings of the Faculty of Arts Academic Staff, please refer to departmental websites.

Chapter Contents**SECTION 1: DEGREE PROGRAMS OFFERED LEADING TO A B.A.****1.1 Degrees****1.2 Available Honours, Major, Minor and Concentration Programs****SECTION 2: ADMISSION TO THE FACULTY OF ARTS B.A. GENERAL, ADVANCED OR HONOURS DEGREE PROGRAMS****2.1 Direct Entry from High School****2.2 Admission from University 1****2.3 Admission as a Transfer Student****2.4 Admission as a Student Seeking a Second Degree****2.5 Admission as a Visiting Student****2.6 Admission as a Special Student****SECTION 3: BASIC FACULTY REGULATIONS FOR THE B.A. GENERAL, ADVANCED AND HONOURS DEGREE PROGRAMS****3.1 General Degree Program****3.2 Advanced Degree Program****3.3 Honours Degree Program****3.4 Bachelor of Arts Degree Program Requirements Chart****SECTION 4: ADMISSION REQUIREMENTS AND BASIC FACULTY REGULATIONS FOR THE B.A. INTEGRATED STUDIES (B.A.I.S.) DEGREE PROGRAM****4.1 General Purpose****4.2 Admission Requirements for the B.A.I.S. Degree Program****4.3 General Structure of the B.A.I.S. Degree Program****4.4 Requirements for Continuing in the B.A.I.S. Degree Program****4.5 Requirements for Graduating with a B.A.I.S. Degree****4.6 Additional Faculty Regulations and Policies****SECTION 5: ADDITIONAL FACULTY REGULATIONS AND POLICIES APPLICABLE TO ALL DEGREE PROGRAMS IN THE FACULTY OF ARTS****5.1 Recognized Subject Fields****5.2 Courses Acceptable for Credit in the Faculty of Arts****5.3 Residency Requirement****5.4 Year-of-Study Equivalents****5.5 Maximum Number of Courses During a Term****5.6 Prerequisite, Corequisite, and Course Availability****5.7 Challenge for Credit****5.8 Repeating a Course****5.9 Statute of Limitations****5.10 Maximum Number of "F" Grades Permitted on Courses Acceptable for Credit in Arts****5.11 Dean's Honour List and Graduating With Distinction or First Class Honours****5.12 University Gold Medal and Program Medals****5.13 Evaluation of Undergraduate Student Coursework****5.14 Seeking a B.A. as a Second Degree****5.15 Application to Graduate with a B.A. Degree****SECTION 6: STUDENT RESPONSIBILITIES****6.1 Students' Code of Responsibilities****6.2 General Responsibilities****SECTION 7: SPECIAL CIRCUMSTANCES AND APPEALS OF MATTERS REGARDING ACADEMIC REGULATIONS****SECTION 8: DEPARTMENTS IN, AND PROGRAMS AND COURSES OFFERED BY, THE FACULTY OF ARTS****8.1 Anthropology****8.2 Asian Studies****8.3 Canadian Studies****8.4 Catholic Studies****8.5 Central and East European Studies****8.6 The Changing Workplace****8.7 Classics****8.8 Cross-Disciplinary Programs****8.9 Economics****8.10 English, Film, and Theatre****8.11 French, Spanish and Italian****8.12 German and Slavic Studies****8.13 Global Political Economy****8.14 History****8.15 Icelandic****8.16 Interdisciplinary Courses****8.17 Judaic Studies****8.18 Labour Studies****8.19 Latin American Studies****8.20 Linguistics****8.21 Medieval and Early Modern Studies****8.22 Native Studies****8.23 Philosophy****8.24 Political Studies****8.25 Psychology****8.26 Religion****8.27 Sociology****8.28 Ukrainian Canadian Heritage Studies****8.29 Women's and Gender Studies****SECTION 9: COURSES AND PROGRAMS OFFERED BY OTHER FACULTIES AND SCHOOLS FOR CREDIT IN ARTS****9.1 School of Art: Art History****9.2 Faculty of Management/I.H. Asper School of Business****9.3 Faculty of Science****9.4 Interfaculty Option in Aging**

ACADEMIC CALENDAR 2015-2016

SECTION 1: DEGREE PROGRAMS OFFERED LEADING TO A B.A.

Degree	Years to Complete (Full-time)	*Total Credit Hours
Bachelor of Arts (General)	3*	90
Bachelor of Arts (Advanced)	4*	120
Bachelor of Arts (Honours)	4*	120**
Bachelor of Arts Integrated Studies	3*	90

*This includes one year (30 credit hours) of study in University 1. There is no time limit for completion of any of the above degree programs. Students may complete their degree on a full-time or part-time basis.

**Effective September 2015, all Honours programs will be 120 credit hours.

		Concentration*	Minor	General Major	Single Advanced Major	Double Advanced Major	Single Honours	Double Honours
Anthropology		.	.	.	.	.	.
Art History		.	.	.				
Asian Studies		.	.	.				
Canadian Studies		.	.	.			.	.
Catholic Studies		.	.					
Central and East European Studies		.	.	.	.	.		.
The Changing Workplace		.						
Classics	Classical Studies	.	.	.	.
	Greek	.	.		.			
	Latin	.	.		.			
Economics		.	.	.	.		.	.
	Economics-Mathematics						.	
	Economics-Statistics						.	
English, Film, and Theatre	English	.	.	.	.	.	.	.
	Film Studies	.	.	.	.	.
	Theatre	.	.	.	.	.
French, Spanish and Italian	French	.	.	.	.	.	.	.
	Spanish	.	.	.	.
	Italian	.	.	.	.
German and Slavic Studies	Italian Studies			.	.			
	German	.	.	.			.	.
	Russian	.	.	.				
	Ukrainian	.	.	.				
	Polish	.	.					
Global Political Economy				.	.			
History		.	.	.	.		.	.
Icelandic		.	.	.			.	.
Judaic Studies		.	.	.				
Labour Studies		.	.	.	.
Latin American Studies		.	.					
Linguistics		.	.	.	.	.
	Linguistics (UofM) and American Sign Language/ English Interpretation (RRC)			.				
Management		.	.					
Mathematics		.	.	.	.
Medieval and Early Modern Studies		.	.	.	.
Option in Aging		.						
Native Studies		.	.	.	.
	Native Languages	.	.					

	Aboriginal Governance Stream with required Minor in Business							
Philosophy		.	.	.	.		.	.
Political Studies		.	.	.	.		.	.
Psychology		.	.	.	.		.	.
Religion		.	.	.	.		.	.
Sociology		.	.	.	.		.	.
	Criminology			.			.	
Ukrainian Canadian Heritage Studies		.	.	.	.
Women's and Gender Studies		.	.	.	.	.	.	.
	<p>NOTES: Students in the General and Advanced Degree programs may complete a Double Major. See Section 3.1.4 or 3.2.4 for information on the declaration of a Double Major in the respective degree program. Effective September 2009 Arts students may complete Minor programs offered by other Faculties/Schools not listed above providing the Minor Program consists of a minimum of 18 credit hours and all other degree requirements are satisfied. Students in the B.A.I.S. Degree Program may complete Minor programs offered by other Faculties/Schools to satisfy the Concentration requirement providing the Minor program consists of a minimum of 18 credit hours.</p> <p>*Concentrations other than the Option in Aging (which is open to all Arts students) are available only to students in the B.A.I.S. degree program.</p>							

SECTION 2: ADMISSION TO THE FACULTY OF ARTS B.A. GENERAL, ADVANCED OR HONOURS DEGREE PROGRAMS

The following is a summary of the admission requirements. All admission requirements, as well as application deadline dates and forms, are included in the Faculty of Arts Applicant Information Bulletin that is available from the [Admissions Office](#), Enrolment Services, 424 University Centre; this information is also posted on the University of Manitoba's website.

Other than Direct Entry students, completion of a minimum of 24 credit hours of university level courses is required. Depending on the academic performance on the courses acceptable for credit, students may be admitted to or transit into the Faculty in good standing or on academic warning.

At the point of admission or transfer to the Faculty of Arts all students proceeding to an undergraduate B.A. Degree are automatically in the General Degree Program. Subsequently, students may apply through the Faculty of Arts General Office for admission to either the Advanced Degree Program or the Honours Degree program.

The specific requirements for the General, Advanced and Honours Degree programs are given in Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Each department and program outlines its entry and requirements in Section 8: Departments in, and Programs and Courses Offered by, the Faculty of Arts.

2.1 Direct Entry from High School

Eligible students may apply to enter the Faculty of Arts upon completion of a high school diploma. Eligible students must meet the criteria listed below:

- Manitoba high school graduation, with five full credits at the Grade 12 level, in courses designated S (Specialized), G (General), or U (Dual Credit-University), or the equivalent standard from other provinces and countries will be considered.
- Must have a minimum average of 85% in three Grade 12 S or U credits and a minimum grade of 60% in each of the three credits.
- One of the three credits included in the minimum average of 85% must be Grade 12 S or U English.

Note: High school mathematics is NOT required for admission to the Faculty of Arts. However, it is recommended students complete either applied mathematics or pre-calculus within the Manitoba high school curriculum, or equivalent, to facilitate their ability to fulfill the University's "M" (or "mathematics") requirement for graduation and to enter certain Arts programs which require mathematics.

2.2 Admission from University 1

- Students who have completed 30 credit hours or more of coursework and who are not admissible to other faculties or schools will be required to transfer to the Faculty of Arts or the Faculty of Science.
- Students who have completed either 24 or 27 credit hours of coursework may choose to transfer to the Faculty of Arts or Faculty of Science.

In either a) or b), the student will either transit to Arts in good standing or on academic warning depending on their performance in University 1. Students who are transited on academic warning from University 1 are advised to see an Arts academic advisor prior to registration.

Note: Students who have exceeded 36 credit hours of "F" grades will not normally be admissible until a suspension has been served. Students may contact the Faculty of Arts for further information and advice.

2.3 Admission as a Transfer Student

Students transferring to the Faculty of Arts from another faculty or school at the University of Manitoba are called “internal transfers.” Students transferring to the Faculty of Arts from another university or college are called “external transfers.”

Transfer students must apply for admission to the Faculty of Arts, Advanced Entry Option, on-line at www.umanitoba.ca/applynow by the application deadline date.

For the University of Manitoba’s general policy on external transfer students and advanced standing, see the chapter on Admission to the University of Manitoba in this Calendar.

Students who apply to transfer to the Faculty of Arts must have completed no fewer than 24 credit hours of university level coursework and must have achieved a minimum cumulative grade point average of 2.00. Students who have completed 24 credit hours or more and who have not achieved at least a 2.00 cumulative grade point average will be considered for admission on the basis of an adjusted grade point average which is a 2.00 grade point average on the best 24 credit hours. Students who have exceeded the maximum number of “F” grades permitted on courses acceptable for credit in Arts (see Section 5.10) should contact the Faculty of Arts for further information and advice.

Anyone who has been placed on academic suspension by another faculty, school, or external institution will not normally be admissible if less than one year has elapsed since he/she had been placed on suspension. The waiting period will be increased to two years if the student has been placed on suspension more than once in consecutive years. For information regarding transfer credit see Sections 5.2.1 and 5.2.2.

2.4 Admission as a Student Seeking a Second Degree

A student who holds an undergraduate degree from a recognized university program may apply for admission to pursue a second undergraduate degree from the Faculty of Arts. For information regarding possible transfer credit see Section 5.14.

2.5 Admission as a Visiting Student

A “visiting” student is one who is pursuing a degree at another institution and whose basis of admission is a Letter of Permission from his/her home institution granting permission to register at the University of Manitoba. Previously admitted visiting students can register in a subsequent term without applying for admission, provided they have a Letter of Permission and have not changed their home institution. Certain restrictions may be placed on the kind and number of courses in which they will be allowed to register.

2.6 Admission as a Special Student

A “special” student is a student who holds a first degree and wishes to take courses out of interest. The Faculty of Arts does not accept students under the special student category. Students seeking admission as a special student should apply to Extended Education.

SECTION 3: BASIC FACULTY REGULATIONS FOR THE B.A. GENERAL, ADVANCED AND HONOURS DEGREE PROGRAMS

For academic regulations related to graduate degrees, see the Graduate Calendar of the Faculty of Graduate Studies. For academic regulations pertaining to the following degrees, Baccalauréat ès Arts (Latin-Philosophie), Baccalauréat ès Arts (Spécialisé en français), and Baccalauréat ès Arts (Spécialisé en traduction), which are also offered under the Faculty of Arts but with instruction available only at Université de Saint-Boniface, see the [Annuaire](#) of the Université de Saint-Boniface.

Students are encouraged, prior to reading the faculty regulations which follow, to review the chapter, General Academic Regulations and Requirements, in this Academic Calendar.

It is highly recommended that all students entering the Faculty of Arts to pursue a General, Advanced or Honours Degree complete six credit hours in each of five different subject fields within the first 30 credit hours. If possible, they should include among those courses the subject fields in which they will probably specialize because future choices may be limited by their initial choice of courses. Also, students must meet a subject field requirement to qualify for entrance to both the Advanced and Honours programs (see Section 3.2 and 3.3).

Honours courses may be taken by students in the General or Advanced Major programs with the written consent of the department head or program coordinator.

3.1 General Degree Program

3.1.1 Its General Purpose

The General Degree in the Faculty of Arts involves taking courses in what are traditionally referred to as the “liberal” arts. The goal of a liberal arts education is to provide students with an education in the humanities and social sciences and at the same time prepare them for future careers. An Arts education is intended to provide students with “employability skills” that are highly valued by employers and needed in the contemporary workplace. Some of these skills include reading, writing, listening, speaking effectively, knowledge of language, critical thinking, problem solving, basic numeracy, information literacy, and an appreciation of our cultural, political, and economic milieu.

The General Degree would not normally prepare students for graduate studies. Most graduate programs require students complete a four year degree. Therefore students interested in a graduate program should complete the Bachelor of Arts Advanced or Honours Degree Program following discussion with a departmental graduate program advisor.

3.1.2 Entrance into the B.A. General Degree Program

1) At the point of admission or transfer to the Faculty of Arts all students proceeding to an undergraduate B.A. Degree are automatically in the General Degree Program. Subsequently, students may apply through the Faculty of Arts General Office for admission to either the Advanced Degree Program or the Honours Degree program.

2) All students who have completed 30 credit hours of coursework are encouraged to declare a Major and a Minor. Once the Major(s) or Minor is declared it can be changed to a different subject field at some later registration. Students may also declare a second or Double Major in lieu of a Minor. Students who want to declare a Double Major must complete a Double Major declaration form available in the Faculty of Arts General Office or on the Faculty of Arts website. Students should note that for entry into most Majors/Minors, the faculty requirement is a grade of "C" or better in the prerequisite course(s).

For entry into a Major(s)/Minor requiring courses from more than one department, the faculty requirement is an average of "C" or better in all courses which are eligible to count towards the Major(s)/Minor.

For detailed information regarding entry and specific course requirements for Majors and Minors, see the specific listing for the relevant department in Sections 8 and 9 of this Calendar.

3.1.3 Requirements for Continuing in the B.A. General Degree Program

1) By the time students complete 60 credit hours, they should have six credit hours in each of five different subject fields and have declared a Major and Minor. Students who have not declared a Major or Minor by the time 60 credit hours of coursework have been completed, will not be able to continue registration until a Major/Minor is declared.

2) Students admitted to the Faculty of Arts, must by the time they have completed 60 credit hours have successfully completed or be registered for at least three credit hours in a course with significant content in written English and at least three credit hours in a course in mathematics. (See the Chapter General Academic Regulations and Requirements, Appendix A: List of Approved Written English and Mathematics Courses, or search Aurora Student for the course attributes "Written English Requirement" or "Mathematics Requirement.")

3) Students must meet the minimum performance level as outlined in Section 5.10.

3.1.4 Ten Faculty Requirements for Graduating with a B.A. General Degree

1) A student must successfully complete 90 credit hours of courses acceptable for credit in the Faculty of Arts (see Section 5.2) with a minimum grade point average of 2.00 (i.e. "C" or better) on these 90 credit hours.

The 90 credit hours of passed coursework must include the remaining nine faculty requirements.

2) There must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science, and at least six credit hours from the list of courses that satisfy the Science requirement (see Section 5.1.1).

3) There must be at least six credit hours completed in each of five different subject fields (as listed in Section 5.1.1). In addition, a subject field may also satisfy other Bachelor of Arts Degree requirements such as Humanities, or Social Sciences, or Sciences, or Mathematics, or Written English.

4) **Major:** There must be 30 credit hours which constitute a Major in one of the subject fields approved by the Faculty of Arts (see Section 5.1.1). The student must also have a cumulative grade point average of 2.00 (i.e. "C") or better in courses where a final grade is recorded and that are used toward the Major including only the last grade of any course that has been repeated and excluding any failed course(s). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required or allowed to complete a Minor, but must complete five full course equivalents as specified by the Major department (i.e. 30 hours of credit in each subject field). Students who have questions about a Major in a particular subject are strongly urged to consult an instructor in the appropriate department. A Major may be declared once the prerequisite is satisfied.

Students who declare and complete a Major in Global Political Economy will not be required nor allowed to complete a separate field for a Minor for purposes of satisfying the degree requirements.

5) **Minor:** There must be 18 credit hours which are in a subject field that is different from that of the declared Major, and which constitute a Minor in one of the subject fields approved by the Faculty of Arts (see Section 5.1.1). A student who declares only one Major must also complete a Minor. A student who declares a Double Major will not be required nor allowed to complete a Minor. A Minor may be declared once the prerequisite has been satisfied. A student who has 18 credit hours in more than one subject field can declare only one of them as a Minor (that is, it is not possible to declare a "Double Minor"). No course can be used to satisfy both the Major(s) and the Minor requirement. A Minor may be declared once the prerequisite is satisfied.

6) There must be at least 30 credit hours of coursework taken and successfully completed outside the Major(s) and Minor subject fields. In addition, there must be at least 12 credit hours of coursework taken and successfully completed in any subject acceptable for credit in the Faculty of Arts including courses in the Major(s) and Minor. Note: Students who complete a Double Major will satisfy this 12 credit hour requirement within their Double Major.

7) A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.

8) There must be at least 60 credit hours that have been taught by the Faculty of Arts (may include up to 24 credit hours from the Department of Mathematics or Art History courses considered as Humanities, see Section 5.1.1), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.

9) There must be at least 30 credit hours numbered at or above the 2000 level.

10) Residency Requirement: A student in the B.A. General Degree Program must complete University of Manitoba residency requirements (see Section 5.3 for details).

3.2 Advanced Degree Program

3.2.1 Its General Purpose

This program is intended primarily to serve students who desire a general education along with a reasonable degree of specialization in one area of study through the Major. In addition to the basic skills learned in the B.A. General Degree Program, an extra year of study provides the opportunity to learn more advanced skills such as research, critical thinking, information management and public speaking.

The Advanced Degree Program is also well suited to students seeking to build an academic term or year of studies abroad into their undergraduate degree. The Advanced Degree offers the time in the degree to take advantage of opportunities for international focus and experience.

While most graduate programs require students complete an Honours Degree, it may be possible to enter a graduate program on the basis of the Advanced Degree. Students should discuss this possibility with a departmental graduate program advisor.

3.2.2 Entrance to the B.A. Advanced Degree Program

1) To enter an Advanced Degree Program, a student must have successfully completed six credit hours in each of four different subject fields (see Section 5.1.1), and also complete an application form which is available in the Faculty of Arts General Office or on-line at <http://umanitoba.ca/faculties/arts/student/index.html> and have it approved by an academic advisor. At the point of admission to the Advanced Degree Program, the student must indicate their intention to complete a Single Advanced Major or a Double Advanced Major.

Once admitted to the Faculty of Arts it is possible to enter this program at any point up to one month prior to graduation provided the student has successfully completed six credit hours in each of four different subject fields.

2) All students are required, upon entering the Single Advanced Major Program, to declare a Major and Minor. Students entering the Double Advanced Major Program are required to declare two Majors. Students should note that for entry into a Major(s) requiring courses from only one department, the faculty requirement is a grade of "C" or better in the prerequisite course(s).

For entry into a Major(s) requiring courses from more than one department, the faculty requirement is that the student must have an average of "C" or better in all courses which are eligible to count towards the Major.

For additional information regarding entrance into Majors (such as which courses are eligible for counting as fulfilling the Major) see the specific listing for the relevant department in Sections 8 and 9. Students with questions about an Advanced Major in a particular subject should consult an instructor in the appropriate department.

3) For entry to the Minor a grade of "C" or better in the prerequisite course(s) is required.

3.2.3 Requirements for Continuing in the B.A. Advanced Degree Program

1) Students admitted to the Faculty of Arts, must by the time they have completed 60 credit hours have successfully completed or be registered for at least three credit hours in a course with significant content in written English and at least three credit hours in a course in mathematics. (See the Chapter General Academic Regulations and Requirements, Appendix A: List of Approved Written English and Mathematics Courses, or search Aurora Student for the course attributes "Written English Requirement" or "Mathematics Requirement.")

2) Students must meet the minimum performance level as outlined in Section 5.10.

3.2.4 Ten Faculty Requirements for Graduating with a B.A. Advanced Degree

1) A student must successfully complete 120 credit hours from among the courses acceptable for credit in the Faculty of Arts (see Section 5.2), with a minimum grade point average of 2.00 (i.e. "C" or better) on these 120 credit hours. (Students who choose to complete a Double Advanced Major will be required to complete more than 120 credit hours.)

The 120 credit hours of passed coursework must include the remaining nine faculty requirements.

2) There must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science, and at least six credit hours from the list of courses that satisfy the Science requirement (see Section 5.1.1).

3) There must be at least six credit hours completed in each of five different subject fields (as listed in Section 5.1.1). In addition, a subject field may also satisfy other Bachelor of Arts requirements such as Humanities, or Social Sciences, or Sciences, or Mathematics, or Written English.

4) **Single Advanced Major:** There must be at least 48 credit hours which constitute a Single Advanced Major in one of the subject fields approved by the Faculty of Arts (see Section 5.1.1). The student must have a grade point average of 2.00 (i.e. "C") or better in courses where a final grade is recorded that are used toward the Major including only the last grade of any course that has been repeated and excluding any failed course(s). A student who declares a Single Advanced Major must also complete a Minor with the exception of students whose Major is Global Political Economy. Students with an Advanced Major in Global Political Economy will not be required nor allowed to complete a Minor for purposes of satisfying the degree requirements.

Double Advanced Major: There must be at least 42 credit hours which constitute a Double Advanced Major in each of two subject fields approved by the Faculty of Arts (see Section 5.1.1). The student must have a grade point average of 2.00 (i.e. "C") or better in courses where a final grade is recorded that are used toward each Major including only the last grade of any course that has been repeated and excluding any failed course(s). A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor, but must complete the Double Advanced Major in accordance with the requirements as specified by the Major department. A Major may be declared once the prerequisite has been satisfied.

Note: No course can be used to satisfy both the Single Advanced Major and Minor requirement. Similarly no course can be used to satisfy both Double Advanced Majors. Not every department offers a Single or Double Advanced Major. See the departmental listings in Sections 8 and 9 for information.

5) **Minor:** There must be 18 credit hours in a field that is different from the Single Advanced Major, and which constitute a Minor in one of the subject fields approved by the Faculty of Arts (see Section 5.1.1). A student who declares a Single Advanced Major must also complete a Minor. A student who declares a Double Advanced Major will not be required nor allowed to complete a Minor. No course can be used to satisfy both the Advanced Major(s) and the Minor requirement. A student having 18 credit hours in more than one subject field can declare only one of them as his/her Minor. A Minor may be declared once the prerequisite has been satisfied.

6) A student who declares a Single Advanced Major with a Minor must have at least 42 credit hours in subjects other than those used towards the Single Advanced Major and Minor subject fields. In addition, students in a Single Advanced Major must successfully complete 12 credit hours of coursework in any subject acceptable for credit in the Faculty of Arts including courses in the Major and Minor.

A student who declares a Double Advanced Major must have at least 36 credit hours in subjects other than those used towards their Double Advanced Major subject fields.

7) A student may not declare a Major/Minor combination in both Sociology and Criminology or both Italian and Italian Studies.

8) There must be at least 81 credit hours that have been taught by the Faculty of Arts (may include up to 36 credit hours from the Department of Mathematics or Art History courses considered as Humanities, see Section 5.1.1), or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.

9) There must be at least 42 credit hours numbered at or above the 2000 level.

10) Residency Requirement: A student in the B.A. Advanced Degree Program must complete University of Manitoba residency requirements (see Section 5.3 for details).

3.3 Honours Degree Program

3.3.1 Its General Purpose

This program is designed to provide a high degree of specialization in a subject field. The entrance requirements and evaluation of performance are at a higher level than the General or Advanced Degree programs. The Honours Degree program is the preferred program for students seeking entrance to graduate study.

3.3.2 Entrance to the B.A. Honours Degree Program

To enter an Honours Degree program, a student must complete an application form which is available in the Faculty of Arts General Office. Students must have successfully completed six credit hours in each of four different subject fields (see Section 5.1.1), with a minimum grade point average of 3.0 (3.5 for entry to Psychology) on all courses including failed and repeated courses. In addition, students must have a grade point average of 3.0 (3.5 for entry to Psychology) or better in all course(s) in the intended Honours subject field(s) including failed and repeated courses. Students applying for Honours Psychology must have a minimum grade of "B" in PSYC 2260. Students applying for Honours History must have a grade of "B" or higher in all 3000 and 4000 level History courses.

3.3.3 Requirements for Continuing in the B.A. Honours Degree Program

1) Prior to each registration, Honours students must have their courses approved by the department in person, and then by the Faculty of Arts General Office, and cannot make any subsequent changes without receiving prior permission from their department and the Faculty General Office.

2) Students admitted to the Faculty of Arts, must by the time they have completed 60 credit hours have successfully completed or be registered for at least three credit hours in a course with significant content in written English and at least three credit hours in a course in mathematics. (See the Chapter General Academic Regulations and Requirements, Appendix A: List of Approved Written English and Mathematics Courses, or search Aurora Student for the course attributes "Written English Requirement" or "Mathematics Requirement".)

3) To continue in an Honours Degree program, the student must maintain a degree grade point average of 3.0 (3.5 for Psychology) at each point of assessment on all courses where a final grade is recorded (as well as meet any additional departmental requirements there may be). In order to continue in Honours History students must also maintain a "B" grade or higher in each History course at the 3000 and 4000 level.

Students who fail to maintain the required minimum degree grade point average are required to withdraw from the Honours Degree program. They will be automatically placed in the General Degree Program and will have the following academic assessment permanently recorded on their transcript: "Required to Withdraw from the Honours Program." These students may be eligible to apply to the Advanced Degree Program.

3.3.4 Four Faculty Requirements for Graduating with a B.A. Honours Degree

It should be noted that not every department has an Honours Degree program. For specific information on available single and Double Honours, please consult the specific listing for the relevant department in Section 8.

Note: Students in an Honours Degree program who satisfy the requirements for a Minor (in accordance with the Minor requirements listed under the B.A. General Degree; Section 3.1.4, point 5 - Minor) may request to have the Minor recorded on their transcript. These students must come to the Faculty of Arts General Office to formally declare their intention to have their Minor recorded on their transcript.

1) The number of credit hours which a student must successfully complete in order to receive an Honours Degree is 120 (effective September 2015). Information on the specific course requirements for the individual departments will be found in Section 8.

ACADEMIC CALENDAR 2015-2016

2) In order to graduate, a student in the B.A. Honours Degree program must satisfy the University of Manitoba residency requirements (see Section 5.3 for details) and attain a minimum degree grade point average of 3.0 on all coursework where a final grade is recorded.

3) Included among the courses presented for graduation there must be at least six credit hours completed in each of five different subject fields (as listed in Section 5.1.1).

4) Among the courses presented for graduation there must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science, and at least six credit hours from the list of courses that satisfy the Science requirement (see Section 5.1.1).

3.4 Bachelor of Arts Degree Program Requirements Chart

GENERAL DEGREE PROGRAM (90 Credit Hours)	ADVANCED DEGREE PROGRAM (120 Credit Hours)	HONOURS DEGREE PROGRAM (120 Credit Hours, effective September 2015)
REQUIREMENT 1: Major(s) or Honours (See Section 8 for Major and Honours requirements)		
- minimum 30 credit hours - grade point average of 2.00 on all courses taken for purposes of satisfying the Major	- Single Advanced Major: minimum 48 credit hours (some departments require more) - Double Advanced Major: minimum 42 credit hours - grade point average of 2.00 on all courses taken for purposes of satisfying the Major	- Single Honours: varies by Honours subject field - Double Honours: varies by Honours subject field(s)
REQUIREMENT 2: Minor (See Section 8 for Minor requirements)		
- minimum 18 credit hours; except when Major is Global Political Economy or for students in a Double General Major Program	- minimum 18 credit hours; except when Major is Global Political Economy or for students in a Double Advanced Major Program	- optional Minor (see note in Section 3.3.4)
REQUIREMENT 3: Options		
- minimum 30 credit hours outside student's chosen Major(s) and Minor - minimum 12 credit hours from the Major and/or Minor or other subjects	- Single Advanced Major: minimum 42 credit hours outside student's chosen Major and Minor - Single Advanced Major: minimum 12 credit hours from the Major and/or Minor or other subjects - Double Advanced Major: minimum 36 credit hours outside student's chosen Majors	Single Honours: ancillary options: minimum 24 to 36 credit hours over years 2, 3, and 4 Double Honours: ancillary options: minimum 6 credit hours over years 2, 3, and 4
Within the above 3 requirements, students must also satisfy the following requirements. Note: a course may satisfy more than one requirement.		
REQUIREMENT 4: Written English and Math		
- Written English and Math Requirement (minimum 3 credit hours in each)	- Written English and Math Requirement (minimum 3 credit hours in each)	- Written English and Math Requirement (minimum 3 credit hours in each)
REQUIREMENT 5: Humanities Requirement (See Section 5)		
- 6 credit hours from subjects identified as Humanities	- 6 credit hours from subjects identified as Humanities	- 6 credit hours from subjects identified as Humanities
REQUIREMENT 6: Social Science Requirement (See Section 5)		
- 6 credit hours from subjects identified as Social Sciences	- 6 credit hours from subjects identified as Social Sciences	- 6 credit hours from subjects identified as Social Sciences
REQUIREMENT 7: Sciences Requirement (See Section 5)		
- 6 credit hours of coursework that satisfies the Science requirement (see Section 5.1.1 for a list of courses that satisfy the Bachelor of Arts Science requirement)	- 6 credit hours of coursework that satisfies the Science requirement (see Section 5.1.1 for a list of courses that satisfy the Bachelor of Arts Science requirement)	- 6 credit hours of coursework that satisfies the Science requirement (see Section 5.1.1 for a list of courses that satisfy the Bachelor of Arts Science requirement)

REQUIREMENT 8: General Requirements		
- 60 credit hours of courses must be taken from courses taught by the Faculty of Arts (may include 24 credit hours of Mathematics or Art History courses) - 30 credit hours must be at the 2000 level or higher - 6 credit hours (c.h.) in each of 5 subject areas (e.g., 6 c.h. Psychology, 6 c.h. Economics, 6 c.h. Computer Science, 6 c.h. French, 6 c.h. Women's and Gender Studies)	- 81 credit hours of courses must be taken from courses taught by the Faculty of Arts (may include 36 credit hours of Mathematics or Art History courses) - 42 credit hours must be at the 2000 level or higher - 6 credit hours (c.h.) in each of 5 subject areas (e.g., 6 c.h. Psychology, 6 c.h. Economics, 6 c.h. Computer Science, 6 c.h. French, 6 c.h. Women's and Gender Studies)	- 6 credit hours (c.h.) in each of 5 subject areas (e.g., 6 c.h. Psychology, 6 c.h. Economics, 6 c.h. Computer Science, 6 c.h. French, 6 c.h. Women's and Gender Studies)
REQUIREMENT 9: Residency Requirements		
- Degree: 48 credit hours or the final 30 credit hours must be taken at the University of Manitoba - Major(s): 18 credit hours at the University of Manitoba	- Degree: 60 credit hours must be taken at the University of Manitoba - Single Advanced Major: 30 credit hours at the University of Manitoba on a Single Advanced Major requiring 48 to 57 credit hours; or 36 credit hours at the University of Manitoba on a Single Advanced Major requiring more than 57 credit hours - Double Advanced Major: 27 credit hours at the University of Manitoba on a Double Advanced Major requiring 42 credit hours	- Degree: 60 credit hours must be taken at the University of Manitoba - Honours subject(s): 33 credit hours at the University of Manitoba on single Honours requiring 54 to 69 credit hours; or 39 credit hours at the University of Manitoba on single Honours requiring more than 69 credit hours; or 24 credit hours at the University of Manitoba on Double or Joint Honours requiring 42 to 45 credit hours; or 21 credit hours at the University of Manitoba on Double or Joint Honours requiring less than 42 credit hours; or 33 credit hours at the University of Manitoba on Double or Joint Honours requiring more than 45 credit hours
REQUIREMENT 10: Graduating Grade Point Average (GPA)		
- 2.00 grade point average on 90 credit hours of passed coursework offered for degree credit	- 2.00 grade point average on 120 credit hours of passed coursework offered for degree credit	- 3.00 grade point average on total passed credit hours offered for degree credit

SECTION 4: ADMISSION REQUIREMENTS AND BASIC FACULTY REGULATIONS FOR THE B.A. INTEGRATED STUDIES (B.A.I.S.) DEGREE PROGRAM

4.1 General Purpose

The Bachelor of Arts Integrated Studies is a 90 credit hour degree program which is geared to serve working adults who have completed some post secondary education. The degree requires areas of Concentration rather than the traditional Major/Minor requirement, providing a more flexible path for degree completion but also ensuring academic rigor (e.g., appropriate writing and quantitative skills, breadth requirements, and an appropriate percentage of upper level courses).

4.2 Admission Requirements for the B.A.I.S. Degree Program

Students must complete one of the following:

- Successful completion of a minimum of 24 credit hours of university level coursework at the University of Manitoba or elsewhere and includes: University of Manitoba certificate or diploma programs and/or diploma programs completed at another accredited post-secondary institution. A minimum cumulative grade point average of 2.0 is required where university courses are used as the basis of admission. Students who have not achieved a 2.0 cumulative grade point average may be eligible for special consideration. A minimum cumulative grade point average of 2.5 or C+ is required on a University of Manitoba certificate or diploma program.
- Be eligible for admission as a "mature" student.

Students who have exceeded 36 credit hours of "F" grades are not admissible until a period of suspension has been served. Students may contact the Faculty of Arts for further information and advice.

ACADEMIC CALENDAR 2015-2016

Applicants must also submit the following with their application for admission:

a) Supplementary Application form

b) A resumé providing evidence of normally three (3) years of full-time workplace experience (i.e., ≥ 30 hours/week) preferably with the same employer. [Applicants who do not strictly fall into this definition of workplace experience may request special consideration from the B.A. Integrated Studies Admissions Committee.]

Students who hold a first undergraduate degree in the Faculty of Arts may not apply for the B.A. Integrated Studies Degree Program.

For detailed admission information, including required averages for admission and application deadline dates, please refer to the Faculty of Arts Applicant Information Brochure at http://www.umanitoba.ca/student/admissions/media/arts_bulletin.pdf.

4.3 General Structure of the B.A.I.S. Degree Program

The Bachelor of Arts Integrated Studies Program is comprised of 90 credit hours divided into three components: Foundation Courses (21 credit hours), Area of Concentration (18 credit hours) and options (51 credit hours).

Foundation Courses

ARTS 1110	Introduction to University	3
EDUA 1560	Adult Learning and Development	3
SWRK 2080 or ENGL 0930	Interpersonal Communication Skills English Composition	3 3
A three credit hour course that satisfies the mathematics requirement ¹		3
ARTS 1160	Leadership: An Interdisciplinary Approach	3
Six credit hours of introductory courses from the Departments of Psychology or Sociology or Anthropology or Political Studies ²		6
Total credit hours		21

Notes:

¹ See Appendix A, List of Approved Written English and Mathematics courses found under the heading General Academic Regulations and Requirements in the Undergraduate Calendar.

² Students who wish to take courses beyond the 1000 level in these departments should consult the course descriptions to ensure the necessary prerequisites are satisfied.

Students may not substitute another course for a Foundation course.

Area of Concentration

Each student must complete the course requirements of at least one Concentration. For purposes of this degree program all Minor programs offered by the Faculty of Arts will be referred to as Concentrations. All Concentrations consist of 18 credit hours of required or specified courses. There are some Concentrations that are not offered as Minors. For a listing of the Minors and Concentrations offered by the respective departments in the Faculty of Arts, please see Section 1.2 and also refer to the departmental entries in Section 8 and 9. For entry into most Concentrations, the faculty requirement is that the student must have a grade of "C" or better in the prerequisite course(s).

A student in the B.A. Integrated Studies Degree Program may also fulfill the requirements of a Concentration by completing the specified requirements of Minor programs offered by other Faculties and Schools providing the Minor consists of a minimum of 18 credit hours. A Minor program offered by other Faculties/Schools will be referred to as a Concentration for purposes of the B.A. Integrated Studies Degree Program. For details on such Concentration (Minor) programs please refer to the relevant Faculty/School's chapter in the Academic Calendar.

A Concentration may be declared once the prerequisite has been satisfied. A course that satisfies the Foundation requirement of the program cannot also be used towards a Concentration. An alternate course/credit hours within the Concentration field must be completed. For example, if PSYC 1200 (6) is taken to satisfy the Foundation requirement, and the student has chosen to complete a Psychology Concentration, then PSYC 1200 will not form part of the 18 credit hours required for the Concentration. The student will complete an additional 6 credit hours of other Psychology courses in lieu of PSYC 1200.

Students who wish to take additional courses from a second Concentration may do so within their elective component. Students who complete the requirements of a second Concentration may submit a written request to the Dean's Office to have a second Concentration recorded on their transcript.

Options

Students must complete 51 credit hours of options outside the Foundation courses and those courses used to satisfy an area of Concentration.

4.4 Requirements for Continuing in the B.A.I.S. Degree Program

- 1) By the time students complete 60 credit hours, they must normally have three credit hours in each of five different subject fields.
- 2) Students must by the time they have completed 60 credit hours have successfully completed or be registered for at least three credit hours in a course with significant content in written English and at least three credit hours in a course in mathematics. (See the Chapter in the Undergraduate Calendar entitled General Academic Regulations and Requirements, Appendix A: List of Approved Written English and Mathematics Courses, or search Aurora Student for the course attributes "Written English Requirement" or "Mathematics Requirement".)
- 3) Students must meet the minimum performance level as outlined in Section 5.10.

4.5 Eight Faculty Requirements for Graduating with a B.A.I.S. Degree

- 1) A student must successfully complete 90 credit hours of coursework acceptable for credit in the Faculty of Arts (see Section 5.2) with a minimum grade point average of 2.00 (i.e. "C" or better) on these 90 credit hours.

The 90 credit hours of passed coursework must include the remaining seven faculty requirements.

- 2) There must be at least six credit hours from subject fields designated Humanities, at least six credit hours from subject fields designated Social Science, and at least six credit hours from the list of courses that satisfy the Science requirement (see Section 5.1.1).
- 3) There must be at least three credit hours completed in each of five different subject fields (as listed in Section 5.1.1). In addition, a subject field may also satisfy other B.A.I.S. requirements such as Humanities, or Social Sciences, or Sciences, or Mathematics, or Written English.
- 4) Concentration: There must be 18 credit hours which constitute a Concentration in one of the subject fields approved by the Faculty of Arts (see Section 5.1.1) or by other Faculties and Schools. A Concentration may be declared once the prerequisite has been satisfied. A student who has 18 credit hours in more than one subject field can declare only one of them as a Concentration. No course can be used to satisfy both a Foundation requirement and the Concentration requirement. A student who has completed the requirements for a second Concentration may apply at the Faculty of Arts General Office to have the second Concentration recorded on their transcript.
- 5) There must be at least 51 credit hours of options which are taken and successfully completed in subject fields outside the Foundation and Concentration courses.
- 6) There must be at least 30 credit hours that have been taught by the Faculty of Arts (may include up to 12 credit hours from the Department of Mathematics or Art History courses considered as Humanities, see Section 5.1.1) or which have been accepted on transfer as equivalent to courses taught by the Faculty of Arts.
- 7) There must be at least 15 credit hours numbered at or above the 2000 level plus 6 credit hours at or above the 3000 level.
- 8) Residency Requirement: A student in the B.A. Integrated Studies degree program must complete University of Manitoba residency requirements (see Section 5.3 for details).

4.6 Additional Faculty Regulations and Policies

Students in the B.A. Integrated Studies Degree Program are subject to the regulations and policies found in Section 5, Section 6, Section 7, Section 8 and Section 9.

SECTION 5: ADDITIONAL FACULTY REGULATIONS AND POLICIES APPLICABLE TO ALL DEGREE PROGRAMS IN THE FACULTY OF ARTS

5.1 Recognized Subject Fields

5.1.1 Five-subject Field Requirement and Humanity/Social Science/Science Requirement

Faculties and Schools offer a number of courses covering a variety of subjects. To satisfy the subject field requirement for any B.A. Degree (with the exception of the B.A. Integrated Studies) a student must complete 6 credit hours in each of 5 different course subjects. For example: 6 credit hours in Psychology, plus 6 credit hours in German, plus 6 credit hours in Mathematics, plus 6 credit hours in Music, plus 6 credit hours in Biological Sciences. Students in the B.A. Integrated Studies Degree Program must complete 3 credit hours in each of 5 different course subjects.

Each course subject in the Faculty of Arts has been further categorized as either a Humanity or Social Science. All courses offered by the Faculty of Science and select courses from other faculties will satisfy the Science requirement. Therefore a course may satisfy both the subject field requirement as well as the requirement for the Humanity/Social Science/Science.

Listed below are the categories of Humanities, Social Sciences, Sciences and the course subjects that belong to each category.

Humanities

- 1) Course subjects taught by the Faculty of Arts that can be used towards the Humanities requirement: Arabic, Asian Studies, Canadian Studies, Catholic Studies, Classical Studies, English (excluding ENGL 0930, ENGL 0940, ENGL 2000, ENGL 2001), Film Studies, French, German, Greek, Hebrew, History, Hungarian, Icelandic, Italian, Judaic Civilization, Latin, Native Languages, Native Studies, Philosophy, Polish, Portuguese, Religion, Russian, Spanish, Theatre, Ukrainian, and Yiddish. In addition the following courses may be used: Global Political Economy GPE 3700; Women's and Gender Studies WOMN 1500, WOMN 2530, WOMN 2570, WOMN 2600, WOMN 3600 and WOMN 3620.

ACADEMIC CALENDAR 2015-2016

2) Course subjects offered by other units which can be used towards the Humanities requirement: Art History (i.e. all courses listed with course prefix FAAH). (For details on Art History courses, see Section 9).

Social Sciences

3) Course subjects taught by the Faculty of Arts that can be used towards the Social Science requirement: Anthropology, Economics, Global Political Economy courses GPE 1700, GPE 2700, GPE 4700, Labour Studies, Linguistics, Political Studies, Psychology, and Sociology. In addition the following courses may be used: Women's and Gender Studies WOMN 1600, WOMN 2500, WOMN 2510, WOMN 2560, WOMN 2610, WOMN 3100, WOMN 3520, WOMN 3550, WOMN 3560 and Others ARTS 1160.

Sciences

4) Students may complete any combination of the courses listed below adding up to six credit hours to satisfy the Bachelor of Arts Science requirement.

Faculty of Science

All courses offered in these subjects in the Faculty of Science: BIOL, CHEM, COMP, FORS, MATH, MBIO, PHYS, STAT; or courses taught by other faculties that can be used toward the Bachelor of Arts Science requirement:

Faculty of Agricultural and Food Sciences

AGRI 1500, AGRI 1510

ENTM 1000, ENTM 2050

PLNT 1000, PLNT 2500

SOIL 3060, SOIL 3520, SOIL 3600

Clayton H. Riddell Faculty of Environment, Earth, and Resources

ENVR 1000, ENVR 2000

GEOG 1290, GEOG 2200, GEOG 2250, GEOG 2272, GEOG 2520, GEOG 2530, GEOG 2540, GEOG 2550, GEOG 2700, GEOG 3390

GEOL 1340, GEOL 1400, GEOL 1410, GEOL 1420, GEOL 2390, GEOL 2440, GEOL 2500, GEOL 2540, GEOL 2570, GEOL 3310

Faculty of Engineering

ENG 1440, ENG 1450, ENG 1460

For course titles and descriptions see the relevant faculty entries in this *Calendar*.

5.1.2 Major, Minor (Concentration) or Honours Programs

1) The Faculty of Arts offers various Majors, Minors (Concentrations) and Honours programs. For a listing of the programs see Section 1.2 and also refer to the respective departmental entries in Section 8 and 9.

2) Major and Minor (Concentration) programs offered by other Faculties or Schools are listed in Section 9. These include a General Major, Advanced Major and Minor (Concentration) offered by the Department of Mathematics, a Minor in Business offered by the Faculty of Management/I.H. Asper School of Business, and a General Major and Minor (Concentration) in Art History offered by the School of Art.

An Arts student may declare a Minor (Concentration) (dependent on the student's program) offered by any Faculty and School providing the Minor (Concentration) program consists of a minimum of 18 credit hours. For details on those Minor (Concentration) programs please refer to the relevant Faculty/School's chapter in this Calendar.

5.2 Courses Acceptable for Credit in the Faculty of Arts

In addition to all courses offered by the Faculty of Arts there are two other categories of courses acceptable for credit in the Faculty of Arts:

5.2.1 Courses Offered by Other Faculties or Schools at the University of Manitoba:

Effective September 2007, all degree credit courses offered by other Faculties or Schools at the University of Manitoba are acceptable for credit in Arts (excludes Pass/Fail courses) subject to the Faculty of Arts overall degree requirements.

If a student was registered in another faculty or school within the University of Manitoba prior to registering in the Faculty of Arts, all courses in which the student received a final grade will be treated in the same way as they would have been had they been taken by a student already registered in the Faculty of Arts. That is, all of these courses will count in determining eligibility for admission to Arts in accordance with Sections 2.1, 2.2 and 5.10 and they will all be taken into account when determining the student's grade point averages in accordance with Sections 5.8 and 5.10. In addition, they will all count towards the minimum number of credit hours required for graduating, provided the student received a passing grade in each of them, and the courses did not conflict with some other graduation or continuing regulation (such as the Residency Requirement).

5.2.2 Courses Offered at Other Universities and Colleges:

Effective September 2007, all courses offered at other universities and colleges which are evaluated as equivalent to University of Manitoba courses (excludes Pass/Fail courses) will be used when determining eligibility for admission and transfer credit.

There are two groups of courses that are taken at other universities or colleges and which can be used for credit in the Faculty of Arts at the University of Manitoba, namely: a) those taken by students who are already registered in the Faculty of Arts at the University of Manitoba, and b) those taken by students prior to transferring to the Faculty of Arts at the University of Manitoba.

a) Students who are already registered in the Faculty of Arts at the University of Manitoba, and who wish to take courses at another university or college to count towards their University of Manitoba degree are required to obtain a Letter of Permission from the Registrar's Office prior to registering at that other institution; see the chapter, General Academic Regulations and Requirements. The Letter of Permission will not be approved for a student who is in academic jeopardy or on academic suspension. As of September 1999 grades earned in courses at other universities are taken into account in the cumulative hours when determining the Grade Point Averages at the University of Manitoba. Grades earned at other universities will not be used in determining eligibility for awards (see Section 5.11 and 5.12 for details).

b) All completed courses that are deemed acceptable for credit in any degree program at the University of Manitoba (excludes Pass/Fail courses) which were taken by a student registered at another university or college prior to transferring to the Faculty of Arts, will be used when determining eligibility for admission and transfer credit. That is, all of these courses will count in determining admissibility, in accordance with Sections 2.1, 2.2 and 5.10.

As of September 1999 the applicable courses (credits and attempts) in both a) and b) are included on the University of Manitoba record, the external courses are counted as attempts and external grades are taken into account when determining the University of Manitoba grade point average as well as count towards the maximum number of "F" grades permitted in an Arts degree (see Section 5.10). Grades earned at other universities will appear on the University of Manitoba transcript and will not be used in determining eligibility for awards (see Section 5.11 and 5.12 for details). There is no limit on attempts in any degree program.

All completed courses that are deemed acceptable for credit in any degree program at the University of Manitoba, which were taken by a student at another university or college prior to transferring to the Faculty of Arts and are outside the ten-year period prior to admission and registration in the Faculty of Arts, will not be used for purposes of determining admissibility, advanced standing or transfer credit. (Some exceptions may be considered for students in the B.A. Integrated Studies Degree Program.)

Students who wish to request a review or reassessment of transfer credit must do so within eight months of the initial determination of transfer of credit to the University of Manitoba.

5.3 Residency Requirement

As indicated in Section 3 and Section 4, each of the four undergraduate degree programs has a residency requirement which requires that a minimum number of credit hours must be taken at the University of Manitoba itself in order to qualify for the degree. Effective September 2009, students admitted to the Faculty of Arts B.A. General, Advanced and Honours Degree Programs will also be required to satisfy a residency requirement on the Major(s), Advanced Major(s) or Honours subject(s) in addition to the residency requirement on the degree. Similarly students admitted to the B.A. Integrated Studies Degree Program will be required to satisfy a residency requirement on the Concentration in addition to a residency requirement on the degree.

1) B.A. General Degree

a) Degree: There are two ways in which the Residency Requirement for the B.A. General Degree may be satisfied: either by successfully completing at the University of Manitoba no fewer than 48 credit hours of the required 90 credit hours (these 48 credit hours may be taken at various points in the student's career); or by successfully completing at the University of Manitoba itself no fewer than the last 30 credit hours of the required 90 credit hours.

b) Major: A minimum of 18 credit hours of the 30 credit hours required for the Major must be successfully completed at the University of Manitoba or through an approved University of Manitoba Exchange Program.

2) B.A. Advanced Degree

a) Degree: To receive the B.A. Advanced Degree, the student must successfully complete at least 60 credit hours of the required 120 credit hours at the University of Manitoba.

b) Single and Double Advanced Majors: Students must successfully complete at the University of Manitoba or through an approved University of Manitoba exchange program the hours of coursework in their program as noted below:

- In a Single Advanced Major requiring 48 to 57 credit hours, 30 credit hours must be completed at the University of Manitoba or through an approved University of Manitoba Exchange Program.
- In a Single Advanced Major requiring more than 57 credit hours, 36 credit hours must be completed at the University of Manitoba or through an approved University of Manitoba Exchange Program.
- In a Double Advanced Major requiring 42 credit hours, 27 credit hours must be completed at the University of Manitoba or through an approved University of Manitoba Exchange Program.

3) B.A. Honours Degree

a) Degree: In order to graduate with a B.A. Honours Degree, students must take and successfully complete the hours of coursework offered by the University of Manitoba as noted below:

- In Honours programs requiring 108 credit hours, 48 credit hours must be from acceptable courses offered by the University of Manitoba;
- In Honours programs requiring 114 credit hours, 54 credit hours must be from acceptable courses offered by the University of Manitoba;
- In Honours programs requiring 120 credit hours, 60 credit hours must be from acceptable courses offered by the University of Manitoba.

Note: Effective September 2015, all Honours programs will require 120 credit hours.

b) Honours Subject(s): Students must successfully complete at the University of Manitoba or through an approved University of Manitoba exchange program the hours of coursework in their Honours subject(s) as noted below:

- In a single Honours subject requiring 54 to 69 credit hours, 33 credit hours must be completed in the Honours subject.
- In a single Honours subject requiring more than 69 credit hours, 39 credit hours must be completed in the Honours subject.
- In a double or joint Honours subject requiring 42 to 45 credit hours in one Honours subject, 24 credit hours must be completed in that Honours subject.
- In a double or joint Honours subject requiring less than 42 credit hours in one Honours subject, 21 credit hours must be completed in that Honours subject.
- In a double or joint Honours subject requiring more than 45 credit hours in one Honours subject, 33 credit hours must be completed in that Honours subject.

c) Once admitted to an Honours program, students are expected to take all their courses at the University of Manitoba. For information on exceptions to this requirement, the student should consult the Faculty of Arts General Office.

4) B.A. Integrated Studies Degree

a) Degree: To receive the B.A. Integrated Studies Degree, the student must successfully complete at the University of Manitoba no fewer than 36 credit hours of the required 90 credit hours (these 36 credit hours may be taken at various points in the student's career).

b) Concentration(s): A minimum of 9 credit hours of the 18 credit hours required for the Concentration must be successfully completed at the University of Manitoba or through an approved University of Manitoba Exchange Program.

Residency Requirement Université de Saint-Boniface:

In order to satisfy the University of Manitoba, Faculty of Arts residency requirement, students who transfer from Université de Saint-Boniface must complete the following minimum hours at the Fort Garry Campus.

- 1) In order to receive the B.A. (General) or (Advanced) Degree, the student must successfully complete at least 30 credit hours at the Fort Garry campus.
- 2) In order to receive the B.A. (Honours) Degree, the student must successfully complete the hours of coursework offered at the Fort Garry campus as noted below:

- In Honours programs requiring 108 credit hours, 24 credit hours of acceptable coursework must be completed at the Fort Garry campus.
- In Honours programs requiring 114 credit hours, 24 credit hours of acceptable coursework must be completed at the Fort Garry campus.
- In Honours programs requiring 120 credit hours, 30 credit hours of acceptable coursework must be completed at the Fort Garry campus.

Note: Effective 2015, all Honours programs will require 120 credit hours.

5.4 Year-of-Study Equivalents

A student's progress towards a degree is measured in terms of credit hours passed rather than years of study completed. The following table may be used to determine the year equivalent.

Year Equivalent	Credit Hours Passed (General/Integrated Studies Degree)	Credit Hours Passed (Advanced/Honours Degree)
1	fewer than 24 credit hours	fewer than 24 credit hours
2	24 credit hours to fewer than 54 credit hours	24 credit hours to fewer than 54 credit hours
3	54 credit hours or more	54 credit hours to less than 84 credit hours
4	not applicable	84 credit hours or more

5.5 Maximum Number of Courses During a Term

Normally a student may attempt a maximum of 15 credit hours during a Fall or Winter term or a maximum of 18 credit hours during the Summer Session. If a student has taken the maximum credit hours in the previous term and has obtained a degree grade point average of 2.75 and is in good standing, he/she may apply at the Faculty of Arts General Office to be allowed to take 3 additional credit hours per term.

5.6 Prerequisite, Corequisite, and Course Availability

Prerequisite: Minimum grades of "C" are required in all courses listed as prerequisites, except as otherwise noted in the course descriptions published in each department and program section of this chapter. If a course is a prerequisite for a second course, the prerequisite must be met in order to continue in the second course.

Some course descriptions will indicate that a specific course is a pre- or corequisite for the course in which you wish to register. If you have not previously taken the specific course, you may register for it in the same term.

Corequisite: Where a course identifies another course as a corequisite, both courses must be taken at the same time.

Course availability: All courses listed in this Calendar are not offered every year. The course(s) being offered for the current terms are available at www.umanitoba.ca

5.7 Challenge for Credit

Some departments in the Faculty of Arts offer courses by means of challenge for credit. Since the courses offered in this manner may vary from year to year, students interested in this method of attaining credit should consult the Challenge for Credit section in the Faculty of Arts Registration Information located on the Faculty of Arts website. The Academic Schedule in the front of this Calendar contains the relevant registration deadline dates appropriate to challenge for credit. Students on academic warning or academic suspension are not permitted to challenge courses for credit.

5.8 Repeating a Course

A student will normally be permitted to repeat a course only once. If a student wishes to repeat a course, he/she should be aware of the following:

- To repeat a course, a student must request permission to do so from the Faculty of Arts General Office or on-line at <http://umanitoba.ca/faculties/arts/student/index.html>.
- All completed courses will appear on the student's transcript and will be used to calculate the student's attempted hours. Courses that have been repeated will appear on the transcript but only the grade on the last attempt will be used in the calculation of the grade point average in the Major field, the cumulative grade point average and in the calculation of the grade point average required for the degree.
- Repeating a course will not remove the original course or grade from the transcript.
- All courses with "F" grades that are repeated count towards the limit of "F" grades permitted in an Arts degree as outlined in Section 5.10.

5.9 Statute of Limitations

Students who have not been registered at the University of Manitoba (or any other post-secondary institution) for a period of five years or longer immediately preceding an admission to Arts may submit a written appeal to the General Office to be allowed to "start afresh" a Faculty of Arts degree. If the appeal is granted, all courses listed on the University of Manitoba record will remain but all previous work will not count/apply towards satisfying degree requirements nor affect the degree GPA calculation. The following notation will appear under the term of readmission:

"Having discontinued attendance at post-secondary institutions for a period of five years or more, this student has been permitted to start afresh on recommendation of the Dean. All previous credits have been forfeited."

5.10 Maximum Number of "F" Grades Permitted on Courses Acceptable for Credit in Arts

Effective September 2013, each student in the Faculty of Arts will be placed on academic suspension for one year despite evidence of improved performance if they have more than 36 credit hours of "F" grades.

Following a one year suspension, the student may return upon application to the Faculty of Arts General Office by selecting one of the following irreversible options:

(a) to continue with no possibility of further "F" grades. Any further "F" grades will result in academic suspension for two years. (Following the two year suspension, the student may apply to the Faculty of Arts General Office to return to start afresh.)

Or

(b) start afresh, with their previous work not counting towards satisfying degree requirements.

(In either case this does not mean that the previous coursework will be removed from the student history or transcript.)

5.11 Dean's Honour List and Graduating with Distinction or First Class Honours

Dean's Honour List

Effective September 2013 to qualify for this list a student must be registered in one of the four degree programs offered by the Faculty of Arts and complete at least 12 credit hours offered by the University of Manitoba during a term and attain a minimum term grade point average of 3.75. The notation "Dean's Honour List" will be included on the student's transcript specific to that term.

With Distinction

Students graduating with a B.A. General or a B.A. Integrated Studies Degree as a first degree will have their degree granted "With Distinction" if they have a minimum degree grade point average of 3.80 on all coursework taken at the University of Manitoba and provided a minimum of 60 credit hours of acceptable coursework is completed at the University of Manitoba. (Students seeking a second degree will be eligible for this recognition provided they complete a minimum of 60 credit hours of acceptable coursework at the University of Manitoba following admission to their second degree program.)

Students graduating with a B.A. Advanced Degree as a first degree will have their degree granted "With Distinction" if they have a minimum degree grade point average of 3.80 on all coursework taken at the University of Manitoba and provided a minimum of 90 credit hours of acceptable coursework is completed at the University of Manitoba. (Students seeking a second degree will be eligible for this recognition provided they complete a minimum of 90 credit hours of acceptable coursework at the University of Manitoba following admission to their second degree program.)

This distinction will be noted on the parchment and on the student's transcript.

First Class Honours

Students graduating with a B.A. Honours Degree will have their degree granted with "First Class Honours" if they have a minimum degree grade point average of 3.80 on all acceptable coursework completed at the University of Manitoba and have met the following residency requirements:

ACADEMIC CALENDAR 2015-2016

- Students must have completed a minimum of 78 credit hours of acceptable coursework at the University of Manitoba in a 108 credit hour Honours program;
- Students must have completed a minimum of 84 credit hours of acceptable coursework at the University of Manitoba in a 114 credit hour Honours program;
- Students must have completed a minimum of 90 credit hours of acceptable coursework at the University of Manitoba in a 120 credit hour Honours program.

Effective 2015, all Honours programs will require 120 credit hours.

The notation "First Class Honours" will appear on both the parchment and the student's transcript.

5.12 University Gold Medal and Program Medals

Gold Medal

The Faculty of Arts will award the University Gold Medal to the student graduating with an Arts degree who:

- 1) has the highest grade point average of all graduating students on all courses creditable in Arts attempted at the University of Manitoba over the last two Fall/Winter terms prior to graduation (with each Fall/Winter consisting of a minimum 24 credit hours completed at the University of Manitoba) including any courses taken in the Summer Session between the last two Fall/Winter terms and
- 2) has a minimum grade point average of 3.85 which is determined on the basis of all courses creditable in Arts attempted in completing the degree, including courses approved on transfer from other faculties/schools at the University of Manitoba.

Students who have up to 30 hours of external transfer credit (including failed courses) would be eligible providing they attain the minimum grade point average of 3.85 on all courses completed at the University of Manitoba which are acceptable for credit in Arts.

The Gold Medal winner is ineligible for Faculty of Arts program medals.

For specific details on the tie-breaking mechanism, contact the Faculty of Arts General Office.

Program Medals

The Faculty of Arts will award a Program Medal to the student graduating in each of the General, Integrated Studies, Advanced and Honours Degree programs who:

- 1) has the highest grade point average of all graduating students on all courses creditable in Arts attempted at the University of Manitoba over the last two Fall/Winter terms prior to graduation (with each session consisting of a minimum of 24 credit hours completed at the University of Manitoba) including any courses taken in the Summer Session between the last two Fall/Winter terms and
- 2) has a minimum grade point average of 3.75 which is determined on the basis of all courses creditable in Arts attempted in completing the degree, including courses approved on transfer from other faculties/schools at the University of Manitoba.

Students who have up to 30 hours of external transfer credit (including failed courses) are eligible providing they attain the minimum grade point average of 3.75 on courses completed at the University of Manitoba which are acceptable for credit in Arts.

The Gold Medal winner is ineligible for Faculty of Arts Program Medals.

For specific details on the tie-breaking mechanism, contact the Faculty of Arts General Office.

5.13 Evaluation of Undergraduate Student Coursework

A copy of the Faculty of Arts Regulations for the Academic Evaluation of Student Coursework is available to students for perusal in the Faculty of Arts General Office or website. This booklet includes regulations concerning the method of student evaluation, final examinations and/or term tests, final grades, etc. It should in particular be noted that there are no Supplemental Examinations in the Faculty of Arts. For information on Incompletes, Deferred Examinations, Debarment, Academic Dishonesty, etc., see the chapter General Academic Regulations and Requirements in this Calendar.

5.14 Seeking a B.A. as a Second Degree

Once a Bachelor of Arts degree has been awarded by the University of Manitoba Senate, it cannot be revoked or "turned in" towards another degree.

Students who have completed an undergraduate degree may apply and be admitted to the Faculty of Arts seeking a second undergraduate degree.

Students who hold a first degree from the Faculty of Arts may not apply for the B.A. Integrated Studies Degree Program as a second degree.

Students who have graduated with a first undergraduate degree from the University of Manitoba will be allowed to transfer up to 60 credit hours of coursework from their first degree toward a second degree program in the Faculty of Arts. Courses taken in a qualifying program will be considered part of the first degree. Courses extra to the first degree, excluding courses taken in a qualifying program or another awarded degree, diploma or certificate, may be transferred in addition to the 60 credit hours.

Students with first degrees awarded by external institutions will be eligible for up to 60 credit hours of transfer credit providing the degree was awarded and the courses were taken within the 10 year period prior to admission and registration in the Faculty of Arts (see Section 5.2.2).

Once admitted students must satisfy all relevant undergraduate degree requirements except for the Written English and Mathematics requirements.

Students may not be admitted to the Faculty of Arts or complete a Bachelor of Arts Degree while concurrently pursuing a degree in another Faculty or School.

No transfer credit will be awarded to students seeking a third, fourth, etc., degree.

Students cannot obtain a second degree in the same discipline at the same or lower level as any of their previously awarded degree(s).

5.15 Application to Graduate with a B.A. Degree

In order to officially receive a degree in any of the four programs leading to a B.A., students must indicate their intention to graduate by the relevant deadline date listed below. This process applies to students in each of the following three categories.

Category 1: Those students currently registered in the Faculty of Arts in either the B.A. General Degree, B.A. Integrated Studies Degree or the B.A. Advanced Degree Program must indicate their intention to graduate using Aurora Student.

Those students currently registered in the Faculty of Arts in the B.A. Honours Degree program must indicate their intention to graduate at the point of registration for their last set of courses when they complete the Registration Worksheet.

Category 2: Those students currently registered in the Faculty of Arts in either the B.A. Advanced or a B.A. Honours Degree program who decide to revert to the B.A. General Degree Program in order to graduate, must submit a request in writing to graduate to the General Office, Faculty of Arts. For graduation in May, the request must be received by April 30. For graduation in October, the request must be received by September 30. For graduation in February, the request must be received by January 30.

Category 3: Those students previously admitted to and registered in one of the respective degree programs in the Faculty of Arts and who have completed all of the requirements for the degree while registered in the Faculty of Arts, but who are currently registered in another Faculty or School at the University of Manitoba (excluding Extended Education) may submit a request in writing to graduate to the Faculty of Arts General Office.

Deadline Dates to declare expected Graduation Date by Aurora Student:

May Graduation: end of registration revision period for Winter Term

October Graduation: August 1

February Graduation: end of registration revision period for Fall Term

SECTION 6: STUDENT RESPONSIBILITIES

6.1 Students' Code of Responsibilities

6.1.1 A Community of Scholars

The Faculty of Arts at the University of Manitoba defines itself as a community of scholars, all citizens of which must commit themselves to the advancement of learning, the dissemination of knowledge, and the well-being of all its members. Essential to these goals is each individual's commitment to the following values:

The affirmation of the dignity, worth, and equality of all citizens in the community;

The importance of reasoned debate and inquiry in all academic pursuits;

The practise of ethical conduct and personal integrity in all aspects of academic life.

Students who enrol in the Faculty of Arts voluntarily choose to join this community of scholars, and in doing so they accept the responsibilities as well as the benefits of living within it.

The Faculty of Arts offers its students remarkable opportunities for the acquisition of knowledge, the development of skills, and the free exchange of ideas that will shape their future lives. The scholarly community also provides a forum for extra-curricular activities, personal growth and social relationships that are equally important to one's sense of fulfilment. This should be an exciting process of discovering new goals, new points of view, and, indeed, a new and better sense of one's ideals and potential. But it is also a process of coming to recognize the value and special nature of the academic community itself.

The dynamic freedom of student life in the Faculty of Arts carries a special obligation that each individual act in such a way as to promote the well-being of other members — to accept willingly the categorical imperative of behaving in such a way that, if everyone else did the same, the good of all would prevail. This is a matter of accepting the differences of others, respecting the rights of others, and not abusing the resources that the faculty and the university put at your disposal. It is also a matter of acting honourably in all personal and academic relationships, and not tolerating through diffidence or neglect any violations of such obligations on the part of others. Our common commitment as citizens of the scholarly community will then work to enhance every individual member's experience and likelihood of success. Only with such a commitment from everyone can the Faculty of Arts fulfil its mission at the core of a public institution charged with educating the leaders of tomorrow's society. And only with such a commitment can we make wise use of the public funds for which we are accountable.

6.1.2 Rights and Responsibilities

As a student in the Faculty of Arts you are entitled to the use of all appropriate resources (human and other) for the successful completion of your studies. But you are also responsible for the use of those resources in a manner that is honest, fair and equitable. For example, when you enrol in a course you implicitly accept the terms of a contract whereby the professor is committed to teaching to the best of his/her ability, while you and the other students are committed to learning to the best of yours. Repeated absences, or the neglect of reading or writing assignments, are not just matters of individual concern; because they undermine the effectiveness of discussion for others as well, they are a failure to honour the academic and social contract that is implicitly a part of your membership in this community. Similarly, borrowing a book from the library is a direct commitment to honour the rules and regulations governing the circulation of such material. To damage a library book by writing in it, highlighting, or worse, is not just an act of individual

vandalism; it is the wilful partial destruction of a resource that other students (and even other generations of students) have the right and the need to consult. It is to forget, in other words, that public property is not no one's property; it is everyone's property.

Similar obligations to ethical conduct are an inherent part of all the academic work you do as requirements of your program. Participation in the free exchange of ideas, upon which the scholarly community depends, obligates all members of that community to complete honesty and to adequate documentation of their intellectual debts. Plagiarism, the representing of someone else's words or ideas as your own, or any other form of academic dishonesty such as cheating, is a betrayal not just of individual honour, but of the whole basis of civilized discourse upon which all other members of the community depend.

The Manitoba Code of Human Rights guarantees everyone the right to be free of discrimination on the basis of gender or sexual orientation, age, ancestry, religion, family status, physical or mental handicap, and political beliefs. The rights and responsibilities of students thus go well beyond the classroom, library, or computer facility. Every student in the Faculty of Arts is at all times entitled to pursue his/her activities and program of study free of any social discrimination, harassment, exploitation or abuse of power on the part of others, staff or students. Consequently, every student also has a reciprocal obligation to act in a similarly ethical fashion toward all other members of the community. In order that we all be fully empowered to take advantage of the pursuit of knowledge, the development of skills and the special opportunities for personal growth offered by the faculty, there must be on everyone's part a commitment to avoid irresponsible behaviour that damages the academic potential or self-esteem of others.

6.1.3 Rules and Regulations

It is the intention of the Faculty of Arts to discourage any conduct that is detrimental to the welfare of the scholarly community and its individual members. In this Undergraduate Calendar there are many regulations governing the expectations and standards of academic work in the faculty, and there are mechanisms of appeal at the department and faculty level for those who feel that the application of these regulations has been unfair or unjust. There are also rules and regulations governing the use of university resources and facilities, and others governing the social conduct of members of the community — for example, a policy on sexual harassment and a policy banning weapons from campus. Any violations of these rules and regulations should be reported to the appropriate administrative agency or authority (e.g., the director of Libraries, the sexual harassment investigation officer or the Security Services). It must be remembered, too, that all federal, provincial and municipal laws (regarding, for example, violence, alcohol, and drugs) are enforced on campus.

There are, however, some kinds of behaviour that fall between these academic and legal concerns, which are nevertheless inappropriate in the context of an academic community. Any disruptive action or physically or verbally aggressive behaviour that serves to threaten or intimidate another member of the community (staff or student) should be immediately reported to the relevant head of department or dean. Persons who are found to have violated the rights of other individuals, or to have subverted the welfare of the academic community, will face disciplinary action, which may include expulsion from the faculty. It is important to recognize, though, that such discipline is always less effective than a common commitment to respect the rights of others.

6.1.4 Conclusion

The foregoing statement of responsibilities applies to all student members of the Faculty of Arts. Faculty members and support staff are governed by a number of university, Senate and faculty policies that set out similar standards of ethical and professional conduct. This code is meant to give the students in the Faculty of Arts a sense of the relation that exists between their rights and their responsibilities and how these rights and responsibilities in turn sustain the welfare of the whole academic community.

6.2 General Responsibilities

Every effort is made to ensure that students in the Faculty of Arts have access to sound information and individual advice and guidance. Within this context and within the framework of faculty and department requirements indicated above, students are personally responsible for course selection and conforming to regulations regarding continuation in, and graduating from, the four undergraduate programs.

Students should take special care to ensure:

That each time they register that the courses they choose meet all requirements for graduation;

- That the courses they choose meet prerequisite conditions;
- That the courses they choose are not exclusions of, or the equivalent of, other courses already taken;
- The accuracy of their registration records, including all changes; and
- That they have noted and are following all deadlines and procedures published in the Calendar and elsewhere.

A copy of the Policy on Disclosure and Security of Student Academic Records is available for students to read in the Faculty of Arts General Office.

SECTION 7: SPECIAL CIRCUMSTANCES AND APPEALS OF MATTERS REGARDING ACADEMIC REGULATIONS

Students should promptly consult the Faculty of Arts General Office when special circumstances warrant consideration of exceptions to regulations. In addition, the Academic Regulations Appeals Committee meets throughout the year to consider appeals from students who request special consideration with respect to rules and regulations governing their programs of study and qualifications for graduation.

Students who intend to appeal matters concerning regulations or decisions of the Faculty which may affect their registration must arrange to submit a written appeal including all pertinent documentation to the secretary normally within three months following the term in which the course was taken or from the date of the academic decision. Appeals will not be considered beyond three years after the end of the course or from the date of the academic decision:

Deadline to Submit Appeal	ARAC Meeting Date
June 30	Third week of August
October 1	Third week of November
December 1	Third week of February
April 1	Third or fourth week of May

Deadlines falling on a Saturday or Sunday will be observed on the preceding Friday. Meeting dates are subject to change by the chair.

Appeals should be addressed to: The Secretary of the Academic Regulations Appeals Committee, c/o Faculty of Arts General Office. Special forms are available in the General Office.

SECTION 8: DEPARTMENTS IN, AND PROGRAMS AND COURSES OFFERED BY, THE FACULTY OF ARTS

8.1 Department of Anthropology

Head: Greg Monks
 General Office: 432 Fletcher Argue Building
 Telephone: 204 474 9361
 E-mail: um-anthro@cc.umanitoba.ca
 Website: umanitoba.ca/anthropology/

8.1.1 Program Information

Anthropology is a science that examines human issues from both cultural and biological perspectives. The most fundamental concern of this discipline is the survival of humanity and the conditions of continuity and change for all human life. The department offers courses in socio-cultural anthropology or ethnology, archaeology, language and culture, and biological or physical anthropology. While academic staff of the department have research interests that range from northern climates to the tropics and from Asia to the Americas, the department is also involved in research that sheds light on Manitoba and its people.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in both ANTH 1210 and ANTH 1220 (or ANTH 1520). For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in both ANTH 1210 and ANTH 1220 (or ANTH 1520).

Honours Program

For entry to the Honours program, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Introductory Courses

The general introductory courses (ANTH 1210, and ANTH 1220 or ANTH 1520) present the major ideas and findings of Anthropology. It is equally appropriate for those planning to take further courses in this field and for students from other departments or faculties.

ACADEMIC CALENDAR 2015-2016

8.1.2 Anthropology

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR TOTAL: 30 CREDIT HOURS			
ANTH 1210 and ANTH 1220 (or ANTH 1520)	<ul style="list-style-type: none"> • ANTH 2000, ANTH 2100, ANTH 2860 • ANTH 2020 or ANTH 2530 • 12 credit hours from courses at the 2000 level and above (of these a minimum of 6 credit hours must be at the 3000 and/or 4000 level)^{1,2,3} 		
SINGLE ADVANCED MAJOR⁴ TOTAL: 48 CREDIT HOURS			
ANTH 1210 and ANTH 1220 (or ANTH 1520)	<ul style="list-style-type: none"> • ANTH 2000, ANTH 2100, ANTH 2860, ANTH 3470, ANTH 4850 • ANTH 2020 or ANTH 2530 • 3 credit hours from: ANTH 2820, ANTH 2890, ANTH 3720, ANTH 3730, ANTH 3930, ANTH 3950, ANTH 3980, ANTH 3990 • 3 credit hours from courses at the 4000 level¹ • 18 credit hours from courses at the 2000 level and above (of these a minimum of 9 credit hours must be at the 3000 and/or 4000 level)^{1,2,3} 		
DOUBLE ADVANCED MAJOR⁴ TOTAL: 42 CREDIT HOURS			
ANTH 1210 and ANTH 1220 (or ANTH 1520)	<ul style="list-style-type: none"> • ANTH 2000, ANTH 2100, ANTH 2860, ANTH 3470, ANTH 4850 • ANTH 2020 or ANTH 2530 • 3 credit hours from: ANTH 2820, ANTH 2890, ANTH 3720, ANTH 3730, ANTH 3930, ANTH 3950, ANTH 3980, ANTH 3990 • 3 credit hours from courses at the 4000 level¹ • 12 credit hours from courses at the 2000 level and above (of these a minimum of 9 credit hours must be at the 3000 and/or 4000 level)^{1,2,3} 		
MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS			
ANTH 1210 and ANTH 1220 (or ANTH 1520)	12 credit hours from courses at the 2000 level and above ^{2,3} ANTH 2000 is recommended for students taking a Minor because the course is fundamental to many subsequent Anthropology courses.		
SINGLE HONOURS			
ANTH 1210 and ANTH 1220 (or ANTH 1520)	<ul style="list-style-type: none"> • ANTH 2000, ANTH 2100, ANTH 2860 • ANTH 2020 or ANTH 2530 	<ul style="list-style-type: none"> • ANTH 3470 • 3 credit hours from one of the following: ANTH 2820, ANTH 2890, ANTH 3720, ANTH 3730, ANTH 3930, ANTH 3950, ANTH 3980, ANTH 3990 • 9 credit hours from courses at the 3000 level 	<ul style="list-style-type: none"> • ANTH 4850 • 9 credit hours from courses at the 4000 level¹
	<ul style="list-style-type: none"> • 15 credit hours from courses at the 2000 level and above^{2,3} • 36 credit hours in ancillary options⁴ 		
NOTES:			
<p>¹ No more than 6 credit hours may be taken from ANTH 4830 or ANTH 4840.</p> <p>² ANTH 2370 is recommended.</p> <p>³ Courses NATV 2070 and NATV 2080 offered by the Department of Native Studies may be used to satisfy this requirement in the General Major, Single Advanced Major, Double Advanced Major, Single Honours and Minor programs.</p> <p>⁴ Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Anthropology courses). Students considering graduate studies should include a quantitative methods course among their ancillary options (e.g., Sociology SOC 2290, Statistics STAT 1000 and STAT 2000).</p>			

8.1.3 Anthropology Course Descriptions

Anthropology Course Descriptions-1000 Level

ANTH 1210 Human Origins and Antiquity Cr.Hrs. 3

(Formerly 076.121) An introduction to physical anthropology and archaeology. Topics include: biological evolution, evolution and comparative behaviour of primates, fossil evidence for human evolution, and the emergence of human culture. Students may not hold credit for ANTH 1210 (076.121) and any of: ANTH 1211 (076.121) or the former 076.120.

ANTH 1220 Cultural Anthropology Cr.Hrs. 3

(Formerly 076.122) The comparative study of human societies and cultures, including language, economic and political organization, family and kinship, ritual and belief systems, cultural stability and change. Students may not hold credit for ANTH 1220 (076.122) and any of: ANTH 1221 (076.122) or ANTH 1520 (076.152) or the former 076.120.

ANTH 1520 Critical Cultural Anthropology Cr.Hrs. 3

(Formerly 076.152) An introduction to social cultural anthropology that critically examines production and exchange systems, age, gender, kinship and other social distinctions, belief systems, politics, and interactions between cultural systems. Learning and performance assessment is based upon supervised reading and essay writing. Students may not hold credit for ANTH 1520 (076.152) and any of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or the former 076.120.

Anthropology Course Descriptions-2000 Level

ANTH 2000 Culture, Society, and Power Cr.Hrs. 3

An advanced introduction to cultural anthropology that focuses on anthropological approaches to the cross-cultural organization, dynamics, and tensions of social relationships at individual, group, and societal levels. Students may not hold credit for ANTH 2000 and any of: ANTH 2001 or the former ANTH 2390 (076.239) or the former ANTH 2391 (076.239). Prerequisite: [a grade of "C" or better in one of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or ANTH 1520 (076.152) or the former 076.120] or written consent of instructor.

ANTH 2020 Relatedness in a Globalizing World Cr.Hrs. 3

Anthropological approaches to diverse practices of human relatedness across cultures and over time, including 21st century reconfigurations or marriage, family, reproduction and kinship.

ANTH 2040 Native North America: A Sociocultural Survey Cr.Hrs. 3

(Formerly 076.204) An ethnographic survey of the cultures of Native North American peoples. Students may not hold credit for both ANTH 2040 (076.204) and ANTH 2041 (076.204). Prerequisite: [a grade of "C" or better in one of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or ANTH 1520 (076.152) or the former 076.120] or written consent of instructor.

ANTH 2060 European Archaeology Cr.Hrs. 3

(Formerly 076.206) This course will survey the archaeological record of Europe from the earliest human occupation through the rise of early cities and complex societies. Case studies will be used to examine the social, political, economic, and technological adaptations of early human societies in the region. Prerequisite: [a grade of "C" or better in one of: ANTH 1210 (076.121) or ANTH 1211 (076.121) or the former 076.120] or written consent of instructor.

ANTH 2100 Introduction to Archaeology Cr.Hrs. 3

(Formerly 076.210) A general introduction to the principles of archaeology and the materials, analyses, and interpretations encountered in archaeological study. Students may not hold credit for ANTH 2100 (076.210) and any of: ANTH 2101 or the former 076.290. Prerequisite: [a grade of "C" or better in one of: ANTH 1210 (076.121) or ANTH 1211 (076.121) or the former 076.120] or written consent of instructor.

ANTH 2230 Anthropology of Travel and Tourism Cr.Hrs. 3

(Formerly 076.223) Anthropological approaches to the study of cultural practices and phenomena of travel and tourism. Travel is examined in various social, historical, and cultural contexts as a way of seeing and experiencing the world. Emphasis is placed on the intersection of culture, colonialism, capitalism, and globalization, with practices of travel, including mass tourism. Prerequisite: [a grade of "C" or better in one of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or ANTH 1520 (076.152) or the former 076.120] or written consent of instructor.

ANTH 2240 Plagues and People Cr.Hrs. 3

Examines selected plagues in evolutionary, ecological, and epidemiological context, and considers the complex biological, social, and economic repercussions for human populations. Foci include past, present, and emerging infectious disease epidemics.

ANTH 2300 Anthropology of Childhood Cr.Hrs. 3

Anthropological approaches to the study of children and childhood. Childhood is examined as a social and historical construction, and children are analyzed as active contributors to their social worlds. Cross-cultural ethnographic material relating to children and youth is critically read and discussed. Prerequisite: [a grade of "C" or better in one of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or ANTH 1520 (076.152) or the former 076.120] or written consent of instructor.

ANTH 2350 Ethnology of Sub-Saharan Africa Cr.Hrs. 3

(Formerly 076.235) A survey of culture and society in traditional and contemporary Africa. Students may not hold credit for both ANTH 2350 (076.235) and the former ANTH 2351 (076.235). Prerequisite: [a grade of "C" or better in one of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or ANTH 1520 (076.152) or the former ANTH 2360 (076.236) or the former ANTH 2361 (076.236) or the former 076.120] or written consent of instructor.

ANTH 2370 Language and Culture Cr.Hrs. 3

(Formerly 076.237) The investigation of the complex interaction of language and culture, including linguistic perspectives on prehistory, ethnosemantics, and sociocultural correlations of linguistic variation. Students may not hold credit for both ANTH 2370 (076.237) and ANTH 2011 (076.201). Prerequisite: [a grade of "C" or better in one of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or ANTH 1520 (076.152) or the former 076.120] or written consent of instructor.

ANTH 2380 Art, Symbols, Cultures Cr.Hrs. 3

(Formerly 076.238) Studies of the social contexts and functions of human artistic and symbolic behaviour in cross-cultural perspective. Students may not hold credit for both ANTH 2380 (076.238) and ANTH 2381 (076.238). Prerequisite: [a grade of "C" or better in one of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or ANTH 1520 (076.152) or the former 076.120] or written consent of instructor.

ANTH 2430 Ecology, Technology and Society Cr.Hrs. 3

(Formerly 076.243) Ecological analysis of the interplay of socio-political and technological processes in different types of societies. Focus upon the ecological side-effects and selected technologies, economic mechanisms and political institutions. Students may not hold credit for both ANTH 2430 (076.243) and ANTH 2500 (076.250). May not be used for Major or Minor in Anthropology.

ANTH 2450 Ethnology of China Cr.Hrs. 3

(Formerly 076.245) Issues in the anthropological study of contemporary China will be introduced in comparative perspective. The emphasis will be on issues such as economic development, changing gender relations, population growth and migration, and the politics of culture. Prerequisite: [a grade of "C" or better in one of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or ANTH 1520 (076.152) or the former 076.120] or written consent of instructor.

ANTH 2470 Anthropology of Mass Communication Cr.Hrs. 3

(Formerly 076.247) This course focuses on media production and dissemination and on images of the world created by media. Media practices and products are addressed in relation to the formation of social relations and identities, the shaping of peoples' sense of time and space, and media's role in the construction of communities and in processes of socio-economic and cultural change. Prerequisite: [a grade of "C" or better in one of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or ANTH 1520 (076.152) or the former 076.120] or written consent of instructor.

ANTH 2500 Culture, Environment, and Technology Cr.Hrs. 3

(Formerly 076.250) Study of ecological systems, focusing on processes of adaptation in societies differing in organization and in views of technology. Demographic and technological changes are examined in relation to cultural, political and ideological factors. Students may not hold credit for both ANTH 2500 (076.250) and ANTH 2430 (076.243). Prerequisite: [a grade of "C" or better in one of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or ANTH 1520 (076.152) or the former 076.120] or written consent of instructor.

ANTH 2510 Anthropology of Economic Systems Cr.Hrs. 3

(Formerly 076.251) A comparative study of factors bearing upon production, exchange, and consumption of goods, practices and ideas in varying social contexts. The course also examines the articulation of economic systems in the global political economy. Prerequisite: [a grade of "C" or better in one of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or ANTH 1520 (076.152) or the former 076.120] or written consent of instructor.

ANTH 2530 Anthropology of Political Systems Cr.Hrs. 3

(Formerly 076.253) Analysis of political institutions and their changing nature in diverse societies and forms of society, with attention to authority, leadership, decision-making, power and its disguises, and forms of resistance. Prerequisite: [a grade of "C" or better in one of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or ANTH 1520 (076.152) or the former 076.120] or written consent of instructor.

ANTH 2550 Culture and the Individual Cr.Hrs. 3

(Formerly 076.255) The study of the interrelations between life-cycle, psychological functioning and malfunctioning, and social and cultural institutions. Emphasis is placed on enculturation and life-cycle rituals. Students may not hold credit for both ANTH 2550 (076.255) and ANTH 2551 (076.255). Prerequisite: [a grade of "C" or better in one of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or ANTH 1520 (076.152) or the former 076.120] or written consent of instructor.

ANTH 2560 Anthropology of Illness Cr.Hrs. 3

(Formerly 076.256) Comparative study of cultural factors involved in health/illness: concepts of disease and curing practices. Prerequisite: [a grade of "C" or better in one of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or ANTH 1520 (076.152) or the former 076.120] or written consent of instructor.

ANTH 2570 Urban Anthropology Cr.Hrs. 3

(Formerly 076.257) Comparison of the processes of urbanization and various forms of urbanism, with attention to archaeological evidence and the emergence of urbanism and urbanization in developing nations.

ANTH 2600 Old World Prehistory Cr.Hrs. 3

(Formerly 076.260) A survey of the archaeological evidence and cultural interpretations of Old World cultures from the beginning of the Pleistocene to the development of agriculture. Prerequisite: [a grade of "C" or better in one of: ANTH 1210 (076.121) or ANTH 1211 (076.121) or the former 076.120] or written consent of instructor.

ANTH 2610 Old World Civilizations Cr.Hrs. 3

(Formerly 076.261) Archaeological evidence and cultural interpretations of the origins of complex societies from the development of agriculture to the beginnings of written history in the Old World. Prerequisite: [a grade of "C" or better in one of: ANTH 1210 (076.121) or ANTH 1211 (076.121) or the former 076.120] or written consent of instructor.

ANTH 2620 New World Prehistory Cr.Hrs. 3

(Formerly 076.262) Archaeological evidence and cultural interpretations of those New World cultures which did not develop civilizations, from the earliest inhabitants until the period of initial European contact. Prerequisite: [a grade of "C" or better in one of: ANTH 1210 (076.121) or ANTH 1211 (076.121) or the former 076.120] or written consent of instructor.

ANTH 2630 New World Civilizations Cr.Hrs. 3

(Formerly 076.263) Archaeological evidence and cultural interpretations of the growth and development of complex societies in the New World from the origins of agriculture to the period of initial European contact. Emphasis will be placed on the "high cultures" of Central and South America. Prerequisite: [a grade of "C" or better in one of: ANTH 1210 (076.121) or ANTH 1211 (076.121) or the former 076.120] or written consent of instructor.

ANTH 2640 Manitoba Prehistory Cr.Hrs. 3

(Formerly 076.264) Archaeological evidence and culture history of prehistoric populations which inhabited the various environmental zones of Manitoba. Prerequisite: [a grade of "C" or better in one of: ANTH 1210 (076.121) or ANTH 1211 (076.121) or the former 076.120] or written consent of instructor.

ANTH 2690 Peoples and Cultures of Contemporary Latin America Cr. Hrs. 3

(Formerly 076.269) An ethnographic survey of the cultural diversity of contemporary Latin America with selected case study examples drawn from Mexico and Central America, South America, and the Hispanic Caribbean. Case studies are selected to represent a variety of anthropological perspectives. Prerequisite: [a grade of "C" or better in one of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or ANTH 1520 (076.152) or the former 076.120] or written consent of instructor.

ANTH 2820 Human Osteology Cr.Hrs. 3

(Formerly 076.282) An examination of normal and pathological skeletal anatomy. Quantitative methods of analysis for archaeological and forensic applications. Prerequisite: [a grade of "C" or better in one of: ANTH 1210 (076.121) or ANTH 1211 (076.121) or the former 076.120] or written consent of instructor.

ANTH 2860 Evolution and Human Diversity Cr.Hrs. 3

(Formerly 076.286) An introduction to the interacting roles of heredity, culture and environment in human families and populations. Introduces the biological bases for variation within/between human populations. Students may not hold credit for both ANTH 2860 (076.286) and ANTH 2861. Prerequisite: [a grade of "C" or better in one of: ANTH 1210 (076.121) or ANTH 1211 (076.121) or the former 076.120] or written consent of instructor.

ANTH 2880 Human Evolution Cr.Hrs. 3

(Formerly 076.288) Intensive study of human organic evolution within hominid primates. Consideration of the relationships of socio-cultural adaptation to human evolution. Prerequisite: [a grade of "C" or better in one of: ANTH 1210 (076.121) or ANTH 1211 (076.121) or the former 076.120] or written consent of instructor.

ANTH 2890 Human Population Biology Cr.Hrs. 3

(Formerly 076.289) Intensive study of the evolutionary implications of genetic variation within/between human populations in relationship to ecological and cultural variation. Prerequisite: [a grade of "C" or better in ANTH 2860 (076.286)] or written consent of instructor.

ANTH 2910 Historical Archaeology Cr.Hrs. 3

(Formerly 076.291) An archaeological survey of the early post-European period in North America. Case studies will emphasize selected regions, time periods, and topics that may include: the western Canadian fur trade; European colonialism in North America; international colonialism. Prerequisite: [a grade of "C" or better in one of: ANTH 1210 (076.121) or ANTH 1211 (076.121) or the former 076.120] or written consent of instructor.

ANTH 2930 Archaeology of a Selected Area Cr.Hrs. 3

(Formerly 076.293) Detailed examination of the archaeology of a geographical area that is of current interest to faculty and students. The areas will rotate annually and will include but not be limited to the Caribbean, Europe, the Northwest Coast, Canada, the Arctic and the sub-Arctic. Prerequisite: [a grade of "C" or better in one of: ANTH 1210 (076.121) or ANTH 1211 (076.121) or the former 076.120] or written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

Anthropology Course Descriptions-3000 Level**ANTH 3200 Anthropology of Food Cr.Hrs. 3**

Considers the diversity of ways that anthropologists have used food as a productive entry point for understanding culture, society, and human ecology. The course will survey highpoints in the history of the anthropology of food and address current topics such as food security and food movements. Prerequisite: [a grade of "C" or better in one of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or ANTH 1520 (076.152) or the former 076.120] or written consent of instructor.

ANTH 3320 Women in Cross-Cultural Perspective Cr.Hrs. 3

(Formerly 076.332) Critical perspectives on the role of women cross-culturally, with ethnographic reference to non-Western societies and cultures. Students may not hold credit for both ANTH 3320 (076.332) and ANTH 3321 (076.332). Prerequisite: [a grade of "C" or better in one of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or ANTH 1520 (076.152) or the former 076.120] or written consent of instructor.

ANTH 3330 Sex and Sexualities Cr.Hrs. 3

Comparative approaches to the study of human sexuality and the diversity of sexual expression and identification from a feminist and cross-cultural ethnographic perspective. Sex and sexualities are examined as social and cultural constructions, experiences, discourses, identities, and practices located in specific local contexts and shaped by wider social processes including colonialism and globalization. This course is also offered as WOMN 3330. Students may not hold credit for ANTH 3330 and any of: WOMN 3330 or the former ANTH 3350 or WOMN 3500 (156.350) with the topic "Anthropology of Sex and Sexualities." Prerequisite: [a grade of "C" or better in a minimum of three credit hours of Anthropology or Women's and Gender Studies courses] or written permission of instructor.

ANTH 3380 Anthropology and Contemporary Social Issues Cr.Hrs. 3

(Formerly 076.338) Anthropological perspectives on poverty, social accountability, colonialism, racism, education, ecological degradation and violence. Students may not hold credit for both ANTH 3380 (076.338) and ANTH 3381 (076.338). Prerequisite: [a grade of "C" or better in each of ANTH 2000 (or ANTH 2001) and 3 credit hours from the following: ANTH 2020 or ANTH 2530 (076.253) or ANTH 2831 (076.283)] or [a grade of "C" or better in the former ANTH 2390 (076.239) or the former ANTH 2391 (076.239)] or written consent of instructor.

ANTH 3470 History of Anthropology Cr.Hrs. 3

(Formerly 076.347) A temporal survey of the development of major paradigms and theoretical movements in anthropological thought and method. Students may not hold credit for both ANTH 3470 (076.347) and ANTH 3471 (076.347). Prerequisite: [a grade of "C" or better in each of ANTH

2000 (or ANTH 2001) and 3 credit hours from the following: ANTH 2020 or ANTH 2530 (076.253) or ANTH 2831 (076.283)] or [a grade of "C" or better in the former ANTH 2390 (076.239) or the former ANTH 2391 (076.239)] or written consent of instructor.

ANTH 3500 Peoples of the Arctic Cr.Hrs. 3

(Formerly 076.350) Ethnographic survey of the aboriginal peoples of the circumpolar regions of Asia, North America, and Greenland. Attention will be given to the aboriginal and post-contact situations among such peoples. Students may not hold credit for both ANTH 3500 (076.350) and ANTH 3501 (076.350). Prerequisite: [a grade of "C" or better in one of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or ANTH 1520 (076.152) or the former 076.120] or written consent of instructor.

ANTH 3550 Canadian Subcultures Cr.Hrs. 3

(Formerly 076.355) An anthropological study of dimensions of community, ethnicity, and social class in Canadian society. Students may not hold credit for both ANTH 3550 (076.355) and ANTH 3551 (076.355).

ANTH 3600 Archaeological Method and Theory Cr.Hrs. 3

(Formerly 076.360) The historical development and current application of theoretical and methodological frameworks for archaeological interpretation. Prerequisite: [a grade of "C" or better in ANTH 2100 (076.210) or the former 076.290] or written consent of instructor.

ANTH 3720 Demography of Past Populations Cr.Hrs. 3

(Formerly 076.372) This course provides students with a basic understanding of demographic methods and techniques applied in analysis of long term changes in the demographic patterns of anthropological populations. Prerequisite: [a grade of "C" or better in one of: ANTH 1210 (076.121) or ANTH 1211 (076.121) or the former 076.120] or written consent of instructor.

ANTH 3730 Forensic Anthropology Cr.Hrs. 3

(Formerly 076.373) This course provides the theory, methods, and techniques for forensic identification of human skeletal remains, including estimation of sex, age-at-death, stature, population affinities and features of personal biology. The laboratory component of this course, where students work with actual human skeletal remains, is a major component. Prerequisite: a grade of "C" or better in ANTH 2820 (076.282).

ANTH 3740 Human Growth and Variation Cr.Hrs. 3

(Formerly 076.374) An examination of variation in human body form and composition in the context of normal growth and development viewed in an evolutionary perspective. Prerequisite: [a grade of "C" or better in ANTH 2860 (076.286)] or written consent of instructor.

ANTH 3750 Anthropological Perspectives on Globalization and the World-System Cr.Hrs. 3

(Formerly 076.375) An anthropological perspective on the modern world-system and the expansion of capitalism into peripheral areas of the world; the transformation of indigenous societies and cultures; the rise of ethnic conflict, protest and resistance; and a comparative examination of selected global and transnational processes. Students may not hold credit for both ANTH 3750 (076.375) and ANTH 3751 (076.375). Prerequisite: [a grade of "C" or better in one of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or ANTH 1520 (076.152) or ANTH 2000 or ANTH 2001 or the former ANTH 2390 (076.239) or the former ANTH 2391 (076.239) or the former 076.120] or written consent of instructor.

ANTH 3810 Anthropology of Belief Systems Cr.Hrs. 3

(Formerly 076.381) A comparative study of belief systems, rituals, and ceremonies in non-Western and Western societies and cultures. Students may not hold credit for both ANTH 3810 (076.381) and ANTH 3811 (076.381). Prerequisite: [a grade of "C" or better in one of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or ANTH 1520 (076.152) or the former 076.120] or written consent of instructor.

ANTH 3910 Archaeological Field Training Cr.Hrs. 6

(Formerly 076.391) Theory and practical field experience in the investigation of archaeological sites from the formulation of research designs through data analysis in the field. Offered in alternate summers. See Anthropology Department for details. Prerequisite: [a grade of "C" or better in ANTH 2100 (076.210) or the former 076.290] and written consent of instructor.

ANTH 3930 Ethnographic Research Methods Cr.Hrs. 3

A survey of ethnographic research methods with an emphasis on qualitative approaches, including both field and analytical techniques. Students may not hold credit for both ANTH 3930 and the former ANTH 3390 (076.339).

ANTH 3950 Artifact Analysis Cr.Hrs. 3

(Formerly 076.395) Analytic and interpretive methods for treating archaeologically recovered materials such as lithics, ceramics and other artifacts are addressed through lectures, demonstrations and other laboratory exercises. Prerequisite: [a grade of "C" or better in ANTH 2100 (076.210) or the former 076.290] or written consent of instructor.

ANTH 3960 Cultural Resource Management Cr.Hrs. 3

(Formerly 076.396) A survey of the concepts, methods, and techniques used in the management of cultural, especially archaeological, heritage resources. The roles of public agencies, private contractors, and heritage legislation in Canadian CRM are reviewed. Prerequisite: [a grade of "C" or better in ANTH 2100 (076.210) or the former 076.290] or written consent of instructor.

ANTH 3970 Ethnography of a Selected Region Cr.Hrs. 3

(Formerly 076.397) An ethnographic survey of the culture(s) of a selected geographical area currently of interest to faculty and students. The areas to be studied may differ from year to year. Students may not hold for credit both ANTH 3970 (076.397) and ANTH 3971 (076.397). Prerequisite: [a grade of "C" or better in one of: ANTH 1220 (076.122) or ANTH 1221 (076.122) or ANTH 1520 (076.152) or the former 076.120] or written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

ANTH 3980 Botanical Analysis in Archaeology Cr.Hrs. 3

(Formerly 076.398) Analytic and interpretive methods for treating archaeologically recovered plant remains and soils are addressed through lectures, demonstrations, and laboratory exercises. Prerequisite: [a grade of "C" or better in ANTH 2100 (076.210) or the former 076.290] or written consent of instructor.

ANTH 3990 Faunal Analysis in Archaeology Cr.Hrs. 3

(Formerly 076.399) Analytic and interpretive methods of treating archaeologically recovered faunal remains are addressed through lectures, demonstrations, and laboratory exercises. Prerequisite: [a grade of "C" or better in ANTH 2100 (076.210) or the former 076.290] or written consent of instructor.

Anthropology Course Descriptions-4000 Level

ANTH 4760 Practicum in Archaeology Cr.Hrs. 3

(Formerly 076.476) This course is designed to provide advanced undergraduate students in archaeology with individualized practical experience in different aspects of archaeology by working with professional archaeologists. Prerequisite: [a grade of "C" or better in ANTH 2100 (076.210) or the former 076.290] and written consent of instructor.

ANTH 4780 Selected Topics in Cultural Anthropology Cr.Hrs. 3

(Formerly 076.478) Prerequisite: written consent of instructor or department head. As the course content will vary from year to year, students may take this course more than once for credit.

ANTH 4790 Selected Topics in Archaeology Cr.Hrs. 3

(Formerly 076.479) Prerequisite: written consent of instructor or department head. As the course content will vary from year to year, students may take this course more than once for credit.

ANTH 4800 Seminar in Applied Anthropology Cr.Hrs. 6

(Formerly 076.480) A review of the history of applied anthropology and investigation of major case studies, research methodologies, intervention strategies, and substantive areas of application. Prerequisite: written consent of instructor or department head.

ANTH 4830 Advanced Reading and Research Cr.Hrs. 3

(Formerly 076.483) Prerequisite: written consent of instructor and department head. As the course content will vary from year to year, students may take this course more than once for credit.

ANTH 4840 Advanced Independent Work Cr.Hrs. 6

(Formerly 076.484) Prerequisite: written consent of instructor and department head. As the course content will vary from year to year, students may take this course more than once for credit.

ANTH 4850 Advanced Seminar in Anthropological Theory Cr.Hrs. 3

(Formerly 076.485) An analysis of the process of theory formation in the social sciences in general and in cultural (social) anthropology in particular. The theoretical content of various contemporary "schools" in anthropology is critically analyzed. Prerequisite: [a grade of "C" or better in ANTH 3470 (076.347) or ANTH 3471 (076.347)] or written consent of instructor or department head.

ANTH 4860 Selected Topics in Biological Anthropology Cr.Hrs. 3

(Formerly 076.486) Topics in biological anthropology which will vary depending on the needs of students and the interest of the instructor. Prerequisite: written consent of instructor or department head. As the course content will vary from year to year, students may take this course more than once for credit.

8.2 Asian Studies Centre

Director: William Lee

Centre Office: 452A University College

Telephone: 204 474 7047

E-mail: asian_studies@umanitoba.ca

Website: umanitoba.ca/asian_studies

8.2.1 Program Information

Asia is home to approximately 60 percent of the world's population. Asian nations have emerged as major economic powers while their populations are asserting their own cultural and historical identities. With this comes an expectation that Western nations will take an interest not only in the economic potential of the continent but also in its rich cultural heritage.

The Asian Studies Centre was established in 1990 to stimulate and organize teaching and research on Asia. Faculty attached to the centre offer instruction in the languages and culture of China, India and Japan. As well, specialists in other departments offer Asia-related courses that can be used for a Major or Minor in Asian Studies.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in both ASIA 1420 (HIST 1420) and ASIA 1430 (HIST 1430). For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in both ASIA 1420 (HIST 1420) and ASIA 1430 (HIST 1430).

8.2.2 Asian Studies

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR TOTAL: 30 CREDIT HOURS			
ASIA 1420 (HIST 1420) and ASIA 1430 (HIST 1430)	<ul style="list-style-type: none"> • 6 credit hours in one of the language courses numbered at the 1000 level from List A • 6 credit hours from ASIA 2080, ASIA 2620 or ASIA 2630 • 6 credit hours in courses numbered at the 2000 level from List A 	6 credit hours from courses in List A numbered at the 3000 level and above (Students may substitute up to 6 credit hours in Asian language courses numbered at the 2000 level.)	
Students who wish to concentrate heavily on languages may take an Asian language course numbered at the 1000 level in Year 1. Students with matriculation in an Asian language may do an Asian language course numbered at the 2000 level in Year 2 and are encouraged to take a language course numbered at the 3000 level language in Year 3.			
MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS			
ASIA 1420 (HIST 1420) and ASIA 1430 (HIST 1430)	12 credit hours chosen from List A		

ACADEMIC CALENDAR 2015-2016

8.2.2 Asian Studies

List A	Courses Acceptable for Asian Studies Credit	
Course No.		Credit Hours
Faculty of Arts		
Anthropology		
ANTH 2450	Ethnology of China	3
Asian Studies Asian Languages		
ASIA 1750	Introduction to Korean	6
ASIA 1760	Introduction to Chinese (Mandarin)	6
ASIA 1770	Introduction to Japanese	6
ASIA 1780	Basic Sanskrit	6
ASIA 1790	Basic Hindi-Urdu	6
ASIA 2340*	Special Studies in Epic and Pauranic Sanskrit 1	3
ASIA 2350*	Special Studies in Epic and Pauranic Sanskrit 2	3
ASIA 2360*	Mandarin Comprehension	6
ASIA 2750	Intermediate Korean	6
ASIA 2760	Intermediate Chinese (Mandarin)	6
ASIA 2770	Intermediate Japanese	6
ASIA 2780	Intermediate Sanskrit	6
ASIA 2790*	Intermediate Hindi-Urdu	6
ASIA 3660*	Advanced Mandarin Comprehension	6
ASIA 3750	Advanced Korean	6
ASIA 3760	Advanced Chinese (Mandarin)	6
ASIA 3770	Advanced Japanese	6
ASIA 3780	Advanced Reading in Japanese	3
ASIA 3790*	Advanced Hindi-Urdu	6
ASIA 3792	Linguistic Analysis of Japanese	3
Asian Studies Other Asian courses		
ASIA 1420	Asian Civilizations to 1500 (Same as HIST 1420)	3
ASIA 1430	Asian Civilizations from 1500 (Same as HIST 1430)	3
ASIA 2070*	South Asian Civilization	6
ASIA 2080	South Asian Civilization	3
ASIA 2570	History, Culture and Society in Chinese Film	3
ASIA 2580	Women in Chinese Film	3
ASIA 2600	Japanese Film	3
ASIA 2610	Modern Chinese Literature in Translation	3
ASIA 2620	Japanese Civilization	3
ASIA 2630	Chinese Civilization	3
ASIA 2650	Premodern Chinese Literature in Translation	3
ASIA 2660*	Modern Chinese Literature in Translation	6
ASIA 2662	Chinese Diaspora Literature	3
ASIA 2670	Modern Japanese Literature in Translation	3
ASIA 3480	Selected Topics in Asian Studies 1	3
ASIA 3490	Selected Topics in Asian Studies 2	3
ASIA 3520	The Japanese Theatre	3
ASIA 3560	Themes and Genres in Asian Literature	3

ASIA 3600	Japanese Popular Culture	3
ASIA 3650*	Masterpieces of Asian Literature	6
150.141*	Asian Civilizations (Same as HIST 1410)	6
150.211*	East Asian Civilization	6
English, Film, and Theatre		
FILM 2380	The International Cinema 1 [Acceptable for credit only when the topic is Asia related]	3
FILM 2390	The International Cinema 2 [Acceptable for credit only when the topic is Asia related]	3
History		
HIST 1410*	Asian Civilizations (Same as the former 150.141)	6
HIST 1420	Asian Civilizations to 1500 (Same as ASIA 1420)	3
HIST 1430	Asian Civilizations from 1500 (Same as ASIA 1430)	3
HIST 2050	South Asia Since 1947	3
HIST 2130	Emergence of Modern South Asia: 1757-1947	3
HIST 2410	History of India	6
HIST 2650	Modern China and Japan	6
HIST 2654	History of the People's Republic of China, 1949-Present	3
HIST 3090	Studies in Asian History	3
HIST 3580	Topics in Recent World History 1 [Acceptable for credit only when the topic is Asia related]	3
HIST 3960*	China, 1911 to the Present	3
HIST 3980	Nationalism on the Indian Sub-Continent in the Twentieth Century	3
HIST 4070	Issues in Modern Asian History 1: Selected Topics (M,B)	3
HIST 4080*	Issues in Modern Asian History 2: Selected Topics (M,B)	3
HIST 4200*	Modern South Asia: Colonialism, Nationalism, and Modernization	3
HIST 4940*	Revolutionary China: A Century of Upheaval, 1870 to Present	6
Political Studies		
POLS 2020*	Asian Politics	6
Religion		
RLGN 1320	Introduction to World Religions	6
RLGN 1321*	Introduction aux religion du monde	6
RLGN 2010	Introduction to Hinduism	3
RLGN 2020	Introduction to Buddhism	3
RLGN 2540*	Modern Movements in World Religions	6
RLGN 2570	Indian Religious Art and Architecture	3
RLGN 2700	Religions of China and Japan	6
RLGN 3150	Buddhism in East Asia	3
RLGN 3160	Tibetan Religious Traditions	3
RLGN 3210	Indian Philosophy	3
RLGN 3220	Indian Religion and Society	3
RLGN 3260	Indian Buddhism	3
RLGN 3266	Readings in Buddhist Texts	3
RLGN 3270	Guru and Disciple	3
RLGN 3750	Topics in Indian Religious Art and Architecture	3
RLGN 4060	The Yoga Tradition	3
RLGN 4100	Advanced Studies in Buddhism	3
RLGN 4190	Advanced Studies in Hinduism	3
020.266*	Religions of Indian Origin	6

ACADEMIC CALENDAR 2015-2016

020.374*	Studies in Asian Religions	6
020.441*	Masters of Spiritual Life	6
020.445*	Topics in Comparative Religion	6
Sociology		
SOC 3690*	Sociology of the Developing Societies	3
School of Art		
FAAH 1100	Survey of Asian Art	3
FAAH 2100*	Survey of Asian Art	3
FAAH 3230	Chinese Art and Architecture	3
FAAH 3240	Japanese Art and Architecture	3
FAAH 3590	Islamic Art and Architecture	3
Clayton H. Riddell Faculty of Environment, Earth, and Resources		
Geography		
GEOG 2490*	Geography of Modern China	3
GEOG 3590	Geography of Developing Countries	6
* Indicates course no longer offered.		

8.2.3 Asian Studies Course Descriptions

Asian Studies Course Descriptions-1000 Level

ASIA 1420 Asian Civilizations to 1500 (B) Cr.Hrs. 3

(Formerly 150.142) A study of major themes in the history and culture of China and Japan, the Indian subcontinent and Southeast Asia from ancient times to around 1500. Also offered as History HIST 1420. May not hold credit with HIST 1420 (011.142).

ASIA 1430 Asian Civilization from 1500 (B) Cr.Hrs. 3

(Formerly 150.143) A study of major themes in the history and culture of China and Japan, the Indian subcontinent and Southeast Asia in modern times. Also offered as History HIST 1430. May not hold credit with HIST 1430 (011.143).

ASIA 1750 Introduction to Korean Cr.Hrs. 6

(Lab required) An introduction to spoken and written Korean for students with little or no previous knowledge of the language. Students will be taught basic pronunciation, vocabulary, and grammar, as well as the Hangul writing system. Students who have received all or a portion of their elementary or secondary education in the Korean language may not normally enrol. Not open to students who have previously obtained credit in ASIA 2750.

ASIA 1760 Introduction to Chinese (Mandarin) Cr.Hrs. 6

(Formerly 150.176) An introduction to modern vernacular (Mandarin) Chinese in spoken and written form. Grounding in pronunciation, basic grammar, vocabulary, and some written characters. Students who have received all or a portion of their elementary or secondary education in the Chinese language may not normally enrol. Not open to students who have previously obtained credit for ASIA 2760 (150.276) or ASIA 3760 (150.376) or the former ASIA 2360 (150.236).

ASIA 1770 Introduction to Japanese Cr.Hrs. 6

(Formerly 150.177) An introduction for non-Japanese speakers to Hiragana, Katakana, and some Kanji. Students will be taught pronunciation, grammar, vocabulary, and about 250 written characters. Not open to students who previously obtained credit for ASIA 2770 (150.277) or ASIA 3770 (150.377). Students who have obtained Grade 12 Japanese in Canada or abroad must obtain written consent of instructor.

ASIA 1780 Basic Sanskrit Cr.Hrs. 6

(Formerly 150.178) Students will first learn the Devanagari script then proceed to reading, writing, conversation, grammar and vocabulary. Not open to students who previously obtained credit for ASIA 2780 (150.278).

ASIA 1790 Basic Hindi-Urdu Cr.Hrs. 6

(Formerly 150.179) Training in conversation, reading and writing of modern standard Hindi and some elements of Urdu. Students will learn to read and write the Devanagari script, and learn the basic grammar of the language. Not open to students who have previously obtained credit for the former ASIA 2790 (150.279) or the former ASIA 3790 (150.379).

Asian Studies Course Descriptions-2000 Level

ASIA 2080 South Asian Civilization Cr.Hrs. 3

An interdisciplinary study of the Indian subcontinent from the ancient to the contemporary period, focusing on geographic, religious, historic, sociological, and political developments. Students may not hold credit for both ASIA 2080 and the former ASIA 2070 (150.207).

ASIA 2570 History, Culture, and Society in Chinese Film Cr.Hrs. 3

(Formerly 150.257) This course will focus on the presentation of various aspects of twentieth century Chinese culture through the medium of film. Films will be selected largely from those recently produced in China, Taiwan, and Hong Kong, with some attention to recent North American movies by ethnic Chinese directors.

ASIA 2580 Women in Chinese Film Cr.Hrs. 3

(Formerly 150.258) This course will focus on the cinematic presentation of women in Chinese films. Films will be selected largely from those produced recently in China, Taiwan, and Hong Kong, as well as in North America by ethnic Chinese directors. The intention is to review how the image of women as reflected in Chinese cinema has changed with time, place, and modern technology.

ASIA 2600 Japanese Film Cr.Hrs. 3

A survey of cinematic art in Japan, with emphasis on the major directors and trends of the postwar period. Films to be studied will be drawn from the work of Mizoguchi, Ozu, Kurosawa, the "New Wave" directors of the 1960s, the comedies of Itami, and films of contemporary directors such as Kitano and Miyazaki.

ASIA 2610 Modern Chinese Literature in Translation Cr.Hrs. 3

A study of 20th and 21st century Chinese literature (in English translation) from the May 4th Movement to the present. With a special focus on prose fiction, students will be introduced to the historical and critical context of literary production in modern China. Lectures and texts in English. Students may not hold credit for both ASIA 2610 and the former ASIA 2660 (150.266).

ASIA 2620 Japanese Civilization Cr.Hrs. 3

(Formerly 150.262) An interdisciplinary study of Japanese civilization from earliest times to the Meiji Restoration. All aspects of traditional Japanese culture will be examined, including geography, religion, philosophy, history, sociology, economics and politics. The nature of Japanese cultural identity will be taken as a unifying theme. Students may not hold credit for both ASIA 2620 (150.262) and the former 150.211.

ASIA 2630 Chinese Civilization Cr.Hrs. 3

(Formerly 150.263) An interdisciplinary study of Chinese civilization from earliest times to the Opium War. All aspects of traditional Chinese culture will be examined, including geography, religion, philosophy, history, sociology, economics, and politics. A central unifying theme will be the examination of Chinese cultural identity. Students may not hold credit for both ASIA 2630 (150.263) and the former 150.211.

ASIA 2650 Premodern Chinese Literature in Translation Cr.Hrs. 3

A study of pre-modern Chinese literature up to 1911. Includes writings in early history and philosophy, essays, poetry, short stories and novels. Lectures and texts in English.

ASIA 2662 Chinese Diaspora Literature Cr.Hrs. 3

This course focuses on the contemporary literature of the Chinese diaspora. Through a reading of prose fiction by writers of Chinese ethnicity living in locations like Taiwan, Hong Kong, Southeast Asia, Australia and North America, we will explore the notion of "different ways of being Chinese." Some of the material studied will have been originally written in English, but much of it will be read in English translation. Lectures and texts in English.

ASIA 2670 Modern Japanese Literature in Translation Cr.Hrs. 3

(Formerly 150.267) This course is intended as an introduction to Japanese Literature from the Meiji era (1868-1912) to the present day. Although some attention will be paid to poetry, the emphasis will be on short stories and the novel.

ASIA 2750 Intermediate Korean Cr.Hrs. 6

(Lab required) A continuation of the study of spoken and written Korean for students who have successfully completed ASIA 1750. Students will be taught advanced pronunciation, vocabulary, and grammar. Students who have received all or a portion of their elementary or secondary education in the Korean language may not normally enrol except by special permission of the instructor. Prerequisite: [a grade of "C" or better in ASIA 1750] or written consent of instructor.

ASIA 2760 Intermediate Chinese (Mandarin) Cr.Hrs. 6

(Formerly 150.276) Continues the introduction of basic vocabulary, grammatical structures, and written characters. Emphasis will be given to the development of aural/oral skills. Not open to students who have previously obtained credit for ASIA 3760 (150.376) or the former ASIA 2360 (150.236). Prerequisite: [a grade of "C" or better in ASIA 1760 (150.176)] or written consent of instructor.

ASIA 2770 Intermediate Japanese Cr.Hrs. 6

(Formerly 150.277) For students who have taken Japanese ASIA 1770 (150.177). Continues the introduction of basic vocabulary, grammatical structures and more written characters. Greater emphasis will be given to the development of aural/oral skills. Not open to students who have previously obtained credit in ASIA 3770 (150.377). Prerequisite: [a grade of "C" or better in ASIA 1770 (150.177)] or written consent of instructor.

ASIA 2780 Intermediate Sanskrit Cr.Hrs. 6

(Formerly 150.278) Advanced grammar, vocabulary, and syntax to enable the student to read epic and pauranic materials. Prerequisite: [a grade of "C" or better in ASIA 1780 (150.178)] or written consent of instructor.

Asian Studies Course Descriptions-3000 Level

ASIA 3480 Selected Topics in Asian Studies 1 Cr.Hrs. 3

(Formerly 150.348) An intensive study of specially selected authors or themes in Asian Studies. The particular subject will vary year to year. Prerequisite: written consent of Asian Studies coordinator. As the course content will vary from year to year, students may take this course more than once for credit.

ASIA 3490 Selected Topics in Asian Studies 2 Cr.Hrs. 3

(Formerly 150.349) An intensive study of specially selected authors or themes in Asian Studies. The particular subject will vary year to year. Prerequisite: written consent of Asian Studies coordinator. As the course content will vary from year to year, students may take this course more than once for credit.

ASIA 3520 The Japanese Theatre Cr.Hrs. 3

(Lab required) An overview and practical introduction to the Japanese theatre. Combines the study of theatre history and representative traditional and modern genres (kagura, nō, kyōgen, kabuki, bunraku, shingeki) with training in traditional movement and dance, and the performance of short, kyōgen plays. Prerequisite: [a grade of "C" or better in at least one of: ASIA 1770 (150.177) or ASIA 2620 (150.262) or THTR 1220 (154.122)] or written consent of instructor.

ASIA 3560 Themes and Genres in Asian Literature Cr.Hrs. 3

A study of selected works of Asian literature organized around specific themes or genres in English translation. Content may vary from year to year, but will include literary works from two or more regions and two or more historical periods. Prerequisite: [a grade of "C" or better in ASIA 1420 (150.142) (HIST 1420 or the former 011.142) or ASIA 1430 (150.143) (HIST 1430 or the former 011.143)] or written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

ASIA 3600 Japanese Popular Culture Cr.Hrs. 3

(Formerly 150.360) This course examines various examples of popular culture in contemporary Japan, including popular literature, film, television, popular music, and leisure activities. Attention will also be paid to popular culture theory and methods of analysis. Prerequisite: [a grade of "C" or better in ASIA 2620 (150.262)] or written consent of instructor.

ASIA 3750 Advanced Korean Cr.Hrs. 6

A continuation of the study of spoken and written Korean for students who have successfully completed ASIA 2750. Students will engage in group projects, discussions, and presentations on topics covered in the course and in a range of communicative situations. Students will also be introduced to authentic examples of Korean novels, essays, journal articles, movies, TV dramas, and selections from Korean history and arts. Students who have received all or a portion of their elementary or secondary education in the Korean language may not normally enroll except by special permission of the instructor. Prerequisite: [a grade of "C" or better in ASIA 2750] or written consent of instructor.

ASIA 3760 Advanced Chinese (Mandarin) Cr.Hrs. 6

(Formerly 150.376) This course is for those who have taken Intermediate Chinese or who have obtained basic language skills in Mandarin Chinese elsewhere. A balanced approach to reading, writing, and aural/oral skills will be employed. Students will use advanced prepared texts and will also be introduced to selected examples of contemporary Chinese literature. Not open to students who previously obtained credit for the former ASIA 3660 (150.366) or the former ASIA 2360 (150.236). Prerequisite: [a grade of "C" or better in ASIA 2760 (150.276)] or written consent of instructor.

ASIA 3770 Advanced Japanese Cr.Hrs. 6

(Formerly 150.377) This course is designed for those who have taken ASIA 2770 (150.277) Intermediate Japanese or have basic linguistic skills in Japanese and wish to improve their ability in the Japanese language previously acquired. Prerequisite: [a grade of "C" or better in ASIA 2770 (150.277)] or written consent of instructor.

ASIA 3780 Advanced Reading in Japanese Cr.Hrs. 3

This course allows students to further develop their skills in the Japanese language through a focus on reading. Course material will be drawn from examples of modern literature and film scripts. Prerequisite: [a grade of "C" or better in ASIA 3770 (150.377)] or written consent of instructor.

ASIA 3792 Linguistic Analysis of Japanese Cr.Hrs. 3

This course analyses structures and usage of the Japanese language, using linguistic methodology to understand the language and associated social, cultural, psychological, and cognitive factors. Prerequisite: [a grade of "C" or better in ASIA 2770 (150.277)] or written consent of instructor.

8.3 Canadian Studies Program

Acting Program Coordinator: Barry Ferguson

Program Office: 251 St. John's College

Telephone: 204 474-6407

E-mail: Barry.Ferguson@ad.umanitoba.ca

Website: umanitoba.ca/canadian_studies/

8.3.1 Program Information

This is an interdisciplinary program that offers a comprehensive and focused approach to the study of Canada. Students will examine Canadian politics, economics, society and culture within a national and international context. A knowledge of French is an asset but it is not required.

The "List of Approved Courses in Canadian Studies" below identifies courses that may be used toward partial fulfillment of the requirements for Canadian Studies. These courses are also identified on Aurora Student with the course attribute of "Canadian Studies Requirement."

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Program.

Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in six credit hours from the list of approved courses in Canadian Studies. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in a six credit hours from the list of approved courses in Canadian Studies.

Honours Program

For entry to the Honours program, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Single Honours

Single Honours will consist of:

- 1) 54 credit hours from the list of approved courses in Canadian Studies, to be taken in the three Honours years, of which a maximum of 24 credit hours and minimum of 12 credit hours must be taken in any one department. At least 24 credit hours must be taken in courses designated as Honours courses. One of these may be a 4000-level interdisciplinary Honours seminar in Canadian Studies.
- 2) The minimum total credit hours that students must hold in order to complete an Honours program in Canadian Studies are 30 in Year 1; 30 in Year 2; 30 in Year 3; and 30 in Year 4.

Double Honours

Double Honours shall consist of:

- 1) 36 credit hours in one of the participating departments, not necessarily courses in the Canadian field, selected in accordance with the regulations of that department.
- 2) 36 credit hours chosen from the list of approved courses in Canadian Studies. At least 18 credit hours from the 36 must be Honours courses. One of these may be a 4000-level interdisciplinary seminar in Canadian Studies.
- 3) The minimum total credit hours that students must hold in order to complete a Double Honours program in Canadian Studies are 30 in Year 1; 30 in Year 2; 30 in Year 3; and 30 in Year 4.

A reading knowledge of French, while not required, is recommended. Students should note that, for certain specific Honours courses in the Canadian field, a reading knowledge of French is, in fact, a prerequisite.

Each of the participating departments is represented by at least one member on the Canadian Studies Program Committee. The initial academic advisor for the program is the committee as a whole or any one of its members. Students who are interested in Canadian Studies may obtain further information from the Canadian Studies Program Coordinator. Students should consult the appropriate department upon entering the program regarding prerequisites for specific courses.

For course descriptions, see departmental listings.

ACADEMIC CALENDAR 2015-2016

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR¹ TOTAL: 30 CREDIT HOURS			
6 credit hours in courses numbered at the 1000 or 2000 level from the list of approved courses in Canadian Studies	24 credit hours from the list of approved courses in Canadian Studies, of which at least 6 credit hours must be numbered at the 3000 level		
MINOR (CONCENTRATION)² TOTAL: 18 CREDIT HOURS			
6 credit hours in courses numbered at the 1000 or 2000 level from the list of approved courses in Canadian Studies	12 credit hours from the list of approved courses in Canadian Studies		
SINGLE HONOURS³			
6 credit hours in courses numbered at the 1000 or 2000 level from the list of approved courses in Canadian Studies	<ul style="list-style-type: none"> • 18 credit hours from the list of approved courses in Canadian Studies (6 credit hours are required in three subject fields) • 12 credit hours in ancillary options⁴ 	<ul style="list-style-type: none"> • 18 credit hours from the list of approved courses in Canadian Studies, of which at least 6 hours must be in an Honours course • 6 credit hours in ancillary options⁴ • 6 credit hours in free options⁵ 	<ul style="list-style-type: none"> • 18 credit hours from the list of approved Honours courses in Canadian Studies • 6 credit hours in ancillary options⁴ • 6 credit hours in free options⁵
DOUBLE HONOURS³			
6 credit hours in courses numbered at the 1000 or 2000 level from the list of approved courses in Canadian Studies	<ul style="list-style-type: none"> • 12 credit hours from the list of approved courses in Canadian Studies • 12 credit hours in other Honours field • 6 credit hours in ancillary options⁴ 	<ul style="list-style-type: none"> • 12 credit hours in approved courses in Canadian Studies • 12 credit hours in other Honours field • 6 credit hours in free options⁵ 	<ul style="list-style-type: none"> • 12 credit hours in approved courses in Canadian Studies • at least 12 credit hours in other Honours field • 6 credit hours in free options⁵
NOTES:			
<p>¹ A Major consists of 30 credit hours, chosen from the list of approved courses in Canadian Studies, of which 6 credit hours must be taken from courses numbered at the 3000 level and 12 credit hours, but no more, must be taken in one department on the list. A maximum of 12 credit hours in courses numbered at the 1000 level may be used toward the 30 credit hour Major.</p> <p>² A Minor (Concentration) consists of 18 credit hours including at least 6 credit hours from each of two departments, chosen from the list of approved courses in Canadian Studies. A maximum of 6 credit hours in courses numbered at the 1000 level may be used toward the 18 credit hour Minor.</p> <p>³ Honours Courses: all 4000 level courses.</p> <p>⁴ Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Canadian Studies courses).</p> <p>⁵ Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Canadian Studies courses).</p>			

8.3.2.1 List of Approved Courses in Canadian Studies, Pt 1

List of Approved Courses in Canadian Studies

In the following list of approved courses the designation (H) indicates an Honours course. Courses designated (USB) are offered in French at Université de Saint-Boniface.

* In the list below indicates courses no longer offered.

Faculty of Arts					
Canadian Studies			ANTH 3461	Ethnologie des Amérindiens de l'Amérique du Nord (B) (USB)	3
CDN 1130	Introduction to Canadian Studies	6	ANTH 3500	Peoples of the Arctic (B)	3
CDN 3730	Canadian Identity: An Interdisciplinary Approach	3	ANTH 3501	Peuples de l'Arctique (B) (USB)	3
CDN 4410	Seminar in Canadian Studies (H)	6	ANTH 3550	Canadian Subcultures	3
Anthropology			ANTH 3551	Sous-cultures canadiennes (USB)	3
ANTH 2040	Native North America: A Sociocultural Survey (B)	3	ANTH 3910	Archaeological Field Training (D,E)	6
ANTH 2041	Les Amérindiens de l'Amérique du nord: une étude socioculturelle (B) (USB)	3	Economics		
ANTH 2640	Manitoba Prehistory	3	ECON 1210	Introduction to Canadian Economic Issues and Policies	3
ANTH 3460*	Native North American Ethnology (B)	3			

ECON 1211	Introduction aux politiques et aux problèmes économiques canadiens (USB)	3	HIST 2970*	Modern Canada: 1921 to the Present (C)	6
ECON 2280*	Social Welfare and Human Resources	6	HIST 2971	Le Canada moderne: de 1921 à nos jours (USB)	6
ECON 2310	Canadian Economic Problems	6	HIST 3050	Canada since 1945 (C)	6
ECON 2311	Les problèmes économiques du Canada (USB)	6	HIST 3052	Canada since the 1960s (C)	3
ECON 2350	Community Economic Development	3	HIST 3054	Canada and the United States (C)	3
ECON 2360*	Women in the Canadian Economy	6	HIST 3220*	The History of Canadian-American Relations (A,C)	6
ECON 2362	Economics of Gender	3	HIST 3250	Canada and the World, 1867 to the Present (C)	6
ECON 3300*	Canadian Economic History	6	HIST 3442	Race, Ethnicity, Immigration, and Nation in Canadian History (C)	3
ECON 3301	Histoire économique du Canada (USB)	6	HIST 3572	The History of Women, Gender, and Sexuality in Canada (C)	6
ECON 3510*	Industrial Relations (Cross-listed with Labour Studies LABR 3510)	6	HIST 3690	History of Northern Canada (C)	6
ECON 3690	Economic Issues of Health Policy	3	HIST 3721	Histoire du Manitoba (C) (USB)	6
ECON 3720	Urban and Regional Economics and Policies	3	HIST 3730	A History of Western Canada (C)	6
018.352*	Introductory Regional Economics	3	HIST 3780	Studies in Canadian History 1 (C)	3
018.353*	Intermediate Regional Economics	3	HIST 3781	Études choisies en histoire du Canada 1 (USB)	3
018.357*	Health Economics	3	HIST 3790*	Studies in Canadian History 2 (C)	3
018.360*	Workshop in the Economy of Canada	6	HIST 3791	Études choisies en histoire du Canada 2 (USB)	3
English, Film, and Theatre			HIST 3910	The Ukrainians in Canada (C)	3
ENGL 2270	Canadian Literature	6	HIST 4060	Gender History in Canada (C) (H)	6
ENGL 3270	Studies in Canadian Literature	3	HIST 4280	Topics in the Cultural History of Canada (C) (H)	6
ENGL 3271	Studies in Canadian Literature	3	HIST 4340	Introduction to Archival Science (G) (H)	6
004.275*	Canadian Literature (H)	6	HIST 4390*	The History of White Attitudes and Policies towards Native Peoples in North America (C) (H)	6
004.288*	Canadian Literature to 1967	3	HIST 4680	Social History of Health and Disease in Modern Canada (C) (H)	6
004.289*	Canadian Literature after 1967	3	HIST 4700*	Canada, 1896 to the Present (C) (H)	6
004.377*	Canadian Poetry	6	HIST 4720*	History of Manitoba (C) (H)	6
004.378*	The Canadian Novel	6	HIST 4890	Canadian Social History (C) (H)	6
004.388*	Studies in Canadian Literature	6	HIST 4900*	The Hudson's Bay Company and British North America (C) (H)	6
FILM 2430	The Canadian Film	3	HIST 4950*	History of Quebec (C) (H)	6
Français (USB)			011.133*	History of Canada from 1534 (C)	6
FRAN 2831	L'individu et le pays (USB)	3	011.133F*	Histoire du Canada (USB)	6
FRAN 2881	Civilisation canadienne-française (USB)	3	011.254*	North American Indian (A,C,S)	6
FRAN 3531	Le théâtre québécois (USB)	3	011.324*	Protestantism and the Development of the Canadian Community, 1749-1970 (C,S)	6
FRAN 3541	Le théâtre de l'Ouest (USB)	3	011.438*	Intellectual History of Canada (C) (H)	3
FRAN 3831	L'époque de la contestation (USB)	3	011.449*	The New Canada, 1867-96 (S) (H)	6
FRAN 3841	La révolution tranquille et le roman (USB)	3	Icelandic		
FRAN 3851	Le théâtre de l'Ouest: poésie, nouvelles (USB)	3	ICEL 2230	Contemporary Icelandic-Canadian Literature	3
FRAN 3861	Le théâtre de l'Ouest: romans (USB)	3	ICEL 2300*	Icelandic-Canadian Literature (H)	6
FRAN 4831	Littérature de l'Acadie et des Cajuns (USB)	3	ICEL 3460*	Laura Goodman Salverson	3
French, Spanish and Italian			ICEL 4440	The Icelanders in Canada (H)	3
FREN 2700	Poésie et théâtre canadiens-français (B)	3	012.445*	Stephan G. Stephansson (H)	3
FREN 3140	Roman canadien-français (B)	3	Labour Studies		
FREN 3850	Civilisation canadienne-française (C)	3	LABR 3510	Industrial Relations (Cross-listed with Economics ECON 3510)	6
044.247*	French-Canadian Literature in Translation	6	Linguistics		
044.348*	Littérature canadienne-française (H)	3	LING 1360	Languages of Canada	3
044.353*	Littérature canadienne-française (B)	3	Native Studies		
History			NATV 1200	The Native Peoples of Canada	6
HIST 1390	History of Colonial Canada: 1500-1885 (C)	3	NATV 1220	The Native Peoples of Canada, Part 1	3
HIST 1400	History of the Canadian Nation Since 1867 (C)	3	NATV 1240	The Native Peoples of Canada, Part 2	3
HIST 1440	History of Canada (C)	6	NATV 1250	Introductory Cree 1	3
HIST 1441	Histoire du Canada (USB)	6	NATV 1260	Introductory Cree 2	3
HIST 2191	Histoire économique et sociale canadienne du XIXe siècle (USB)	6	NATV 1270	Introductory Ojibway 1	3
HIST 2280	Aboriginal History of Canada (C)	6	NATV 1280	Introductory Ojibway 2	3
HIST 2282	Inventing Canada (C)	3	NATV 1290	Introductory Inuktitut	3
HIST 2284*	Democracy and Dissent in Canada: Social Movements in the 20th Century (C)	3	NATV 2020	The Métis of Canada	3
HIST 2286	Modern Canada (C)	3	NATV 2040	Native Peoples of the Northern Plains	3
HIST 2288	History of Social Movements in Canada (C)	3	NATV 2060	The Native Peoples of the Eastern Woodlands	3
HIST 2950*	Early Canada: from the Earliest Settlement to 1867 (C)	6	NATV 2070	The Native Peoples of the Subarctic	3
HIST 2951*	Les origines du Canada: depuis la première colonie jusqu'en 1867 (USB)	6	NATV 2080	Inuit Society and Culture	3
HIST 2960*	The New Dominion: 1867 to 1921 (C)	6	NATV 2220	Native Societies and the Political Process	3
HIST 2961*	Le nouveau Dominion: de 1867 à 1921 (USB)	6			

ACADEMIC CALENDAR 2015-2016

NATV 2250	Intermediate Cree	6
NATV 2270*	Intermediate Ojibway	6
NATV 2272	Intermediate Ojibway 1	3
NATV 2274	Intermediate Ojibway 2	3
NATV 2300	Cree Literature	3
NATV 2320	Structure of the Cree Language	3
NATV 2410	Canadian Native Literature	3
NATV 2420	Inuit Literature in Translation	3
NATV 2450	Images of Indians in North American Society	3
NATV 3000	Selected Topics	3
NATV 3240	Native Medicine and Health	3
NATV 3270	The Métis Nation	3
NATV 3280	Aboriginal Peoples and the Canadian Justice System	3
NATV 3300	Native Language Planning and Development	3
NATV 3310	Canadian Law and Aboriginal Peoples	3
NATV 3320*	Aboriginal Organizations	3
NATV 3340*	Circumpolar Cultures and Lifestyles	3
NATV 3370	Political Development in the North	3
NATV 3380	Cultural Constructions of Gender in Canadian Aboriginal Societies	3
NATV 4200	First Nations Government	3
NATV 4210	Seminar in Contemporary and Historical Métis Issues	3
NATV 4220	Environment, Economy and Aboriginal People	3
NATV 4230	Traditional Knowledge and Native Studies Research	3
NATV 4240	Arctic Lifestyles	3
NATV 4250	Topics on Aboriginal Identities	3
NATV 4260*	Sacred Lands and Sacred Spaces of Indigenous Peoples	3
NATV 4280	Missionaries, Colonialism and Aboriginal Peoples	3
032.090*	Introductory Cree	6
032.091*	Introductory Ojibway	6
032.121*	Intermediate Ojibway	6
032.130*	Intermediate Cree	6
032.205*	Coastal Indians of Canada	3
032.220*	Native Societies and the Political Process	3
032.321*	The Native Identity	6
032.323*	Native Peoples and the Law 2	3
032.325*	Native Peoples and the Law 1	6
032.373*	Art of the North American Native Peoples	3
Political Studies		
POLS 1070	Law, Politics and Power in Canada	3
POLS 2070	Introduction to Canadian Government	6
POLS 2071	Introduction au système gouvernemental Canadien (USB)	6
POLS 2561	Questions d'actualité en politique Canadienne (USB)	6
POLS 2570*	Introduction to Public Administration	6
POLS 2571	Initiation à l'administration publique (USB)	6
POLS 3100	Gender and Politics in Canada	3
POLS 3170	The Canadian Charter of Rights and Freedoms	3
POLS 3470	Canadian Public Management	3
POLS 3520	Canadian Foreign and Defence Policy	6
POLS 3561	Politique étrangère Canadienne (USB)	6
POLS 3670	Canadian Political Parties	3
POLS 3860	Canadian Federalism	3
POLS 3960	Canadian Politics	6
POLS 4070	Advanced Seminar: Canadian Government (H)	3
POLS 4080	Advanced Seminar: Canadian Democracy (H)	3
POLS 4140	Canadian Political Ideas (H)	3
POLS 4150	Indigenous Governance (H)	3
POLS 4180	Provincial Politics in Canada (H)	3
POLS 4190	Manitoba Politics and Government (H)	3
POLS 4660	The State in the Economy (H)	6
POLS 4860	The Canadian Policy Process (H)	6
019.156*	Introduction to Canadian Government	6
019.156F*	Introduction au système gouvernemental Canadienne (USB)	6
019.206*	Urban and Local Politics	6
019.256*	Issues of Canadian Politics	6
019.266*	Human Rights and Civil Liberties	6
019.286*	Canadian Political Parties	6
019.356*	Canadian Foreign Policy	6
019.366*	Quebec and the Canadian Political System (H)	3
019.368*	Canadian Defense Policy	3
019.476*	Manitoba Politics and Voting Behaviour	6
019.487*	Government and Public Sector Unionism (H)	6
Religion		
RLGN 2410*	Religion in Canada (C)	6
RLGN 2411*	Les religions au Canada (USB)	6
RLGN 2590	Religion and Social Issues	3
RLGN 2591	La religion et les problèmes sociaux (USB)	3
020.272*	Dimensions of Religiosity in Contemporary Canadian Literature	6
Slavic Studies		
UKRN 2410	Ukrainian Canadian Cultural Experience	3
UKRN 2420*	Ukrainian Canadian Literature	3
UKRN 2430*	Ukrainian Canadian Folklore	3
Sociology		
SOC 2320	Canadian Society and Culture	3
SOC 2321	La société Canadienne et sa culture (USB)	3
SOC 2370	Ethnic Relations	3
SOC 2371	Rapports ethniques (USB)	3
SOC 2531	Sociologie du Manitoba (USB)	6
SOC 2610	Sociology of Criminal Justice and Corrections	3
SOC 2620	The Sociology of Aging	3
SOC 3380	Power, Politics and the Welfare State	3
SOC 3470*	Political Sociology	3
SOC 3471	Sociologie politique (USB)	3
SOC 3700	Sociology of Law	3
Ukrainian Canadian Heritage Studies		
UCHS 3100	The Ukrainian Arts in Canada	3
School of Art		
FAAH 3260	Canadian Art and Architecture to World War II	3
FAAH 3270	Canadian Art Since World War II	3
FAAH 3430	Inuit Art	3
054.358*	Inuit Culture and Art	3
054.375*	Canadian Art 1	3
054.376*	Canadian Art 2	3
Clayton H. Riddell Faculty of Environment, Earth, and Resources		
Geography		
GEOG 2450*	The Making of the Prairie Landscape (A)	6
GEOG 2570	Geography of Canada (A)	3
GEOG 2900	Geography of Canadian Prairie Landscapes (A)	3
GEOG 3431	Géographie du Canada (USB)	3
GEOG 3480*	Canadian Problems	3
GEOG 3481	Particularités de la géographie du Canada (USB)	3
GEOG 3700*	Canada: The Making of the Human Landscape (A)	6
GEOG 3701	Canada: évolution de l'écoumène (USB)	6
GEOG 3900*	Geography of Manitoba (A)	3
053.369*	Historical Geography of Indian Peoples in the Canadian Fur Trade	6
053.378*	Historical Geography of Canadian Indians (A)	6
053.470*	Historical Geography of the Ojibway Indians (H)	3

8.3.3 Canadian Studies Course Descriptions

CDN 1130 Introduction to Canadian Studies Cr.Hrs. 6

(Formerly 151.113) This course will introduce students to an interdisciplinary study of Canadian themes and issues from early exploration to the present. The emergence of Canada as a nation will be studied within the context of four themes: the aboriginal past; the land; political and economic structures; art and culture. As a first-year course in Canadian studies students will be encouraged to develop their writing, research and library skills.

CDN 3730 Canadian Identity: An Interdisciplinary Approach Cr.Hrs. 3

(Formerly 151.373) An interdisciplinary lecture/seminar (art, economics, history, literature) course which will explore Canadian Identity. Themes to be studied include the Aboriginal past, French/British colonization, Land/regions and Ethnic diversity.

CDN 4410 Seminar in Canadian Studies Cr.Hrs. 6

(Formerly 151.441) A seminar course whose content may vary from year to year. Prerequisite: written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

8.4 Catholic Studies Program

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Website: umanitoba.ca/catholic_studies

8.4.1 Program Information

The historical relationships and ongoing encounters that the members of the Roman Catholic Church have had with disciplines such as history, the arts and sciences, as well as human thought comprise the framework around which the Catholic Studies program is formed. It seeks to explore the Catholic tradition in ways that do justice to its full contributions and challenges as a historical and contemporary phenomenon.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Minor Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in CATH 1190 and a grade of "C" or better in at least three credit hours from the List of Approved Courses in Catholic Studies.

YEAR 1	YEAR 2	YEAR 3	YEAR 4
MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS			
CATH 1190 and at least 3 credit hours from the List of Approved Courses in Catholic Studies	<ul style="list-style-type: none"> • CATH 3900 • 9 credit hours from the List of Approved Courses in Catholic Studies 		

List of Approved Courses in Catholic Studies		
Faculty of Arts		
Catholic Studies		
CATH 1190	Introduction to Catholic Studies	3
CATH 2000	Special Topics in Catholic Studies	3
CATH 2010	Literature and Catholic Culture 1	3
CATH 2020	Literature and Catholic Culture 2	3
CATH 2100	Field Studies in Catholic Culture	6
CATH 2200	Catholicism and Human Sexuality	3
CATH 2300	The Jesuits: Their Legacy and Influence	3
CATH 2400	Mystics, Saints and Sinners: The Quest for Holiness in the Catholic Church	3
CATH 3900	Catholic Social Teaching	3
History		
HIST 2180	The History of Catholicism to 1540 (G)	3
HIST 2990	The History of Catholicism since 1540 (G)	3
HIST 2991	Histoire de l'Église catholique depuis 1540 (G)	3
HIST 4820*	The Crusades (D)	6
Philosophy		
PHIL 2320*	Thomas Aquinas and Medieval Philosophy	6
PHIL 2780	Thomas Aquinas	3
Religion		
RLGN 2840	The Second Vatican Council	3
RLGN 2850	Contemporary Issues in Roman Catholicism	3
RLGN 3870	The Thought of Bernard Lonergan	3
School of Art		
Art History		
FAAH 2060	Medieval to Early Renaissance Art and Architecture	3
FAAH 2070	Renaissance to Baroque Art and Architecture	3
FAAH 3130	Topics in Medieval Art and Architecture	3
FAAH 3140	Topics in Renaissance and Baroque Art and Architecture	3
FAAH 3280	Early Byzantine Art and Architecture	3

* Indicates course no longer offered.

8.4.3 Catholic Studies Course Descriptions

CATH 1190 Introduction to Catholic Studies Cr.Hrs. 3

(Formerly 160.119) An initiation into diversity, richness, and significance of Roman Catholicism in its many different forms and expressions, seeking to highlight the resources and techniques available for pursuing an interdisciplinary study of Catholicism as a field of intellectual inquiry.

CATH 2000 Special Topics in Catholic Studies Cr.Hrs. 3

The subject matter of this course will vary from year to year, but it will deal with a special topic of current interest in the interdisciplinary program in Catholic Studies. Prerequisite: [a grade of "C" or better in CATH 1190 (160.119)] or written consent of program coordinator. As the course content will vary from year to year, students may take this course more than once for credit.

CATH 2010 Literature and Catholic Culture 1 Cr.Hrs. 3

The course will focus on the portrayals of Catholic Culture in literature of the 20th Century prior to Vatican II Council. Students will also study the formal features of poetry, drama, and prose focusing on the Catholic Tradition. Prerequisite: [a grade of "C" or better in CATH 1190 (160.119) or ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)] or written consent of instructor.

CATH 2020 Literature and Catholic Culture 2 Cr.Hrs. 3

The course will focus on the portrayals of Catholic Culture in literature of the 20th and 21st Century following Vatican II Council. Students will also study the formal features of poetry, drama, and prose involving the Catholic Tradition. Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)] or written consent of instructor.

CATH 2100 Field Studies in Catholic Culture Cr.Hrs. 6

Offered as part of the Summer Session, this course consists of on-campus study followed by travel to major sites and museums. Prerequisite: none, but CATH 1190 (160.119) is recommended.

CATH 2200 Catholicism and Human Sexuality Cr.Hrs. 3

This course explores the Catholic Church's understanding of sexual expression with a focus on topics such as reciprocity and performance, fidelity, romantic love, sexual identities, and intimacy with special attention given to the works of Pope John Paul II and other contemporary Catholic thinkers. Students may not hold credit for both CATH 2200 and CATH 2000 when titled "Catholicism and Sexual Expression." Prerequisite: [a grade of "C" or better in CATH 1190 (160.119)] or written consent of instructor.

CATH 2300 The Jesuits: Their Legacy and Influence Cr.Hrs. 3

The Society of Jesus (the Jesuit order) has aroused admiration and respect as well as fear and suspicion throughout its eventful history. The Jesuits have left an indelible mark on the Catholic Church as well as the modern world itself in their roles as explorers, intellectuals, artists, scientists, and teachers. This course focuses on Jesuit contributions to science, education, the fine arts, politics, and social reform since the order's foundation in 1534. Students may not hold credit for both CATH 2300 and CATH 2000 when titled "The Jesuits: Their Legacy and Influence." Prerequisite: [a grade of "C" or better in CATH 1190 (160.119)] or written consent of instructor.

CATH 2400 Mystics, Saints, and Sinners: The Quest for Holiness in the Catholic Church Cr.Hrs. 3

This course will explore the Roman Catholic notion of sanctity as it developed over the course of history. From martyr to mystic and ascetic to activist, variations of holiness will be examined in relation to the regions, periods, and interests that shaped them. It provides both a chronological and an interdisciplinary overview of sanctity from the New Testament to the present with a special focus on the lives of the saints, relics, shrines, and canonization treatises. Prerequisite: [a grade of "C" or better in CATH 1190 (160.119)] or written consent of instructor.

CATH 3900 Catholic Social Teaching Cr.Hrs. 3

An introduction to Catholic social teaching with a dual focus on critical theory and praxis. Students will engage the Church's position on issues such as human dignity, solidarity with minority and oppressed populations, the common good, subsidiarity, rights and responsibilities, as well as the preferential option for the poor. Prerequisite: [a grade of "C" or better in each of CATH 1190 (160.119) and an additional 3 credit hours of CATH courses] or written consent of instructor.

8.5 Central and East European Studies Program

Acting Program Coordinator: Iryna Konstantiuk

Program Office: 321 Fletcher Argue

Telephone: 204 474 8298

E-mail: Iryna.Konstantiuk@umanitoba.ca

Website: umanitoba.ca/european_studies/

8.5.1 Program Information

The disintegration of the former Soviet Union has altered the social, political, and economic environment of Central and Eastern Europe. The emergence of new independent countries and the transition from an environment dominated by communist political and economic structures continue to reshape Europe. This program offers an array of courses from five departments. It explores past and present issues in the region.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of “C” or better in both six credit hours of Russian, German, Polish, Ukrainian, Hungarian or Yiddish and six credit hours from the list of approved courses in Central and East European Studies below. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of “C” or better in both six credit hours of Russian, German, Polish, Ukrainian, Hungarian or Yiddish and six credit hours from the list of approved courses in Central and East European Studies below.

Honours Program (Double Honours Only)

For entry to the Honours program, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

This program is only available to students registered in the Honours program in Economics, History or Political Studies.

Courses used toward the Major, Minor (Concentration) or Honours may not also be used toward a Major, Minor (Concentration) or Honours in the department in which they are offered.

8.5.2 Central and East European Studies

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR TOTAL: 30 CREDIT HOURS			
<ul style="list-style-type: none"> • 6 credit hours in a language from courses numbered at the 1000 or 2000 level² in Russian, German, Ukrainian, Polish, Hungarian or Yiddish • 6 credit hours from the List of Approved Courses in Central and East European Studies 	<ul style="list-style-type: none"> • 12 credit hours from the List of Approved Courses in Central and East European Studies, of which at least 6 credit hours must be taken in two subject fields • 6 credit hours from the List of Approved Courses in Central and East European Studies or from language courses numbered at the 1000, 2000, or 3000 level³ in Russian, German, Ukrainian, Polish, Hungarian or Yiddish 		
SINGLE ADVANCED MAJOR TOTAL: 48 CREDIT HOURS			
<ul style="list-style-type: none"> • 6 credit hours in a language from courses numbered at the 1000 or 2000 level² in Russian, German, Ukrainian, Polish, Hungarian or Yiddish • 6 credit hours from the List of Approved Courses in Central and East European Studies 	<ul style="list-style-type: none"> • 30 credit hours from the List of Approved Courses in Central and East European Studies, of which at least 12 credit hours must be taken in two subject fields • 6 credit hours from the List of Approved Courses in Central and East European Studies or from language courses numbered at the 1000, 2000, or 3000 level³ in Russian, German, Ukrainian, Polish, Hungarian or Yiddish 		
DOUBLE ADVANCED MAJOR TOTAL: 42 CREDIT HOURS			
<ul style="list-style-type: none"> • 6 credit hours in a language from courses numbered at the 1000 or 2000 level² in Russian, German, Ukrainian, Polish, Hungarian or Yiddish • 6 credit hours from the List of Approved Courses in Central and East European Studies 	<ul style="list-style-type: none"> • 24 credit hours from the List of Approved Courses in Central and East European Studies, of which at least 12 credit hours must be taken in two subject fields • 6 credit hours from the List of Approved Courses in Central and East European Studies or from language courses numbered at the 1000, 2000, or 3000 level³ in Russian, German, Ukrainian, Polish, Hungarian or Yiddish 		

MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS		
6 credit hours in a language from courses numbered at the 1000 or 2000 level ² in Russian, German, Ukrainian, Polish, Hungarian or Yiddish, plus 6 credit hours from the List of Approved Courses in Central and East European Studies ⁴	6 credit hours from the List of Approved Courses in Central and East European Studies	
DOUBLE HONOURS¹		
6 credit hours in a language from courses numbered at the 1000 or 2000 level ² in Russian, German, Ukrainian, Polish, Hungarian or Yiddish	<ul style="list-style-type: none"> • 6 credit hours from the List of Approved Courses in Central and East European Studies • 6 credit hours in a language from courses numbered at the 1000 or 2000 level² in Russian, German, Ukrainian, Polish, Hungarian or Yiddish³ • 6 credit hours in a language from courses numbered at the 3000 level in Russian, German, Ukrainian or Polish • 6 credit hours from courses numbered at the 3000 level in History, Economics, Political Studies, Russian, Ukrainian, German or Fine Arts⁵ • 24 credit hours in other Honours field • 6 credit hours in ancillary options⁶ • 6 credit hours in free options⁷ 	<ul style="list-style-type: none"> • 12 credit hours from courses numbered at the 4000 level in Economics, German, History, Political Studies, Russian Ukrainian or Fine Arts⁵ (of these at least 6 credit hours must be taken from two subject fields) • minimum of 12 credit hours in other Honours field • 6 credit hours in free options⁷
NOTES:		
<p>¹ Students must ensure that all course prerequisites are met when selecting courses for the Double Honours program. Students should consult the program coordinator when selecting courses in Year 1 and 2 of the program.</p> <p>² Students should note that while the majority of students begin language instruction with courses numbered at the 1000 level, in exceptional circumstances and with the approval of the committee, students may begin language instruction with courses numbered at the 2000 level.</p> <p>³ Students who begin their language instruction in Year 1 with 6 credit hours of courses numbered beyond the 1000 level may take 6 credit hours at the 1000, 2000 or 3000 levels in a different language approved by the program coordinator.</p> <p>⁴ Students who have declared a Major in Russian, German or Ukrainian can either take 12 credit hours from at least two different subject fields from the List of Approved Courses in Central and East European Studies, or 6 credit hours from courses numbered at the 1000 or 2000 level in a language (Russian, German, Ukrainian, Polish, Hungarian or Yiddish) other than their declared Major and 6 credit hours from the List of Approved Courses in Central and East European Studies.</p> <p>⁵ Courses must be individually approved by the program coordinator as relevant to Central and East European Studies. For information on available courses, please contact the program coordinator.</p> <p>⁶ Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Central and East European Studies courses).</p> <p>⁷ Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Central and East European Studies courses).</p>		

List of Approved Courses in Central and East European Studies		
Faculty of Arts		
Anthropology		
ANTH 2060	European Archaeology	3
Economics		
ECON 2270*	European Economic History	6
ECON 2510	The Economy of Ukraine	3
ECON 4450*	Comparative Economic Systems	6
German and Slavic Studies		
GRMN 1300	Masterpieces of German Literature in English Translation (C)	3
GRMN 1310	Love in German Culture in English Translation (C)	3
GRMN 2120	Introduction to German Culture from 1918 to the Present (C)	3
GRMN 2130	Introduction to German Culture from the Beginnings to 1918 (C)	3
GRMN 2510	German Fairy Tales from the Brothers Grimm to Hollywood (C)	3
GRMN 3260	Representations of the Holocaust (B)	3
GRMN 3262	Representations of the Holocaust in English Translation (C)	3

ACADEMIC CALENDAR 2015-2016

GRMN 3270	Studies in Contemporary German Cinema (C)	3
GRMN 3280	Sex, Gender and Cultural Politics in the German-Speaking World (B)	3
GRMN 3282	Sex, Gender and Cultural Politics in the German-Speaking World in English Translation (C)	3
GRMN 3290	History in Literature in German-Speaking Countries (B)	3
GRMN 3390	German Representations of War (C)	3
GRMN 3392	German Representations of War (B)	3
GRMN 3520*	Special Topics in Comparative German and Slavic Studies	6
GRMN 3530	Special Topics in Comparative German and Slavic Studies (C)	3
POL 1900	Love, Heroes and Patriotism in Contemporary Poland	3
POL 2600	Polish Culture until 1918	3
POL 2610	Polish Culture 1918 to the Present	3
RUSN 1400	Masterpieces of Russian Literature in Translation	3
RUSN 2280	Russian Culture until 1900	3
RUSN 2290	Russian Culture from 1900 to the Present	3
RUSN 2310	Exploring Russia through Film	3
RUSN 2410	Russian Literature after Stalin	3
RUSN 2740	Literature and Revolution	3
RUSN 2750*	Contemporary Russian Literature and Film	3
RUSN 2770*	Masterpieces of Russian Literature in Translation	3
RUSN 3770	Tolstoy	3
RUSN 3780	Dostoevsky	3
SLAV 2240*	East European Literature 1	3
SLAV 2250*	East European Literature 2	3
SLAV 2260	Russia, Ukraine and Poland Cultures in Dialogue 1	3
SLAV 2270	Russia, Ukraine and Poland Cultures in Dialogue 2	3
SLAV 3520*	Special Topics in Comparative German and Slavic Studies	6
SLAV 3530	Special Topics in Comparative German and Slavic Studies	3
SLAV 3920	Gogol	3
UKRN 2200	Ukrainian Myth, Rites and Rituals	3
UKRN 2770	Ukrainian Culture until 1900	3
UKRN 2780	Ukrainian Culture from 1900 to the Present	3
UKRN 2800	Literature and Revolution in Ukraine	3
UKRN 2820	Holodomor and Holocaust in Ukrainian Literature and Culture	3
UKRN 3100	Ukrainian Story Writing Through the Ages	3
UKRN 3300	Literature of Independent Ukraine	3
UKRN 3670*	Contemporary Ukrainian Literature	3
UKRN 3850*	Ukrainian Short Story	3
History		
HIST 2080	The Byzantine Empire and the Slavic World (D)	3
HIST 2240	History of Antisemitism and the Holocaust (E)	6
HIST 2490	History of Russia	6
HIST 2600	Introduction to Ukraine	3
HIST 2610	Making of Modern Ukraine	3
HIST 2660	History of the Soviet Union (E)	3
HIST 2661	Histoire de l'Union soviétique (E)	3
HIST 2840	A History of Russia to 1917	3
HIST 2841	Histoire de la Russie jusqu'en 1917 (E)	3
HIST 3030*	Issues in Ukrainian History	3
HIST 3060*	German and German Jewish History, 1780-1933 (E)	3
HIST 3062	German and German-Jewish History, 1618 to the Present (E)	6
HIST 3064	German and German-Jewish History, 1618-1900 (E)	3
HIST 3066	German and German-Jewish History, 1900 to the Present (E)	3
HIST 3180*	Modern Russia: The Soviet Era and Beyond	6
HIST 4300	Problems in Modern Russian and Soviet History	6
011.255*	History of Ukraine	6

Judaic Studies		
YDSH 2320	Yiddish Literature and Language	6
Political Studies		
POLS 3720	Politics, Government and Society in Ukraine	3
POLS 3810	Introduction to Marxism	3
POLS 2920*	Government, Politics and Society in Ukraine	6
POLS 4810*	Seminar in Marxist-Leninist and Contemporary Marxist Political Theory	6
Religion		
RLGN 1350	The History of Eastern Christianity	6
RLGN 2530	Eastern Christianity in the Contemporary World	3
RLGN 3280	Hasidism	3
School of Art		
FAAH 3160	Topics in 20th Century Art (only when topic focuses on Central and Eastern Europe)	3
FAAH 3280	Early Byzantine Art and Architecture	3
FAAH 3290	Later Byzantine Art and Architecture	3
FAAH 4070	Seminar in Art History 1 (when its focus is on Central and Eastern Europe)	3
FAAH 4080*	Seminar in Art History 2 (when its focus is on Central and Eastern Europe)	3
Clayton H. Riddell Faculty of Environment, Earth, and Resources		
Geography		
GEOG 3600*	Geography of Ukraine	3

* Indicates course no longer offered.

Students are advised to consult the respective departmental Calendar entries for specific information on prerequisites and restrictions.

8.6 The Changing Workplace Program

Program Coordinator: Arts General Office
Program Office: 3rd Floor Fletcher Argue
Telephone: 204 474 9100
E-mail: arts_inquiry@umanitoba.ca

8.6.1 Program Information

The Changing Workplace is a Concentration only available to students in the B.A. Integrated Studies degree program. This program is not available as a Minor program.

The Changing Workplace is an interdisciplinary concentration and has been developed in response to information received from employees and mid-career working adults interested in pursuing a degree. Successful completion of this concentration provides learners with an understanding of the workplace in its current context and its changing nature.

Concentration Program

For entry to the Concentration, the prerequisite is a minimum grade of "C" or better in the first 6 credit hours of courses required for the Concentration.

The Concentration in The Changing Workplace will consist of 18 credit hours from the following list of courses. Students must meet the departmental prerequisites for entry into any course in this list. No course can be used to satisfy more than one Concentration.

Faculty of Arts		
Anthropology		
ANTH 2500	Culture, Environment, and Technology (B)	3
Economics		
ECON 1210	Introduction to Canadian Economic Issues and Policies	3
Labour Studies		
LABR 1260	Working for a Living	3
LABR 1290	Introduction to the Canadian Labour Movement	3
LABR 2100	The Political Economy of Labour	3
LABR 3060	Workplace Health and Safety	3
Philosophy		
PHIL 2830	Business Ethics	3
Sociology		

ACADEMIC CALENDAR 2015-2016

SOC 2390	Social Organization	3
NOTE: Specific course sections of ECON 2610 Special Topics in Economics (3) may satisfy the concentration requirement. Students should contact the Department of Economics for information.		
For course descriptions, see departmental listings.		

8.7 Department of Classics

Head: Lea Stirling
General Office: 364 University College
Telephone: 204 474 9502
E-mail: classics@umanitoba.ca
Website: umanitoba.ca/classics

8.7.1 Program Information

Classics programs focus on the languages, literature and material cultures of ancient Greece and Rome. The two cultures are considered for their formative role at the beginnings of western civilization and for their continuing influence on modern civilization. Although courses, and entire programs, are available to students without any Latin or Greek, those intending to pursue specialist studies in any field of classical studies are urged to begin study of the languages as early as possible. The department, through academic staff members with expertise in art history and archaeology, offers a variety of opportunities for travel courses and fieldwork overseas.

The Department of Classics offers Major and Minor (Concentration) programs in Classical Studies, Greek, and Latin.

8.7.2 Classical Studies

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in the first six credit hours in Classics or the first six credit hours from the list of approved courses offered by other departments as noted below. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in both CLAS 1270 and CLAS 1280, or written permission of the department head.

8.7.3 Classical Studies

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR TOTAL: 30 CREDIT HOURS			
CLAS 1270 and CLAS 1280	24 credit hours in Classical Studies (Within the 24 credit hours, a student may include up to 12 credit hours in Latin or Greek courses and may substitute up to 15 credit hours from the approved list of courses offered by other departments as noted below.)		
SINGLE ADVANCED MAJOR TOTAL: 48 CREDIT HOURS			
CLAS 1270 and CLAS 1280	42 credit hours in Classical Studies (Within the 42 credit hours, a student may include up to 18 credit hours in Latin or Greek courses and may substitute up to 21 credit hours from the approved list of courses offered by other departments as noted below.)		
MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS			
CLAS 1270 and CLAS 1280	12 credit hours in Classical Studies (Within the 12 credit hours, a student may include up to 6 credit hours in Latin or Greek courses and may substitute up to 9 credit hours from the approved list of courses offered by other departments as noted below.)		

List A: Approved List of Courses Offered by Other Departments Acceptable for Credit in a Major/Minor (Concentration) in Classical Studies

History		
HIST 2420	The Medieval World (D)	6
HIST 3270*	Roman Law in Medieval Europe (D)	3
HIST 4740*	The Golden Age of Byzantium (D)	6
HIST 4840*	The Early Middle Ages	6

011.206*	The Emergence of the Medieval World (D)	3
011.207*	The Early and High Middle Ages, 800-1300 A.D. (D)	3
011.264*	History of the Byzantine Empire	6
Philosophy		
PHIL 2650	Plato	3
PHIL 2660	Aristotle	3
Religion		
RLGN 2550	History of Early Christian Thought	3
RLGN 3640	Religion in the Hellenistic and Roman Mediterranean	3

* Indicates course no longer offered.

For course descriptions, see the departmental listings in this Calendar.

8.7.4 Greek

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of “C” or better in both GRK 1010 and GRK 1020, or written consent of the department head. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of “C” or better in both GRK 1010 and GRK 1020, or written consent of the department head.

8.7.5 Greek

YEAR 1	YEAR 2	YEAR 3	YEAR 4
SINGLE ADVANCED MAJOR TOTAL: 48 CREDIT HOURS			
GRK 1010 and GRK 1020	GRK 1310, GRK 2770 plus 36 credit hours in Greek		
MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS			
GRK 1010 and GRK 1020	GRK 1310 plus 9 credit hours in Greek		

8.7.6 Latin

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of “C” or better in both LATN 1080 and LATN 1090, or written consent of the department head. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of “C” or better in both LATN 1080 and LATN 1090, or written consent of the department head.

8.7.7 Latin

YEAR 1	YEAR 2	YEAR 3	YEAR 4
SINGLE ADVANCED MAJOR TOTAL: 48 CREDIT HOURS			
LATN 1080 and LATN 1090	LATN 1320, LATN 2760 plus 36 credit hours in Latin		
MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS			
LATN 1080 and LATN 1090	LATN 1320 plus 9 credit hours in Latin		

8.7.8 Classics Course Descriptions-Classical Studies

Classics Course Descriptions-Classical Studies--1000 Level

CLAS 1270 Introduction to Ancient Greek Culture Cr.Hrs. 3
(Formerly 003.127) Ancient archaeological and literary evidence (in English translation) is the basis for a survey of the major social, political, religious, intellectual, artistic and literary institutions and achievements of the Greeks from the Bronze Age to the early Roman Imperial Period. The Greeks are studied in the context of the ancient Mediterranean world but also with reference to their continuing contributions to world civilization.

CLAS 1280 Introduction to Ancient Roman Culture Cr.Hrs. 3
(Formerly 003.128) Ancient archaeological and literary evidence (in English translation) is the basis for a survey of the major social, political, religious, intellectual, artistic and literary institutions and achievements of the Romans, from the period of the monarchy to the onset of the Middle Ages. The Romans are studied in the context of the ancient Mediterranean world but also with reference to their continuing contributions to world civilization.

Classics Course Descriptions-Classical Studies-2000 Level

CLAS 2140 Greek History: Pre-Classical Greece, 1200-479 BC Cr.Hrs. 3
This course covers the crucial formative centuries which prefigured the Classical period of Greek history. It focuses upon the Dark Age (ca. 1200-700), when the political framework of later Greece was established, and the subsequent cultural renaissance of the seventh and sixth centuries BC.

CLAS 2150 Greek History: Classical Greece, 479-323 BC Cr.Hrs. 3
This course covers the heyday of imperial, democratic Athens, her crushing defeat by Sparta, now allied with Persia, and the ensuing crisis of the city-state which culminated in Greek subjection to Macedonian kings, Philip and Alexander.

CLAS 2160 Roman History: The Roman Republic, 753-30 BC Cr.Hrs. 3
This course covers the history of Rome from its supposed foundation in 753 BC to the end of the Republic in 30 BC. The course considers not only the events of Roman Republican history but also how historians of ancient Rome interpreted these events.

CLAS 2170 Roman History: The Roman Empire, 30 BC-AD 337 Cr.Hrs. 3
This course covers the history of Rome under emperors, from the ascension of Augustus to the death of Constantine, the first Christian emperor, in AD 337. An important theme in the course is the rise of Christianity.

CLAS 2210 Women in Ancient Greece and Rome Cr.Hrs. 3
This course analyzes the changing roles of women in ancient Greek and Roman society (roughly 800 BCE to 400 CE). Using ancient texts, inscriptions, artworks, and archaeological remains, students will examine women's roles in family life, marriage practices, religion, politics, and the economy. Although the majority of ancient evidence about women is created by men and concerns the upper classes, the course will also seek evidence of female viewpoints and the lives of lower-class women.

CLAS 2460 Field Studies in Greek Archaeology and History Cr.Hrs. 6
(Formerly 003.246) Offered as part of the Summer Session, the course consists of three weeks of on-campus study followed by three weeks of travel to major sites and museums. Prerequisite: none, but one or more of CLAS 1270 (003.127) or CLAS 1280 (003.128) or CLAS 2140 or CLAS 2150 or CLAS 2670 (003.267) is recommended. As the course content will vary from year to year, students may take this course more than once for credit.

CLAS 2490 Field Studies in Roman Archaeology and History Cr.Hrs. 6
(Formerly 003.249) Offered as part of the Summer Session, the course consists of three weeks of on-campus study followed by three weeks of travel to major sites and museums. Prerequisite: none, but one or more of CLAS 1270 (003.127) or CLAS 1280 (003.128) or CLAS 2160 or CLAS 2170 or CLAS 2680 (003.268) is recommended. As the course content will vary from year to year, students may take this course more than once for credit.

CLAS 2500 Aspects of Classical Culture and Languages Cr.Hrs. 3
The content of this course will vary, being devoted each time to surveying a special area of Classical civilization such as athletics, technology, warfare, death, slavery, education, or reception in modern film or literature. Ancient textual and archaeological evidence will form the basis of discussion. As the topics for this course will vary from year to year, students may take this course more than once for credit.

CLAS 2520 Greek and Roman Mythology Cr.Hrs. 3
(Formerly 003.252) A survey of Greek and Roman myths of creation and the gods with attention to the nature and definition of myth; Greek and Roman legends; the connections of mythology with religious beliefs and cults; and with the literature and arts of Western civilization.

CLAS 2612 Greek Literature in Translation Cr.Hrs. 3
A survey in English of selected works of such major figures in Greek literature as Homer, Aeschylus, Sophocles, Euripides, Aristophanes, Herodotus, Thucydides, and Plato. The course includes discussion of the influence of these and other works on the arts and literature of the world. Students may not hold credit for both CLAS 2612 and the former CLAS 3610 (003.361).

CLAS 2622 Latin Literature in Translation Cr.Hrs. 3
A survey in English of selected works of such major figures in Latin literature as Vergil, Ovid, Terence, Livy, Cicero, Horace and Seneca. The course includes discussion of the influence of these and other works on the arts and literature of the world. Students may not hold credit for both CLAS 2622 and the former CLAS 3620 (003.362).

CLAS 2670 Greek Art and Archaeology Cr.Hrs. 3
(Formerly 003.267) A survey, illustrated with slides, of the Minoan, Mycenaean, and classical Greek civilizations. The relevant archaeological sites and artistic works will be studied.

CLAS 2680 Roman Art and Archaeology Cr.Hrs. 3
(Formerly 003.268) A survey, illustrated with slides, of the civilization and art of the Roman world. The Etruscan civilization and archaeological sites of Hellenistic Greece as they influence the art of Republican and Imperial Rome will be studied.

CLAS 2710 Greek and Latin Elements in English Cr.Hrs. 3
(Formerly 003.271) A systematic study of the contribution of the classical languages to modern English, including the vocabulary of the sciences. The course is intended as a practical means of enhancing English vocabulary while it also emphasizes that the linguistic contributions are a reflection of the broad historical and cultural influences of classical antiquity on the modern world.

Classics Course Descriptions-Classical Studies-3000 Level

CLAS 3250 Aegean and Italian Prehistory Cr.Hrs. 3
This course provides a detailed archaeological and historical view of Mediterranean culture and society from the Neolithic period of the sixth millennium BC through the early centuries of the first millennium BC. The course ends with a look ahead to the Early Iron Age. Prerequisite: [a grade of "C" or better in one of: CLAS 1270 (003.127), CLAS 2140, CLAS 2150, ANTH 2060 (076.206), FAAH 1030 (054.103), HIST 1200 (011.120), HIST 1201 (011.120), HIST 1350 (011.135)] or written consent of department head.

CLAS 3260 Hellenistic Civilization: History and Archaeology Cr.Hrs. 3

The Hellenistic period spans the years from the death of Alexander the Great in 323 BC to the death of the Ptolemaic queen Cleopatra VII in 31 BC. This course explores both the political and, more generally, the cultural history of the period using both textual and archaeological sources. Prerequisite: [a grade of "C" or better in one of: CLAS 1270 (003.127), CLAS 1280 (003.128), CLAS 2140, CLAS 2150, FAAH 1030 (054.103), HIST 1200 (011.120), HIST 1201 (011.120), HIST 1350 (011.135)] or written consent of department head

CLAS 3264 Pompeii and Herculaneum Cr.Hrs. 3

This course will study the art and archaeology of Pompeii, Herculaneum, and other sites destroyed by Mount Vesuvius in 79 C.E., with attention to social history, artistic developments, and daily life. Students may not hold credit for both CLAS 3264 and the former CLAS 3730 (003.373) when titled "Pompeii and Herculaneum." Prerequisite: [a grade of "C" or better in one of: CLAS 1270 (003.127), CLAS 1280 (003.128), CLAS 2160, CLAS 2170, CLAS 2680 (003.268), FAAH 1030 (054.103), HIST 1200 (011.120), HIST 1201 (011.120), HIST 1350 (011.135)] or written consent of department head.

CLAS 3270 The World of Late Antiquity: History and Archaeology Cr.Hrs. 3

This course examines the later Roman Empire, beginning with the reign of Constantine in the early fourth century and ending in the early fifth century. It combines historical and archaeological sources for the study of political, religious and social developments within the period. Prerequisite: [a grade of "C" or better in one of: CLAS 1270 (003.127), CLAS 1280 (003.128), CLAS 2170, CLAS 2680 (003.268), FAAH 1030 (054.103), HIST 1200 (011.120), HIST 1201 (011.120), HIST 1350 (011.135)] or written consent of department head.

CLAS 3650 Religion in Ancient Greece Cr.Hrs. 3

(Formerly 003.365) The religious beliefs and practices of the Greeks from the prehistoric period through the beginnings of the Hellenistic period as related to their political, social, intellectual, and domestic institutions; based on the study of both literary and archaeological evidence. Prerequisite: [a grade of "C" or better in one of: CLAS 1270 (003.127), CLAS 2140, CLAS 2150, CLAS 2520 (003.252), CLAS 2670 (003.267), CLAS 3670, RLGN 3640 (020.364)] or written consent of department head.

CLAS 3660 Religion in Ancient Rome Cr.Hrs. 3

(Formerly 003.366) The religious beliefs and practices of the Romans from earliest times until the reign of Constantine as related to their political, social, intellectual, and domestic institutions; based on the study of both literary and archaeological evidence from Italy and the rest of the Roman world. Prerequisite: [a grade of "C" or better in one of: CLAS 1280 (003.128), CLAS 2160, CLAS 2170, CLAS 2520 (003.252), CLAS 2680 (003.268), CLAS 3670, RLGN 3640 (020.364)] or written consent of department head.

CLAS 3670 Religion in the Hellenistic and Roman Mediterranean Cr.Hrs. 3

This course explores the wide variety of religious traditions, practices, and beliefs of the Mediterranean region in the Hellenistic and Roman period (c. 300 BCE to 300 CE). This period is exemplified by a great deal of continuity, but it was also a time of experimentation, innovation, and cultural entrepreneurship. Also offered by Religion as RLGN 3640 (020.364). Students may not hold credit for both CLAS 3670 and RLGN 3640 (020.364).

CLAS 3680 Studies in a Classical Literary Genre 1 Cr.Hrs. 3

(Formerly 003.368) The content of this course will vary, being devoted each time to a particular type of Greek and Roman literature such as epic, tragedy, comedy, satire, rhetoric, the novel, historical writings, scientific writing, etc. Lectures and discussions of the literature and its influence will be based on readings in English translation. As the course content will vary from year to year, students may take this course more than once for credit.

CLAS 3682 Greek and Roman Epic Cr.Hrs. 3

The core readings in this course will consist of contemporary English translations of a substantial portion of the Greek and Latin epic corpus, including complete or partial works by Homer, Apollonius Rhodius, Vergil, Ovid, Lucan and Statius. The classical epics will be studied with reference to their place in literary and cultural history. Students may not hold credit for both CLAS 3682 and CLAS 3680 (003.368) when titled "Greek and Roman Epic Poetry."

CLAS 3684 Greek and Roman Tragedy Cr.Hrs. 3

This course examines the tragic drama of fifth-century Athens and imperial Rome (in translation), with particular emphasis on the extant plays of Aeschylus, Sophocles, Euripides, and Seneca in their respective historical, intellectual and cultural contexts. Students may not hold credit for both CLAS 3684 and CLAS 3680 (003.368) when titled "Greek and Roman Tragedy."

CLAS 3710 Aspects of Classical Culture 1 Cr.Hrs. 3

(Formerly 003.371) The content of this course will vary, being devoted each time to the investigation of a special area of Classical civilization such as athletics, technology, the erotic, the occult, cuisine, law, medicine, architecture, education. Lectures and discussions will be based on the study of both archaeological and literary evidence. Prerequisite: [a grade of "C" or better in CLAS 1270 (003.127) or CLAS 1280 (003.128)] or written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

Classics Course Descriptions-Greek-1000 Level**GRK 1010 Introduction to the Reading of Ancient Greek 1 Cr.Hrs. 3**

(Formerly 003.101) Readings in Ancient Greek poetry and prose with related exercises in grammar and composition intended to prepare students to read Classical and Hellenistic Greek.

GRK 1020 Introduction to the Reading of Ancient Greek 2 Cr.Hrs. 3

(Formerly 003.102) Further readings in Ancient Greek poetry and prose with related exercises in grammar and composition intended to prepare students to read Classical and Hellenistic Greek. Students may not hold credit for both GRK 1020 (003.102) and GRK 1030 (003.103). Prerequisite: a grade of "C" or better in GRK 1010 (003.101)

GRK 1030 New Testament Greek Cr.Hrs. 6

(Formerly 003.103) The grammar and syntax of New Testament Greek. Normally taught only in the Approved Teaching Centres. May be used for credit towards the Major or Minor in Greek only with written consent of department head. Students may not hold credit for GRK 1030 (003.103) and any of: GRK 1010 (003.101) or GRK 1020 (003.102).

GRK 1060 Introductory Modern Greek 1 Cr.Hrs. 3

(Formerly 003.106) A practical introduction to the written and spoken language for those with little or no knowledge of Modern Greek. Personal instruction in script, vocabulary, aural comprehension, pronunciation and syntax is supplemented with the use of audio recording in the laboratory or via other media such as the internet. Not for credit towards the Major or Minor in Classical Studies.

GRK 1070 Introductory Modern Greek 2 Cr.Hrs. 3

(Formerly 003.107) The continuation of GRK 1060 (003.106) with further personal instruction in vocabulary, aural comprehension, pronunciation and syntax supplemented with the use of audio recordings in the laboratory or via other media such as the internet. Not for credit towards the Major or Minor in Classical Studies. Prerequisite: [a grade of "C" or better in GRK 1060 (003.106)] or written consent of department head.

GRK 1310 Intermediate Readings in Ancient Greek Cr.Hrs. 3

(Formerly 003.131) Further readings in ancient Greek poetry and prose with related exercises in grammar and composition intended to advance the student's skill at reading Classical and Hellenistic Greek. Prerequisite: [a grade of "C" or better in GRK 1030 (003.103)] or [a grade of "C" or better in both GRK 1010 (003.101) and GRK 1020 (003.102)].

GRK 1330 The Acts of the Apostles Cr.Hrs. 3

(Formerly 003.133) The complete Book of Acts is read in Greek with attention to related textual, linguistic and historical matters. Prerequisite: [a grade of "C" or better in both GRK 1010 (003.101) and GRK 1020 (003.102)] or [a grade of "C" or better in GRK 1310 (003.131)] or written consent of department head.

Classics Course Descriptions-Greek-2000 Level

GRK 2060 Intermediate Modern Greek 1 Cr.Hrs. 3

(Formerly 003.206) Continued study and practice in oral and written communication in Modern Greek. Course work includes conversation, prose composition and reading of selected texts from Greek literary works and popular media. Not for credit towards a Major or Minor in Classical Studies. Prerequisite: [a grade of "C" or better in GRK 1070 (003.107)] or written consent of department head.

GRK 2070 Intermediate Modern Greek 2 Cr.Hrs. 3

(Formerly 003.207) Continued study and practice in oral and written communication in Modern Greek. Course work includes conversation, prose composition and reading of selected texts from Greek literary works and popular media. Not for credit towards a Major or Minor in Classical Studies. Prerequisite: [a grade of "C" or better in GRK 2060 (003.206)] or written consent of department head.

GRK 2732 Readings in Greek Poetry Cr.Hrs. 3

Readings from the works of selected poets of the Archaic and Classical periods. Students may not hold credit for both GRK 2732 and the former GRK 2730 (003.273). Prerequisite: a grade of "C" or better in GRK 1310 (003.131).

GRK 2752 Readings in Greek Prose Literature Cr.Hrs. 3

Readings from the works of selected prose authors of the Classical period. Students may not hold credit for both GRK 2752 and the former GRK 2750 (003.275). Prerequisite: a grade of "C" or better in GRK 1310 (003.131).

GRK 2770 Greek Prose Composition and Sight Translation Cr.Hrs. 3

(Formerly 003.277) Assignments in writing Greek prose and practice in the techniques for effective reading of prose and poetry at sight. Prerequisite: a grade of "C" or better in GRK 1310 (003.131).

GRK 2790 History of the Greek Language Cr.Hrs. 3

(Formerly 003.279) A survey of the language from its Indo-European pre-history to the modern era. The phonological, morphological and lexical aspects of the language are investigated in the light of Greek literary and inscriptional documents and some comparative evidence from cognate languages. Prerequisite: [a grade of "C" or better in GRK 1310 (003.131)] or [a working knowledge of Modern Greek and written consent of the department head].

GRK 2810 Prose Writings of the Hellenistic and Greco-Roman Periods Cr.Hrs. 3

(Formerly 003.281) Reading of selected literary and historical documents relating to Judaism and early Christianity. Prerequisite: a grade of "C" or better in GRK 1310 (003.131) or GRK 1330 (003.133).

Classics Course Descriptions-Greek-3000 Level

GRK 3750 Homer Cr.Hrs. 3

(Formerly 003.375) At least three complete books of the Iliad or Odyssey are read with attention to compositional technique and metre. Prerequisite: [a grade of "C" or better in GRK 2732 or GRK 2752 or the former GRK 2730 (003.273) or the former GRK 2750 (003.275)] or written consent of department head.

GRK 3770 Greek Poetry of the Archaic Period Cr.Hrs. 3

(Formerly 003.377) Reading of selections from Hesiod, the Homeric Hymns and such lyric poets as Sappho, Alcaeus, Anacreon, Pindar and Bacchylides. Prerequisite: [a grade of "C" or better in GRK 2732 or GRK 2752 or the former GRK 2730 (003.273) or the former GRK 2750 (003.275)] or written consent of department head.

GRK 3790 The Greek Tragedians Cr.Hrs. 3

(Formerly 003.379) Reading of at least one tragedy from among those of Aeschylus, Sophocles or Euripides. Prerequisite: [a grade of "C" or better in GRK 2732 or GRK 2752 or the former GRK 2730 (003.273) or the former GRK 2750 (003.275)] or written consent of department head.

GRK 3810 Aristophanes Cr.Hrs. 3

(Formerly 003.381) Reading of at least one complete comedy. Prerequisite: [a grade of "C" or better in GRK 2732 or GRK 2752 or the former GRK 2730 (003.273) or the former GRK 2750 (003.275)] or written consent of department head.

GRK 3830 The Greek Historians Cr.Hrs. 3

(Formerly 003.383) Selected readings from the works of Herodotus and Thucydides and/or the historical works of Xenophon. Prerequisite: [a grade of "C" or better in GRK 2732 or GRK 2752 or the former GRK 2730 (003.273) or the former GRK 2750 (003.275)] or written consent of department head.

GRK 3850 Plato Cr.Hrs. 3

(Formerly 003.385) Readings of two of the shorter dialogues or of selections from several dialogues. Prerequisite: [a grade of "C" or better in GRK 2732 or GRK 2752 or the former GRK 2730 (003.273) or the former GRK 2750 (003.275)] or written consent of department head.

GRK 3870 The Attic Orators Cr.Hrs. 3

(Formerly 003.387) Readings from the works of such orators as Isocrates, Lysias and Demosthenes. Prerequisite: [a grade of "C" or better in GRK 2732 or GRK 2752 or the former GRK 2730 (003.273) or the former GRK 2750 (003.275)] or written consent of department head.

GRK 3930 Advanced Studies in Greek Prose Literature Cr.Hrs. 3

Readings in a particular genre such as philosophy, history, or rhetoric with substantial reading in secondary critical or interpretive literature. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

GRK 3940 Advanced Studies in Greek Poetry Cr.Hrs. 3

Readings in a particular genre such as epic, tragedy, comedy, lyric or epigram with substantial reading in secondary critical or interpretive literature. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

Classics Course Descriptions-Latin-1000 Level

LATN 1080 Introduction to the Reading of Latin 1 Cr.Hrs. 3

(Formerly 003.108) Readings in Latin poetry and prose with related exercises in grammar and composition intended to prepare students to read Classical and Medieval Latin.

LATN 1090 Introduction to the Reading of Latin 2 Cr.Hrs. 3

(Formerly 003.109) Further readings in Latin poetry and prose with related exercises in grammar and composition intended to prepare students to read Classical and Medieval Latin. Prerequisite: a grade of "C" or better in LATN 1080 (003.108).

LATN 1320 Intermediate Readings in Latin Cr.Hrs. 3

(Formerly 003.132) Further readings in Latin prose and poetry with related exercises in grammar and syntax as continued preparation for the reading of Classical and Medieval Latin. Prerequisite: a grade of "C" or better in both LATN 1080 (003.108) and LATN 1090 (003.109).

Classics Course Descriptions-Latin-2000 Level**LATN 2720 Selected Readings in Republican and Augustan Poetry Cr. Hrs. 3**

(Formerly 003.272) Readings from among the comedies of Plautus and Terence, the shorter poems of Catullus, and the *Metamorphoses* of Ovid. Prerequisite: a grade of "C" or better in LATN 1320 (003.132).

LATN 2740 Selected Readings in Republican and Augustan Prose Cr. Hrs. 3

(Formerly 003.274) Readings from among the works of Livy and Caesar and the letters and philosophical writings of Cicero. Prerequisite: a grade of "C" or better in LATN 1320 (003.132).

LATN 2760 Latin Prose Composition and Sight Translation Cr.Hrs. 3

(Formerly 003.276) Assignments in writing Latin prose and practice in the techniques for effective reading of poetry and prose at sight. Prerequisite: a grade of "C" or better in LATN 1320 (003.132).

LATN 2780 History of the Latin Language Cr.Hrs. 3

(Formerly 003.278) A survey of the language from its Indo-European pre-history to its position as the matrix of the Romance languages. Phonological, morphological and lexical aspects of the language are investigated in the light of Latin documents and some comparative evidence from cognate languages. Prerequisite: a grade of "C" or better in LATN 1320 (003.132)

LATN 2800 Readings in Medieval or Renaissance Latin Cr.Hrs. 3

(Formerly 003.280) Selections of prose and poetry written after the beginning of the fourth century after Christ. Prerequisite: a grade of "C" or better in LATN 1320 (003.132).

Classics Course Descriptions-Latin-3000 Level**LATN 3740 Roman Comedy Cr.Hrs. 3**

(Formerly 003.374) Reading of at least two plays from among the comedies of Plautus and Terence. Prerequisite: [a grade of "C" or better in LATN 2720 (003.272) or LATN 2740 (003.274)] or written consent of department head.

LATN 3760 Orations of Cicero Cr.Hrs. 3

(Formerly 003.376) Reading of at least two complete speeches from among the political and forensic works of Cicero. Prerequisite: [a grade of "C" or better in LATN 2720 (003.272) or LATN 2740 (003.274)] or written consent of department head.

LATN 3780 Roman Satire Cr.Hrs. 3

(Formerly 003.378) Reading of selected Satires of Horace and Juvenal and of excerpts from the *Apocolocyntosis* of Seneca and the *Satyricon* of Petronius. Prerequisite: [a grade of "C" or better in LATN 2720 (003.272) or LATN 2740 (003.274)] or written consent of department head.

LATN 3800 Lyric and Elegiac Poetry of the Augustan Age Cr.Hrs. 3

(Formerly 003.380) Selected Odes and Epodes of Horace and amatory elegies of Propertius, Ovid and Tibullus. Prerequisite: [a grade of "C" or better in LATN 2720 (003.272) or LATN 2740 (003.274)] or written consent of department head.

LATN 3820 Vergil's Aeneid Cr.Hrs. 3

(Formerly 003.382) Reading of at least three books of the *Aeneid*. Prerequisite: [a grade of "C" or better in LATN 2720 (003.272) or LATN 2740 (003.274)] or written consent of department head.

LATN 3840 Vergil's Eclogues and Georgics Cr.Hrs. 3

(Formerly 003.384) Reading of the *Eclogues* in their entirety and at least two books of the *Georgics*. Prerequisite: [a grade of "C" or better in LATN 2720 (003.272) or LATN 2740 (003.274)] or written consent of department head.

LATN 3860 The Roman Historians Cr.Hrs. 3

(Formerly 003.386) Reading of selected passages from the works of Livy, Caesar, Sallust and Tacitus. Prerequisite: [a grade of "C" or better in LATN 2720 (003.272) or LATN 2740 (003.274)] or written consent of department head.

LATN 3880 Poetry of the Silver Age Cr.Hrs. 3

(Formerly 003.388) Reading of one or two tragedies of Seneca with selections from the works of Martial, Statius or Lucan. Prerequisite: [a grade of "C" or better in LATN 2720 (003.272) or LATN 2740 (003.274)] or written consent of department head.

LATN 3932 Advanced Studies in Latin Prose Literature Cr.Hrs. 3

Readings in a particular genre such as philosophy, history, or rhetoric with substantial reading in secondary critical or interpretive literature. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

LATN 3942 Advanced Studies in Latin Poetry Cr.Hrs. 3

Reading in a particular genre such as epic, lyric, comedy or elegy with substantial reading in secondary critical or interpretive literature. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

ACADEMIC CALENDAR 2015-2016

8.8 Cross-Disciplinary Programs

The Faculty of Arts offers the following Cross-Disciplinary programs. For course descriptions and prerequisites, refer to departmental sections in this Calendar.

Art History	See Section 9.1
Asian Studies	See Section 8.2
Canadian Studies	See Section 8.3
Catholic Studies	See Section 8.4
Central and East European Studies	See Section 8.5
The Changing Workplace	See Section 8.6
Global Political Economy	See Section 8.13
Labour Studies	See Section 8.18
Latin American Studies	See Section 8.19
Medieval and Early Modern Studies	See Section 8.21
Ukrainian Canadian Heritage Studies	See Section 8.28
Women's and Gender Studies	See Section 8.29

8.9 Department of Economics

Acting Head: Steven Lecce

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8.9.1 Program Information

The economy is important to all Canadians, and economics is the field of study that helps us understand our world: wages and employment, economic growth, productivity, wealth and poverty, government budgets and taxation, resource exploitation, business practices, inflation, recession, regional economic differences. In economics we study the history and current reality of these issues. We learn the principles and techniques necessary to gain a sound understanding of the choices and problems facing us during our lifetime.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the General or Advanced Major, the prerequisite is a grade of "C" or better in both ECON 1010 and ECON 1020, or both ECON 1210 and ECON 1220. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in both ECON 1010 and ECON 1020, or both ECON 1210 and ECON 1220.

Honours Program

For entry to the Honours program, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Honours students are advised to select their ancillary options from the following disciplines: Geography, History, Mathematics, Political Studies, Statistics, Sociology and Philosophy. However, other fields may be selected to satisfy study or career interests.

Preparation for Graduate Studies

Students contemplating graduate work are advised to complete the Honours program where they will obtain good background knowledge of mathematics, statistics, and econometrics, as well as core theory courses in economics. Students who have not completed the Honours program must, at minimum, seek to obtain good background in both mathematics and statistics by taking the 3000 level Mathematical Economics and 4000 level Micro, Macro and Econometrics courses required in the Honours program.

Other

Combinations of courses for the Major, Minor and Honours programs, other than those listed below, may be permitted by written consent of the department head. Similarly, Honours courses may be taken by students in the General Major or Advanced Major programs with the written consent of the instructor and the department head; an average grade of "B" in all Economics courses is normally required before such consent may be given.

For information regarding the Canadian Studies program, see Section 8.3; for the Central and East European Studies program, see Section 8.5.

8.9.2 Economics

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR^{1,2} TOTAL: 30 CREDIT HOURS			
Both ECON 1010 and ECON 1020, or both ECON 1210 and ECON 1220	<ul style="list-style-type: none"> ECON 2010, ECON 2020, ECON 2040 An additional 15 credit hours in Economics numbered at the 2000 level or higher, of which at least 6 hours must be from courses numbered at the 3000 level 		
SINGLE ADVANCED MAJOR TOTAL: 48 CREDIT HOURS			
<ul style="list-style-type: none"> Both ECON 1010 and ECON 1020, or both ECON 1210 and ECON 1220 MATH 1500 or MATH 1520 	ECON 2010, ECON 2020, ECON 2030, ECON 2040	ECON 3010, ECON 3020, ECON 3040	ECON 4822
An additional 12 credit hours in Economics numbered at the 2000 level or higher			
MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS			
Both ECON 1010 and ECON 1020, or both ECON 1210 and ECON 1220	An additional 12 credit hours in Economics numbered at the 2000 level or higher		
SINGLE HONOURS^{4, 5, 6, 7}			
<ul style="list-style-type: none"> Both ECON 1010 and ECON 1020, or both ECON 1210 and ECON 1220 MATH 1500 or MATH 1520 	ECON 2010, ECON 2020, ECON 2030, ECON 2040	ECON 3010, ECON 3020, ECON 3030, ECON 3040, ECON 3810	ECON 4010, ECON 4020, ECON 4040, ECON 4050, ECON 4052
<ul style="list-style-type: none"> A further 24 credit hours in Economics, of which no more than 6 additional hours can be from courses numbered at the 2000 level and at least 6 additional hours must be from courses numbered at the 4000 level 24 credit hours in ancillary options⁵ 			
DOUBLE HONOURS^{3, 4, 5, 6, 7}			
<ul style="list-style-type: none"> Both ECON 1010 and ECON 1020, or both ECON 1210 and ECON 1220 MATH 1500 or MATH 1520 	<ul style="list-style-type: none"> 36 credit hours in Economics courses, to include the following: <ul style="list-style-type: none"> ECON 2010, ECON 2020, ECON 2030, ECON 2040, ECON 3010, ECON 3020, ECON 3040 A further 15 credit hours in Economics, of which no more than 6 additional hours can be from courses numbered at the 2000 level and at least 6 additional hours must be from courses numbered at the 4000 level At least 36 credit hours in other Honours field At least 6 credit hours in ancillary options⁵ At least 12 credit hours in free options⁶ 		
NOTES:			
<p>¹ In cases where students have been granted three hours of unallocated transfer credit in Economics at the 1000 level, and have achieved additional credits in Economics from The University of Manitoba, and wish to declare Economics as a General Major without having full credit in the former ECON 1200, then the Years 2-3 requirement for a Major in Economics will be ECON 2010, ECON 2020 and ECON 2040, plus an additional 15 credit hours in Economics of which at least 6 hours must be from courses numbered at the 3000 level.</p> <p>² Students in the General Major may choose to apply for admission to the Single Advanced Major, Single Honours or Double Honours programs in Economics. Such students are recommended to take MATH 1500 or MATH 1520 as an elective as it is a prerequisite to upper level Economics courses in those programs.</p> <p>³ Students contemplating Double Honours in Economics and Mathematics, or Economics and Statistics are referred to the Economics-Mathematics Joint Honours Program or the Economics-Statistics Joint Honours Program.</p> <p>⁴ Students contemplating graduate work in Economics should refer to the notes above under "Preparation for Graduate Studies".</p> <p>⁵ Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Economics courses).</p> <p>⁶ Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Economics courses).</p> <p>⁷ Honours courses: ECON 3030, ECON 3810 and all 4000 level courses.</p>			

8.9.3 Economics-Mathematics Joint Honours Program

The Department of Economics and the Department of Mathematics (Faculty of Science) offer a Joint Honours program for students wishing in-depth study in Economics and Mathematics. For Mathematics course listings, refer to the Faculty of Science chapter in the Calendar.

Joint Honours Program

Students in the Joint Honours program will follow the regulations outlined in the Honours program, see Section 3.3: Honours Degree Program.

8.9.4 Economics-Mathematics Joint Honours Program

YEAR 1	YEAR 2	YEAR 3	YEAR 4
JOINT HONOURS⁷ TOTAL: 120 CREDIT HOURS			
<ul style="list-style-type: none"> Both ECON 1010 and ECON 1020, or both ECON 1210 and ECON 1220 MATH 1220¹, MATH 1230¹, MATH 1232¹, MATH 1240¹ STAT 1000² COMP 1010² 6 credit hours of electives, which should include the required "Written English" course 	<ul style="list-style-type: none"> ECON 2010, ECON 2020 MATH 2020, MATH 2080, MATH 2090, MATH 2150, MATH 2180 9 credit hours of approved electives 	<ul style="list-style-type: none"> ECON 3010, ECON 3020, ECON 3040² MATH 2030, MATH 2160, MATH 3320, MATH 3340, MATH 3440, MATH 3470, MATH 3472 24 credit hours of approved Economics courses³ 3 credit hours from MATH 2140, MATH 3420, MATH 3460, MATH 4370, or any Mathematics course at the 4000 level 3 credit hours of Mathematics courses at the 3000 or 4000 level 	
30 HOURS	30 HOURS	60 HOURS	
NOTES:			
<p>¹ Students in this program must achieve a minimum grade of "B" in MATH 1230, MATH 1232, MATH 1220, and MATH 1240. Students are strongly advised to take MATH 1220, MATH 1230, and MATH 1232. The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved: MATH 1300 (A) in place of MATH 1220, MATH 1500 (A) in place of MATH 1230, MATH 1700 (A) in place of MATH 1232, MATH 1690 (B) in place of MATH 1230 and MATH 1232.</p> <p>² Some courses may be taken in a different year than indicated; STAT 1000, COMP 1010, ECON 3040 may be taken in Year 2. The normal prerequisite for ECON 3040 is ECON 2040, which will be waived for students in this program who have completed Year 1.</p> <p>³ Of the 24 credit hours in electives in Economics in Years 3 and 4, no more than 6 credit hours may be at the 2000 level or below and at least 6 credit hours must be at the 4000 level. Students are encouraged to take ECON 4010, ECON 4020 and ECON 4040.</p> <p>⁴ Economics Honours courses: ECON 3030, ECON 3810 and all 4000 level courses.</p>			

8.9.5 Economics-Statistics Joint Honours Program

The Department of Economics and the Department of Statistics (Faculty of Science) offer a Joint Honours program for students wishing in-depth study in Economics and Statistics. For Statistics course listings, refer to the Faculty of Science chapter in the Calendar.

Joint Honours Program

Students in the Joint Honours program will follow the regulations outlined in the Honours program, see Section 3.3: Honours Degree Program.

8.9.6 Economics-Statistics Joint Honours Program

YEAR 1	YEAR 2	YEAR 3	YEAR 4
JOINT HONOURS³ TOTAL: 120 CREDIT HOURS			
<ul style="list-style-type: none"> Both ECON 1010 and ECON 1020, or both ECON 1210 and ECON 1220 MATH 1220¹, MATH 1230¹, MATH 1232¹, MATH 1240¹ STAT 1000 COMP 1010 Plus 6 credit hours of electives which should include the required "Written English" course 	<ul style="list-style-type: none"> ECON 2010, ECON 2020 STAT 2000, STAT 2400 MATH 2030, MATH 2080, MATH 2140, MATH 2150 Plus 6 credit hours of approved Economics electives² 	<ul style="list-style-type: none"> ECON 3010, ECON 3020 STAT 3400, STAT 3470, STAT 3480, STAT 3490, STAT 3800 MATH 2160, MATH 3360 Plus 3 credit hours of approved Economics electives² 	<ul style="list-style-type: none"> ECON 4040, ECON 4042 STAT 4100, STAT 4200, STAT 4520, STAT 4530 Plus 12 credit hours of approved Economics electives²
30 HOURS	30 HOURS	30 HOURS	30 HOURS
NOTES:			
<p>¹ The following substitutions are allowed: MATH 1300 in place of MATH 1220, MATH 1500 in place of MATH 1230, MATH 1700 in place of MATH 1232. Students must attain specific grade requirements in order to meet the upper level course prerequisites. Consult course descriptions for further information.</p> <p>² Of the 21 credit hours of electives in Economics in Years 2, 3 and 4, no more than 6 credit hours may be at the 2000 level or below; ECON 2030 and ECON 3040 are recommended in Year 2 or 3. The normal prerequisite for ECON 3040 is ECON 2040, which will be waived for students in this program who have completed Year 1.</p> <p>³ Economics Honours courses: ECON 3030, ECON 3810 and all 4000 level courses.</p>			

8.9.7 Economics Course Descriptions

Economics Course Descriptions-1000 Level

ECON 1010 Introduction to Microeconomic Principles Cr.Hrs. 3

This course introduces students to the study of microeconomics. Topics include: demand and supply, price determination, market structure and resource allocation; the behaviour of consumers and firms; and market intervention by government. Selected economic topics are examined such as: welfare programs, environmental regulation, the economics of discrimination, pay equity, and taxation. Students may not hold credit for ECON 1010 and any of: ECON 1011 or ECON 1210 (018.121) or ECON 1211 (018.121) or ECON 1220 (018.122) or ECON 1221 (018.122) or the former ECON 1200 (018.120) or the former ECON 1201 (018.120).

ECON 1020 Introduction to Macroeconomic Principles Cr.Hrs. 3

This course introduces students to the study of macroeconomics. Topics include: aggregate performance and policy; the determinants of national income, employment and the price level, the role of monetary and fiscal policies in stabilizing the economy and promoting economic growth. Students may not hold credit for ECON 1020 and any of: ECON 1021 or ECON 1210 (018.121) or ECON 1211 (018.121) or ECON 1220 (018.122) or ECON 1221 (018.122) or the former ECON 1200 (018.120) or the former ECON 1201 (018.120).

ECON 1210 Introduction to Canadian Economic Issues and Policies Cr. Hrs. 3

(Formerly 018.121) A survey of some major principles underlying, and influences acting upon the Canadian economy and its regions. Students may not hold credit for ECON 1210 (018.121) and any of: ECON 1211 (018.121) or ECON 1010 or ECON 1011 or ECON 1020 or ECON 1021 or the former ECON 1200 (018.120) or the former ECON 1201 (018.120).

ECON 1220 Introduction to Global and Environmental Economic Issues and Policies Cr.Hrs. 3

(Formerly 018.122) A survey of some major principles and policies characterizing the world economy and the environment. Students may not hold credit for ECON 1220 (018.122) and any of: ECON 1221 (018.122) or ECON 1010 or ECON 1011 or ECON 1020 or ECON 1021 or the former ECON 1200 (018.120) or the former ECON 1201 (018.120).

Economics Course Descriptions-2000 Level

ECON 2010 Microeconomic Theory 1 Cr.Hrs. 3

This course builds on ECON 1010 to examine in greater detail microeconomic concepts of supply, demand, and industry structure. The course also includes the study of externalities, public goods, information asymmetries, and risk and uncertainty. Students may not hold credit for ECON 2010 and any of: ECON 2451, the former ECON 2450 (018.245), or the former ECON 2700 (018.270). Prerequisite: [a grade of "C" or better in ECON 1010 or ECON 1011 or the former ECON 1200 (018.120) or the former ECON 1201] or [a grade of "C" or better in both ECON 1210 (or ECON 1211 (018.121)) and ECON 1220 (or ECON 1221 (018.122))].

ECON 2020 Macroeconomic Theory 1 Cr.Hrs. 3

A study of classical macroeconomic models of the determination of economic aggregates such as national income, consumption, investment, government spending, exports, imports, and economy-wide variables such as the interest rate, the foreign exchange rate, the price level and inflation, and the unemployment rate. The influence of fiscal and monetary policies on the aggregate economy is examined. Students may not hold credit for ECON 2020 and any of: ECON 2471, the former ECON 2470 (018.247), or the former ECON 2800 (018.280). Prerequisite: [a grade of "C" or better in ECON 1020 or ECON 1021 or the former ECON 1200 (018.120) or the former ECON 1201] or [a grade of "C" or better in both ECON 1210 (or ECON 1211 (018.121)) and ECON 1220 (or ECON 1221 (018.122))].

ECON 2030 Mathematical Economics 1 Cr.Hrs. 3

Introduction to mathematical methods used in economic analysis including differentiation, matrix algebra, comparative statics, and optimization. Students may not hold credit for both ECON 2030 and the former ECON 2530 (018.253). Prerequisite: [a grade of "C" or better in six credit hours of 1000 level Economics] and [a grade of "C" or better in MATH 1230 or MATH 1500 (136.150) or MATH 1501 or MATH 1520 (136.152)].

ECON 2040 Quantitative Methods in Economics Cr.Hrs. 3

An introduction to statistical methods relevant to Economics, which include: descriptive statistics; probability and probability distributions; hypothesis testing; and ordinary least squares regression. The use of contemporary econometric software is required. Students may not hold credit for both ECON 2040 and the former ECON 3170 (018.317). Prerequisite: a grade of "C" or better in six credit hours of 1000 level Economics.

ECON 2310 Canadian Economic Problems Cr.Hrs. 6

(Formerly 018.231) Application of economic theory to a broad range of problems such as agriculture, trade, foreign ownership, regional disparities, competition policy, education. Students may not hold credit for both ECON 2310 (018.231) and ECON 2311 (018.231). Prerequisite: a grade of "C" or better in six credit hours of 1000 level Economics.

ECON 2350 Community Economic Development Cr.Hrs. 3

(Formerly 018.235) A study of the economic development problems of northern and native communities in Manitoba. Students may not hold credit for ECON 2350 (018.235) and any of: NATV 3120 or the former NATV 4310 (032.431). Prerequisite: none.

ECON 2362 Economics of Gender Cr.Hrs. 3

This course will use both neo-classical and feminist economic theory to explore how gender differences may lead to different economic outcomes for men and women, both within families and in the marketplace. Topics covered may include gender aspects of production (both inside and outside the household), leisure, marriage and divorce, fertility, childcare, education, migration, aging and development. Students may not hold credit for both ECON 2362 and the former ECON 2360 (018.236). Prerequisite: a grade of "C" or better in ECON 1010 or ECON 1011 or ECON 1210 (018.121) or ECON 1211 (018.121) or the former ECON 1200 (018.120) or the former ECON 1201 (018.120).

ECON 2390 Introduction to Environmental Economics Cr.Hrs. 3

(Formerly 018.239) The economics of management of water, air and land resource quality, and the economics of conservation. The economic implications of environmental standards, licensing, criteria and pollution charges will be illustrated by current issues. Students may not hold credit for both ECON 2390 (018.239) and ABIZ 2390 (061.239). Prerequisite: [a grade of "C" or better in ECON 1010 or ECON 1011 or the former ECON 1200 (018.120) or the former ECON 1201 (018.120)] or [a grade of "C" or better in both ECON 1210 (or ECON 1211 or the former 018.121) and ECON 1220 (or ECON 1221 or the former 018.122)].

ECON 2400 Introduction to Energy Economics Cr.Hrs. 3

(Formerly 018.240) A study of the economic relationships in energy production, consumption, demand and supply, pricing and conservation, energy policy and the development of new and renewable energy sources. Prerequisite: a grade of "C" or better in six credit hours of 1000 level Economics.

ECON 2410 The Manitoba Economy Cr.Hrs. 3

(Formerly 018.241) Application of economic theory to the historical development and present structure of the provincial economy. Prerequisite: none.

ECON 2510 The Economy of Ukraine Cr.Hrs. 3

(Formerly 018.251) A study of the Ukrainian economy in Eastern Europe: socioeconomic history, state and structure of the Ukrainian economy within the former Soviet Union, prospects and problems of economic restructuring. Prerequisite: none.

ECON 2520 Economics of Sports and Leisure Cr.Hrs. 3

(Formerly 018.252) Economic analysis of current issues in professional and amateur sports, and leisure. Prerequisite: none.

ECON 2540 Political Economy 1: Production and Distribution Cr.Hrs. 3

(Formerly 018.254) A study of the theories, institutions, policies and relations of power in national and global economic society with reference to the production of market and non-market goods and services and the distribution of necessary and surplus output. Particular attention will be given to the role of the state in the regulation of markets and the distribution of surplus. Prerequisite: a grade of "C" or better in six credit hours of 1000 level Economics.

ECON 2550 Political Economy 2: Economic Growth and Fluctuations in a Global Economic Environment Cr.Hrs. 3

(Formerly 018.255) A study of the theories, institutions, policies and relations of power in national and global economic society with reference to economic growth, international trade and finance, economic fluctuations, inflation and unemployment. Particular attention will be given to the role of the state in the regulations of macroeconomic activity. Prerequisite: a grade of "C" or better in ECON 2540 (018.254).

ECON 2610 Special Topics in Economics Cr.Hrs. 3

(Formerly 018.261) This course will vary from year to year depending on the needs of students and the interests and availability of instructors. Prerequisite: [a grade of "C" or better in six credit hours of 1000 level Economics] or written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

ECON 2620 Special Topics in Economics Cr.Hrs. 3

(Formerly 018.262) This course will vary from year to year depending on the needs of students and the interests and availability of instructors. Prerequisite: [a grade of "C" or better in six credit hours of 1000 level Economics] or written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

ECON 2630 An Introduction to the World's Economies Cr.Hrs. 6

(Formerly 018.263) An examination of the world's economies from a broad-based economics perspective (including economic theories, institutional perspectives and historical evidence) to explain the development and limits of the world's changing and differing economies, and economic growth patterns in the light of the private business sector, labour relations and the role of the state. Students may not hold credit for both ECON 2630 (018.263) and ECON 2620 (018.262) Special Topics in Economics when titled Introduction to the World's Economies. Prerequisite: a grade of "C" or better in six credit hours of 1000 level Economics.

Economics Course Descriptions-3000 Level

ECON 3010 Microeconomic Theory 2 Cr.Hrs. 3

This course uses basic calculus and optimization techniques to study consumer and firm behaviour, demand and supply theory, monopoly, monopolistic competition, oligopoly, and the Edgeworth Box analysis of an exchange economy. Students may not hold credit for ECON 3010 and any of: ECON 2461, the former ECON 2460 (018.246), or the former ECON 3700 (018.370). Prerequisite: [a grade of "C+" or better in ECON 2010 or ECON 2451 or the former ECON 2450 (018.245) or the former ECON 2700 (018.270)] and [a grade of "C" or better in MATH 1230 or MATH 1500 (136.150) or MATH 1501 or MATH 1520 (136.152)].

ECON 3020 Macroeconomic Theory 2 Cr.Hrs. 3

Theories of national income, employment, inflation, balance of payments, stabilization policy, and economic growth within the framework of macroeconomic models of an open economy with particular attention to empirical evidence from Canada, the U.S., and other countries. This course requires the use of calculus. Students may not hold credit for ECON 3020 and any of: ECON 2481, the former ECON 2480 (018.248), or the former ECON 3800 (018.380). Prerequisite: [a grade of "C+" or better in ECON 2020 or ECON 2471 or the former ECON 2470 (018.247) or the former ECON 2800 (018.280)] and [a grade of "C" or better in MATH 1230 or MATH 1500 (136.150) or MATH 1501 or MATH 1520 (136.152)].

ECON 3030 Mathematical Economics 2 Cr.Hrs. 3

Mathematical methods used in economic analysis. Topics will include optimization with constraints, exponential and logarithmic functions, integrals, dynamic analysis, basic differential equations, and Hamiltonians. Students may not hold credit for both ECON 3030 and the former ECON 3730 (018.373). Prerequisite: [a grade of "C" or better in ECON 2030 or the former ECON 2530 (018.253)] or written consent of instructor.

ECON 3040 Introduction to Econometrics Cr.Hrs. 3

This course builds on ECON 2040 by introducing: multivariate ordinary least squares regression using matrices; heteroskedasticity; and autocorrelation. Additional topics may include: instrumental variables; binary choice models; and panel data models. Students may not hold credit for both ECON 3040 and the former ECON 3180 (018.318). Prerequisite: a grade of "C+" or better in ECON 2040 or the former ECON 3170 (018.317).

ECON 3160 Managerial Economics Cr.Hrs. 3

An introduction to the economic foundations of managerial decision making, which includes pricing strategies, boundaries of the firm, investment in human capital, and incentive contract design. Also offered by Management as GMGT 3160 (027.316). May not be held with GMGT 3160 (027.316). Prerequisite: [a grade of "C" or better in both ECON 1010 (or ECON 1011) and ECON 1020 (or ECON 1021), or the former ECON 1200 (018.120), or the former ECON 1201 (018.120)] and [a grade of "C" or better in MATH 1500 (or MATH 1501 or the former 136.150) or MATH 1510 (136.151) or MATH 1520 (136.152) or ECON 2530 (018.253)].

ECON 3362 Labour Economics 1 Cr.Hrs. 3

An introduction to labour economics, including labour supply, labour demand and the determination of wages and employment. Students may not hold credit for both ECON 3362 and the former ECON 3360 (018.336). Prerequisite: a grade of "C" or better in ECON 2010 or ECON 2451 or the former ECON 2450 (018.245) or the former ECON 2700 (018.270).

ECON 3364 Labour Economics 2 Cr.Hrs. 3

Analysis of topics in labour economics such as unemployment, immigration, gender discrimination and the impact of unions. Students may not hold credit for both ECON 3364 and the former ECON 3360 (018.336). Prerequisite: a grade of "C" or better in ECON 3362.

ECON 3374 Public Expenditure Analysis and Policy Evaluation Cr.Hrs. 3

The study of the role of government in the economy, government budget and expenditure evaluation issues, benefit-cost analysis, as well as government intervention regulation, public pricing, and ownership issues. Students may not hold credit for both ECON 3374 and the former ECON 3370 (018.337). Prerequisite: a grade of "C" or better in ECON 2010 or ECON 2451 or the former ECON 2450 (018.245) or the former ECON 2700 (018.270).

ECON 3376 Taxation, Tax Policy and Inter-government Public Finance Issues Cr.Hrs. 3

A study of the principles of taxation, tax policy in Canada and elsewhere, government deficit and debt issues and fiscal federalism with emphasis on inter-governmental finance issues. Students may not hold credit for both ECON 3376 and the former ECON 3370 (018.337). Prerequisite: a grade of "C" or better in ECON 2010 or ECON 2451 or the former ECON 2450 (018.245) or the former ECON 2700 (018.270).

ECON 3392 An Introduction to Development Economics Cr.Hrs. 3

The definition and major challenges of development and an introduction to theories of growth and development. Students may not hold credit for both ECON 3392 and the former ECON 3390 (018.339). Prerequisite: [a grade of "C" or better in ECON 2010 or ECON 2451 or the former ECON 2450 (018.245) or the former ECON 2700 (018.270)] and [a grade of "C" or better in ECON 2020 or ECON 2471 or the former ECON 2470 (018.247) or the former ECON 2800 (018.280)] or written consent of instructor.

ECON 3394 Development Economics: Problems and Policies Cr.Hrs. 3

Processes and problems of development policies to accelerate change. Economic relations between developed and developing regions. Students may not hold credit for both ECON 3394 and the former ECON 3390 (018.339). Prerequisite: [a grade of "C" or better in ECON 2010 or ECON 2451 or the former ECON 2450 (018.245) or the former ECON 2700 (018.270)] and [a grade of "C" or better in ECON 2020 or ECON 2471 or the former ECON 2470 (018.247) or the former ECON 2800 (018.280)] and [a grade of "C" or better in ECON 3392 or ECON 2630 (018.263)] or written consent of instructor.

ECON 3610 Special Studies Cr.Hrs. 3

(Formerly 018.361) This reading course will vary from year to year depending on the needs of students and the interests of instructors. Prerequisite: written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

ECON 3620 Special Studies Cr.Hrs. 6

(Formerly 018.362) This reading course will vary from year to year depending on the needs of students and the interests of instructors. Prerequisite: written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

ECON 3640 Economics of the Financial System Cr.Hrs. 3

(Formerly 018.364) Flows of funds through the financial system; savings and investment and asset choices of households and firms; intermediation by financial institutions; arbitrage between and within countries, government financial policy, with special reference to Canada. Students may not hold credit for ECON 3640 (018.364) and any of: ECON 3641 or FIN 3460 (009.346). Prerequisite: a grade of "C" or better in one of: ECON 2010 or ECON 2451 or ECON 3010 or ECON 2461 or the former ECON 2450 (018.245) or the former ECON 2460 (018.246) or the former ECON 2700 (018.270) or the former ECON 3700 (018.370).

ECON 3650 Monetary Macroeconomics and Policy Cr.Hrs. 3

(Formerly 018.365) Demand for and supply of money; term structure of interest rates; tools of central banking; design and conduct of monetary policy. Students may not hold credit for both ECON 3650 (018.365) and ECON 3651. Prerequisite: a grade of "C" or better in one of: ECON 2020 or ECON 2471 or ECON 3020 or ECON 2481 or the former ECON 2470 (018.247) or the former ECON 2480 (018.248) or the former ECON 2800 (018.280) or the former ECON 3800 (018.380).

ECON 3670 International Trade Cr.Hrs. 3

(Formerly 018.367) A study of the theory of international trade and modern trade issues including the effect of economic integration on growth, distribution, national policy and the environment. Prerequisite: a grade of "C" or better in one of: ECON 2010 or ECON 2451 or the former ECON 2450 (018.245) or the former ECON 2700 (018.270). ECON 3010 or ECON 2461 or the former ECON 2460 (018.246) is recommended.

ECON 3680 International Finance Cr.Hrs. 3

(Formerly 018.368) A study of the theory of international financial markets and issues in open economy macroeconomics focusing on the balance of payments, exchange rates and the effects of international financial integration on national economies. Prerequisite: a grade of "C" or better in one of: ECON 2020 or ECON 2471 or the former ECON 2470 (018.247) or the former ECON 2800 (018.280). ECON 3020 or ECON 2481 or the former ECON 2480 (018.248) is recommended.

ECON 3690 Economic Issues of Health Policy Cr.Hrs. 3

(Formerly 018.369) The structure, functioning and financing of the Canadian health care delivery system and the demand for health care in Canada. Prerequisite: a grade of "C" or better in six credit hours of 1000 level Economics.

ECON 3692 Economic Determinants of Health Cr.Hrs. 3

The objective of this course is to provide an economics perspective on the epidemiological transition from infectious to chronic disease. This course will contrast the biomedical, consumer choice and political economy approaches and their policy implications. Prerequisite: a grade of "C" or better in ECON 1010 or ECON 1011 or ECON 1210 (018.121) or ECON 1211 (018.121) or the former ECON 1200 (018.120) or the former ECON 1201 (018.120).

ECON 3710 Sustainable Development: Issues and Policy Cr.Hrs. 3

(Formerly 018.371) An examination of the theory and practice of economic sustainability, ecological sustainability, and social sustainability, with emphasis on analysing current issues and designing policies to achieve sustainable development. Prerequisite: a grade of "C" or better in six credit hours of 1000 level Economics.

ECON 3720 Urban and Regional Economics and Policies Cr.Hrs. 3

(Formerly 018.372) An introduction to the study of the determinants of the spatial distribution of economic activity among urban centres and regions. Particular attention will be paid to such contemporary Canadian problems as regional disparities, urban and environmental decay, and urban renewal, and the policy issues involved in dealing with these problems. Prerequisite: a grade of "C" or better in ECON 2010 or ECON 2451 or the former ECON 2450 (018.245) or the former ECON 2700 (018.270).

ECON 3742 Industrial Organization and Firm Strategy Cr.Hrs. 3

Market structure and firms' strategic decisions will be analyzed. Topics may cover monopoly pricing strategies such as price discrimination; non-pricing strategies such as advertising, quality decisions and differentiated products; dynamic oligopoly models; mergers; anti-competitive behaviour; and auctions. This course assumes students have a sound background in economic theory, as well as single-variable calculus and basic statistics. Students may not hold credit for both ECON 3742 and the former ECON 3740 (018.374). Prerequisite: [a grade of "C" or better in ECON 2010 or ECON 2451 or the former ECON 2450 (018.245) or the former ECON 2700 (018.270)] or written consent of instructor.

ECON 3810 Alternative Approaches to Macroeconomic Analysis Cr.Hrs. 3

(Formerly 018.381) A survey of Post-Keynesian, Cambridge, Marxian, and institutionalist approaches to macroeconomic fluctuations, contrasting their theoretical and policy frameworks with those of mainstream macroeconomics. Prerequisite: a grade of "B" or better in ECON 2020 or ECON 2471 or the former ECON 2470 (018.247) or the former ECON 2800 (018.280).

Economics Course Descriptions-4000 Level**ECON 4010 Advanced Microeconomic Theory Cr.Hrs. 3**

An intensive study of advanced microeconomic analysis using optimization techniques involving multivariate calculus. Topics will include consumer theory, producer theory, general equilibrium, intertemporal choice, risk and insurance markets, and asymmetric information (moral hazard and adverse selection). Prerequisite: a grade of "B" or better in ECON 3010 or ECON 2461 or the former ECON 2460 (018.246) or the former ECON 3700 (018.370).

ECON 4012 Topics in Advanced Microeconomic Theory Cr.Hrs. 3

An intensive review of selected topics in advanced microeconomic theory. Prerequisite: a grade of "B" or better in ECON 3010 or ECON 2461 or the former ECON 2460 (018.246) or the former ECON 3700 (018.370). As the course content will vary from term to term, students may take this course more than once for credit.

ECON 4020 Topics in Advanced Macroeconomic Theory Cr.Hrs. 3

An intensive review of selected topics in advanced macroeconomic theory. Prerequisite: a grade of "B" or better in ECON 3020 or ECON 2481 or the former ECON 2480 (018.248) or the former ECON 3800 (018.380). As the course content will vary from term to term, students may take this course more than once for credit.

ECON 4040 Seminar in Applied Econometrics Cr.Hrs. 3

An applied course with a research component that incorporates real-world data and contemporary econometric software with an emphasis on the application of econometrics to a range of microeconomic and macroeconomic problems. Topics may include: endogeneity; instrumental variables; generalized method of moments; generalized least squares; limited dependent variable models; univariate and multivariate time series models; and panel data models. Students may not hold credit for ECON 4040 and any of: ABIZ 4120 (061.412) or the former ECON 4120 (018.412). Prerequisite: a grade of "C+" or better in ECON 3040 or the former ECON 3180 (018.318).

ECON 4042 Topics in Econometrics Cr.Hrs. 3

This is a theoretical course that addresses more advanced econometric topics with the intent of preparing students for graduate-level studies in econometrics. Standard topics will be examined in more depth. Students may not hold credit for both ECON 4042 and the former ECON 4130 (018.413). Prerequisite: a grade of "C+" or better in ECON 3040 or the former ECON 3180 (018.318).

ECON 4050 History of Economic Thought 1 Cr.Hrs. 3

A seminar course on the history of economic thought up to 1870. Attention is given to the evolution and significance of major theoretical concepts and approaches, the people who developed them and the attendant social, intellectual and economic context. Students may not hold credit for both ECON 4050 and the former ECON 4410 (018.441). Prerequisite: written consent of department head.

ECON 4052 History of Economic Thought 2 Cr.Hrs. 3

A seminar course on the history of economic thought since 1870. Attention is given to the evolution and significance of major theoretical concepts and approaches, the people who developed them, and the attendant social, intellectual and economic context. Students may not hold credit for ECON 4052 and the former ECON 4410 (018.441). Prerequisite: a grade of "C" or better in ECON 4050.

ECON 4140 Evaluation of Economic Policy and Programs Cr.Hrs. 3

This is a course in applied micro-economic policy analysis using the techniques of cost-benefit analysis as its foundation. Students will learn the welfare foundations of cost-benefit analysis, techniques for decision-making under conditions of risk and uncertainty, and how these techniques may be applied to public policy. The course will include examples from all areas of public policy, including health, education, social services criminal justice, etc. Prerequisite: written consent of department head.

ECON 4430 Theories of Economic Development Cr.Hrs. 6

(Formerly 018.443) A study of theories, problems, and policies of economic growth and development both for advanced and underdeveloped countries. Prerequisite: written consent of department head. ECON 2020 (or the former ECON 2800 (018.280)) and ECON 3020 (or the former ECON 3800 (018.380)) are recommended but not required.

ECON 4490 Special Studies Cr.Hrs. 3

(Formerly 018.449) This readings course will vary from year to year depending on the needs of students and the interests of instructors. Prerequisite: written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

ECON 4500 Special Studies Cr.Hrs. 6

(Formerly 018.450) This readings course will vary from year to year depending on the needs of students and interests of instructors. Prerequisite: written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

ECON 4820 Workshop on Canadian Economic Policy Cr.Hrs. 6

(Formerly 018.482) In depth examination of policy issues on selected topics such as unemployment, inflation, international trade, transfer payments, health care, the environment. A major research paper will be expected of all students. Students may not hold credit for ECON 4820 (018.482) and any of: ECON 4822 or the former ECON 4830 (018.483). Prerequisite: [a grade of "C" or better in each of ECON 2040 (or the former ECON 3170 (018.317)) and ECON 3040 (or the former ECON 3180 (018.318))] and [a grade of "C" or better in ECON 2010 (or ECON 2451 or the former ECON 2450 (018.245) or the former ECON 2700 (018.270))] and [a grade of "C" or better in ECON 3010 (or ECON 2461 or the former ECON 2460 (018.246) or the former ECON 3700 (018.370))] and [a grade of "C" or better in ECON 2020 (or ECON 2471 or the former ECON 2470 (018.247) or the former ECON 2800 (018.280))] and [a grade of "C" or better in ECON 3020 (or ECON 2481 or the former ECON 2480 (018.248) or the former ECON 3800 (018.380))]. Registration is restricted to students who have formally declared an Advanced Major in Economics or Honours Economics.

ECON 4822 Economic Research and Communication Cr.Hrs. 6

This is the capstone course for students in their final year of the B.A. (Adv.) major in Economics. The aim of this course is to develop some of the research, analytical, and writing skills that will allow students to utilize knowledge and quantitative skills acquired in previous economics courses. Students may not hold credit for ECON 4822 and any of: ECON 4820 (018.482) or the former ECON 4830 (018.483). Prerequisite: [a grade of "C" or better in each of ECON 2040 (or the former ECON 3170 (018.317)) and ECON 3040 (or the former ECON 3180 (018.318))] and [a grade of "C" or better in ECON 2010 (or ECON 2451 or the former ECON 2450 (018.245) or the former ECON 2700 (018.270))] and [a grade of "C" or better in ECON 3010 (or ECON 2461 or the former ECON 2460 (018.246) or the former ECON 3700 (018.370))] and [a grade of "C" or better in ECON 2020 (or ECON 2471 or the former ECON 2470 (018.247) or the former ECON 2800 (018.280))] and [a grade of "C" or better in ECON 3020 (or ECON 2481 or the former ECON 2480 (018.248) or the former ECON 3800 (018.380))]. Registration is restricted to students who have formally declared an Advanced Major in Economics or Honours Economics.

8.10 English, Film, and Theatre

Head: Brenda Austin-Smith

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Telephone: 204 474 9678

E-mail: english@umanitoba.ca

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8.10.1 English Program Information

English literature connects us in vital ways to times, places, and cultures, including our own; engages us in important moral and social questions; encourages us to reflect upon the capacities of the human mind and imagination; invites us to probe connections between language, form, structure, and meaning; and entertains, surprises, shocks, and moves us. Through its offerings of courses in contemporary and historical literature and in creative writing, our program promotes the study of English from this wide range of perspectives.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in ENGL 1200 or ENGL 1300 or both ENGL 1400 (or the former ENGL 1310) and ENGL 1340. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate, including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in ENGL 1200 or ENGL 1300 or both ENGL 1400 (or the former ENGL 1310) and ENGL 1340.

Honours Program

For entry to the Honours program see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs. A grade of "B" or better is required in ENGL 1200 or ENGL 1300 or in both ENGL 1400 (or the former ENGL 1310) and ENGL 1340; ENGL 1200 is strongly recommended. Students may also be admitted to Honours in English in the third year of undergraduate study, in consultation with the department. Honours students must have their programs approved by the department each year. Normally, to continue in the Honours program, a minimum grade of "B" must be obtained in all English courses.

Honours courses are also open to students who have been accepted into the pre-M.A. program and to students who have obtained the written consent of the department head.

Honours students who revert to a General program in English must meet the literature prior to the 1900 requirement for a Major or Minor, and they should consult the department head before continuing.

Students taking Single Honours should, if possible, take at least 12 credit hours in one of the following languages: French, German, Greek, Icelandic, Italian, Latin, Russian, Spanish.

Notes

ENGL 0930, ENGL 0940, ENGL 1061 and ENGL 1071 are not designed to teach English as a second language.

For students who need help with basic writing skills, the Department of English, Film, and Theatre offers two half courses: ENGL 0930 English Composition and ENGL 0940 Writing About Literature. These courses are limited in size. Both ENGL 0930 and ENGL 0940 are acceptable for credit towards a degree in Arts or Science, but they may not be counted for credit in the 48 hours for a Single Advanced Major, the 42 hours for a Double Advanced Major, the 30 hours for a General Major, or the 18 hours for a Minor (Concentration). Either or both will, however, be included in the total number of hours a student is allowed to take in the combined Major and Minor. There is no prerequisite for entry into ENGL 0930 or ENGL 0940, and these courses are not required for admission to subsequent English courses.

Study Resources

All students taking English should own a writing handbook and a good dictionary such as Webster's New Collegiate, Funk and Wagnall's Standard College, The Concise Oxford, The Gage Canadian, or The New World. Students will also find useful The MLA Handbook and M.H. Abrams, A Glossary of Literary Terms.

ACADEMIC CALENDAR 2015-2016

8.10.2 English

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR^{1,4} TOTAL: 30 CREDIT HOURS			
ENGL 1200 or ENGL 1300 or both ENGL 1400 (or the former ENGL 1310) and ENGL 1340	24 credit hours in general courses at the 2000 level and above to include at least 9 credit hours of literature prior to 1900 ⁴ [of the credit hours listed above, at least 6 credit hours must be at the 3000 level].		
SINGLE ADVANCED MAJOR^{1,4,9} TOTAL: 48 CREDIT HOURS			
ENGL 1200 or ENGL 1300 or both ENGL 1400 (or the former ENGL 1310) and ENGL 1340	42 credit hours in general courses ³ at the 2000 level and above to include at least 15 credit hours of literature prior to 1900 ⁴ [of the credit hours listed above, at least 9 credit hours must be at the 3000 level].		
DOUBLE ADVANCED MAJOR^{1,4,9} TOTAL: 42 CREDIT HOURS			
ENGL 1200 or ENGL 1300 or both ENGL 1400 (or the former ENGL 1310) and ENGL 1340	36 credit hours in English at the 2000 level and above to include at least 12 credit hours of literature prior to 1900 [of the credit hours listed above, at least 9 credit hours must be at the 3000 level].		
MINOR (CONCENTRATION)^{2,4} TOTAL: 18 CREDIT HOURS			
ENGL 1200 or ENGL 1300 or both ENGL 1400 (or the former ENGL 1310) and ENGL 1340	12 credit hours in general courses at the 2000 level and above to include at least 6 credit hours of literature prior to 1900 [of the credit hours listed above, at least 3 credit hours must be at the 3000 level]. Students may not offer literature in translation courses ⁴ to satisfy the requirements of the Minor (Concentration).		
SINGLE HONOURS^{1,4,8}			
ENGL 1200 or ENGL 1300 or both ENGL 1400 (or the former ENGL 1310) and ENGL 1340	<ul style="list-style-type: none"> • ENGL 2640 (in Year 2) • 24 credit hours of literature prior to 1900⁴, of which 12 credit hours is to be in literature prior to 1700 selected from the following English courses: ENGL 2070, ENGL 2080, ENGL 2090, ENGL 3000, ENGL 3010, ENGL 3020, ENGL 3030, ENGL 3050, ENGL 3080, ENGL 3090, ENGL 3180⁵ • 6 credit hours in Canadian literature, selected from the following English courses: ENGL 2270, ENGL 3270⁵ • 12 credit hours in other literature after 1900, selected from the following English courses: ENGL 2160, ENGL 2180, ENGL 2830, ENGL 3980, ENGL 3990⁵ • 9 credit hours in other English courses at the 2000 level and above [of the credit hours listed above, at least 9 credit hours must be at the 3000 level]. • 9 credit hours in Honours courses (4000 level) in Years 3 and 4. Honours courses that are double-numbered with a graduate course will be limited to fourth-year Honours students. • 24 credit hours in ancillary options⁶ 		
DOUBLE HONOURS^{2,4,8}			
ENGL 1200 or ENGL 1300 or both ENGL 1400 (or the former ENGL 1310) and ENGL 1340	<ul style="list-style-type: none"> • ENGL 2640 (in Year 2) • 18 credit hours of literature prior to 1900⁴ • 6 credit hours in other English courses at the 2000 level and above [of the credit hours listed above, at least 6 credit hours must be at the 3000 level]. • 6 credit hours in Honours courses (4000 level). Honours courses that are double-numbered with a graduate course will be limited to fourth-year Honours students. • 36 credit hours in second honours field • 6 credit hours in ancillary options⁶ • 12 credit hours in free options⁷ 		

NOTES:

¹ Students may offer up to 6 credit hours in Film Studies or Theatre courses, with the exception of FILM 1290, FILM 1310 (or the former FILM 1300), THTR 1220, THTR 2170, THTR 2180 and THTR 2490, toward the General Major, Single Advanced Major, Double Advanced Major and Single Honours in English. Any Film Studies or Theatre courses so applied may not also be offered toward a Minor (Concentration) in Film Studies or Theatre.

² Film Studies course FILM 2280 may be used as an English course to satisfy the English course requirements. If it is used as such, it may not also be applied to a Minor (Concentration) in Film Studies or as an ancillary option in Honours.

³ Credit in ENGL 2000 may be offered toward the 48 hours in general courses required for a Single Advanced Major only.

⁴ Students may offer up to 6 credit hours of literature in translation courses (ENGL 2490, CLAS 2612, CLAS 2622, ICEL 3320, ICEL 3330) to satisfy requirements for a General Major, Single Advanced Major, Double Advanced Major, Single Honours or Double Honours. Students may offer up to 3 credit hours of literature in translation courses to satisfy the “literature prior to 1900” requirement for a General Major, Single Advanced Major, Double Advanced Major, Single Honours or Double Honours. Students may not offer literature in translation courses to satisfy the requirements for a Minor (Concentration).

⁵ Certain courses that vary in content from year to year, such as Honours courses and Special Topics courses, may also satisfy this requirement, as determined by the Department.

⁶ Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding English courses).

⁷ Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including English courses).

⁸ Honours courses: all 4000 level courses.

⁹ It is recommended that students complete a six credit hour theory course, specifically ENGL 2640.

Literature Prior to 1900

Students declaring a four-year Advanced Major in English must take at least 15 credit hours from the courses listed below. Students declaring a three-year General Major in English must take at least 9 credit hours from the list. Students declaring a Minor (Concentration) in English must take at least 6 credit hours from the list. Courses chosen from this list will be deemed to satisfy the previous “Special List” requirement for students in progress towards a degree with previously declared Majors or Minors (Concentrations) in English. [NOTE: From year to year, other courses may meet this requirement. Please refer to the on-line course timetable for additional information on these courses.]

Course	Credit Hours	
English		
ENGL 2070	Literature of the Sixteenth Century	6
ENGL 2080	Medieval Literature	6
ENGL 2090	Literature of the Seventeenth Century	6
ENGL 2120	Literature of the Restoration and Eighteenth Century	6
ENGL 2130	Literature of the Romantic Period	6
ENGL 2140	Literature of the Victorian Period	6
ENGL 2170	American Literature to 1900	6
ENGL 3000	Chaucer	6
ENGL 3010	Shakespeare	6
ENGL 3020	Milton	6
ENGL 3030	Studies in Sixteenth-Century Literature	3
ENGL 3050	Studies in Old English	6
ENGL 3080	Studies in Medieval Literature	3
ENGL 3090	Studies in Seventeenth-Century Literature	3
ENGL 3120	Studies in Restoration and Eighteenth-Century Literature	3
ENGL 3130	Studies in the Romantics	3
ENGL 3140	Studies in the Victorians	3
ENGL 3180	Studies in Renaissance Literature	3
NOTE: Restrictions apply to the following courses regarding their use for credit in English (ENGL 2490) and for fulfillment of the literature prior to 1900 requirement. See program note 4. Contact the department for further information on restrictions.		
Classics (Classical Studies)		
CLAS 2612	Greek Literature in Translation (taught with ENGL 2490)	3
CLAS 2622	Latin Literature in Translation (taught with ENGL 2490)	3
CLAS 3610*	Greek Literature in Translation (taught with ENGL 2490)	3
CLAS 3620*	Latin Literature in Translation (taught with ENGL 2490)	3
Icelandic		
ICEL 3320	Old Norse Mythology (taught with ENGL 2490)	3
ICEL 3330	Icelandic Sagas in Translation (taught with ENGL 2490)	3

* Indicates course no longer offered.

8.10.3 English Course Descriptions

English Course Descriptions-0 Level

ENGL 0930 English Composition Cr.Hrs. 3

(Formerly 004.093) Designed to help students write better essays. Course focuses on effective expression; sentence, paragraph, and essay construction; and the writing process. A great deal of writing is required; instructors address the particular needs of individual students. Students may not enter English courses numbered above the 1000 level directly from this course. This course is not designed to teach English as a second language. This course does not satisfy the Humanities requirement.

ENGL 0940 Writing About Literature Cr.Hrs. 3

(Formerly 004.094) Designed to supplement and to complement ENGL 0930 (004.093), the course may be taken by itself. The course focuses on writing about literature through the study of the short story and poetry. Students may not normally enter English courses numbered above the 1000 level directly from this course. This course is not designed to teach English as a second language. This course does not satisfy the Humanities requirement.

English Course Descriptions-1000 Level

ENGL 1200 Representative Literary Works Cr.Hrs. 6

(Formerly 004.120) An introduction to the study of literature, with emphasis on the development of reading and writing skills. Poetry, prose and drama from various historical periods. Texts for each section will be announced. Students may not hold credit for both ENGL 1200 (004.120) and ENGL 1201 (004.120). English 40S or the former English 300 are strongly recommended, but English 40G or the former 301 or 305 will also be accepted.

ENGL 1300 Literature since 1900 Cr.Hrs. 6

(Formerly 004.130) An introduction to the study of literature, with emphasis on the development of reading and writing skills. Poetry, prose and drama from Canada, Britain, the United States and other countries. Texts for each section will be announced. Students may not hold credit for both ENGL 1300 (004.130) and ENGL 1301 (004.130). English 40S or the former English 300 are strongly recommended, but English 40G or the former 301 or 305 will also be accepted.

ENGL 1340 Introduction to Literary Analysis Cr.Hrs. 3

(Formerly 004.134) This course is intended to provide students with reading, writing, and analytic skills required for literary studies.

ENGL 1400 Thematic Approaches to the Study of Literature Cr.Hrs. 3

An introduction to the study of literature, with emphasis on the development of reading and writing skills. Poetry, prose, and drama from various thematic perspectives. Texts for each section will be announced. English 40S or the former English 300 are strongly recommended, but English 40G or the former 301 or 305 will also be accepted. Students may not hold credit for both ENGL 1400 and the former ENGL 1310 (004.131).

English Course Descriptions-2000 Level

ENGL 2000 Intermediate Writing and Research Cr.Hrs. 6

(Formerly 004.200) Designed to teach students how to read, write, and research at the university level, this course stresses effective expository writing, prose reading, and research skills. There is no prerequisite for this course. Students may not hold credit for both ENGL 2000 (004.200) and ENGL 2001 (004.200). NOTE: Credit in ENGL 2000 (004.200) is acceptable toward a degree in Arts or Science, but does not satisfy the humanities requirement in the Faculty of Arts. It may not be offered for credit in the 30 hours for a Major (General) or the 18 hours for a Minor but may be offered for credit in the 48 hours for the Major (Advanced).

ENGL 2070 Literature of the Sixteenth Century Cr.Hrs. 6

(Formerly 004.207) A survey of poetry, prose and drama by major and minor writers in historical context. Students may not hold credit for both ENGL 2070 (004.207) and ENGL 2071 (004.207). Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (or the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)].

ENGL 2080 Medieval Literature Cr.Hrs. 6

(Formerly 004.208) A survey of poetry, prose and drama by major and minor writers in historical context. Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (or the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)].

ENGL 2090 Literature of the Seventeenth Century Cr.Hrs. 6

(Formerly 004.209) A survey of poetry, prose and drama by major and minor writers in historical context. Students may not hold credit for both ENGL 2090 (004.209) and ENGL 2091 (004.209). Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (or the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)].

ENGL 2120 Literature of the Restoration and Eighteenth Century Cr.Hrs. 6

(Formerly 004.212) A survey of poetry, prose and drama by major and minor writers in historical context. Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (or the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)].

ENGL 2130 Literature of the Romantic Period Cr.Hrs. 6

(Formerly 004.213) A survey of poetry, prose and drama by major and minor writers in historical context. Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)].

ENGL 2140 Literature of the Victorian Period Cr.Hrs. 6

(Formerly 004.214) A survey of poetry, prose and drama by major and minor writers in historical context. Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)].

ENGL 2160 British Literature since 1900 Cr.Hrs. 6

(Formerly 004.216) A survey of poetry, prose and drama by major and minor writers in historical context. Students may not hold credit for both ENGL 2160 (004.216) and ENGL 2161 (004.216). Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)].

ENGL 2170 American Literature to 1900 Cr.Hrs. 6

(Formerly 004.217) A survey of poetry, prose and drama by major and minor writers in historical context. Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)].

ENGL 2180 American Literature since 1900 Cr.Hrs. 6

(Formerly 004.218) A survey of poetry, prose and drama by major and minor writers in historical context. Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)].

ENGL 2190 Special Topics Cr.Hrs. 3

(Formerly 004.219) Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)]. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 2270 Canadian Literature Cr.Hrs. 6

(Formerly 004.227) A survey of poetry, prose and drama by major and minor writers in historical context. Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)].

ENGL 2490 Literature in Translation Cr.Hrs. 3

(Formerly 004.249) Content of this course will vary from year to year and from section to section. See the course descriptions available from the English Department. Each section of this course will be double-numbered with the department of the instructor teaching the course. Restrictions: See note 4 in the program table under section 8.10.2 English. Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)]. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 2550 Critical Practise Cr.Hrs. 3

(Formerly 004.255) An introduction to the critical idioms and methods for the analysis of literary texts. This course emphasizes the application of critical idioms and methods in the analysis of literary texts. Students may not hold credit for both ENGL 2550 (004.255) and the former ENGL 2800 (004.280). Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)].

ENGL 2570 The Novel Cr.Hrs. 6

(Formerly 004.257) A survey of the development of the novel as a genre. Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)].

ENGL 2600 Writing and Gender Cr.Hrs. 3

(Formerly 004.260) The literary representation of gender, the influence of the author's gender on writing, and other issues of gender in literature. Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)].

ENGL 2640 History of Critical Theory: From Plato to the Present Cr.Hrs. 6

(Formerly 004.264) A survey of critical theory, with some emphasis on application. Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)].

ENGL 2760 Introductory Creative Writing Cr.Hrs. 3

(Formerly 004.276) Offers students the chance to explore the basic forms of creative writing - poetry, fiction, and drama - whether or not they have made previous formal attempts to write in these forms. A sample of the student's writing is not required for admission to this course. The format is seminar and workshop and will include, as needed, lectures on the

fundamentals of creative writing. Students may not register concurrently for ENGL 2760 (004.276) or any of: ENGL 3500 (004.350) or ENGL 3790 (004.379). Not open to students who have previously obtained credit for any of ENGL 3500 (004.350) or ENGL 3790 (004.379). Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)].

ENGL 2830 Literature of Africa and/or the Caribbean Cr.Hrs. 3

(Formerly 004.283) This course will explore the literatures of Africa and the Caribbean by writers from Nigeria, South Africa, Kenya, Zimbabwe, Grenada, Jamaica, and/or Trinidad. We will also examine the theories often associated with postcolonialism - theories of marginality, power, alterity, ethnicity, race, locality, space, the subaltern, mimicry, hybridity, nationalism, diaspora, class, migration, multiculturalism, minority discourse, resistance, and historical revisionism - in a comparative context. Accordingly, we will be reading both fictional and theoretical works. The central objective of this course is to offer an overview of some contemporary world literature written in English. Students will also be encouraged to examine the texts from a variety of complimentary literary perspectives including new historicism, feminism, and Marxism. Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)].

ENGL 2900 Genre Cr.Hrs. 3

(Formerly 004.290) Selections in literature of a particular genre. Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)]. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 2940 Short Fiction I Cr.Hrs. 3

(Formerly 004.294) Representative writers. Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)].

ENGL 2960 Drama 1 Cr.Hrs. 3

(Formerly 004.296) An introduction to dramatic forms and conventions. Students may not hold credit for both ENGL 2960 (004.296) and ENGL 2961 (004.296). Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)].

ENGL 2980 Poetry 1 Cr.Hrs. 3

(Formerly 004.298) Introduction to poetic language and forms. Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or [a grade of "C" or better in each of ENGL 1400 (the former ENGL 1310 (004.131)) and ENGL 1340 (004.134)].

English Course Descriptions-3000 Level**ENGL 3000 Chaucer Cr.Hrs. 6**

(Formerly 004.300) Critical study of the works of this author, including historical context. Prerequisite: a grade of "C" or better in six hours of English at the 2000 level.

ENGL 3010 Shakespeare Cr.Hrs. 6

(Formerly 004.301) Critical study of the works of this author, including historical context. Students may not hold credit for both ENGL 3010 (004.301) and ENGL 3011 (004.301). Prerequisite: a grade of "C" or better in six hours of English at the 2000 level.

ENGL 3020 Milton Cr.Hrs. 6

(Formerly 004.302) Critical study of the works of this author, including historical context. Students may not hold credit for both ENGL 3020 (004.302) and the former ENGL 3021 (004.302). Prerequisite: a grade of "C" or better in six hours of English at the 2000 level.

ENGL 3030 Studies in Sixteenth-Century Literature Cr.Hrs. 3

(Formerly 004.303) Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre website for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 3050 Studies in Old English Cr.Hrs. 6

(Formerly 004.305) Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre website for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 3080 Studies in Medieval Literature Cr.Hrs. 3

(Formerly 004.308) Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre website for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 3090 Studies in Seventeenth-Century Literature Cr.Hrs. 3

(Formerly 004.309) Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre website for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 3120 Studies in Restoration and Eighteenth-Century Literature Cr.Hrs. 3

(Formerly 004.312) Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. NOTE: The content of this course will vary from year to year. Students are asked to consult the department of English, Film, and Theatre website for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 3130 Studies in the Romantics Cr.Hrs. 3

(Formerly 004.313) Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre website for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 3140 Studies in the Victorians Cr.Hrs. 3

(Formerly 004.314) Students may not hold credit for both ENGL 3140 (004.314) and ENGL 3141 (004.314). Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre website for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 3170 Studies in American Literature Cr.Hrs. 3

(Formerly 004.317) Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre website for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 3180 Studies in Renaissance Literature Cr.Hrs. 3

(Formerly 004.318) Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre website for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 3190 Studies in Special Topics Cr.Hrs. 6

(Formerly 004.319) Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre website for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 3270 Studies in Canadian Literature Cr.Hrs. 3

(Formerly 004.327) Students may not hold credit for both ENGL 3270 (004.327) and ENGL 3271 (004.327). Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 3500 Creative Writing Cr.Hrs. 6

(Formerly 004.350) Classroom hours will be arranged. Students may concentrate on poetry or on prose alone. Enrolment will be limited to allow for the particular interests of students. Written consent of the instructor, based on a sample of the student's work, must be obtained before registration. Samples of writing (with name, address, and telephone number) are to be submitted to the department general office not later than June 1. NOTE: Students may offer only one of ENGL 3500 (004.350) and ENGL 3790 (004.379) for credit in a Major. If both courses are taken, however, they will be included in the total number of hours that a student has in a Major.

ENGL 3530 Special Topics in Creative Writing 1 Cr.Hrs. 3

This advanced studies course will include practical and theoretical components and will focus on a particular area of writing craft or poetics without an emphasis on end-of-term publication or production. Possible topics include prose fiction, poetry, memoir, dramaturgy and screenwriting. Prerequisites: [a grade of "C" or better in ENGL 2760 (004.276)] and written consent of instructor, based on a sample of the student's work. Samples of writing (with name, address and telephone number) are to be submitted at the department general office at least two months prior to the start of the course. Enrolment for this course will be limited. NOTE: The content of this course will vary from year to year. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 3540 Special Topics in Creative Writing 2 Cr.Hrs. 6

This advanced studies course will include practical and theoretical components and will focus on a particular area of writing craft or poetics without an emphasis on end-of-term publication or production. Possible topics include prose fiction, poetry, memoir, dramaturgy and screenwriting. Prerequisites: [a grade of "C" or better in ENGL 2760 (or 004.276)] and written consent of instructor, based on a sample of the student's work. Samples of writing (with name, address and telephone number) are to be submitted at the department general office no later than June 1. Enrolment for this course will be limited. NOTE: The content of this course will vary from year to year. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 3550 Studies in British Literature since 1900 Cr.Hrs. 3

(Formerly 004.355) Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre website for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 3630 Studies in Critical Theory Cr.Hrs. 3

(Formerly 004.363) Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre website for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 3660 Special Studies Cr.Hrs. 6

(Formerly 004.366) Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre website for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 3670 Studies in the Novel Cr.Hrs. 6

(Formerly 004.367) Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. Students may not hold credit for both ENGL 3670 (004.367) and ENGL 3671 (004.367). NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre website for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 3790 Advanced Creative Writing Cr.Hrs. 6

(Formerly 004.379) An intensive workshop among other students at a high level of talent. The instructor will work closely with each student through individual conferences. Students will normally have taken ENGL 3500 (004.350) as a prerequisite to this course; however, standing in either does not automatically guarantee admission to ENGL 3790 (004.379). Written consent of the instructor, based on a sample of the student's work, must be obtained before registration. Samples of writing (with name, address, and telephone number) are to be submitted at the department general office no later than June 1. Students may offer only one of ENGL 3790 (004.379) and ENGL 3500 (004.350) for credit for a Major. NOTE: Students may offer only one of ENGL 3790 (004.379) and ENGL 3500 (004.350) for credit for a Major. If both courses are taken, however, they will be included in the total number of hours that a student has in the Major.

ENGL 3800 Special Studies 1 Cr.Hrs. 3

(Formerly 004.380) Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre website for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 3890 Studies in Writing and Gender Cr.Hrs. 3

(Formerly 004.389) Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre website for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 3960 Drama 2 Cr.Hrs. 3

(Formerly 004.396) Advanced study of selected topics. Students may not hold credit for both ENGL 3960 (004.396) and ENGL 3961 (004.396). Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre website for detailed course descriptions.

ENGL 3970 Poetry 2 Cr.Hrs. 3

(Formerly 004.397) Advanced study of selected topics. Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre website for detailed course descriptions.

ENGL 3980 Studies in Modernism Cr.Hrs. 3

(Formerly 004.398) Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre website for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 3990 Studies in Post-Modernism Cr.Hrs. 3

(Formerly 004.399) Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre website for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit.

English Course Descriptions-4000 Level**ENGL 4630 Honours Seminar 1 Cr.Hrs. 3**

(Formerly 004.463) This course may vary from year to year depending on the needs and interests of instructors and students. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 4640 Honours Seminar 2 Cr.Hrs. 3

(Formerly 004.464) This course may vary from year to year depending on the needs and interests of instructors and students. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 4770 Honours Seminar 1 Cr.Hrs. 6

(Formerly 004.477) This course may vary from year to year depending on the needs and interests of instructors and students. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

ACADEMIC CALENDAR 2015-2016

8.10.4 Film Studies

Chair: Brenda Austin-Smith
Program Office: 360 University College
Telephone: 204 474 9581
E-mail: filmstudies@umanitoba.ca

8.10.5 Film Studies Program Information

Film is the most important popular culture art form of the twenty-first century. Our knowledge and perception of the modern world is shaped by film or its related media — video and television. Film is a social, cultural, and historical document that, in addition to being worthwhile for study as an artistic medium, also shares issues with philosophy, sociology, political studies, and other disciplines. Instructors include people who have made and written about films and who are well prepared to discuss film history, film as cultural artifact and the connections between film and other disciplines.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of “C” or better in both FILM 1290 and FILM 1310 (or the former FILM 1300). For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of “C” or better in both FILM 1290 and FILM 1310 (or the former FILM 1300).

8.10.6 Film Studies

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR¹ TOTAL: 30 CREDIT HOURS			
FILM 1290 and FILM 1310	24 credit hours in Film Studies courses, including FILM 3420		
SINGLE ADVANCED MAJOR¹ TOTAL: 60 CREDIT HOURS			
FILM 1290 and FILM 1310	<ul style="list-style-type: none"> • 42 credit hours in Film Studies including FILM 3420 and an additional 6 credit hours in courses numbered at the 3000 level • 12 credit hours from List A and B of which at least 6 credit hours must be from List A 		
DOUBLE ADVANCED MAJOR¹ TOTAL: 42 CREDIT HOURS			
FILM 1290 and FILM 1310	<ul style="list-style-type: none"> • FILM 2280; FILM 2380 or FILM 2390 or FILM 2430; FILM 3420 or ENGL 2640 • 24 additional credit hours in Film Studies at the 2000 level and above (of the 24 credit hours, at least 6 credit hours, excluding FILM 3420, must be at the 3000 level) 		
MINOR (CONCENTRATION)¹ TOTAL: 18 CREDIT HOURS			
FILM 1290 and FILM 1310	12 credit hours in Film Studies courses		
NOTE:			
¹ The content of topics courses (FILM 2380, FILM 2390, FILM 2460, FILM 3250, FILM 3260, FILM 3270, FILM 3400, FILM 3410) will vary from term to term and may be taken more than once for credit.			

List A		
Faculty of Arts		
Classics		
CLAS 2612	Greek Literature in Translation	3
CLAS 2622	Latin Literature in Translation	3
CLAS 3610*	Greek Literature in Translation	3
CLAS 3620*	Latin Literature in Translation	3
CLAS 3680	Studies in a Classical Literary Genre 1	3
CLAS 3690*	Studies in a Classical Literary Genre 2	3
CLAS 3700*	Studies in a Classical Literary Genre 3	3
English, Film, and Theatre		
ENGL 1200	Representative Literary Works	6
ENGL 1300	Literature since 1900	6

ENGL 2170	American Literature to 1900	6
ENGL 2180	American Literature since 1900	6
ENGL 2270	Canadian Literature	6
ENGL 2960	Drama 1	3
ENGL 3010	Shakespeare	6
ENGL 3270	Studies in Canadian Literature	3
ENGL 3500	Creative Writing	6
ENGL 3670	Studies in the Novel	6
ENGL 3790	Advanced Creative Writing	6
ENGL 3960	Drama 2	3
ENGL 3980	Studies in Modernism	3
French, Spanish and Italian		
FREN 3500	Littérature du 17e siècle (B)	3
FREN 3580	Travail indépendant (A, B)	3
German and Slavic Studies (German)		
GRMN 2370*	Modern German Literature in Translation	6
German and Slavic Studies (Polish)		
POL 2320*	An Outline of Polish Literature	6
German and Slavic Studies (Ukrainian)		
UKRN 2420*	Ukrainian Canadian Literature	3
UKRN 3660*	Ukrainian Literature in the West	3
UKRN 3670*	Contemporary Ukrainian Literature	3
Judaic Studies		
HEB 2210	Modern Hebrew Literature	6
SEM 2210*	Modern Hebrew Literature	6

List B		
Faculty of Arts		
English, Film, and Theatre		
THTR 1220	Introduction to Theatre	6
THTR 2150	Theatrical Techniques: Onstage	6
THTR 2470	Fundamentals of Dramatic Analysis	3
THTR 2480	Theatre History	3
THTR 3460	Theory of Drama and Performance	3
THTR 3470	Text and Performance	3
School of Art		
FAAH 1030	Introduction to Art 1A	3
FAAH 1040	Introduction to Art 2A	3
FAAH 1050	Introduction to Art 1B	3
FAAH 1060	Introduction to Art 2B	3
*Indicates course no longer offered.		

8.10.7 Film Studies Course Descriptions

Film Studies Course Descriptions-1000 Level

FILM 1290 The Art of the Film 1 Cr.Hrs. 3

(Formerly 152.129) The study of film as an art form, entertainment and document.

FILM 1310 Film History Cr.Hrs. 3

In this course students will examine films from more than one period in film history, exploring the relationships among and between films in terms of genre, style, theme, structure, and other aesthetic elements. Students will study films selected from various periods of world cinema, taking into consideration how and in what ways films bear the traces of their time and place, or are affiliated with relevant movements in art, history, or society, or have been shaped by technical and artistic developments in the art of film. Students may not hold credit for FILM 1310 and the former FILM 1300 (152.130). Prerequisite: [a grade of "C" or better in FILM 1290 (152.129)] or written consent of instructor.

Film Studies Course Descriptions-2000 Level

FILM 2280 Film and Literature Cr.Hrs. 6

(Formerly 152.228) The interrelationships between literature and film through an analysis of significant films, novels, poems and plays. Special attention to adaptations of Shakespeare, modern drama, the 19th century novel, the modern novel, and popular fiction. Prerequisite: [a grade of "C" or better in each of FILM 1290 (152.129) and FILM 1310 (or the former FILM 1300 (152.130))] or written consent of instructor.

FILM 2300 The Popular Film Cr.Hrs. 3

(Formerly 152.230) Current trends in film as a form of culture. Emphasis on recently released films as mirrors of existing social myths and values. Prerequisite: [a grade of "C" or better in each of FILM 1290 (152.129) and FILM 1310 (or the former FILM 1300 (152.130))] or written consent of instructor.

FILM 2330 Film and Contemporary Thought Cr.Hrs. 3

(Formerly 152.233) Recent films viewed in the light of current intellectual developments. Screenings are complemented by readings in contemporary political theory, philosophy, art, psychology, critical theory, etc. Prerequisite: [a grade of "C" or better in each of FILM 1290 (152.129) and FILM 1310 (or the former FILM 1300 (152.130))] or written consent of instructor.

FILM 2370 Experimental Cinema Cr.Hrs. 3

(Formerly 152.237) Formal innovations in avant-garde and underground films and videos, their significance and influence on the feature film industry.

FILM 2380 The International Cinema 1 Cr.Hrs. 3

(Formerly 152.238) An examination of major works of international cinema, focusing upon the contributions of individual countries, or relevant global issues. Prerequisite: [a grade of "C" or better in each of FILM 1290 (152.129) and FILM 1310 (or the former FILM 1300 (152.130))] or written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

FILM 2390 The International Cinema 2 Cr.Hrs. 3

(Formerly 152.239) An examination of major works of international cinema, focusing upon the contributions of individual countries, or relevant global issues. Prerequisite: [a grade of "C" or better in each of FILM 1290 (152.129) and FILM 1310 (or the former FILM 1300 (152.130))] or written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

FILM 2400 The American Film to 1950 Cr.Hrs. 3

(Formerly 152.240) The aesthetic development of the American Film from the early days until the beginning of television. Prerequisite: [a grade of "C" or better in each of FILM 1290 (152.129) and FILM 1310 (or the former FILM 1300 (152.130))] or written consent of instructor.

FILM 2410 The American Film from 1950 Cr.Hrs. 3

(Formerly 152.241) An examination of the Hollywood film from the decline of the studio system. Prerequisite: [a grade of "C" or better in each of FILM 1290 (152.129) and FILM 1310 (or the former FILM 1300 (152.130))] or written consent of instructor.

FILM 2420 Realism and Film Cr.Hrs. 3

(Formerly 152.242) Theories and forms of the non-fiction film as an art form, an information carrier and a propaganda tool.

FILM 2430 The Canadian Film Cr.Hrs. 3

(Formerly 152.243) The development of the film industry in Canada in its varied forms, with emphasis upon key films, regional differences and Manitoba contributions.

FILM 2460 Film Genres Cr.Hrs. 3

(Formerly 152.246) An examination of a major cinematic genre (e.g. the gangster film, the western, the musical) with emphasis upon the permanence and evolution of generic conventions and the ability of filmmakers to register personal visions within these conventions. Prerequisite: [a grade of "C" or better in each of FILM 1290 (152.129) and FILM 1310 (or the former FILM 1300 (152.130))] or written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

Film Studies Course Descriptions-3000 Level

FILM 3250 Special Topics in Film 1 Cr.Hrs. 3

(Formerly 152.325) An intensive examination of selected topics in film. Contents of the course will vary according to the needs and interests of students and faculty. Prerequisite: [a grade of "C" or better in each of FILM 1290 (152.129) and FILM 1310 (or the former FILM 1300 (152.130))] or written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

FILM 3260 Special Topics in Film 2 Cr.Hrs. 3

(Formerly 152.326) An intensive examination of selected topics in film. Contents of the course will vary according to the needs and interests of students and faculty. Prerequisite: [a grade of "C" or better in each of FILM 1290 (152.129) and FILM 1310 (or the former FILM 1300 (152.130))] and written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

FILM 3270 Special Topics in Film 3 Cr.Hrs. 6

An intensive examination of selected topics in film including creative filmmaking projects. Contents of the course will vary according to the needs and interests of students and faculty. Prerequisite: [a grade of "C" or better in each of FILM 1290 (152.129) and FILM 1310 (or the former FILM 1300 (152.130))] and written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

FILM 3400 The Director's Cinema 1 Cr.Hrs. 3

(Formerly 152.340) An intensive critical look at the career of one or two major filmmakers. Prerequisite: [a grade of "C" or better in each of FILM 1290 (152.129) and FILM 1310 (or the former FILM 1300 (152.130))] or written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

FILM 3410 The Director's Cinema 2 Cr.Hrs. 3

(Formerly 152.341) An intensive critical look at the career of one or two major filmmakers. Prerequisite: [a grade of "C" or better in each of FILM 1290 (152.129) and FILM 1310 (or the former FILM 1300 (152.130))] or written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

FILM 3420 Film Theory Cr.Hrs. 3

(Formerly 152.342) A survey of Film Theory from its beginnings to the present: Eisenstein to André Bazin to Christian Metz and others (film theories, not reviewers). Prerequisite: [a grade of "C" or better in each of FILM 1290 (152.129) and FILM 1310 (or the former FILM 1300 (152.130))] or written consent of instructor

FILM 3430 Screenwriting Cr.Hrs. 3

(Formerly 152.343) An introduction to the techniques and procedures of screenwriting. Students will be expected to complete a screenplay. Students may not hold credit for both FILM 3430 (152.343) and Screenwriting as previously offered under the title of Special Topics. Prerequisite: [a grade of "C" or better in each of FILM 1290 (152.129) and FILM 1310 (or the former FILM 1300 (152.130))] or written consent of instructor.

FILM 3440 Filmmaking Cr.Hrs. 3

(Formerly 152.344) Basic 16mm filmmaking equipment is used to understand the rudiments of cinematography, editing, and lighting. Students will make two films and edit some pre-shot footage. Students may not hold credit for both FILM 3440 (152.344) and Filmmaking previously offered under the title of Special Topics. Prerequisite: [a grade of "C" or better in each of FILM 1290 (152.129) and FILM 1310 (or the former FILM 1300 (152.130))] or written consent of instructor.

FILM 3450 The Animated Film Cr.Hrs. 3

(Formerly 152.345) The art of animation from early cell and puppet films to computer animation and current experimentation. Special attention is given to the "Golden Age of Animation" and to Canada's continuing contribution. Prerequisite: [a grade of "C" or better in each of FILM 1290 (152.129) and FILM 1310 (or the former FILM 1300 (152.130))] or written consent of instructor.

FILM 3460 Acting for the Camera Cr.Hrs. 3

This course is a practical exploration of the acting techniques appropriate for work in film and television. Each student will be required to perform a significant number of scene bits and a few full scenes on video camera. Students will develop skills connected with directing actors in film; intensive preparatory scene analysis, storyboarding, and camera operation during performance. Students may not hold credit for both FILM 3460 and Acting for the Camera as previously offered under the title of Special Topics. Prerequisite: [a grade of "C" or better in each of FILM 1290 (152.129) and FILM 1310 (or the former FILM 1300 (152.130))] or written consent of instructor.

FILM 3650 Advanced Filmmaking Cr.Hrs. 3

(Formerly 152.365) This course is for students who have taken FILM 3440 (152.344) Basic Filmmaking and offers an opportunity to pursue longer, more technically ambitious work. Students are required to shoot one (1) 10 minute 16mm film; transfer that film to video; edit and soundtrack it. Prerequisite: [a grade of "C+" or better in FILM 3440 (152.344)] and written consent of instructor.

8.10.8 Theatre Program

Program Chair: William Kerr
 Program Office: 360 University College
 Telephone: 204 474 9581
 E-mail: theatre@umanitoba.ca

8.10.9 Theatre Program Information

Theatre is a way of finding out what it means to be human and is therefore a very effective component of a liberal, humanist education. The Theatre Program is focused yet multi-faceted, offering both creative and intellectual opportunities. An intensive, hands-on experience in every aspect of play creation is a hallmark of University of Manitoba Theatre. The interrelationship between the academic program and the Black Hole Company provides students with excellent balance in the creation and interpretation of theatre.

Although it is not a professional acting program in the style of the National Theatre School, the program provides excellent preparation for professional training. It also offers a particular focus on new play development and directing. Many University of Manitoba Theatre graduates have gone on to pursue professional careers in theatre, opera, and film, with or without further study. Many others students have pursued graduate studies or have taken the skills of theatre and applied them in making an impact in careers as diverse as education, advertising, the media, law, business, politics, psychology, fine arts, and design.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 4: Basic Faculty Regulations for the Three Programs Leading to a B.A.

Major Program

For entry to the General Major, the prerequisite is a grade of "C" or better in THTR 1220. For entry to the Single or Double Advanced Major, the prerequisite is a grade of "C" or better in THTR 1220 and a grade of "C" or better in ENGL 1200 or ENGL 1300 or both ENGL 1400 (or the former ENGL 1310) and ENGL 1340. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

It is not possible for students who have previously completed a Major in Drama to complete a Minor in Theatre.

Courses used toward the Major in Theatre may not be used for a Minor in the other areas (English or Film Studies) and no more than 6 credit hours numbered at the 1000 level in addition to THTR 1220, may be credited towards a Theatre Major.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in THTR 1220.

8.10.10 Theatre

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR¹ TOTAL: 30 CREDIT HOURS			
THTR 1220	<ul style="list-style-type: none"> • THTR 2160; THTR 2470 plus 6 credit hours from THTR 2150, THTR 2170, THTR 2180, THTR 2490 • 6 credit hours from THTR 2480, THTR 2600, THTR 2610, THTR 3460, THTR 3470, THTR 3610, THTR 3620, THTR 3630, THTR 3640 • 3 additional credit hours from Theatre courses specified above and/or from List A 		
SINGLE ADVANCED MAJOR^{1,2} TOTAL: 54 CREDIT HOURS			
THTR 1220; ENGL 1200 or ENGL 1300 or both ENGL 1400 (or the former ENGL 1310) and ENGL 1340	<ul style="list-style-type: none"> • THTR 2160; THTR 2470 and ENGL 2960 plus 6 credit hours from THTR 2150, THTR 2170, THTR 2180, THTR 2490 • 12 credit hours from THTR 2480, THTR 2600, THTR 2610, THTR 3460, THTR 3470, THTR 3610, THTR 3620, THTR 3630, THTR 3640 • 12 additional credit hours from Theatre courses specified above and/or from List A 		
DOUBLE ADVANCED MAJOR^{1,2,3} TOTAL: 42 CREDIT HOURS			
THTR 1220	<ul style="list-style-type: none"> • THTR 2470 • 9 credit hours from THTR 2150, THTR 2160, THTR 2170, THTR 2180, THTR 2490, THTR 3470 • 24 additional credit hours from Theatre courses at the 2000 level and above 		

MINOR (CONCENTRATION)¹ TOTAL: 18 CREDIT HOURS		
THTR 1220	12 credit hours from THTR 2150, THTR 2160, THTR 2170, THTR 2180, THTR 2470, THTR 2480, THTR 2490, THTR 2600, THTR 2610, THTR 3460, THTR 3470, THTR 3610, THTR 3620, THTR 3630, THTR 3640	
NOTES:		
¹ The content of topics courses (THTR 2600, THTR 2610, THTR 3470, THTR 3610, THTR 3620) will vary from term to term and may be taken more than once for credit.		
² It is recommended that students complete a three credit hour theory course, specifically THTR 3460.		
³ It is strongly recommended that students enrolled in a Double Advanced Major in Theatre and Film Studies complete THTR 2160.		

List A		
English, Film, and Theatre		
ENGL 1200	Representative Literary Works	6
ENGL 1300	Literature since 1900	6
ENGL 2270	Canadian Literature	6
ENGL 2760	Introductory Creative Writing	3
ENGL 2960	Drama 1	3
ENGL 3010	Shakespeare	6
ENGL 3500	Creative Writing [not available for credit with ENGL 2760]	6
ENGL 3520*	Studies in the Forms of Discourse	3
ENGL 3790	Advanced Creative Writing [not available for credit with ENGL 2760]	6
ENGL 3960	Drama 2	3
ENGL xxxx	English, Film, and Theatre Department Special Studies courses approved in advance by the chair of the Theatre Program.	
* Indicates course no longer offered.		

The content of English "Studies" courses varies from year to year; when the proportion of dramatic literature studied is acceptably high, that offering of the course may be used for credit toward a Theatre Major.

English, Film, and Theatre		
FILM 1290	The Art of the Film 1	3
FILM 1300*	The Art of the Film 2	3
FILM 1310	Film History	3
FILM 2280	Film and Literature	6
FILM 2300	The Popular Film	3
FILM 2330	Film and Contemporary Thought	3
FILM 2370	Experimental Cinema	3
FILM 2380	The International Cinema 1	3
FILM 2390	The International Cinema 2	3
FILM 2400	The American Film to 1950	3
FILM 2410	The American Film from 1950	3
FILM 2420	Realism and Film	3
FILM 2430	The Canadian Film	3
FILM 2460	Film Genres	3
FILM 3250	Selected Topics in Film 1	3
FILM 3260	Selected Topics in Film 2	3
FILM 3270	Special Topics in Film 3	6
FILM 3400	The Director's Cinema 1	3
FILM 3410	The Director's Cinema 2	3
FILM 3420	Film Theory	3
FILM 3430	Screenwriting	3
FILM 3440	Filmmaking	3
FILM 3450	The Animated Film	3
FILM 3460	Acting for the Camera	3
* Indicates course no longer offered.		

8.10.11 Theatre Course Descriptions

Theatre Course Descriptions-1000 Level

THTR 1220 Introduction to Theatre Cr.Hrs. 6

(Formerly 154.122) A study of plays both as literature and as texts for stage presentation. The course will include practical work in studio sessions.

Theatre Course Descriptions-2000 Level

THTR 2150 Theatrical Techniques: Onstage Cr.Hrs. 6

(Formerly 154.215) Advanced acting and an introduction to the fundamentals of directing. Lectures on dramatic and theatrical theory, and the analysis of representative plays; workshops on acting and directing, including the presentation of scenes; participation in the current Black Hole Theatre season. Prerequisite: [a grade of "C" or better in THTR 1220 (154.122)] and written consent of instructor.

THTR 2160 Theatrical Techniques: Backstage Cr.Hrs. 6

(Formerly 154.216) An introduction to the backstage arts and crafts of the Theatre: set, props, and costume design and construction; lighting and sound design and execution; stage management; company management. Practical projects required in conjunction with the current Black Hole Theatre season, the nature of the projects to be determined by the student's interests and the need of the company. Prerequisite: [a grade of "C" or better in THTR 1220 (154.122)] and written consent of instructor.

THTR 2170 Specialized Practical Training 1 Cr.Hrs. 3

(Formerly 154.217) Two special workshops, such as voice, stage movement, mime, or directing, from the Prairie Theatre Exchange Adult Program and approved in advance by the University of Manitoba Theatre Program. Students may hold credit for only two of: THTR 2170 (154.217) or THTR 2180 (154.218) or THTR 2490 (154.249). Prerequisite: [a grade of "C" or better in THTR 1220 (154.122)] and written consent of the Theatre program chair.

THTR 2180 Specialized Practical Training 2 Cr.Hrs. 3

(Formerly 154.218) Two special workshop courses, other than those credited for THTR 2170 (154.217), from the Prairie Theatre Exchange Adult Program and approved in advance by the University of Manitoba Theatre Program. Students may hold credit for only two of: THTR 2170 (154.217) or THTR 2180 (154.218) or THTR 2490 (154.249). Prerequisite: [a grade of "C" or better in THTR 1220 (154.122)] and written consent of the Theatre program chair.

THTR 2470 Fundamentals of Dramatic Analysis Cr.Hrs. 3

(Formerly 154.247) This course aims at developing critical and analytic skills specific to the understanding of dramatic texts, through an introduction to key concepts, terminology and critical methods. Prerequisite: [a grade of "C" or better in THTR 1220 (154.122) or ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130)] or written consent of instructor.

THTR 2480 Theatre History Cr.Hrs. 3

(Formerly 154.248) A study of plays, theatre architecture, dramatic theory, acting theory, and the social context in which theatre was presented in an era in the history of the theatre (e.g. Classical Greek and Roman, British Medieval and Tudor, Restoration and Seventeenth Century French). Prerequisite: [a grade of "C" or better in THTR 1220 (154.122)] or written consent of instructor.

THTR 2490 Specialized Practical Training 3 Cr.Hrs. 3

(Formerly 154.249) An alternative method of taking THTR 2170 (154.217) or THTR 2180 (154.218). Two special workshops, other than those credited for THTR 2170 (154.217) or THTR 2180 (154.218), taken one each term in a single academic year, from the Prairie Theatre Exchange Adult Program and approved in advance by the University of Manitoba Theatre Program. Students may hold credit for only two of: THTR 2170 (154.217) or THTR 2180 (154.218) or THTR 2490 (154.249). Prerequisite: [a grade of "C" or better in THTR 1220 (154.122)] and written consent of the Theatre program chair.

THTR 2600 Special Studies 1 Cr.Hrs. 3

(Formerly 154.260) An extensive examination of selected topics that will vary from year to year, depending upon the needs and interests of the instructor and students. Prerequisite: written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

THTR 2610 Special Studies 2 Cr.Hrs. 3

(Formerly 154.261) An extensive examination of selected topics that will vary from year to year, depending upon the needs and interests of the instructor and students. Prerequisite: written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

Theatre Course Descriptions-3000 Level

THTR 3460 Theory of Drama and Performance Cr.Hrs. 3

(Formerly 154.346) Studies in major theories of drama, performance and its reception from Aristotle to the present day. Theories will be studied in conjunction with an in-depth analysis of a number of dramatic texts. Prerequisite: [a grade of "C" or better in one of: THTR 2470 (154.247) or ENGL 2960 (004.296) or ENGL 2961 (004.296)] or written consent of instructor.

THTR 3470 Text and Performance Cr.Hrs. 3

(Formerly 154.347) Explores the works of a significant playwright or group of playwrights, the appropriate dramatic theory/ies, the production and performance style involved. Students may be required to direct, act and/or design. Prerequisite: [a grade of "C" or better in THTR 2150 (154.215)] or [a grade of "C" or better in six credit hours from: THTR 2170 (154.217) or THTR 2180 (154.218) or THTR 2490 (154.249)] or written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

THTR 3610 Special Studies 3 Cr.Hrs. 3

(Formerly 154.361) An extensive examination of selected topics that will vary from year to year, depending upon the needs and interests of the instructor and students. Prerequisite: written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

THTR 3620 Special Studies 4 Cr.Hrs. 3

(Formerly 154.362) An extensive examination of selected topics that will vary from year to year, depending upon the needs and interests of the instructor and students. Prerequisite: written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

THTR 3630 Practicum 1 Cr.Hrs. 3

(Formerly 154.363) Theatre Practicum in which the student works with a professional mentor on a production at the Prairie Theatre Exchange. Openings contingent on a match between student's theatrical field and interest and PTE's needs. Prerequisite: [a grade of "C" or better in six credit hours from: THTR 2150 (154.215) or THTR 2160 (154.216) or THTR 2170 (154.217) or THTR 2180 (154.218) or THTR 2490 (154.249)] and written consent of the Theatre program chair.

THTR 3640 Practicum 2 Cr.Hrs. 6

(Formerly 154.364) Theatre Practicum in which the student works with a professional mentor on a production at the Prairie Theatre Exchange. Openings contingent on a match between student's theatrical field and interest and PTE's needs. Prerequisite: [a grade of "C" or better in six credit hours from: THTR 2150 (154.215) or THTR 2160 (154.216) or THTR 2170 (154.217) or THTR 2180 (154.218) or THTR 2490 (154.249); and written consent of the Theatre program chair.

8.11 Department of French, Spanish and Italian

Acting Head: Connie Cartmill
General Office: 430 Fletcher Argue Building
Telephone: 204 474 9313
E-mail: fsi@umanitoba.ca
Website: umanitoba.ca/fsi

8.11.1 French Program Information

Romance languages — French, Spanish and Italian — are descendants of Latin and are the most widely spoken of the Romance languages. The department offers language instruction and a rich variety of literature and culture courses, with a particular emphasis on French Canadian literature. Language instruction also includes translation courses in French, Spanish and Italian.

8.11.2 French

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of “C” or better in FREN 1190 or FREN 1200. Only one of FREN 1190 or FREN 1200 may be used for credit in the 30 hour Major. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of “C” or better in FREN 1190 or FREN 1200. Only one of FREN 1190 or FREN 1200 may be used for credit in the 18 hour Minor (Concentration).

Honours Program

For entry to the Honours program, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

8.11.3 French

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR TOTAL: 30 CREDIT HOURS			
FREN 1190 or FREN 1200	12 credit hours from courses numbered at the 2000 level of which at least 3 credit hours must be language and 3 credit hours must be literature	12 credit hours from courses numbered at the 3000 level of which at least 3 credit hours must be language and 3 credit hours must be literature	
SINGLE ADVANCED MAJOR TOTAL: 48 CREDIT HOURS			
FREN 1190 or FREN 1200	<ul style="list-style-type: none"> • 18 credit hours of French courses numbered at the 2000 level, including at least 3 credit hours in language and 3 credit hours in literature • 18 credit hours of French courses numbered at the 3000 level, including at least 3 credit hours in language and 3 credit hours in literature • 6 credit hours of French courses numbered at the 4000 level, including at least 3 credit hours in language and 3 credit hours in literature 		
DOUBLE ADVANCED MAJOR TOTAL: 42 CREDIT HOURS			
FREN 1190 or FREN 1200	<ul style="list-style-type: none"> • 15 credit hours of French courses numbered at the 2000 level, including at least 3 credit hours in language and 3 credit hours in literature • 15 credit hours of French courses numbered at the 3000 level, including at least 3 credit hours in language and 3 credit hours in literature • 6 credit hours of French courses numbered at the 4000 level, including at least 3 credit hours in language and 3 credit hours in literature 		
MINOR (CONCENTRATION)¹ TOTAL: 18 CREDIT HOURS			
FREN 1190 or FREN 1200	3 credit hours in a language course numbered at the 2000 level and 3 credit hours in a literature course numbered at the 2000 level	3 credit hours in a language course numbered at the 3000 level and 3 credit hours in a literature course numbered at the 3000 level	
SINGLE HONOURS^{1,4}			

ACADEMIC CALENDAR 2015-2016

FREN 1190 or FREN 1200	<ul style="list-style-type: none"> • FREN 2660, FREN 2870, FREN 2910 • FREN 3140 • FREN 2740 or FREN 3160 • 3 credit hours of French language or civilization courses numbered at the 2000 or 3000 level • 12 credit hours of ancillary options² 	<ul style="list-style-type: none"> • FREN 3100, FREN 3500, FREN 3870, FREN 3910 • FREN 2680 or FREN 2720 • 3 credit hours of French language or civilization courses numbered at the 2000 or 3000 level • 6 credit hours of free options³ • 6 credit hours of ancillary options² 	<ul style="list-style-type: none"> • FREN 4710 or FREN 4730 • 9 additional credit hours of French courses numbered at the 4000 level • 6 additional credit hours of French courses numbered at the 3000 or 4000 level • 6 credit hours of free options³ • 6 credit hours of ancillary options²
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DOUBLE HONOURS^{1,4}

FREN 1190 or FREN 1200	<ul style="list-style-type: none"> • FREN 2660 • FREN 2870 or FREN 2910 • 3 credit hours of French language or civilization courses numbered at the 2000 or 3000 level • 3 credit hours of French literature courses numbered at the 2000 or 3000 level • 6 credit hours of ancillary options² • 12 credit hours from second Honours field 	<ul style="list-style-type: none"> • FREN 3100 or FREN 3500 • FREN 3870 or FREN 3910 • 3 credit hours of French language or civilization courses numbered at the 2000 or 3000 level • 3 credit hours of French literature courses numbered at the 2000 or 3000 level • 6 credit hours of free options³ • 12 credit hours from second Honours field 	<ul style="list-style-type: none"> • FREN 4710 or FREN 4730 • 6 additional credit hours of French courses numbered at the 4000 level • 3 additional credit hours of French courses numbered at the 3000 or 4000 level • 6 credit hours of free options³ • 12 credit hours from second Honours field
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NOTES:

¹ Students in Year 2 will normally take courses numbered at the 2000 level and students in Year 3 will normally take courses numbered at the 3000 level.

² Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding French courses).

³ Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including French courses).

⁴ Honours courses: all 4000 level courses.

The three areas of study are identified in the course listings with the following letters in brackets after the course title:

- A: French Language
- B: French Literature
- C: French Civilization

NOTE: Civilization courses FREN 2810 and FREN 3850 may be counted as either French language or literature credits, but not both.

The language of instruction in all French courses except FREN 1152, FREN 1154 and FREN 1200 is French. In courses FREN 1152, FREN 1154 and FREN 1200, at the discretion of the instructor, English may be used to clarify difficult points of grammar and critical analysis of literature.

With written permission of the department head, students registered on the Fort Garry campus may take courses in French language and literature at Université de Saint-Boniface.

For information regarding Canadian Studies, see Section 8.3.

8.11.4 French Course Descriptions

French Course Descriptions-1000 Level

FREN 1152 Introductory French 1 Cr.Hrs. 3

(Lab required) This course is the first in the introductory French language sequence. Students are not required to register for both courses. A basic study of the fundamental structures of French including regular and irregular verbs in the present and the passé composé, with oral and written practice. For students with no prior knowledge of French or who have studied French up to and including Grade 11 or its equivalent. Students with Grade 12 French may not normally take the course. Students may not hold credit for both FREN 1152 and the former FREN 1150 (044.115). Not open to students who have previously obtained credit in FREN 1154 or FREN 1190 (044.119) or FREN 1200 (044.120) or FREN 1252 or the former FREN 1250 (044.125). Not for credit in French Major or Minor.

FREN 1154 Introductory French 2 Cr.Hrs. 3

(Lab required) This course is the second in the introductory French language sequence. Students are not required to register for both courses. A continuing study of the fundamental structures of French including the imparfait, future and conditional, with oral and written practice. For students with limited prior knowledge of French or who have studied French up to and including Grade 11 or its equivalent or who have successfully completed Introductory French 1. Students may not hold credit for both FREN 1154 and the former FREN 1150 (044.115). Not open to students who have previously obtained credit in FREN 1190 (044.119) or FREN 1200 (044.120) or FREN 1252 or the former FREN 1250 (044.125). Not for credit in French Major or Minor.

FREN 1190 Français Cr.Hrs. 6

(Formerly 044.119) Un cours comportant des éléments de langue, de linguistique et de littérature destiné aux étudiants issus des écoles françaises ou aux étudiants de la filière immersion. Students may not hold credit for both FREN 1190 (044.119) and FREN 1200 (044.120). Prerequisite: Senior Matriculation French or written consent of department head.

FREN 1200 French 1 Cr.Hrs. 6

(Formerly 044.120) Language study and practise and readings in French and French-Canadian culture. Students may not hold credit for both FREN 1200 (044.120) and FREN 1190 (044.119). Prerequisite: [Senior Matriculation French] or [a grade of "C" or better in FREN 1154 or the former FREN 1150 (044.115)].

FREN 1252 Français oral 1 Cr.Hrs. 3

For students whose mother tongue is not French, and who wish to improve their understanding, fluency and correctness in spoken French. Regular attendance is obligatory. Direct access to FREN 2610. Not open to students from Français or Immersion high school programs. Students may not hold credit for both FREN 1252 and the former FREN 1250 (044.125). Prerequisite: [Senior matriculation French] or [a grade of "B" or better in FREN 1154 (or the former FREN 1150 (044.115)) or "C" or better in FREN 1200 (044.120)] or written consent of department head.

French Course Descriptions-2000 Level

FREN 2022 La grammaire au bureau (A) Cr.Hrs. 3

Ce cours vise à acquérir, analyser et pratiquer le vocabulaire du français des affaires et de l'administration. Un accent sera mis sur l'acquisition de structures grammaticales propres à la rédaction de textes du domaine des affaires. Students may not hold credit for both FREN 2022 and FREN 2630 (044.263) with the topic "Français commercial." Prerequisite: [a grade of "C" or better in FREN 1190 (044.119) or FREN 1200 (044.120)] or written consent of department head.

FREN 2610 Français oral 2 (A) Cr.Hrs. 3

(Formerly 044.261) Ce cours vise à l'amélioration de la compréhension du français parlé ainsi qu'au développement de la facilité et de la correction de l'expression orale. Une attention particulière sera vouée au développement du vocabulaire ainsi qu'à la maîtrise des structures grammaticales. Le cours n'a pas été conçu pour les étudiants qui sont déjà bilingues. Prerequisite: [a grade of "C" or better in FREN 1252 or the former FREN 1250 (044.125)] or written consent of department head.

FREN 2620 Grammaire et lexique (A) Cr.Hrs. 3

(Formerly 044.262) Révision intensive de la grammaire et enrichissement du vocabulaire. Prerequisite: [a grade of "C" or better in FREN 1190 (044.119) or FREN 1200 (044.120)] or written consent of department head.

FREN 2630 Special Studies (A) Cr.Hrs. 3

(Formerly 044.263) The content of this course will vary from year to year depending on the needs and interests of instructors and students. Prerequisite: [a grade of "C" or better in FREN 1190 (044.119)] or [a grade of "C+" or better in FREN 1200 (044.120)] or [a grade of "C" or better in FREN 2620 (044.262)] or written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

FREN 2640 Special Studies (B) Cr.Hrs. 3

(Formerly 044.264) The content of this course will vary from year to year depending on the needs and interests of instructors and students. Prerequisite: [a grade of "C" or better in FREN 1190 (044.119)] or [a grade of "C+" or better in FREN 1200 (044.120)] or [a grade of "C" or better in FREN 2620 (044.262)] or written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

FREN 2642 Special Topics (B) Cr.Hrs. 3

The content of this course will vary depending on the needs and interests of instructors and students. Prerequisite: [a grade of "C" or better in FREN 1190 (044.119)] or [a grade of "C+" or better in FREN 1200 (044.120)] or [a grade of "C" or better in FREN 2620 (044.262)] or written consent of department head. As the course content will vary from section to section, students may take this course more than once for credit.

FREN 2660 Analyses textuelles (A) Cr.Hrs. 3

(Formerly 044.266) A partir de textes courts en prose et en vers, l'étudiant(e) apprendra à reconnaître les moyens linguistiques et stylistiques dont dispose l'auteur pour créer l'expressivité de son texte. Prerequisite: [a grade of "C" or better in FREN 1190 (044.119)] or [a grade of "C+" or better in FREN 1200 (044.120)] or [a grade of "C" or better in FREN 2620 (044.262)] or written consent of department head.

FREN 2680 Littérature féminine française (B) Cr.Hrs. 3

(Formerly 044.268) Une étude de textes écrits par des femmes et analysés selon la perspective des théories féministes contemporaines. Prerequisite: [a grade of "C" or better in FREN 1190 (044.119)] or [a grade of "C+" or better in FREN 1200 (044.120)] or [a grade of "C" or better in FREN 2620 (044.262)] or written consent of department head.

FREN 2700 Poésie et théâtre canadiens-français (B) Cr.Hrs. 3

(Formerly 044.270) Introduction à la poésie et au théâtre canadiens-français. Parmi les poètes se trouveront Nelligan, Saint-Denis Garneau et Anne Hébert. Sur la liste des dramaturges figureront Michel Tremblay, Marcel Dubé et Gratien Gélinas. Prerequisite: [a grade of "C" or better in FREN 1190 (044.119)] or [a grade of "C+" or better in FREN 1200 (044.120)] or [a grade of "C" or better in FREN 2620 (044.262)] or written consent of department head.

FREN 2720 Roman français du vingtième siècle (B) Cr.Hrs. 3

(Formerly 044.272) Ce cours est destiné à initier l'étudiant(e) au roman français du vingtième siècle. Les romanciers étudiés seront choisis parmi les plus connus, tels que Proust, Gide, Colette, Mauriac, Cocteau, Camus, Robbe-Grillet, Duras, Cardinal et Yourcenar. Prerequisite: [a grade of "C" or better in FREN 1190 (044.119)] or [a grade of "C+" or better in FREN 1200 (044.120)] or [a grade of "C" or better in FREN 2620 (044.262)] or written consent of department head.

FREN 2740 Théâtre et poésie du dix-neuvième siècle (B) Cr.Hrs. 3

(Formerly 044.274) Initiation aux poètes et aux dramaturges représentatifs des mouvements romantique, symboliste et réaliste. Parmi les auteurs choisis figureront Hugo, Vigny, Musset, Baudelaire, Rimbaud, Scribe, Dumas fils, Rostand. Prerequisite: [a grade of "C" or better in FREN 1190 (044.119)] or [a grade of "C+" or better in FREN 1200 (044.120)] or [a grade of "C" or better in FREN 2620 (044.262)] or written consent of department head.

FREN 2770 Littératures francophones d'Afrique et des Antilles (B) Cr.Hrs. 3

Études des principales tendances littéraires de l'Afrique et des Antilles francophones depuis l'époque coloniale jusqu'à nos jours: négritude, engagement anticolonial, post-indépendance et désillusion, créolité, immigration. Lecture d'œuvres marquantes. Prerequisite: [a grade of "C" or better in FREN 1190 (044.119)] or [a grade of "C+" or better in FREN 1200 (044.120)] or [a grade of "C" or better in FREN 2620 (044.262)] or written consent of department head.

FREN 2780 Idéologie et oppression dans le roman français contemporain (B) Cr.Hrs. 3

Étude du thème de divers genres d'oppression dans le roman français contemporain. Analyse philosophique du concept de l'idéologie. Students may not hold credit for both FREN 2780 and FREN 2640 (044.264) when titled "Idéologie et oppression." Prerequisite: [a grade of "C" or better in FREN 1190 (044.119)] or [a grade of "C+" or better in FREN 1200 (044.120)] or written consent of department head.

FREN 2810 Civilisation française moderne (A, B, C) Cr.Hrs. 3

(Formerly 044.281) Ce cours a pour objet l'étude de la civilisation française au plus tôt depuis le XVII^e siècle, au plus tard depuis la Révolution. Il portera sur les transformations connues par la France dans ses structures politiques, sociales et ses modes de vie. Il s'attachera simultanément au mouvement des idées et à la création artistique dans les domaines de l'architecture, de la sculpture, de la peinture et de la musique. Prerequisite: [a grade of "C" or better in FREN 1190 (044.119)] or [a grade of "C+" or better in FREN 1200 (044.120)] or [a grade of "C" or better in FREN 2620 (044.262)] or written consent of department head.

FREN 2870 Stylistique comparée 1 (A) Cr.Hrs. 3

(Formerly 044.287) Initiation à la stylistique comparée du français et de l'anglais. Ce cours comporte des exercices de traduction et d'analyse de traductions. Prerequisite: [a grade of "C" or better in FREN 1190 (044.119)] or [a grade of "C+" or better in FREN 1200 (044.120)] or [a grade of "C" or better in FREN 2620 (044.262)] or written consent of department head.

FREN 2910 Expression écrite 1 (A) Cr.Hrs. 3

(Formerly 044.291) Une étude des techniques de composition libre. Le cours comportera notamment une révision de la phrase complexe et une analyse d'éléments de rhétorique particulièrement utiles pour la rédaction en français. Prerequisite: [a grade of "C" or better in FREN 1190 (044.119)] or [a grade of "C+" or better in FREN 1200 (044.120)] or [a grade of "C" or better in FREN 2620 (044.262)] or written consent of department head.

French Course Descriptions-3000 Level

FREN 3020 Révision intensive de la grammaire française (A) Cr.Hrs. 3

Étude systématique et avancée de la grammaire française avec révision de vocabulaire. Ce cours est la suite logique de FREN 2620 (Grammaire et lexic) mais on peut s'y inscrire sans l'avoir suivi. Dans ce cours-ci, nous parlerons des nuances de la langue qui ne sont pas traitées en deuxième année mais nous reverrons aussi quelques-unes des questions fondamentales examinées auparavant. Prerequisite: [a grade of "C" or better in any 2000-level French course] or written consent of department head. FREN 2610 (044.261) may not be used as a prerequisite.

FREN 3022 Les communications au bureau (A) Cr.Hrs. 3

Ce cours vise à acquérir, analyser et pratiquer le vocabulaire du français des affaires et de l'administration. Un accent sera mis sur la maîtrise des outils linguistiques et des techniques spécifiques propres à la rédaction de textes de type commercial et administratif. Students may not hold credit for both FREN 3022 and FREN 2630 (044.263) with the topic "Français commercial." Prerequisite: [a grade of "C" or better in any 2000-level French course] or written consent of department head. FREN 2610 (044.261) may not be used as a prerequisite.

FREN 3100 Littérature française du dix-huitième siècle (B) Cr.Hrs. 3

(Formerly 044.310) Après une introduction portant sur le dix-huitième siècle en France, on étudiera quelques-uns des grands auteurs et dramaturges de ce siècle, tels Montesquieu, Voltaire, Prévost, Marivaux, Beaumarchais et Rousseau. Prerequisite: [a grade of "C" or better in any 2000-level French course] or written consent of department head. FREN 2610 (044.261) may not be used as a prerequisite.

FREN 3140 Roman canadien-français (B) Cr.Hrs. 3

(Formerly 044.314) Ce cours est destiné à initier l'étudiant(e) au roman canadien-français. Parmi les auteurs étudiés se trouveront Hubert Aquin, Marie-Claire Blais, Roch Carrier. Un accent particulier sera mis sur l'interprétation historique. Prerequisite: [a grade of "C" or better in any 2000-level French course] or written consent of department head. FREN 2610 (044.261) may not be used as a prerequisite.

FREN 3160 Roman et nouvelle français du dix-neuvième siècle (B) Cr.Hrs. 3

(Formerly 044.316) Étude des principaux romanciers romantiques, réalistes et naturalistes: un choix de Chateaubriand, Constant, Balzac, Sand, Flaubert, Zola, Maupassant. Prerequisite: [a grade of "C" or better in any 2000-level French course] or written consent of department head. FREN 2610 (044.261) may not be used as a prerequisite.

FREN 3350 Français oral 3 (A) Cr.Hrs. 3

(Formerly 044.335) Ce cours vise au perfectionnement de la facilité d'expression, de la correction et de la compréhension du français oral. Le professeur se servira de certains aspects de la culture canadienne-française, et dans une moindre mesure de la culture française, pour stimuler la conversation. Prerequisite: [a grade of "C" or better in FREN 2610 (044.261)] or written consent of department head.

FREN 3500 Littérature du 17^e siècle (B) Cr.Hrs. 3

(Formerly 044.350) Ce cours constitue une analyse d'ouvrages marquants tirés du domaine de la littérature française classique. Prerequisite: [a grade of "C" or better in any 2000-level French course] or written consent of department head. FREN 2610 (044.261) may not be used as a prerequisite.

FREN 3580 Travail indépendant (A, B) Cr.Hrs. 3

(Formerly 044.358) Ce demi-cours s'étendra sur toute la durée des deux trimestres. Chaque étudiant sera placé sous la direction d'un professeur qui l'assistera dans l'établissement d'un programme de lectures relatif à un domaine d'intérêt particulier pour l'étudiant en question. A la fin du cours l'étudiant présentera un mémoire à son directeur. Not available for credit

towards a Major or Minor in French. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

FREN 3830 Special Studies (A) Cr.Hrs. 3

(Formerly 044.383) The content of this course will vary from year to year depending on the needs and interests of instructors and students. Prerequisite: [a grade of "C" or better in any 2000-level French course]. FREN 2610 (044.261) may not be used as a prerequisite. As the course content will vary from year to year, students may take this course more than once for credit.

FREN 3840 Special Studies (B) Cr.Hrs. 3

(Formerly 044.384) The content of this course will vary from year to year depending on the needs and interests of instructors and students. Prerequisite: [a grade of "C" or better in any 2000-level French course]. FREN 2610 (044.261) may not be used as a prerequisite. As the course content will vary from year to year, students may take this course more than once for credit.

FREN 3842 Special Topics (B) Cr.Hrs. 3

The content of this course will vary depending on the needs and interests of instructors and students. Prerequisite: [a grade of "C" or better in any 2000-level French course]. FREN 2610 (044.261) may not be used as a prerequisite. As the course content will vary from section to section, students may take this course more than once for credit.

FREN 3850 Civilisation canadienne-française (A, B, C) Cr.Hrs. 3

(Formerly 044.385) Aspects du développement de la culture du Canada français. Éléments de la vie politique, sociale et artistique des Québécois et des francophones hors Québec surtout au 20e siècle. Prerequisite: [a grade of "C" or better in any 2000-level French course] or written consent of department head.

FREN 3860 Études sur Beauvoir (B) Cr.Hrs. 3

(Formerly 044.386) Le but de ce cours est d'étudier l'oeuvre et la pensée de Simone de Beauvoir dont l'importance dans les études féministes continue d'être très marquée. Un choix de textes sera effectué parmi ses essais philosophiques, ses romans et son autobiographie. Prerequisite: [a grade of "C" or better in any 2000-level French course] or written consent of department head. FREN 2610 (044.261) may not be used as a prerequisite.

FREN 3870 Stylistique comparée 2 (A) Cr.Hrs. 3

(Formerly 044.387) Étude approfondie des principes et techniques de la traduction accompagnée d'exercices et d'analyses de traductions d'un niveau élevé. Prerequisite: [a grade of "C" or better in FREN 2870 (044.287)] or written consent of department head.

FREN 3910 Expression écrite 2 (A) Cr.Hrs. 3

(Formerly 044.391) Ce cours est une étude des techniques de composition libre à un niveau avancé. Il comportera notamment des exercices avec la phrase complexe et l'étude et la pratique d'un certain nombre de genres de français écrit. Prerequisite: [a grade of "C" or better in any 2000-level French course] or written consent of department head.

French Course Descriptions-4000 Level

FREN 4610 Études spécialisées Cr.Hrs. 3

Le contenu de ce cours variera d'année en année selon les besoins et les intérêts des étudiants et du professeur. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

FREN 4620 Pratiques et théories critiques (B) Cr.Hrs. 3

(Formerly 044.462) Ce cours est destiné à initier l'étudiant(e) à l'analyse critique de textes littéraires. Le choix des pratiques et des théories critiques dépendra de l'instructeur. Prerequisite: written consent of department

head.

FREN 4640 Séminaire: Littérature française du vingtième siècle (B) Cr.Hrs. 3

(Formerly 044.464) Le but de ce cours est d'offrir à l'étudiant(e) une introduction à certaines oeuvres littéraires complexes, mais essentielles, de ce siècle, dans les différents ordres de la poésie, du théâtre et du roman. Elles pourraient être prises à des auteurs comme Claudel, Valéry, Saint-John Perse, Antonin Artaud, Proust, Gide, Sartre, Yourcenar. Prerequisite: written consent of department head.

FREN 4650 Études sur l'Ancien Régime (B) Cr.Hrs. 3

L'étude des oeuvres d'un auteur, d'une période ou d'un thème d'avant la Révolution française, du XVIe au XVIIIe siècles. Le choix des oeuvres, de la période ou du thème dépendra des besoins et des intérêts des étudiants et de l'instructeur. Prerequisite: written consent of department head.

FREN 4710 Séminaire de langue (A) Cr.Hrs. 3

(Formerly 044.471) L'objet de ce cours est d'affermir la maîtrise du français chez l'étudiant(e) par des études de grammaire approfondie, une approche méthodique des problèmes majeurs de rhétorique et de la stylistique, ainsi que par une pratique régulière de l'expression orale destinée à en assurer l'aisance et la correction. Prerequisite: written consent of department head.

FREN 4730 Traduction (A) Cr.Hrs. 3

(Formerly 044.473) Une formation dans la traduction d'extraits tirés d'oeuvres de prosateurs anglais et français. Seront également traduits des textes de nature technique traitant de l'actualité politique, sociale, économique, juridique, etc. Prerequisite: written consent of department head.

ACADEMIC CALENDAR 2015-2016

8.11.5 Spanish

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in SPAN 1180, or a grade of "C" or better in both SPAN 1190 and SPAN 1262 (or SPAN 1290), or a grade of "C" or better in both SPAN 1280 and 3 credit hours from Spanish courses numbered at the 2000 level. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

It is recommended that students who wish to Major in Spanish take the introductory course in the Summer Session prior to entering the fall program, or take SPAN 1262 and SPAN 1272 (or SPAN 1290) in the Summer Session prior to their entry into the second year. This will allow for a wider variety of course selections in the final two years.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in SPAN 1180, or a grade of "C" or better in both SPAN 1190 and SPAN 1262 (or SPAN 1290), or a grade of "C" or better in both SPAN 1280 and 3 credit hours from Spanish courses numbered at the 2000 level.

Other

Students entering the university with prior knowledge of Spanish may be allowed 'prerequisite standing' in course SPAN 1180 by the Spanish section of the department. Special permission is required to enter a higher numbered course.

All Spanish courses except SPAN 1180 and SPAN 1190 are taught in Spanish.

With written permission of the department head, students registered on the Fort Garry campus may take courses in Spanish language and literature at Université de Saint-Boniface.

For information regarding the Minor program in Latin American Studies, see Section 8.19.

8.11.6 Spanish

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR (OPTION 1)¹ TOTAL: 30 CREDIT HOURS			
SPAN 1180	SPAN 1262 (or the former SPAN 1260) and SPAN 1272 (or the former SPAN 1270), or SPAN 1290, or SPAN 1280 ³ and 3 credit hours from Spanish courses numbered at the 2000 level	<ul style="list-style-type: none"> • SPAN 2550 • 9 credit hours from Spanish courses numbered at the 2000 level • 6 credit hours from Spanish courses numbered at the 3000 level 	
GENERAL MAJOR (OPTION 2)¹ TOTAL: 30 CREDIT HOURS			
SPAN 1190	<ul style="list-style-type: none"> • SPAN 1262 (or the former SPAN 1260) and SPAN 1272 (or the former SPAN 1270), or SPAN 1290, or SPAN 1280³ and 3 credit hours from Spanish courses numbered at the 2000 level • SPAN 2550 • 6 credit hours from Spanish courses numbered at the 2000 level 	12 credit hours from Spanish courses numbered at the 3000 level	
GENERAL MAJOR (OPTION 3)² TOTAL: 30 CREDIT HOURS			
SPAN 1280 and 3 credit hours from Spanish courses numbered at the 2000 level	<ul style="list-style-type: none"> • SPAN 2550 • 9 credit hours from Spanish courses numbered at the 2000 level 	12 credit hours from Spanish courses numbered at the 3000 level	
SINGLE ADVANCED MAJOR (OPTION 1)¹ TOTAL: 48 CREDIT HOURS			

SPAN 1180	SPAN 1262 (or the former SPAN 1260) and SPAN 1272 (or the former SPAN 1270), or SPAN 1290, or SPAN 1280 ³ and 3 credit hours from Spanish courses numbered at the 2000 level	<ul style="list-style-type: none"> • SPAN 2550 • 12 credit hours from Spanish courses numbered at the 2000 level • 6 credit hours from Spanish courses numbered at the 3000 level 	15 credit hours from Spanish courses numbered at the 3000 level
SINGLE ADVANCED MAJOR (OPTION 2)¹TOTAL: 48 CREDIT HOURS			
SPAN 1190	<ul style="list-style-type: none"> • SPAN 1262 (or the former SPAN 1260) and SPAN 1272 (or the former SPAN 1270), or SPAN 1290, or SPAN 1280³ and 3 credit hours from Spanish courses numbered at the 2000 level • SPAN 2550 • 6 credit hours from Spanish courses numbered at the 2000 level 	<ul style="list-style-type: none"> • 6 credit hours from Spanish courses numbered at the 2000 level • 9 credit hours from Spanish courses numbered at the 3000 level 	15 credit hours from Spanish courses numbered at the 3000 level
SINGLE ADVANCED MAJOR (OPTION 3)²TOTAL: 48 CREDIT HOURS			
SPAN 1280 and 3 credit hours from Spanish courses numbered at the 2000 level	<ul style="list-style-type: none"> • SPAN 2550 • 9 credit hours from Spanish courses numbered at the 2000 level 	<ul style="list-style-type: none"> • 6 credit hours from Spanish courses numbered at the 2000 level • 9 credit hours from Spanish courses numbered at the 3000 level 	15 credit hours from Spanish courses numbered at the 3000 level
MINOR (CONCENTRATION) (OPTION 1)¹ TOTAL: 18 CREDIT HOURS			
SPAN 1180	SPAN 1262 (or the former SPAN 1260) and SPAN 1272 (or the former SPAN 1270), or SPAN 1290, or SPAN 1280 ³ and 3 credit hours from Spanish courses numbered at the 2000 level	<ul style="list-style-type: none"> • 3 credit hours from Spanish courses numbered at the 2000 level • SPAN 2550 	
MINOR (CONCENTRATION) (OPTION 2)¹ TOTAL: 18 CREDIT HOURS			
SPAN 1190	<ul style="list-style-type: none"> • SPAN 1262 (or the former SPAN 1260) and SPAN 1272 (or the former SPAN 1270), or SPAN 1290, or SPAN 1280³ and 3 credit hours from Spanish courses numbered at the 2000 level • SPAN 2550 	6 credit hours from Spanish courses numbered at the 3000 level	
MINOR (CONCENTRATION) (OPTION 3)² TOTAL: 18 CREDIT HOURS			
SPAN 1280 and 3 credit hours from Spanish courses numbered at the 2000 level	<ul style="list-style-type: none"> • 3 credit hours from Spanish courses numbered at the 2000 level • SPAN 2550 	6 credit hours from Spanish courses numbered at the 3000 level	
NOTES:			
<p>¹ Options 1 and 2 are not open to students with native oral fluency in Spanish. Students with native oral fluency in Spanish are advised to follow Option 3.</p> <p>² Option 3 is open to students with native oral fluency in Spanish. Such students may enter Spanish courses numbered at the 2000 level with a grade of "C" or better in SPAN 1280.</p> <p>³ With written consent of the department head students may be allowed to substitute both SPAN 1262 and SPAN 1272 (or SPAN 1290) with both SPAN 1280 (3) and an additional 3 credit hours of 2000 level Spanish courses.</p>			

8.11.7 Spanish Course Descriptions--1000 Level

SPAN 1180 Introductory Spanish Cr.Hrs. 6

(Formerly 044.118) (Lab required) A course designed for those with little or no previous knowledge of Spanish. The course includes grammar, reading and oral practice, with language laboratory exercises. An oral approach is utilized. The student is given glimpses of cultural aspects of Spain and Spanish America. Students with Senior 4 Spanish may not normally take the course for credit. Not open to students with native oral fluency. Students may not hold credit for SPAN 1180 and any of: SPAN 1171 or SPAN 1190 or SPAN 1191 or the former SPAN 1181 (former TRAD 1181 or former 122.118). Not open to students who have previously obtained credit in SPAN 1262 or SPAN 1263 or SPAN 1272 or SPAN 1273 or SPAN 1280 or SPAN 1290 or the former SPAN 1260 (044.126) or the former SPAN 1261 or the former TRAD 1261 (122.126) or the former SPAN 1270 (044.127) or the former SPAN 1271 or the former TRAD 1271 (122.127).

SPAN 1190 Introductory Spanish 2 Cr.Hrs. 3

(Lab required) The second term of SPAN 1180 Introductory Spanish. This course is intended for students who have already knowledge of the alphabet and the sound system, as well as elementary comprehension, communication and writing skills equivalent to those that would be achieved in the first term of SPAN 1180. Students may not hold credit for SPAN 1190 and any of: SPAN 1191 or SPAN 1180 (044.118) or the former SPAN 1181 (former TRAD 1181 or former 122.118). Not open to students who have previously obtained credit in SPAN 1262 or SPAN 1263 or SPAN 1272 or SPAN 1273 or SPAN 1280 or SPAN 1290 or the former SPAN 1260 (044.126) or the former SPAN 1261 or the former TRAD 1261 (122.126) or the former SPAN 1270 (044.127) or the former SPAN 1271 or the former TRAD 1271 (122.127). Prerequisite: [a grade of "C" or better in SPAN 1171] or [Senior 4 Spanish] or written consent of instructor or department head.

SPAN 1262 Intermediate Spanish Grammar and Conversation 1 Cr.Hrs. 3

(Lab required) This course is the first of the intermediate Spanish language sequence. Focus is on developing intermediate skills in reading, writing, speaking and listening. The primary goals are to build communicative competence and enhance social and cultural awareness of the Spanish-speaking world. Not open to students with native oral fluency. Students may not hold credit for SPAN 1262 and any of: SPAN 1263 or SPAN 1280 or SPAN 1290 or the former SPAN 1260 (044.126) or the former SPAN 1261 or the former TRAD 1261 (122.126). Prerequisite: [a grade of "C" or better in SPAN 1180 (044.118) (the former SPAN 1181 or the former TRAD 1181 or the former 122.118) or SPAN 1190 or SPAN 1191] or written consent of instructor or department head.

SPAN 1272 Intermediate Spanish Grammar and Conversation 2 Cr.Hrs. 3

(Lab required) This course is the second of the intermediate Spanish language sequence. Focus is on continued development of intermediate skills in reading, writing, speaking and listening. The primary goals are to further enhance communicative competence and social and cultural awareness of the Spanish-speaking world. Not open to students with native oral fluency. Students may not hold credit for SPAN 1272 and any of: SPAN 1273 or SPAN 1280 or SPAN 1290 or the former SPAN 1270 (044.127) or the former SPAN 1271 or the former TRAD 1271 (122.127). Prerequisite: [a grade of "C" or better in SPAN 1262 or SPAN 1263 or the former SPAN 1260 (044.126) or the former SPAN 1261 or the former TRAD 1261 (122.126)] or written consent of instructor or department head.

SPAN 1280 Spanish for Native Speakers Cr.Hrs. 3

A survey of grammar and writing for people with an advanced level of oral Spanish. All the class exercises, readings, activities and examinations will be in Spanish. Students may not hold credit for SPAN 1280 and any of: SPAN 1262 or SPAN 1263 or SPAN 1272 or SPAN 1273 or SPAN 1290 or the former SPAN 1260 (044.126) or the former SPAN 1261 or the former TRAD 1261 (122.126) or the former SPAN 1270 (044.127) or the former SPAN 1271 or the former TRAD 1271 (122.127). Prerequisite: written consent of instructor or department head.

SPAN 1290 Accelerated Intermediate Spanish Cr.Hrs. 6

(Lab required) This is a one term accelerated course which combines the content of SPAN 1262 and SPAN 1272 (or the former SPAN 1260 (044.126) and the former SPAN 1270 (044.127)). It is a review of grammar and pronunciation structured around extensive writing practice and conversation of contemporary issues relating to the Spanish speaking world. There will be six hours of classroom instruction with a two hour laboratory per week. This course is not open to students with native oral fluency. Students may not hold credit for SPAN 1290 and any of: SPAN 1262 or SPAN 1263 or SPAN 1272 or SPAN 1273 or SPAN 1280 or the former SPAN 1260 (044.126) or the former SPAN 1261 or the former TRAD 1261 (122.126) or the former SPAN 1270 (044.127) or the former SPAN 1271 or the former TRAD 1271 (122.127). Prerequisite: [a grade of "C" or better in SPAN 1180 (044.118) (or the former SPAN 1181 or the former TRAD 1181 (122.118) or SPAN 1190 or SPAN 1191] or written consent of instructor or department head.

Spanish Course Descriptions-2000 Level

SPAN 2200 Spanish American Culture and Civilization Cr.Hrs. 3

(Formerly 044.220) A picture of the geographical, political, economic, social, artistic and cultural forces in Latin America. Essays, cultural readings, newspaper articles, magazines and films are utilized to enhance awareness and to stimulate discussion. Prerequisite: [a grade of "C" or better in one of: SPAN 1262 or SPAN 1263 or SPAN 1272 or SPAN 1273 or SPAN 1280 or SPAN 1290 or the former SPAN 1260 (044.126) or the former SPAN 1261 or the former TRAD 1261 (122.126) or the former SPAN 1270 (044.127) or the former SPAN 1271 or the former TRAD 1271 (122.127)] or written consent of department head.

SPAN 2210 Voices and Images of Latin America Cr.Hrs. 3

A study of the important figures that have influence on social and artistic movements of the Latin American culture such as Frida Khalo, Diego Rivera, Che Guevara, and Fernando Botero. Prerequisite: [a grade of "C" or better in one of: SPAN 1262 or SPAN 1263 or SPAN 1272 or SPAN 1273 or SPAN 1280 or SPAN 1290 or the former SPAN 1260 (044.126) or the former SPAN 1261 or the former TRAD 1261 (122.126) or the former SPAN 1270 (044.127) or the former SPAN 1271 or the former TRAD 1271 (122.127)] or written consent of department head.

SPAN 2510 Survey of Spanish Civilization Cr.Hrs. 3

(Formerly 044.251) A study of the history of Spanish culture with special stress on its non-literary arts, and selected aspects of Spanish life. Prerequisite: [a grade of "C" or better in one of: SPAN 1262 or SPAN 1263 or SPAN 1272 or SPAN 1273 or SPAN 1280 or SPAN 1290 or the former SPAN 1260 (044.126) or the former SPAN 1261 or the former TRAD 1261 (122.126) or the former SPAN 1270 (044.127) or the former SPAN 1271 or the former TRAD 1271 (122.127)] or written consent of department head.

SPAN 2520 Introduction to Spanish Literature Cr.Hrs. 3

(Formerly 044.252) This course will consist of an introduction to Spanish literary characteristics and the study of selected works from the major historical periods and genres. Prerequisite: [a grade of "C" or better in one of: SPAN 1262 or SPAN 1263 or SPAN 1272 or SPAN 1273 or SPAN 1280 or SPAN 1290 or the former SPAN 1260 (044.126) or the former SPAN 1261 or the former TRAD 1261 (122.126) or the former SPAN 1270 (044.127) or the former SPAN 1271 or the former TRAD 1271 (122.127)] or written consent of department head.

SPAN 2550 Advanced Spanish Composition Cr.Hrs. 3

(Formerly 044.255) Designed to enhance the student's ability in writing Spanish. Emphasis on advanced grammatical concepts and clarity of expression. Students may not hold credit for both SPAN 2550 (044.255) and SPAN 2551. Prerequisite: [a grade of "C" or better in one of: SPAN 1262 or SPAN 1263 or SPAN 1280 or SPAN 1290 or the former SPAN 1260 (044.126) or the former SPAN 1261 or the former TRAD 1261 (122.126)] or written consent of department head.

SPAN 2560 Advanced Spanish Conversation Cr.Hrs. 3

(Formerly 044.256) Designed to enhance the student's conversational skills. Intensive oral practise as well as written exercises based on contemporary issues. Not open to students with native oral fluency. Prerequisite: [a grade of "C" or better in both SPAN 1262 (the former SPAN 1260 (044.126)) and SPAN 1272 (the former SPAN 1270 (044.127))] or [a grade of "C" or better in both SPAN 1263 (the former SPAN 1261 or the former TRAD 1261 (122.126)) and SPAN 1273 (the former SPAN 1271 or the former TRAD 1271 (122.127))] or [a grade of "C" or better in SPAN 1290] or written consent of department head.

SPAN 2570 Special Studies Cr.Hrs. 3

(Formerly 044.257) The content of this course is variable, depending on the needs and interests of students and instructors. A tutorial form is used. Prerequisite: [a grade of "C" or better in any 1000-level Spanish course] or written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

SPAN 2580 Contemporary Spanish Female Playwrights Cr.Hrs. 3

This course introduces students to the study of Spanish theater written by contemporary women writers. The course will explore how they use their work and the stage to denounce a contemporary Spanish society that needs to be reexamined. Analysis will underscore how these playwrights treat dis/similar subject matters: search for identity, gender, sexuality, relationships, patriarchal values, feminism, among others. The course will be taught in Spanish. All class readings and examinations are in Spanish. Prerequisite: [a grade of "C" or better in one of: SPAN 1262 or SPAN 1263 or SPAN 1272 or SPAN 1273 or SPAN 1280 or SPAN 1290 or the former SPAN 1260 (044.126) or the former SPAN 1261 or the former TRAD 1261 (122.126) or the former SPAN 1270 (044.127) or the former SPAN 1271 or the former TRAD 1271 (122.127)] or written consent of department head.

Spanish Course Descriptions-3000 Level**SPAN 3070 Dali, Lorca, Bunuel Cr.Hrs. 3**

Study of the three most representative members of Spanish surrealism and avant-gardism in the twentieth century. Prerequisite: [a grade of "C" or better in any 2000-level Spanish course] or written consent of department head.

SPAN 3080 Contemporary Latin American Novel Cr.Hrs. 3

This course will concentrate on the major writers of the Latin American "Boom" such as: Gabriel Garcia Marquez, Carlos Fuentes, Julio Cortazar and Mario Vargas Llosa. It may also include other authors connected with the Boom such as: Alejo Carpentier, Juan Rulfo, Jorge Luis Borges, Manuel Puig. Prerequisite: [a grade of "C" or better in any 2000-level Spanish course] or written consent of department head.

SPAN 3220 Contemporary Spanish Cinema Cr.Hrs. 3

(Formerly 044.322) A survey of Contemporary Spain through its cinema and other cultural manifestations. All the class readings, class lectures, movies and examinations are in Spanish. Prerequisite: [a grade of "C" or better in any 2000-level Spanish course] or written consent of department head.

SPAN 3270 Special Studies Cr.Hrs. 3

(Formerly 044.327) The content of this course is variable, depending on the needs and interests of students and instructors. A tutorial format is used. Prerequisite: [a grade of "C" or better in any 2000-level Spanish course] or written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

SPAN 3290 The Art of Translation Cr.Hrs. 3

(Formerly 044.329) A course on the basic techniques of translation and a study of specialized vocabulary related to the professions. Prerequisite: [a grade of "C" or better in any 2000-level Spanish course] or written consent of department head.

SPAN 3300 Cinema and Literature Cr.Hrs. 3

A survey of the culture (Spain and Latin America) through its literature and cinema. The course will be taught in Spanish. All the readings, movies, activities and examinations will be in Spanish. Prerequisite: [a grade of "C" or better in any 2000-level Spanish course] or written consent of department head.

SPAN 3310 Advanced Spanish Vocabulary and Composition Cr.Hrs. 3

A survey of grammar and vocabulary, the course also emphasizes and enhances students' writing abilities. The course will be taught in Spanish. All the class exercises, readings, activities and examinations will be in Spanish. Prerequisite: [a grade of "C" or better in any 2000-level Spanish course] or written consent of department head.

SPAN 3320 Testimony and Human Rights in Latin America Cr.Hrs. 3

A survey of the culture of human rights in Latin America through its testimonial literature. The course will be taught in Spanish. All readings, activities and examinations will be in Spanish. Prerequisite: [a grade of "C" or better in any 2000-level Spanish course] or written consent of department head.

SPAN 3330 Spanish Phonetics and Pronunciation Cr.Hrs. 3

This course includes a thorough study of advanced Spanish phonetics and pronunciation. Students may not hold credit for both SPAN 3330 and the former SPAN 3280 (044.328). Prerequisite: [a grade of "C" or better in any 2000-level Spanish course] or written consent of department head.

SPAN 3340 Spanish Syntax and Grammar Cr.Hrs. 3

This course includes a thorough study of advanced Spanish syntax and grammar. Students may not hold credit for SPAN 3340 and any of: SPAN 3441 or the former SPAN 3280 (044.328). Prerequisite: [a grade of "C" or better in any 2000-level Spanish course] or written consent of department head.

SPAN 3670 Poetry and Novel of the Golden Age Cr.Hrs. 3

(Formerly 044.367) This course will concentrate on major poets and novelists of the sixteenth and seventeenth centuries such as Garcilaso de la Vega, Fray Luis de Leon, S. Juan de la Cruz, Lope de Vega, Gongora, and Cervantes. Prerequisite: [a grade of "C" or better in any 2000-level Spanish course] or written consent of department head.

SPAN 3680 Drama of the Golden Age Cr.Hrs. 3

(Formerly 044.368) A study of representative works by the principal dramatists of the Spanish classical period, such as Lope de Vega, Tirso de Molina, Vélez de Guervara, and Calderon de la Barca. Prerequisite: [a grade of "C" or better in any 2000-level Spanish course] or written consent of department head.

SPAN 3780 Short Fiction in Spanish Cr.Hrs. 3

(Formerly 044.378) A study of short narrative fiction as a genre in Spain and Latin America through the close reading of representative works. Prerequisite: [a grade of "C" or better in any 2000-level Spanish course] or written consent of department head.

SPAN 3790 Latin American Cinema and Society Cr.Hrs. 3

(Formerly 044.379) A survey of contemporary Latin American society through its cinema. The course will be taught in Spanish. All class readings, movies and examinations are in Spanish. Prerequisite: [a grade of "C" or better in any 2000-level Spanish course] or written consent of department head.

ACADEMIC CALENDAR 2015-2016

8.11.8 Italian

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in ITLN 1080.

It is not possible to have a Minor in Italian and a Major in Italian Studies.

Other

All Italian courses except ITLN 1080 are taught in Italian.

Travel/study courses in Italian may be offered in the Summer Session; see department for information.

8.11.10 Italian Studies

The Major (General and Advanced) in Italian Studies is an interdisciplinary program designed to provide advanced reading, writing, oral, and translation skills in contemporary Italian language, in the context of a broad appreciation for Italian/Roman history and its contributions to art and culture. For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

YEAR 1	YEAR 2	YEAR 3	YEAR 4
MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS			
ITLN 1080	6 credit hours selected from Italian courses numbered at the 2000 level	6 credit hours selected from Italian courses numbered at the 3000 level	

Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in ITLN 1080. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

It is not possible to have a Major in Italian Studies and a Minor in Italian.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

8.11.11 Italian Studies

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR TOTAL: 30 CREDIT HOURS			
ITLN 1080	ITLN 2080, or ITLN 2090 and ITLN 2100	6 credit hours selected from ITLN 3050, ITLN 3060, ITLN 3760, ITLN 3770	
	Plus at least 12 credit hours of courses selected from List A		
SINGLE ADVANCED MAJOR TOTAL: 48 CREDIT HOURS			
ITLN 1080	ITLN 2080, or ITLN 2090 and ITLN 2100	6 credit hours selected from ITLN 3050, ITLN 3060, ITLN 3760, ITLN 3770	
	Plus at least 30 credit hours of courses selected from List A		

List A		
Faculty of Arts		
Italian		
ITLN 3050	Italian Through Literature	3
ITLN 3060	Italian Through Film	3
ITLN 3760	Italian Translation Workshop	3
ITLN 3770	Modern Italian Usage	3
Classics		
CLAS 1280	Introduction to Ancient Roman Culture	3
CLAS 2160	Roman History: The Roman Republic, 753-30 BC	3
CLAS 2170	Roman History: The Roman Empire, 30 BC-AD 337	3
CLAS 2622	Latin Literature in Translation	3
CLAS 2680	Roman Art and Archaeology	3

CLAS 3620*	Latin Literature in Translation	3
003.261*	Roman History	6
LATN 1080	Introduction to the Reading of Latin 1	3
LATN 1090	Introduction to the Reading of Latin 2	3
LATN 1320	Intermediate Readings in Latin	3
LATN 2720	Selected Readings in Republican and Augustan Poetry	3
LATN 2740	Selected Readings in Republican and Augustan Prose	3
LATN 2780	History of the Latin Language	3
LATN 2800	Readings in Medieval or Renaissance Latin	3
LATN 3740	Roman Comedy	3
LATN 3760	Orations of Cicero	3
LATN 3780	Roman Satire	3
LATN 3800	Lyric and Elegiac Poetry of the Augustan Age	3
LATN 3820	Virgil's Aeneid	3
LATN 3840	Virgil's Eclogues and Georgics	3
LATN 3860	The Roman Historians	3
LATN 3880	Poetry of the Silver Age	3
History		
HIST 2350	Europe 1789-1870 (E)	3
HIST 2360	Europe 1870 to the Present (E)	3
HIST 2370	History of Europe since the French Revolution (E)	6
HIST 2900	Topics in Social History (G) (when taught as "Topic: Italy")	6
HIST 3120*	Topics in History 2 (G) (when taught as "Topic: Italy")	3
HIST 3136	History of Medieval Italy, 568-1300 (D)	3
HIST 3138	History of Medieval Italy, 1300-1500 (D)	3
HIST 3140	Medieval Italy (D)	6
HIST 3270*	Roman Law in Medieval Europe (D)	3
HIST 3680	Europe, 1870-1945 (E)	6
HIST 3682	Europe 1870-1918 (E)	3
HIST 3684	Europe 1918-1945 (E)	3
HIST 4530*	Europe, 1870-1914 (E)	6
School of Art		
FAAH 2060	Medieval to Early Renaissance Art and Architecture	3
FAAH 2070	Renaissance to Baroque Art and Architecture	3
FAAH 3130	Topics in Medieval Art and Architecture	3
FAAH 3140	Topics in Renaissance and Baroque Art and Architecture	3
Marcel A. Desautels Faculty of Music		
MUSC 1070	Introduction to the History of Music	3
MUSC 1080	History of Music 2	3
MUSC 3100	Opera Repertoire	3

*indicates course no longer offered.

For course descriptions, see departmental listings.

8.11.12 Italian Course Descriptions

ITLN 1080 Introductory Italian Cr.Hrs. 6

(Formerly 044.108) An introduction to the Italian language for students with little or no knowledge of Italian. The course emphasizes the learning and practise of vocabulary, grammar and the development of both written and spoken Italian. A language laboratory will help students practise and improve their oral Italian. Not open to students who have previously obtained credit in ITLN 2080 (044.208).

ITLN 2080 Intermediate Italian Cr.Hrs. 6

(Formerly 044.208) This course consists of a thorough review of grammatical structures for students with previous knowledge of Italian. Readings of a number of twentieth-century Italian authors are used as a basis for discussion. Language study and practise is emphasized in the classroom and in the language laboratory. Prerequisite: [a grade of "C" or better in ITLN 1080 (044.108)] or written consent of department head.

ITLN 2090 Speaking in Italian Cr.Hrs. 3

(Formerly 044.209) Offers extensive practice in idiomatic spoken language. Grammar review with a focus on oral fluency. Conversation will be based on social, political, and cultural aspects of Italian life. Prerequisite: [a grade of "C" or better in ITLN 1080 (044.108)] or written consent of department head.

ITLN 2100 Writing in Italian Cr.Hrs. 3

(Formerly 044.210) This course strengthens writing skills in Italian, with special emphasis on the grammatical structure of the Italian language for effective communication. Prerequisite: [a grade of "C" or better in ITLN 1080 (044.108)] or written consent of department head.

ITLN 3050 Italian Through Literature Cr.Hrs. 3

Through the study of selected works and authors, students will gain a better understanding of Italy's history and culture. Prerequisite: [a grade of "C" or better in ITLN 2080 (044.208)] or [a grade of "C" or better in each of ITLN 2090 (044.209) and ITLN 2100 (044.210)] or written consent of department head.

ITLN 3060 Italian Through Film Cr.Hrs. 3

The aim of this course is to better understand modern and contemporary Italy, by viewing, meditating upon and discussing those films produced in Italy which most reflect the country, its language and culture, and its literature. Prerequisite: [a grade of "C" or better in ITLN 2080 (044.208)] or [a grade of "C" or better in each of ITLN 2090 (044.209) and ITLN 2100 (044.210)] or written consent of department head.

ITLN 3760 Italian Translation Workshop Cr.Hrs. 3

(Formerly 044.376) A practical course on translating many types of text from and into Italian, as well as terminology development. Special emphasis on the use of the Internet and other computer-mediated resources. Prerequisite: [a grade of "C" or better in ITLN 2080 (044.208)] or [a grade of "C" or better in each of ITLN 2090 (044.209) and ITLN 2100 (044.210)] or written consent of department head.

ITLN 3770 Modern Italian Usage Cr.Hrs. 3

(Formerly 044.377) Polish your Italian for business and professional work situations from client relations to terminology, including e-mail and Internet. Course will be customized according to students' professional interests. Prerequisite: [a grade of "C" or better in ITLN 2080 (044.208)] or [a grade of "C" or better in each of ITLN 2090 (044.209) and ITLN 2100 (044.210)] or written consent of department head.

8.11.13 Portuguese Course Descriptions

PORT 1170 Introductory Portuguese Cr.Hrs. 6

(Lab required) A course designed for those with little or no previous knowledge of Portuguese. The course includes grammar, reading and oral practice, with language laboratory exercises. An oral approach is utilized. The student is given glimpses of cultural aspects of Portugal and Brazil. Students with high school Portuguese or its equivalent may not normally take the course for credit. Not open to students who have previously obtained credit in PORT 1282.

PORT 1282 Intermediate Portuguese Grammar and Conversation 1 Cr. Hrs. 3

(Lab required) This course is the first of the intermediate Portuguese language sequence. Focus is on developing intermediate skills in reading, writing, speaking and listening. The primary goals are to build communicative competence and enhance social and cultural awareness of Portugal and Brazil. Not open to students with native oral fluency. Prerequisite: [a grade of "C" or better in PORT 1170] or written consent of instructor or department head.

8.12 German and Slavic Studies

Head: Stephan Jaeger
Campus Address & General Office: 328 Fletcher Argue Building
Telephone: 204 474 9370
Email Address: german_slavic@umanitoba.ca
Website: umanitoba.ca/german_and_slavic/

8.12.1 Program Information

This department's program covers two European cultural and language groups. German is the official language of five European countries and an understanding of German language and culture is essential to any understanding of European history. Courses are offered in German language, literature and culture. In Slavic Studies, the department offers language, literature and culture courses in Russian, Ukrainian and Polish — the three largest Slavic language groups. The Slavic countries of Eastern Europe exert an important influence on international affairs. In Canada, immigration from both German and Slavic language groups has contributed greatly to the country's cultural mosaic. The department also offers language courses in Hungarian.

8.12.2 German

8.12.2 German Program Information

For entry, continuation and graduation requirements for the General Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

General Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in 6 credit hours in German courses at any level. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate, including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in 6 credit hours in German.

Honours Program

For entry to the Honours program, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Other

German courses are arranged into categories as follows:

Category A: Language courses

Category B: Literature, Culture and Applied Linguistics courses conducted in German

Category C: Literature, Culture and Applied Linguistics courses conducted in English

8.12.3 German

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR TOTAL: 30 CREDIT HOURS			
30 credit hours of German to include:			
GRMN 1120 ¹			
GRMN 2100 ²			
GRMN 2120 or GRMN 2130 or GRMN 2140			
GRMN 3200			
Within the required credit hours in German, 3 credit hours must be from Category B courses and a further 3 credit hours must be from Categories B or C courses			
MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS			
6 credit hours in German	12 credit hours in German		

ACADEMIC CALENDAR 2015-2016

SINGLE HONOURS⁴	
<ul style="list-style-type: none"> • 36 credit hours of German (of which at least 24 credit hours must be German courses numbered at the 2000, 3000 or 4000 level) to include: GRMN 1120¹ GRMN 2100² GRMN 2120 or GRMN 2130 GRMN 2140 GRMN 3200 • In years 2 and 3 students must also complete 24 credit hours of ancillary options⁶ and 6 credit hours of free options⁵ 	<ul style="list-style-type: none"> • GRMN 4600³ • GRMN 4570 • 6 additional credit hours in German courses numbered at the 4000 level • 6 additional credit hours in German courses numbered at the 3000 or 4000 level • 12 credit hours in free options⁵
<ul style="list-style-type: none"> • Within the required credit hours in German, 15 credit hours must be from Category B courses and a further 15 credit hours must be from Categories B or C courses 	
DOUBLE HONOURS⁴	
<ul style="list-style-type: none"> • 30 credit hours of German (of which at least 18 credit hours must be German courses numbered at the 2000, 3000 or 4000 level) to include: GRMN 1120¹ GRMN 2100² GRMN 2120 or GRMN 2130 GRMN 2140 GRMN 3200 • In years 2 and 3 students must also complete 6 credit hours of ancillary options⁶ and 6 credit hours in free options⁵ • In years 2 and 3 students must also complete 24 credit hours in second Honours field 	<ul style="list-style-type: none"> • GRMN 4600³ • GRMN 4570 • 3 additional credit hours in German courses numbered at the 4000 level • 3 additional credit hours in German courses numbered at the 3000 or 4000 level • 6 credit hours in free options⁵ • 12 credit hours in other Honours field
<ul style="list-style-type: none"> • Within the required credit hours in German, 12 credit hours must be from Category B courses and a further 6 credit hours must be from Categories B or C courses 	
NOTES:	
<p>¹ Students with superior language ability will not be required to complete GRMN 1120 if they complete either GRMN 2100 or GRMN 3200 with a minimum grade of "C".</p> <p>² Students with superior language ability will not be required to complete GRMN 2100 if they complete GRMN 3200 with a minimum grade of "C".</p> <p>³ With written consent of department head, students may substitute GRMN 4600 with GRMN 4200.</p> <p>⁴ Honours courses: all 4000 level courses.</p> <p>⁵ Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including German courses).</p> <p>⁶ Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding German courses in the Single Honours, and excluding German and the second Honours field courses in the Double Honours).</p>	

8.12.4 German Course Descriptions

German Course Descriptions-1000 Level

GRMN 1120 Beginning German (A) Cr.Hrs. 6

(Formerly 008.112) (Lab required) Three hours of lectures, plus one hour of language lab or conversation class per week. The course is intended for students with little or no previous knowledge of German. Basic grammar is included, but emphasis is placed on the development of broad reading and speaking skills. Satisfactory completion of this course enables students to proceed to GRMN 2100 or GRMN 2103. Students may not hold credit for GRMN 1120 and any of: GRMN 1123 or GRMN 1125 or the former GRMN 1121 (008.112). Students with Grade 12 German or its equivalent may not normally take the course for credit. Not open to students who have previously obtained credit for GRMN 2100 or GRMN 2103 or GRMN 2105 or the former GRMN 2101 (008.210).

GRMN 1300 Masterpieces of German Literature in English Translation (C) Cr.Hrs. 3

Language of instruction: English. The course introduces students to representative works (prose, poetry, and drama) by German-speaking writers such as Goethe, Kleist, Thomas Mann, Kafka, and Rilke, with an emphasis on the ages of Classicism, Romanticism, and Modernism. Stresses the development of English reading and writing skills. The course is designed for students who have little or no prior knowledge of German literature.

GRMN 1310 Love in German Culture in English Translation (C) Cr.Hrs. 3

Language of instruction: English. An introduction to the discourse and meaning of love through German culture from the Middle Ages to the present; analyzes the expression of different concepts of love (spiritual, courtly, erotic, romantic, sexual, free, same-sex, familial, virtual) in literature and other cultural forms. Stresses the development of English reading and writing skills. The course is designed for students who have little or no prior knowledge of German culture.

German Course Descriptions-2000 Level

GRMN 2100 Intermediate German (A) Cr.Hrs. 6

(Formerly 008.210) Grammar review, exercises, development of practical oral skills, conversation and modern usage. Introduction to German poetry and prose. Students may not hold credit for GRMN 2100 and any of: GRMN 2103 or GRMN 2105 or the former GRMN 2101 (008.210). Prerequisite: [German 40S] or [a grade of "C" or better in GRMN 1120 or GRMN 1125 or the former GRMN 1121 (008.112)] or written consent of department head.

GRMN 2120 Introduction to German Culture from 1918 to the Present (C) Cr.Hrs. 3

Language of instruction: English. An introduction to the culture of contemporary German-speaking countries; analyzes literature and other cultural forms since the end of World War I, including the Weimar Republic, the Third Reich and the Holocaust, divided Germany, Re-Unification, and the European Union.

GRMN 2130 Introduction to German Culture from the Beginnings to 1918 (C) Cr.Hrs. 3

Language of instruction: English. An introduction to the culture of the German-speaking countries from the Romans to the end of World War I; analyzes literature and other cultural forms and their relation to the rise of the German Nation in the 19th century and its first "fall" in the 20th century.

GRMN 2140 Exploring German Literature (B) Cr.Hrs. 3

Language of instruction: German. In this intermediate course, we will read and discuss a number of works belonging to different literary genres by major German-speaking authors, such as Kafka, Mann, Brecht, Böll, Grass, Jelinek, Wolf, and others. Activities and assignments in this course will focus on the development of reading competency in different literary

genres, the expansion of students' German vocabulary, and the development of German written and oral expression. Prerequisite: [a grade of "C" or better in GRMN 2100 or GRMN 2105 or GRMN 3200 (008.320) or GRMN 3201 or the former GRMN 2101 (008.210)] or written consent of department head.

GRMN 2480 Special Topics in German (B) Cr.Hrs. 3

(Formerly 008.248) Language of instruction: German. Topics dealing with German literature and culture. Course content will vary from year to year depending on the interests and needs of students and staff. Prerequisite: [a grade of "C" or better in GRMN 2100 or GRMN 2105 or GRMN 3200 (008.320) or GRMN 3201 or the former GRMN 2101 (008.210)] or written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

GRMN 2500 Special Topics in German in English Translation (C) Cr.Hrs. 3

Language of instruction: English. Topics dealing with German literature and culture. Course content will vary from term to term depending on the interests and needs of students and staff. Students may take this course more than once for credit.

GRMN 2510 German Fairy Tales from the Brothers Grimm to Hollywood (C) Cr.Hrs. 3

Language of instruction: English. Study of the German fairy tales with a specific emphasis on the "folk fairy tales" collected by the Brothers Grimm and their adaptations in the 20th and 21st centuries in film (Disney, DEFA, among others), literature, and music. The course familiarizes students with the historical, cultural, and national contexts of the original fairy tales, and trains students in different approaches to understanding those fairy tales (gender, psycho-analysis, child developmental psychology, horror, and others).

German Course Descriptions-3000 Level

GRMN 3200 Deutsche Sprachpraxis 1 (A) Cr.Hrs. 6

(Formerly 008.320) Modern German usage through conversation, writing and practical exercises; study of contemporary fictional and non-fictional texts and films. Emphasis on vocabulary and structural and stylistic problems. Students may not hold credit for both GRMN 3200 and GRMN 3201 (008.320). Prerequisite: a grade of "C" or better in GRMN 2100 or GRMN 2105 or the former GRMN 2101 (008.210).

GRMN 3220 Deutsche Sprachpraxis 2 (A) Cr.Hrs. 3

Advanced work on various aspects of the German language, involving intensive practice in writing and conversational skills; translation of literary and non-literary materials from and into German; and exercise in stylistic and structural analysis of literary and non-literary German in a variety of registers and contexts. Prerequisite: a grade of "C" or better in GRMN 3200 (008.320) or GRMN 3201 (008.320)

GRMN 3230 Business German (A) Cr.Hrs. 3

An introduction to the contemporary terminology and usage of German in the workplace. Listening, speaking, reading, and writing skills will be developed through a variety of activities. This course also aims at developing cross-cultural awareness. The course prepares the student for the business exam Zertifikat für den Beruf. Students may not hold credit for both GRMN 3230 and GRMN 3211 (008.321). Prerequisite: [a grade of "C" or better in GRMN 2100 or GRMN 2105 or GRMN 3200 (008.320) or GRMN 3201 or the former GRMN 2101 (008.210)] or written consent of department head.

GRMN 3232 Introduction to German Translation (A) Cr.Hrs. 3

Language of instruction: German. An introduction to the art of translation (German to English) with a focus on translation principles, language analysis, and hands-on translation of texts from a variety of fields. Prerequisite: [a grade of "C" or better in GRMN 3200 (008.320) or GRMN 3201 (008.320)] or written consent of department head.

GRMN 3240 German Enlightenment and Classicism (B) Cr.Hrs. 3

Language of instruction: German. A study of selected texts of the German Enlightenment and Classicism, including works by Lessing, Schiller, Goethe and others; advanced language practise. Prerequisite: [a grade of "C" or better in GRMN 2140] or written consent of department head.

GRMN 3250 German Romanticism (B) Cr.Hrs. 3

Language of instruction: German. Study of selected fairy tales, novellas, letters, poetry and other texts by authors such as Novalis, Tieck, E.T.A. Hoffmann, and Kleist; topics discussed include the relationship between Enlightenment and Romanticism, the role of women, the discovery of the uncanny, the role of the fantastic, and romantic vampires, advanced language practise. Prerequisite: [a grade of "C" or better in GRMN 2140] or written consent of department head.

GRMN 3260 Representations of the Holocaust (B) Cr.Hrs. 3

Language of instruction: German. This course will focus on the literary rendering, including film versions and German memorial culture, of the Holocaust experience by authors from the German-speaking countries, such as Anna Seghers, Jurek Becker, Paul Celan, Max Frisch, Peter Weiss, Ruth Klüger, W.G. Sebald, and others. Students may not hold credit for both GRMN 3260 and GRMN 3262. Prerequisite: [a grade of "C" or better in GRMN 2140] or written consent of department head.

GRMN 3262 Representations of the Holocaust in English Translation (C) Cr.Hrs. 3

Language of instruction: English. This course will focus on the literary rendering, including film versions and German memorial culture, of the Holocaust experience by authors from the German-speaking countries, such as Anna Seghers, Jurek Becker, Paul Celan, Max Frisch, Peter Weiss, Ruth Klüger, W.G. Sebald, and others. Students may not hold credit for both GRMN 3262 and GRMN 3260. Prerequisite: [a grade of "C" or better in a minimum of 30 credit hours of university level coursework] or written consent of department head.

GRMN 3270 Studies in Contemporary German Cinema (C) Cr.Hrs. 3

Language of instruction: English. Studies the major accomplishments of East and West German cinema of the postwar period, as well as cinematic trends since German unification. We will consider questions of narrative, genre, and authorship, examine film's relationship to other media, and focus on the dynamic interaction between film history and social history. Films to be studied include features by prominent directors such as Wolf, Fassbinder, Wenders, von Trotta, Carow, Dörrie, and Tykwer. Prerequisite: [a grade of "C" or better in a minimum of 30 credit hours of university level coursework] or written consent of department head.

GRMN 3280 Sex, Gender and Cultural Politics in the German-Speaking World (B) Cr.Hrs. 3

Language of instruction: German. Explores a wide range of literary and cultural texts that deal with sex and gender in the German-speaking world. Discussion will address topics such as representation of women and men in literature and the social and historical climate in which the literature was and is produced. Students may not hold credit for both GRMN 3280 and GRMN 3282. Prerequisite: [a grade of "C" or better in GRMN 2140] or written consent of department head.

GRMN 3282 Sex, Gender and Cultural Politics in the German-Speaking World in English Translation (C) Cr.Hrs. 3

Language of instruction: English. Explores a wide range of literary and cultural texts that deal with sex and gender in the German-speaking world. Discussion will address topics such as representation of women and men in literature and the social and historical climate in which the literature was and is produced. Students may not hold credit for both GRMN 3282 and GRMN 3280. Prerequisite: [a grade of "C" or better in a minimum of 30 credit hours of university level coursework] or written consent of department head.

GRMN 3290 History in Literature in German-Speaking Countries (B) Cr. Hrs. 3

Language of instruction: German. Analyzes how history is represented and remembered in literature and other genres. The course will focus on the representation of one historical period such as the Weimar Republic or the Nazi Third Reich. Please consult the instructor for details on which historical period as it appears in literature will be considered. Prerequisite: [a grade of "C" or better in GRMN 2140] or written consent of department head.

GRMN 3390 German Representations of War (C) Cr.Hrs. 3

Language of instruction: English. Focuses on representations of war, particularly World War II from a German and European perspective in fiction, historiography, film, photography, and memorial culture. Students may not hold credit for both GRMN 3390 and GRMN 3392. Prerequisite: [a grade of "C" or better in a minimum of 30 credit hours of university level coursework] or written consent of department head.

GRMN 3392 German Representations of War (B) Cr.Hrs. 3

Language of Instruction: German. Focuses on representations of war, particularly World War II from a German and European perspective in fiction, historiography, film, photography, and memorial culture. Students may not hold credit for GRMN 3392 and GRMN 3390. Prerequisite: [a grade of "C" or better in GRMN 2140] or written consent of department head.

GRMN 3500 Special Topics in German (B) Cr.Hrs. 3

Language of instruction: German. Topics dealing with German literature and culture. Course content will vary from year to year depending on interests and needs of students and staff. Prerequisite: [a grade of "C" or better in GRMN 2140] or written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

GRMN 3510 Special Topics in German in English Translation (C) Cr.Hrs. 3

Language of instruction: English. Topics dealing with German literature and culture. Course content will vary from year to year depending on interests and needs of students and staff. Prerequisite: [a grade of "C" or better in a minimum of 30 credit hours of university level coursework] or written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

GRMN 3530 Special Topics in Comparative German and Slavic Studies (C) Cr.Hrs. 3

Language of instruction: English. Topics comparing German and Slavic – Ukrainian, Russian, Polish – literatures and cultures. Course is co-taught by a member from the German and one from the Slavic Section. Course content will vary from year to year depending on interests and needs of students and staff. Possible topics include Memory of World War II, Cold War and Post-Cold War, and Modernism. Students may not hold credit for both GRMN 3530 and SLAV 3530 when topic is the same. Prerequisite: [a grade of "C" or better in a minimum of 30 credit hours of university level coursework] or written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

German Course Descriptions-4000 Level

GRMN 4200 Literary and Cultural Theory (C) Cr.Hrs. 3

Language of instruction: English. A survey of the major theoretical approaches to German literatures and cultures. Discusses the aesthetics of Enlightenment and Idealism, Nietzsche, Freud, Prague Structuralism, hermeneutics, semiotics, the Frankfurt School, collective memory, gender studies, and multi-culturalism; application of theories to German literary texts and other cultural examples. Prerequisite: written consent of department head.

GRMN 4210 Survey of Second Language Acquisition and Methods of Language Teaching in German (B) Cr.Hrs. 3

Language of instruction: German. For advanced undergraduate students with a high proficiency in German who are interested in the learning and teaching of German as a foreign / second language; the course provides a general introduction to theories and approaches in second language acquisition (SLA) and to methods of the teaching of German as a foreign language. This course is not acceptable for credit in a Bachelor of Education program. Prerequisite: written consent of department head.

GRMN 4540 Introduction to German Language Structure (B) Cr.Hrs. 3

Language of instruction: German. An introduction to the scientific study of the German language and to the role of the language teacher in the examination, analysis, and description of the German language. Topics include grammar, word formation, meaning, sound systems, language acquisition and change, and language in society. Prerequisite: written consent of department head.

GRMN 4570 Honours Thesis in German Studies (B,C) Cr.Hrs. 3

The Thesis presents the results of an independent research project supervised by a faculty member. The thesis can be written in German or in English. Prerequisite: written consent of department head.

GRMN 4600 Senior Seminar in German Studies (B) Cr.Hrs. 3

Language of instruction: German. Introduces basic methodology of German literary and cultural studies (genres, periods, resources, bibliographical methods). Examines German culture during critical periods in German history with specific emphasis on literature. Students work closely with a faculty advisor during the semester and are expected to produce a major research paper. Prerequisite: written consent of department head.

GRMN 4610 Independent Work (B) Cr.Hrs. 3

(Formerly 008.461) Language of instruction: German. Each student will work with an instructor to prepare a reading program in an appropriate area and present written assignments as required. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

GRMN 4660 Special Topics in German (B) Cr.Hrs. 3

Language of instruction: German. The specific content of this course will vary from year to year. A description of the course is available in advance at the Department Office. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

GRMN 4670 Special Topics in German in English Translation (C) Cr.Hrs. 3

Language of instruction: English. The specific content of this course will vary from year to year. A description of the course is available in advance at the Department Office. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

ACADEMIC CALENDAR 2015-2016

8.12.5 Russian

For entry, continuation and graduation requirements for the General Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in six credit hours in Russian courses at any level. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in six credit hours in Russian courses at any level.

8.12.6 Russian

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL RUSSIAN MAJOR TOTAL: 30 CREDIT HOURS			
30 credit hours of Russian to include:			
<ul style="list-style-type: none"> • RUSN 1300¹ or RUSN 1330¹ • RUSN 2810² or RUSN 2820² • 6 credit hours from RUSN 3200³, RUSN 3210³, RUSN 3220³ • In addition to the above required courses, students must complete the balance of credit hours by taking courses in Russian (RUSN) or Slavic Studies (SLAV) or courses selected from List A 			
RUSSIAN MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS			
6 credit hours in Russian (RUSN) courses	<ul style="list-style-type: none"> • 6 credit hours in Russian (RUSN) or Slavic Studies (SLAV) courses • 6 credit hours in Russian (RUSN) or Slavic Studies (SLAV) courses or courses selected from List A 		
NOTES:			
¹ With written consent from the department head, students with superior language ability can substitute RUSN 1300 or RUSN 1330 with RUSN 2810 or RUSN 2820.			
² With written consent from the department head, students with superior language ability can substitute RUSN 2810 or RUSN 2820 with other 2000 or 3000 level Russian courses.			
³ With written consent from the department head, other 3000 level Russian language courses may be approved for credit.			

List A	Courses Acceptable for Russian Credit	
With written consent from the department head, courses offered by other departments may be approved for credit.		
Course No.	Credit Hours	
Faculty of Arts		
History		
HIST 2490	History of Russia (E)	6
HIST 2660	History of the Soviet Union (E)	3
HIST 2840	A History of Russia to 1917 (E)	3

8.12.7 Russian Course Descriptions

Russian Course Descriptions 1000 Level

RUSN 1300 Introductory Russian Cr.Hrs. 6

(Formerly 052.130) (Lab required) Three hours of lectures plus one hour of lab per week. Basic grammar, conversation and reading with emphasis on communication skills. Cultural content is introduced through a range of audio-visual materials. Not open to native speakers and students with high school Russian 41G credit. Students may not hold credit for both RUSN 1300 (052.130) and RUSN 1330 (052.133).

RUSN 1330 Introductory Russian 2 Cr.Hrs. 3

(Formerly 052.133) (Lab required) Three hours of lectures plus one hour of lab per week. Intended for students who have already a knowledge of the alphabet and the sound system, as well as elementary comprehension, communication and writing skills equivalent to those that would be achieved in the first term of RUSN 1300 (052.130). Students may not hold credit for both RUSN 1330 (052.133) and RUSN 1300 (052.130). Prerequisite: successful completion of a placement test administered by the department.

RUSN 1400 Masterpieces of Russian Literature in Translation Cr.Hrs. 3

An introduction to representative works by major Russian writers, with emphasis on key paradigms in literary and socio-political thinking in Russia. Early 19th century to the present. The course is designed for students who have little or no prior knowledge of Russian literature. Lectures and readings in English. Students may not hold credit for both RUSN 1400 and the former RUSN 2770

Russian Course Descriptions-2000 Level

RUSN 2280 Russian Culture until 1900 Cr.Hrs. 3

(Formerly 052.228) A survey of the Russian cultural heritage from the pre-Christian era to the end of the nineteenth century. Mythology, the arts and literature. Lectures in English. Readings are available in both English translation and in the original.

RUSN 2290 Russian Culture from 1900 to the Present Cr.Hrs. 3

(Formerly 052.229) Russian culture from the end of the 19th century to the present day. Major developments in Russian art, film and literature. Readings are available in both English translation and in the original.

RUSN 2310 Exploring Russia through Film Cr.Hrs. 3

A survey of Russian cinema from its origins to the present. The course focuses on the role of film in Russian culture, ideological uses of film, and cinema as a medium of cultural dissent and witness to social change. Lectures in English; all films are in Russian with English subtitles; no prior knowledge of Russian language or culture is required.

RUSN 2410 Russian Literature after Stalin Cr.Hrs. 3

A survey of Russian literature from the period of High Stalinism to the present. The course examines effects of ideological and political change on literary production. Lectures in English. Readings in English or in the original.

RUSN 2630 Russian Language Seminar Abroad Cr.Hrs. 3

(Formerly 052.263) The study of Russian language, literature and culture at an intensive language school in Eastern Europe. Designed for students aiming at near-native fluency. Prerequisite: [a grade of "C" or better in RUSN 1300 (052.130) or RUSN 1330 (052.133)] and written consent of department head.

RUSN 2740 Literature and Revolution Cr.Hrs. 3

(Formerly 052.274) Responses to the 1917 Revolution, focusing on writers of the twenties. Mayakovsky, Kollontai, Babel, Olesha, Zamyatin, Pilnyak, Bulgakov. References to art, cinema and cultural politics of the period. Lectures in English.

RUSN 2810 Intermediate Russian Cr.Hrs. 6

(Formerly 052.281) Grammar review, conversation, translation and reading of selected texts. Development of communication skills through practical exercises. Cultural content is introduced through use of audio-visual and internet materials. Students may not hold credit for both RUSN 2810 (052.281) and RUSN 2820 (052.282). Prerequisite: [a grade "C" or better in RUSN 1300 (052.130) or RUSN 1330 (052.133)] or [Russian 41G] or written consent of department head.

RUSN 2820 Intermediate Russian 2 Cr.Hrs. 3

(Formerly 052.282) Intended for students who already have basic comprehension, communication and writing skills equivalent to those that would be achieved in the first term of RUSN 2810 (052.281). Students may not hold credit for both RUSN 2820 (052.282) and RUSN 2810 (052.281). Prerequisite: successful completion of a placement test administered by the department.

RUSN 2830 Special Topics in Russian Cr.Hrs. 3

A study of the Russian language through listening, reading, writing, and conversation, with a strong cultural component. The content of this course will vary from year to year, depending on the needs and interests of the students and staff. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

Russian Course Descriptions-3000 Level

RUSN 3200 Advanced Russian 1 Cr.Hrs. 3

Advanced composition, translation, reading and study of selected literary and other texts. Development of overall communication skills. Students may not hold credit for both RUSN 3200 and the former RUSN 3930 (052.393). Prerequisite: [a grade "C" or better in RUSN 2810 (052.281) or RUSN 2820 (052.282)] or written consent of department head.

RUSN 3210 Advanced Russian 2 Cr.Hrs. 3

Continues RUSN 3200. Further work in advanced composition, translation, reading and study of selected literary and other texts. Development of overall communication skills. Students may not hold credit for RUSN 3210 and any of: the former RUSN 3930 (052.393) or the former RUSN 3940 (052.394). Prerequisite: [a grade "C" or better in RUSN 3200] or written consent of department head.

RUSN 3220 Selected Topics in Russian Cr.Hrs. 3

Language of instruction: Russian. Advanced study of the Russian language through reading and analysis of literary or/and non-fictional texts including academic writing. The content of this course will vary from year to year, depending on the needs and interests of instructors and students. Prerequisite: [a grade "C" or better in one of: RUSN 2810 (052.281), RUSN 2820 (052.282), RUSN 3200, RUSN 3210, the former RUSN 3930 (052.393), the former RUSN 3940 (052.394)] or written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

RUSN 3330 Chekhov Cr.Hrs. 3

(Formerly 052.333) The study of selected short stories and plays. Lectures in English. Readings are available in both Russian and English translation.

RUSN 3580 Russian Poetry Cr.Hrs. 3

(Formerly 052.358) A study of major Russian poetry of the 19th and 20th centuries, including works by Pushkin, Lermontov, Tiutchev, Fet, Blok, Mayakovsky, Akhmatova, Esenin, Evtushenko, Vinokurov, Kazakova. Lectures and readings in Russian. Prerequisite: [a grade of "C" or better in one of: RUSN 3200 or RUSN 3210 or the former RUSN 3930 (052.393) or the former RUSN 3940 (052.394)] or written consent of department head.

ACADEMIC CALENDAR 2015-2016

RUSN 3770 Tolstoy Cr.Hrs. 3

(Formerly 052.377) A study of the novelist that focuses on the development of the aesthetic views and intellectual biography. Representative works from his early, middle and late period will be selected for analysis. Lectures in English. Readings in the original or in English.

RUSN 3780 Dostoevsky Cr.Hrs. 3

(Formerly 052.378) A study that focuses on the writer's art, in particular on his development of the polyphonic novel. Lectures in English. Readings in the original or in English.

RUSN 3790 Special Studies Cr.Hrs. 3

(Formerly 052.379) The content of this course will vary from year to year, depending on the needs and interests of instructors and students. A description of the course is available in advance at the department office. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

RUSN 3900 Tolstoy's War and Peace Cr.Hrs. 3

(Formerly 052.390) This writer's art, view of history and human nature. References to film versions. Lectures in English. Readings in the original or in English.

RUSN 3980 Women and Russian Literature Cr.Hrs. 3

(Formerly 052.398) A study of the literature produced by Russian women writers in the nineteenth and early twentieth centuries, including an examination of key issues raised in works by writers such as Bunina, Durova, Volkonskaia, Pavlova, Guro, Gippius, Forsh, Akhmatova, Tsvetaeva, and Chukovskaia. Lectures in English. Readings in the original and/or in English.

Russian Course Descriptions-4000 Level

RUSN 4620 Selected Topics 1 Cr.Hrs. 3

(Formerly 052.462) A program of independent reading and/or research on selected topics to 1900, undertaken by a student in consultation with his or her prospective instructor. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

8.12.8 Ukrainian

For entry, continuation and graduation requirements for the General Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

General Major Program

For entry to the Major, the prerequisite is a grade of “C” or better in six credit hours in Ukrainian courses at any level. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of “C” or better in six credit hours in Ukrainian courses at any level.

8.12.9 Ukrainian

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL UKRAINIAN MAJOR TOTAL: 30 CREDIT HOURS			
30 credit hours of Ukrainian to include:			
<ul style="list-style-type: none"> • UKRN 1310¹ or UKRN 1320¹ • UKRN 2720² or UKRN 2730² • UKRN 3950³ and UKRN 3960³ • In addition to the above required courses, students must complete the balance of credit hours by taking Ukrainian (UKRN) or Slavic Studies (SLAV) courses⁴ 			
UKRAINIAN MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS			
6 credit hours in Ukrainian (UKRN) courses	12 credit hours in Ukrainian (UKRN) or Slavic Studies (SLAV) courses ⁴		
NOTES:			
¹ With written consent from the department head, students with superior language ability can substitute UKRN 1310 or UKRN 1320 with UKRN 2720 or UKRN 2730.			
² With written consent from the department head, students with superior language ability can substitute UKRN 2720 or UKRN 2730 with other 2000 or 3000 level Ukrainian courses.			
³ With written consent from the department head, other 3000 level Ukrainian language courses may be approved for credit.			
⁴ With written consent from the department head, courses offered by other departments may be approved for credit.			

8.12.10 Ukrainian Course Descriptions

Ukrainian Course Descriptions-1000 Level

UKRN 1230 Language Seminar in Ukraine 1 Cr.Hrs. 3

(Formerly 052.123) The study of Ukrainian language at an intensive language school in Ukraine. The course is designed for students aiming at near-native fluency. Prerequisite: [a grade of “C” or better in UKRN 1310 (052.131) or UKRN 1320 (or equivalent)] and written consent of department head.

UKRN 1310 Introductory Ukrainian Cr.Hrs. 6

(Formerly 052.131) (Lab required) Three hours of lectures plus one hour of lab per week. Basic grammar, conversation, composition and reading. Emphasis is placed on communication skills. Cultural content is introduced through a range of audio-visual materials. Not open to native speakers and students with Ukrainian 40S credit. Students may not hold credit for both UKRN 1310 (052.131) and UKRN 1320 (052.132).

UKRN 1320 Introductory Ukrainian 2 Cr.Hrs. 3

(Formerly 052.132) (Lab required) Three hours of lectures plus one hour of lab per week. This course is intended for students who already have a knowledge of the alphabet and the sound system and elementary oral comprehension and reading, writing, and speaking skills equivalent to those that would be achieved in the first term of UKRN 1310 (052.131). Students may not hold credit for both UKRN 1320 (052.132) and UKRN 1310 (052.131). Prerequisite: successful completion of a placement test administered by the department.

Ukrainian Course Descriptions-2000 Level

UKRN 2100 Exploring Ukrainian Literature Cr.Hrs. 3

Language of Instruction: Ukrainian. An introduction to Ukrainian literature that simultaneously helps students improve their language skills. This is a transitional course that builds upon a basic reading knowledge. A number of works by major authors and from different genres are discussed. Activities and assignments focus on developing reading competency, vocabulary, written and oral expression. Prerequisite: [a grade of “C” or better in UKRN 2720 (052.272) or UKRN 2730 (052.273) or UKRN 3950 (052.395) or UKRN 3960 (052.396)] or written consent of department head.

UKRN 2200 Ukrainian Myth, Rites and Rituals Cr.Hrs. 3

An exploration of folk mythology, and the rites, rituals and festivals associated with the calendar cycle. Lectures and readings in English. Students may not hold credit for UKRN 2200 and any of: the former UKRN 2510 (052.251) or the former UKRN 2520 (052.252).

UKRN 2260 Ukrainian Culture Seminar Abroad Cr.Hrs. 3

(Formerly 052.226) This course is offered as part of the Summer Session. It is a study experience in Ukraine. The course features extensive exploration of contemporary Ukrainian culture. The course is taught in English. Students are given the maximum individual attention. Mornings are spent in class. Excursions are planned in Kyiv and neighboring sites. Prerequisite: [a grade of “C” or better in UKRN 1310 (052.131) or UKRN 1320 (052.132) (or equivalent)] and written consent of the department head.

UKRN 2410 Ukrainian Canadian Cultural Experience Cr.Hrs. 3

A study of the legacy left by several generations of Ukrainian Canadians in literature and the performing arts, music, art and architecture, with particular attention to the construction of identity and the critique of culture. Lectures and readings in English. Students may not hold credit for both UKRN 2410 and the former UKRN 2420 (052.242).

UKRN 2590 Ukrainian Literature and Film Cr.Hrs. 3

(Formerly 052.259) An examination of the relationship of Ukrainian literature and film. Students read literary works which have inspired films and analyze the unique formal qualities of each. The course considers the stylistic influence of film on literature and vice versa; the relationship between writer and director, especially in the case where they are one and the same person. Readings in the original and/or in English. Films in Ukrainian with English subtitles or plot summaries.

UKRN 2720 Intermediate Ukrainian Cr.Hrs. 6

(Formerly 052.272) Grammar review, conversation, translation and reading of selected texts. Development of communication skills through practical exercises. Cultural content is introduced through audio-visual materials. Students may not hold credit for both UKRN 2720 (052.272) and UKRN 2730 (052.273). Prerequisite: [a grade of "C" or better in UKRN 1310 (052.131) or UKRN 1320 (052.132)] or [Ukrainian 40S] or written consent of department head.

UKRN 2730 Intermediate Ukrainian 2 Cr.Hrs. 3

(Formerly 052.273) This course is the second term of UKRN 2720 (052.272) Intermediate Ukrainian, and is intended for students who already have basic oral comprehension and reading, writing, and speaking skills equivalent to those that would be achieved in the first term of UKRN 2720 (052.272). Students may not hold credit for both UKRN 2730 (052.273) and UKRN 2720 (052.272). Prerequisite: successful completion of a placement test administered by the department.

UKRN 2770 Ukrainian Culture until 1900 Cr.Hrs. 3

(Formerly 052.277) A survey that examines the Ukrainian Culture Heritage from the pre-Christian era, through medieval times and the baroque to the end of the 19th century. Issues in mythology, religion, the arts and literature are discussed. Lectures in English. Readings are available in both English translation and the original.

UKRN 2780 Ukrainian Culture from 1900 to the Present Cr.Hrs. 3

(Formerly 052.278) Major trends in thought, the visual arts, film and literature from the end of the 19th century to the present day. Lectures in English. Readings are available in both English translation and Ukrainian.

UKRN 2800 Literature and Revolution in Ukraine Cr.Hrs. 3

A study of literature and its relationship to the arts in the decade that followed the Revolution of 1917. Lectures in English. Readings available in English and in the original. Viewing and discussion of films.

UKRN 2820 Holodomor and Holocaust in Ukrainian Literature and Culture Cr.Hrs. 3

A study of how the Holodomor (Famine) of 1932-33 and the Holocaust have been represented, and of the international impact of these representations. References to art and film. Lectures and readings in English.

Ukrainian Course Descriptions-3000 Level

UKRN 3100 Ukrainian Story Writing Through the Ages Cr.Hrs. 3

Masterpieces of the short story genre from early modern times to the present. Focusing on great works and writers, the course provides insights into the genre and into different periods in Ukrainian literature. Film adaptations of some works will be viewed and discussed. Students may not hold credit for both UKRN 3100 and the former UKRN 3850 (052.385).

UKRN 3300 Literature of Independent Ukraine Cr.Hrs. 3

A study of recent writings from Ukraine, focusing on the post-1991 period. References to art and film of the period.

UKRN 3440 Ukrainian Poetry Cr.Hrs. 3

A study of some of the best Ukrainian poetry with a particular emphasis on the modern period. Lectures and readings in Ukrainian. Prerequisite: [a grade of "C" or better in UKRN 1310 (052.131) or UKRN 1320 (052.132)] or written consent of department head.

UKRN 3840 Ukrainian Novel Cr.Hrs. 3

(Formerly 052.384) A study of representative novels of the 19th and 20th centuries. The course begins with the Romantic period and ends with contemporary writing. Lectures in English. Readings in the original or in English.

UKRN 3880 Special Studies Cr.Hrs. 3

(Formerly 052.388) The content of this course will vary from year to year, depending on the needs and interests of instructors and students. A description of the course is available in advance at the department office. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

UKRN 3910 Shevchenko Cr.Hrs. 3

(Formerly 052.391) A study of the greatest works, focusing on the writer's intellectual and artistic development. References to his art and the imperial context. Lectures in English. Readings in the original. Prerequisite: [a grade of "C" or better in UKRN 1310 (052.131) or UKRN 1320 (052.132)] or written consent of department head.

UKRN 3950 Advanced Ukrainian 1 Cr.Hrs. 3

(Formerly 052.395) Advanced composition, translation, readings and study of selected literary and other texts. Development of oral and comprehension skills through study of contemporary film, television and other audio-visual materials. Prerequisite: [a grade of "C" or better in UKRN 2720 (052.272) or UKRN 2730 (052.273)] or written consent of department head.

UKRN 3960 Advanced Ukrainian 2 Cr.Hrs. 3

(Formerly 052.396) A continuation of UKRN 3950 (052.395) Advanced Ukrainian 1. Continued work in advanced composition, translation, readings and study of selected literary and other texts. Continued development of oral and comprehension skills through study of contemporary film, television and other audio-visual materials. Prerequisite: [a grade of "C" or better in UKRN 3950 (052.395)] or written consent of department head.

UKRN 3970 Women and Ukrainian Literature Cr.Hrs. 3

(Formerly 052.397) A study of the literature produced by Ukrainian women writers in the nineteenth and early twentieth centuries, including an examination of key issues raised in works by writers such as Vovchok, Pchilka, Kobrynska, Ianovska, Kobylanska, Iaroshynska, and Ukrainka. Lectures in English. Readings in the original and/or in English.

Ukrainian Course Descriptions-4000 Level

UKRN 4640 Selected Topics 1 Cr.Hrs. 3

(Formerly 052.464) A program of independent reading and/or research on selected topics to 1900, undertaken by a student in consultation with his or her prospective instructor. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

8.12.11 Polish

For entry, continuation and graduation requirements for the General Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in six credit hours in Polish courses.

8.12.12 Polish

YEAR 1	YEAR 2	YEAR 3	YEAR 4
POLISH MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS			
6 credit hours in Polish (POL) courses	12 credit hours in Polish (POL) courses, SLAV 2260, or SLAV 2270		

8.12.13 Polish Course Descriptions-**Polish Course Descriptions-1000 Level****POL 1890 Introductory Polish Cr.Hrs. 6**

(Formerly 052.189) Basic grammar, conversation, composition, readings, language laboratory sessions.

POL 1900 Love, Heroes and Patriotism in Contemporary Poland Cr.Hrs. 3

A study of the impact of Romanticism on contemporary Polish national consciousness, images of love, and the role of art and the artist in society. The course explores diverse written and visual sources representing Polish and European Romanticism and its mutual influences. Lectures and readings in English.

Polish Course Descriptions-2000 Level**POL 2600 Polish Culture until 1918 Cr.Hrs. 3**

An introductory survey from the beginnings of the Polish state to 1918. This is a lecture style course devoted to studying the achievements of Polish culture and their impact on world culture. Students will observe the creation of Polish national identity through the examination of documents from literature and culture. Lectures and readings in English. Students may not hold credit for both POL 2600 and the former POL 2530 (052.253).

POL 2610 Polish Culture 1918 to the Present Cr.Hrs. 3

An introductory survey from 1918 to the present. This is a lecture style course devoted to studying the achievements of Polish culture and their impact on shaping of the contemporary Polish society. Students will observe the cultural changes that defined Poland following one hundred years of non-existence as a nation. The re-examining of the Polish national identity will be studied through documents from literature, art, mythology and music. Lectures and readings in English. Students may not hold credit for both POL 2610 and the former POL 2530 (052.253).

POL 2660 Special Topics in Polish Literature and Culture Cr.Hrs. 3

Topics dealing with Polish literature and culture. Content of this course will vary from year to year, depending on the needs and interests of instructors and students. As the course content will vary from year to year, students may take this course more than once for credit.

POL 2690 Polish Language and Culture Cr.Hrs. 6

(Formerly 052.269) Offered as part of the Summer Session, this course is a study experience in Poland. The program features practical language training and an exploration of the Polish culture. Prerequisite: written consent of instructor.

POL 2890 Intermediate Polish Cr.Hrs. 6

(Formerly 052.289) Grammar review, composition, translation, readings of selected prose and poetry. Prerequisite: [a grade of "C" or better in POL 1890 (052.189)] or written consent of department head.

Polish Course Descriptions-3000 Level**POL 3890 Advanced Polish Cr.Hrs. 6**

(Formerly 052.389) Syntax, advanced composition, readings and study of selected prose and poetry. Prerequisite: [a grade of "C" or better in POL 2890 (052.289)] or written consent of department head.

8.12.14 Slavic Studies-General Course Descriptions**Slavic Studies-General Course Descriptions 2000 Level****SLAV 2260 Russia, Ukraine and Poland - Cultures in Dialogue 1 Cr.Hrs. 3**

Key issues in the cultural heritages of the three largest Slavic nations. Particular attention is paid to the way each culture has represented itself and the other two in literature and the arts. Students will examine the way cultural myths have been formed, challenged and modified. Early times to the late 19th century. Lectures and readings in English.

SLAV 2270 Russia, Ukraine and Poland - Cultures in Dialogue 2 Cr.Hrs. 3

Key issues in the cultural heritages of the three largest Slavic nations. Particular attention is paid to the way each culture has represented itself and the other two in literature and the arts. Students will examine the way cultural myths have been formed, challenged and modified. Late 19th century to the present. Lectures and readings in English.

Slavic Studies-General Course Descriptions 3000 Level**SLAV 3530 Special Topics in Comparative German and Slavic Studies Cr. Hrs. 3**

Language of instruction: English. Topics comparing German and Slavic – Ukrainian, Russian, Polish – literatures and cultures. Course is co-taught by a member from the German and one from the Slavic Section. Course content will vary from year to year depending on interests and needs of students and staff. Possible Topics include Memory of World War II, Cold War and Post-Cold War, and Modernism. Students may not hold credit for both SLAV 3530 and GRMN 3530 when topic is the same. Prerequisite: [a grade of "C" or better in a minimum of 30 credit hours of university level coursework] or written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

SLAV 3920 Gogol Cr.Hrs. 3

(Formerly 052.392) A study of the author's major fiction and his influence on Russian and Ukrainian cultures and identity politics.

8.12.15 Hungarian Course Descriptions**HUNG 1000 Introduction to Hungarian 1 Cr.Hrs. 3**

(Lab required) The course is intended for students with little or no previous knowledge of Hungarian. Students are introduced to basic grammar and vocabulary as well as aspects of Hungarian culture. Emphasis is placed on communication skills. Satisfactory completion of this course enables students to proceed to HUNG 1002 Introduction to Hungarian 2.

HUNG 1002 Introduction to Hungarian 2 Cr.Hrs. 3

(Lab required.) The course is intended for students with some elementary knowledge of Hungarian. Students will expand their understanding of basic grammar and vocabulary, as well as aspects of Hungarian culture. Emphasis is placed on communication skills. Prerequisite: [a grade of "C" or better in HUNG 1000] or written consent of department head.

8.13 Global Political Economy Program

Program Coordinator: Mark Hudson

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Telephone: 204 272 1655

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Website: umanitoba.ca/global_political_economy/

8.13.1 Program Information

The departments of Anthropology, Economics, History, Political Studies and Sociology collaborate in a Major and Advanced Major that explores change in social, economic, political and international relations that have re-shaped and continue to re-shape the world. The public and private sectors, as well as non-governmental agencies, must understand the global forces that affect their international relationships as well as those that affect their internal ability to respond to restructuring forces around them.

For entry to the General Major, the prerequisite is a grade of "C" or better in the following: both ECON 1010 and ECON 1020, or both ECON 1210 and ECON 1220; and 6 credit hours from GPE 1700 (or GEOG 1700), HIST 1370, HIST 1380, HIST 1500, HIST 2380, HIST 2720.

For entry to the Single Advanced Major, the prerequisite is a grade of "C" or better in the following: both ECON 1010 and ECON 1020, or both ECON 1210 and ECON 1220; and 6 credit hours from GPE 1700 (or GEOG 1700), HIST 1370, HIST 1380, HIST 1500, HIST 2380, HIST 2720, POLS 1000.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Note: Students who declare and complete a Major will not be required or allowed to complete a separate field for a Minor for purposes of satisfying degree requirements.

8.13.2 Global Political Economy

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR¹ TOTAL: 48 CREDIT HOURS			
<ul style="list-style-type: none"> • 6 credit hours from the following: HIST 1370, HIST 1380, HIST 1500, HIST 2380, HIST 2720 • ECON 1010 and ECON 1020, or ECON 1210 and ECON 1220 • GPE 1700 (or GEOG 1700) 	<ul style="list-style-type: none"> • ANTH 2000² • ECON 2540 • ECON 2550 • GPE 2700 • SOC 2290³, or both ANTH 3930 and STAT 1000 	<ul style="list-style-type: none"> • ANTH 3320² • GPE 3700 • POLS 3250⁴ or ANTH 3750 • POLS 3270⁴ • SOC 3380 or SOC 3838 or SOC 3840 or SOC 3890³ 	
SINGLE ADVANCED MAJOR TOTAL: 66 CREDIT HOURS			
<ul style="list-style-type: none"> • 6 credit hours from the following: HIST 1370, HIST 1380, HIST 1500, HIST 2380, HIST 2720 • ECON 1010 and ECON 1020, or ECON 1210 and ECON 1220 • GPE 1700 (or GEOG 1700) • POLS 1000 	<ul style="list-style-type: none"> • ANTH 2000² • ECON 2540 • ECON 2550 • GPE 2700 • SOC 2290³, or both ANTH 3930 and STAT 1000 	<ul style="list-style-type: none"> • ANTH 3320² • GPE 3700 • POLS 3250⁴ or ANTH 3750 • POLS 3270⁴ • SOC 3380 or SOC 3838 or SOC 3840 or SOC 3890³ 	GPE 4700
In years 2, 3 and 4 students must take an additional 9 credit hours from List A.			
NOTES:			
¹ Students in the General Major are very strongly advised to include in their elective courses a minimum of 6 credit hours from the following list (if not already taken in the core requirements): ANTH 2530, ANTH 3750, ECON 2630, HIST 1370, HIST 1380, HIST 1500, HIST 2380, HIST 2670, HIST 2680, HIST 2720, POLS 1000, POLS 2040, POLS 3250, POLS 3810, SOC 3380, SOC 3838, SOC 3840, SOC 3890.			
² Students are advised to take ANTH 1220 or ANTH 1520 as an elective in Year 1 as it is the prerequisite for some upper level Anthropology courses. Otherwise, students will require written consent of Anthropology department head prior to registration.			
³ Students are advised to take SOC 1200 as an elective in Year 1 as it is the prerequisite for upper level Sociology courses. Otherwise, students will require written consent of Sociology department head prior to registration.			
⁴ Students are advised to take POLS 2040 as an elective in Year 2 as it is the prerequisite for upper level Political Studies courses. Otherwise, students will require written consent of Political Studies department head prior to registration.			

List of Courses for Global Political Economy

See the departmental Calendar section for full course descriptions.

Global Political Economy		
GPE 1700	Social Justice in the 21 st Century: Global Political Economy and Environmental Change (same as GEOG 1700)	3
GPE 2700	Perspectives on Global Political Economy	3
GPE 3700	A Survey of Global Political Economy	3
GPE 4700	Studies in Global Political Economy	6

Anthropology		
ANTH 2000	Culture, Society, and Power	3
ANTH 2530	Anthropology of Political Systems	3
ANTH 3320	Women in Cross-Cultural Perspective	3
ANTH 3750	Globalization and the World-System	3
Economics		
ECON 1010	Introduction to Microeconomic Principles	3
ECON 1020	Introduction to Macroeconomic Principles	3
ECON 1210	Introduction to Canadian Economic Issues and Policies	3
ECON 1220	Introduction to Global and Environmental Economic Issues and Policies	3
ECON 2540	Political Economy 1: Production and Distribution	3
ECON 2550	Political Economy 2: Economic Growth and Fluctuations in a Global Economic Environment	3
History		
HIST 1370	An Introduction to Modern World History: 1500-1800 (M)	3
HIST 1380	An Introduction to Modern World History: 1800 - Present (M)	3
HIST 1500	An Introduction to Modern World History: 1500 - Present (M)	6
HIST 2380	The Twentieth-Century World (G,M)	6
HIST 2720	The World Since 1945 (G,M)	6
Political Studies		
POLS 1000	Democracy and Development	3
POLS 3250	International Political Economy	3
POLS 3270	Theories of the Capitalist World Order	3
Sociology		
SOC 2290	Introduction to Research Methods	6
SOC 3380	Power, Politics and the Welfare State	3
SOC 3838	Ecology and Society	3
SOC 3840	Community and Social Reconstruction	3
SOC 3890	Power and Inequality in Comparative Perspective	3
List A		
Faculty of Arts		
Anthropology		
ANTH 2530	Anthropology of Political Systems	3
ANTH 3750	Anthropological Perspectives on Globalization and the World-System	3
Economics		
ECON 2630	An Introduction to the World's Economies	6
History		
HIST 1370	An Introduction to Modern World History: 1500-1800 (M)	3
HIST 1380	An Introduction to Modern World History: 1800 - Present (M)	3
HIST 1500	An Introduction to Modern World History: 1500 - Present (M)	6
HIST 2380	The Twentieth-Century World (G,M)	6
HIST 2670	History of Capitalism (M)	3
HIST 2680	A History of Socialism from the French Revolution to the Present (M)	3
HIST 2720	The World Since 1945 (G,M)	6
HIST 3580	Topics in Recent World History 1 (M)	3
	Acceptable for credit only when the topic is "Global Economic Crises in World History, 1929-Present"	
Political Studies		
POLS 2040	Introduction to International Relations	6
POLS 3250	International Political Economy	3
POLS 3810	Introduction to Marxism	3
Sociology		
SOC 2240	Sociology of Globalization	3
SOC 3380	Power, Politics and the Welfare State	3
SOC 3838	Ecology and Society	3
SOC 3840	Community and Social Reconstruction	3
SOC 3890	Power and Inequality in Comparative Perspective	3

8.13.3 Global Political Economy Course Descriptions

GPE 1700 Social Justice in the 21st Century: Global Political Economy and Environmental Change Cr.Hrs. 3

Introduces students to political economy and cultural geography through the close analysis of contemporary world events, including but not limited to instances of violent conflict, environmental change, international negotiations, political processes and events, social movements, and policy developments. A multimedia approach will advance students' understanding of geopolitical events from political economy and spatial perspectives. Specific content of the course will change year-by-year in response to developments in national and world politics. Also offered by Clayton H. Riddell Faculty of Environment, Earth, and Resources as GEOG 1700. Students may not hold credit for both GPE 1700 and GEOG 1700.

GPE 2700 Perspectives on Global Political Economy Cr.Hrs. 3

(Formerly 157.270) An interdisciplinary seminar exploring issues in political economy at the global level from the perspectives of Anthropology, History, Economics, Political Studies, and Sociology. Prerequisite: written consent of Global Political Economy coordinator.

GPE 3700 A Survey of Global Political Economy Cr.Hrs. 3

Provides students with a systemic intellectual history of the field of Global Political Economy. The course delineates Global Political Economy as a distinctive scholarly tradition, discusses the separation of economics and politics, and surveys the tradition from classical political economy through historical materialism, development economics, imperialism, world systems theory, and more. Students will relate these approaches to contemporary issues in GPE such as economic and ecological crises, inequality, or corporate power. Prerequisite: [a grade of "C" or better in GPE 1700 or GEOG 1700] or written consent of instructor.

GPE 4700 Studies in Global Political Economy Cr.Hrs. 6

(Formerly 157.470) An advanced interdisciplinary seminar that will study the effects of institutions, structures, and dynamics operating in the current global political economy. Students, working in groups, will be expected to do case studies on selected local (or regional) political economies. Prerequisite: written consent of Global Political Economy coordinator.

8.14 Department of History

Head: Tina Chen

Campus Address & General Office: 403 Fletcher Argue Building

Telephone: 204 474 8401

Email Address: history@umanitoba.ca

Website: umanitoba.ca/history

8.14.1 Program Information

The study of history provides essential background for many disciplines and professions where research analysis, communications skills and an understanding of how past events influence the present are important. The department includes specialists in intellectual, cultural, social, medieval, Aboriginal, women's, and international history. A particular area of departmental specialization is Canadian and western Canadian history.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in the first six credit hours of History. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

When selecting 2000-level courses in Year 2, students should anticipate their future interests.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in the first six credit hours of History.

Honours Program

For entry to the Honours program, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

In addition, students are to have a grade point average of 3.0 or better in all History courses completed before admission.

To continue in the Honours program a 3.0 grade point average, with minimum grades of "B" in all 3000- and 4000-level History courses, must be maintained. Normally, students who fail to maintain a minimum grade of "B" in all 3000- and 4000-level courses will be required to withdraw from the Honours program.

It is recommended that students complete History HIST 4400 or HIST 4580 in Year 4 if they intend to do graduate work.

Other

At most, 12 credit hours at the 1000-level in History may count for a B.A. General, B.A. Advanced, or B.A. Honours Degree credit.

Courses CLAS 2140, CLAS 2150, CLAS 2160 and CLAS 2170 offered by the Department of Classics count for credit towards a General Major, Single Advanced Major, Single Honours or Double Honours in History, CLAS 2140, CLAS 2150, CLAS 2160 and CLAS 2170 also count for credit towards a Minor (Concentration) in History.

8.14.2 History

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR TOTAL: 30 CREDIT HOURS			
6 credit hours in History courses numbered at the 1000 or 2000 level or 3 credit hours in History courses numbered at the 1000 level and 3 credit hours in History courses numbered at the 2000 level	12 credit hours in History courses numbered at the 2000 level	<ul style="list-style-type: none"> • 6 credit hours in History courses numbered at the 3000 level • 6 credit hours in History courses numbered at the 2000 or 3000 level 	
Within the 30 credit hours, students must choose 6 credit hours from each of 3 different areas of study.			

ACADEMIC CALENDAR 2015-2016

SINGLE ADVANCED MAJOR TOTAL: 48 CREDIT HOURS			
6 credit hours in History courses numbered at the 1000 or 2000 level or 3 credit hours in History courses numbered at the 1000 level and 3 credit hours in History courses numbered at the 2000 level	18 credit hours in History courses numbered at the 2000 level	18 credit hours in History courses numbered at the 3000 level, or 12 credit hours in History courses numbered at the 3000 level and 6 credit hours in History courses numbered at the 2000 level, or 12 credit hours in History courses numbered at the 3000 level and 6 credit hours in History courses numbered at the 4000 level	6 credit hours in History courses numbered at the 4000 level
Within the 48 credit hours, students must choose 6 credit hours from each of 3 different areas of study.			
MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS			
6 credit hours in History courses numbered at the 1000 or 2000 level or 3 credit hours in History courses numbered at the 1000 level and 3 credit hours in History courses numbered at the 2000 level	6 credit hours in History courses numbered at the 2000 level	6 credit hours in History courses numbered at the 2000 or 3000 level	
SINGLE HONOURS^{1,4}			
6 credit hours in History courses numbered at the 1000 or 2000 level or 3 credit hours in History courses numbered at the 1000 level and 3 credit hours in History courses numbered at the 2000 level	<ul style="list-style-type: none"> • 18 credit hours in History courses numbered at the 2000 or 3000 level • 6 credit hours in History courses numbered at the 3000 level • HIST 3990 • 24 credit hours in ancillary options² • 6 credit hours in free options³ 		<ul style="list-style-type: none"> • 24 credit hours in History courses numbered at the 4000 level • 6 credit hours in free options³
Honours students must choose from a minimum of three different defined areas of historical study.			
DOUBLE HONOURS^{1,4}			
6 credit hours in History courses numbered at the 1000 or 2000 level or 3 credit hours in History courses numbered at the 1000 level and 3 credit hours in History courses numbered at the 2000 level	<ul style="list-style-type: none"> • 18 credit hours in History courses numbered at the 2000 or 3000 level • HIST 3990 • 6 credit hours in ancillary options² • 6 credit hours in free options³ • 24 credit hours in other Honours field 		<ul style="list-style-type: none"> • 12 credit hours in History courses numbered at the 4000 level • 6 credit hours in free options³ • 12 credit hours in other Honours field
Honours students must choose from a minimum of three different defined areas of historical study.			
NOTES:			
¹ Students, particularly those intending to proceed to a graduate program, are encouraged to study a second language during the course of their Honours program.			
² Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding History courses).			
³ Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including History courses). It is recommended students register for additional History courses at the 2000 level or higher.			
⁴ Honours courses: all 4000 level courses.			

History courses are arranged into groups and areas of study as follows:

Groups:	Areas:	
numbered at the 1000 level: Introductory	A:	The Americas
numbered at the 2000 level: General	B:	Asian
numbered at the 3000 level: Special	C:	Canadian
numbered at the 4000 level: Honours	D:	Ancient and Medieval
	E:	European
	G:	General
	M:	Modern World
	R:	Africa and the Middle East

For information regarding Cross-Disciplinary Programs, see Section 8.8 and for Canadian Studies, see Section 8.3.

8.14.3 History Course Descriptions-**History Course Descriptions-1000 Level****HIST 1200 An Introduction to the History of Western Civilization (G) Cr. Hrs. 6**

(Formerly 011.120) An introductory survey of the cultural history of the Western world from the ancient Greeks to the present. Students may not hold credit for HIST 1200 (011.120) and any of: HIST 1201 (011.120) or HIST 1350 (011.135) or HIST 1360 (011.136).

HIST 1260 New Directions in History: Inquiries into the Cultural Basis of the Modern World (G) Cr.Hrs. 3

(Formerly 011.126) The history of cultural change focusing on such topics as leisure and popular culture, sexuality and history, and the social consequences of creativity and genius. The specific content will vary from year to year.

HIST 1270 New Directions in History: Inquiries into the Power Relations of the Modern World (G) Cr.Hrs. 3

(Formerly 011.127) The history of the social and cultural impact of factors such as changes in technology and communication, warfare, and revolution. The specific content will vary from year to year.

HIST 1350 An Introduction to the History of Western Civilization to 1500 (G) Cr.Hrs. 3

(Formerly 011.135) An introductory survey of the cultural history of the Western World from the earliest civilizations to 1500. Students may not hold credit for HIST 1350 (011.135) and any of: HIST 1200 (011.120) or HIST 1201 (011.120).

HIST 1360 An Introduction to the History of Western Civilization from 1500 (G) Cr.Hrs. 3

(Formerly 011.136) An introductory survey of the cultural history of the Western World from 1500 to the present. Students may not hold credit for both HIST 1360 (011.136) and any of: HIST 1200 (011.120) or HIST 1201 (011.120).

HIST 1370 An Introduction to Modern World History: 1500-1800 (M) Cr. Hrs. 3

(Formerly 011.137) A study of the forces which created the modern world, including the rise of capitalism and the encounter of Western and non-Western societies. Students may not hold credit for both HIST 1370 (011.137) and HIST 1500 (011.150).

HIST 1380 An Introduction to Modern World History: 1800-Present (M) Cr.Hrs. 3

(Formerly 011.138) A study of the forces which created the modern world, including industrialization, imperialism, decolonization, and the emergence of revolution and counter-revolution. Students may not hold credit for both HIST 1380 (011.138) and HIST 1500 (011.150).

HIST 1390 History of Colonial Canada: 1500-1885 (C) Cr.Hrs. 3

(Formerly 011.139) A study of the development of Canada from its colonial origins to the completion of national and transcontinental unification. Emphasis is on French Canada, Indian-European cultural contact, regional life and social organization, impact of colonialism, and the creation of a national state. Students may not hold credit for HIST 1390 (011.139) and any of: HIST 1440 (011.144) or HIST 1441 (011.144).

HIST 1400 History of the Canadian Nation since 1867 (C) Cr.Hrs. 3

(Formerly 011.140) A study of the national development of Canada to the present. Emphasis is placed on French Canada, the regional life and social organization of the country, the impact of continentalism, the development of the economy, and the rise of a national sentiment. Students may not hold credit for HIST 1400 (011.140) and any of: HIST 1440 (011.144) or HIST 1441 (011.144).

HIST 1420 Asian Civilizations to 1500 (B) Cr.Hrs. 3

(Formerly 011.142) A study of major themes in the history and culture of China and Japan, the Indian subcontinent and Southeast Asia from ancient times to around 1500. Also offered as Asian Studies ASIA 1420. May not be held with ASIA 1420 (150.142) or the former HIST 1410 (011.141).

HIST 1430 Asian Civilizations from 1500 (B) Cr.Hrs. 3

(Formerly 011.143) A study of major themes in the history and culture of China and Japan, the Indian subcontinent and Southeast Asia in modern times. Also offered as Asian Studies ASIA 1430 (150.143). May not be held with ASIA 1430 (150.143) or the former ASIA 1410 (011.141).

HIST 1440 History of Canada (C) Cr.Hrs. 6

(Formerly 011.144) A study of Canadian development from earliest days to the present. Emphasis is placed on Aboriginal societies, the history of French Canada, the regional life and social organization of the country, the impact of colonialism and continentalism, and the rise of nationalisms. Students may not hold credit for HIST 1440 (011.144) and any of: HIST 1441 (011.144) or HIST 1390 (011.139) or HIST 1400 (011.140).

HIST 1500 An Introduction to Modern World History: 1500-Present (M) Cr.Hrs. 6

(Formerly 011.150) A study of the forces which created the modern world, including the rise of capitalism, colonial expansion from the 15th Century on, and the emergence of revolution and counter-revolution in the 20th Century. Students may not hold credit for both HIST 1500 (011.150) and any of: HIST 1370 (011.137) or HIST 1380 (011.138).

History Course Descriptions-2000 Level**HIST 2050 South Asia since 1947 (B) Cr.Hrs. 3**

(Formerly 011.205) A comparative history of India, Pakistan, Bangladesh and Sri Lanka since their achievement of independence in the late 1940s.

HIST 2080 The Byzantine Empire and the Slavic World (D) Cr.Hrs. 3

(Formerly 011.208) A study of the rise and fall of the "later Roman Empire" and of its relations with Russia, Bulgaria, Serbia and the west (i.e., in the crusades), 800-1261 A.D.

HIST 2130 Emergence of Modern South Asia: 1757-1947 (B) Cr.Hrs. 3

(Formerly 011.213) A survey of major developments in the modern history of the Indian subcontinent with particular reference to colonialism and nationalism and to the 20th Century emergence of India, Pakistan, and Bangladesh.

HIST 2140 Colonial Latin America (A) Cr.Hrs. 3

(Formerly 011.214) A survey of the major developments in Latin America from the Indigenous cultures and European Conquest to Independence in 1821.

HIST 2150 Independent Latin America (A) Cr.Hrs. 3

(Formerly 011.215) A survey of the major developments in Latin America from Independence in 1821 to the present.

HIST 2180 The History of Catholicism to 1540 (G) Cr.Hrs. 3

(Formerly 011.218) The history of Roman Catholicism from the first century to 1540. Emphasis will be placed on the external forces and internal developments that have shaped Catholicism.

HIST 2210 History of Britain, 1485 to the Present (E) Cr.Hrs. 6

(Formerly 011.221) A general survey of British history from 1485 to the present. Emphasis is placed on constitutional, political, and diplomatic themes; social, economic, and cultural factors are also discussed. Students may not hold credit for both HIST 2210 (011.221) and HIST 2211 (011.221).

HIST 2220 The Shaping of Modern Ireland, 1500-Present (E) Cr.Hrs. 6

The history of Ireland from 1500 to the end of the twentieth century focusing on changes in political, social, religious, economic and cultural relationships in shaping Modern Ireland.

HIST 2230 History of the United States from 1607 (A) Cr.Hrs. 6

(Formerly 011.223) A survey of the development of the American people and their institutions from Colonial times to the present day. Students may not hold credit for HIST 2230 (011.223) and any of: HIST 2750 or HIST 2760 (011.276) or HIST 2761 (011.276).

HIST 2240 History of Antisemitism and the Holocaust (E) Cr.Hrs. 6

(Formerly 011.224) A survey of the role of the Jewish minority in Christian Europe over the past two thousand years. First term will focus on the evolution of anti-Jewish ideas and policies. Second term will be a study of the Nazi German Holocaust and, in particular, the role of antisemitism as a causal factor therein. Students may not hold credit for both HIST 2240 (011.224) and the former JUD 2940 (055.294).

HIST 2250 Social History of the Jews: Antiquity to Present (G) Cr.Hrs. 6

A social, economic, and political history of the Jewish experience from the beginnings of the Jewish diaspora to the present, covering Jewish communities in medieval and modern Europe, the Middle East, and North America.

HIST 2280 Aboriginal History of Canada (C) Cr.Hrs. 6

(Formerly 011.228) A historical survey of Aboriginal peoples in Canada from early times to the present. The course will cover pre-contact peoples, responses to the European arrival, military alliances, the fur trade, the Métis, treaties, government policies and Aboriginal responses, and cultural resurgence and political organizing since 1945.

HIST 2282 Inventing Canada (C) Cr.Hrs. 3

This course examines the "invention" and "reinvention" of Canada both before and after Confederation. It examines the process of invention from a range of different perspectives: political, cultural, economic, and social.

HIST 2286 Modern Canada (C) Cr.Hrs. 3

This course addresses the history of Canada since the First World War with attention to social, political, economic, diplomatic and cultural topics such as: interwar and postwar life, struggles for equality, international and internal conflict, immigration, new technologies, nationalism, aboriginal affairs, the arts and Canada's role in the world. Students may not hold credit for HIST 2286 and any of: HIST 2971 (011.297) or HIST 3050 (011.305) or the former HIST 2970 (011.297).

HIST 2288 History of Social Movements in Canada (C) Cr.Hrs. 3

This course examines how Canadian democracy has historically been contested, debated, and challenged. It will focus on the post-Confederation history of social movements, citizen engagement, and state responses to dissent. The course will discuss grassroots movements of workers, the poor, women, indigenous peoples, and racial and ethnic minorities. Students may not hold credit for both HIST 2288 and the former HIST 2284.

HIST 2350 Europe 1789-1870 (E) Cr.Hrs. 3

The History of Europe during the French Revolution and the conservative reaction to it, focusing on political ideologies and national and international politics. Students may not hold credit for both HIST 2350 and HIST 2370 (011.237).

HIST 2360 Europe 1870 to the Present (E) Cr.Hrs. 3

The history of Europe since 1870, focusing on industrialisation, imperialism, political ideologies, and national and international politics. Students may not hold credit for both HIST 2360 and HIST 2370 (011.237).

HIST 2370 History of Europe since the French Revolution (E) Cr.Hrs. 6

(Formerly 011.237) The history of Europe since 1789, focusing on industrialization, political ideologies, and national and international politics. Students may not hold credit for HIST 2370 (011.237) and any of: HIST 2350 or HIST 2360.

HIST 2380 The Twentieth-Century World (G,M) Cr.Hrs. 6

(Formerly 011.238) The problems of the modern world, including the global impact of Western civilization, the clash of ideologies, war and peace, and modernization. Students may not hold credit for both HIST 2380 (011.238) and HIST 2381 (011.238).

HIST 2390 Early Modern Europe, 1450-1789 (D,E) Cr.Hrs. 6

This course is a survey of early modern European history. It will include such major topics as the Renaissance, the printing revolution, the Reformation, European interactions with the rest of the world and imperialism, the military revolution, the witch trials and the Enlightenment.

HIST 2400 History of Human Rights and Social Justice in the Modern World (G,M) Cr.Hrs. 3

Introductory course examining the emergence of the modern human rights era and social justice movements globally. Possible topics of study: human rights as global norm; non-Western conceptions of rights; workplace rights; indigenous rights; women's and gender rights.

HIST 2410 History of India (B) Cr.Hrs. 6

(Formerly 011.241) The aim of the course is to introduce students to Indian history. It provides a broad survey of major developments in Indian history from its origins in Indus valley to the present.

HIST 2420 The Medieval World (D) Cr.Hrs. 6

(Formerly 011.242) A survey of the society and culture of the Middle Ages, from 500-1500.

HIST 2490 History of Russia (E) Cr.Hrs. 6

(Formerly 011.249) A survey of Russian history from its origins to the present. Students may not hold credit for HIST 2490 (011.249) and any of: HIST 2660 (011.266) or HIST 2661 or HIST 2840 (011.284) or HIST 2841.

HIST 2500 History of Africa (R) Cr.Hrs. 6

A broad survey of African history from pre-colonial times through colonialism to the post-colonial present.

HIST 2502 The Modern Middle East: A Critical Survey (R) Cr.Hrs. 6

Survey of the major issues in the history of the modern Middle East. Emphasis on understanding today's social and political context in the Middle East through the lens of history. Students may not hold credit for both HIST 2502 and HIST 2900 with the topic "The Middle East from the Rise of Islam to the Nation State."

HIST 2520 A History of Germany since the Reformation (E) Cr.Hrs. 6

(Formerly 011.252) A survey of German history from the 16th Century to the present day.

HIST 2570 Nationalism in Modern Times (M) Cr.Hrs. 3

(Formerly 011.257) A study of the ideology and practices of national movements in the 19th and 20th Centuries. Attention will be given in particular to the development of the idea of the nation, and nation-building in the twentieth-century world.

HIST 2600 Introduction to Ukraine (E) Cr.Hrs. 3

A history of Ukraine and its people, beginning with medieval Kievan Rus' and ending in the 18th century with Ukraine's absorption into Russian and Austrian empires.

HIST 2610 Making of Modern Ukraine (E) Cr.Hrs. 3

A history of cultural, religious, economic and political forces, in the period 1800 to the present, that stimulated Ukraine's struggle for national independence from foreign domination.

HIST 2650 Modern China and Japan (B) Cr.Hrs. 6

(Formerly 011.266) An examination of the major developments in East Asian history from the mid-1800s to the present. Topics to be studied include Western imperialism in East Asia, the Chinese revolutions, Japanese and Chinese approaches to modernization, democracy movements in Japan and China, and how Sino-Japanese relations shape the history of region.

HIST 2654 History of the People's Republic of China, 1949-Present (B) Cr.Hrs. 3

This course examines the history of the People's Republic of China from its founding in 1949 through the present day. The course considers continuity and change between the Maoist and post-1976 periods as well as changing meanings of socialism and their impact on state power and social orders.

HIST 2660 History of the Soviet Union (E) Cr.Hrs. 3

(Formerly 011.266) Attention will be given in particular to the Russian Revolution, the nature of the Soviet political system, the major social and economic experiments, and the Soviet role in international politics. Students may not hold credit for HIST 2660 (011.266) and any of: HIST 2661 or HIST 2490 (011.249) or the former HIST 3471 (011.347).

HIST 2670 History of Capitalism (M) Cr.Hrs. 3

(Formerly 011.267) A study of the emergence and evolution of the capitalist system stressing its effects on human culture from the 15th to the 20th Centuries. Students may not hold credit for both HIST 2670 (011.267) and HIST 2671.

HIST 2680 A History of Socialism from the French Revolution to the Present (M) Cr.Hrs. 3

(Formerly 011.268) The history of socialism, both revolutionary and nonrevolutionary from the French Revolution to the present. The course covers the history of theory and political action, and of both European and non-European socialism.

HIST 2720 The World Since 1945 (G,M) Cr.Hrs. 3

(Formerly 011.272) A survey of the political, social, economic, and cultural history of the world since World War II.

HIST 2750 History of the United States from 1607 to 1877 (A) Cr.Hrs. 3

A survey of the development of the American people and their institutions from Colonial times to Reconstruction. Students may not hold credit for HIST 2750 and any of: HIST 2230 (011.223) or HIST 2041 (011.204).

HIST 2760 History of the United States from 1877 (A) Cr.Hrs. 3

(Formerly 011.276) A survey of the development of the American people from Reconstruction to the present. Students may not hold credit for HIST 2760 (011.276) and any of: HIST 2761 (011.276) or HIST 2230 (011.223).

HIST 2820 An Introduction to Historical Method (G) Cr.Hrs. 6

(Formerly 011.282) This course is intended mainly for prospective history and social science teachers but also will be useful for History Major and Honours students. It combines a survey of approaches to the writing of history, past and present, and, through the presentation of a research paper, an introduction to the use and assessment of historical evidence. Students may not hold credit for both HIST 2820 (011.282) and the former HIST 2821 (011.282).

HIST 2840 A History of Russia to 1917 (E) Cr.Hrs. 3

(Formerly 011.284) A survey of the historical development of Russia from its beginnings to the end of the Imperial period. Students may not hold credit for HIST 2840 (011.284) and any of: HIST 2841 or HIST 2490 (011.249) or the former HIST 3471 (011.347).

HIST 2900 Topics in Social History (G) Cr.Hrs. 6

(Formerly 011.290) The content of this course will vary from year to year. A description of the course is available in advance at the History Department Office. As the course content will vary from year to year, students may take this course more than once for credit.

HIST 2930 The History of the British Isles, 412-1485 (D) Cr.Hrs. 6

(Formerly 011.293) A survey of the political, social, religious and cultural history of the British Isles (with special emphasis on England) from the end of the Roman occupation to the conclusion of the Wars of the Roses.

HIST 2990 The History of Catholicism since 1540 (G) Cr.Hrs. 3

(Formerly 011.299) The history of Roman Catholicism from about 1540 to the present. Emphasis will be placed on Catholic responses to the modern world and to movements of theological and institutional reform. Students may not hold credit for both HIST 2990 (011.299) and HIST 2991.

History Course Descriptions-3000 Level**HIST 3020 South America since 1945 (A) Cr.Hrs. 3**

(Formerly 011.302) Major developments since 1945 on the continent of South America, with special emphasis on major political movements, Marxism and populism, the impact of industrialization, and South America's international role. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3040 Mexico, Central America, and Cuba since 1945 (A) Cr.Hrs. 3

(Formerly 011.304) Major developments since 1945, with special emphasis on changes in the Mexican revolutionary system, the crisis in Central America, and the Cuban Revolution. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3050 Canada since 1945 (C) Cr.Hrs. 6

(Formerly 011.305) A problems approach to recent Canadian history involving lectures and seminars. Emphasis will be placed on political, social and economic issues of national interest during the last 40 years. Students may not hold credit for both HIST 3050 (011.305) and HIST 2286. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3052 Canada since the 1960s (C) Cr.Hrs. 3

Examines fundamental topics and themes in Canada's politics, economy and society from the 1960s to the present, including: Quebec nationalism after 1960; western regionalism and the reassertion of provincial rights since the 1970s; the women's movement and first nations' activism since the 1960s; constitutional reform, patriation and the Charter of Rights and Freedoms in the 1980s and 1990s; free trade and globalization since the 1980s. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3054 Canada and the United States (C) Cr.Hrs. 3

This course will undertake a detailed and comprehensive study of Canada's relationship with its neighbour from the eighteenth century to the present. Students may not hold credit for both HIST 3054 and HIST 3220 (011.322). Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3062 German and German-Jewish History, 1618 to the Present (E) Cr.Hrs. 6

The history of Germany from 1618 to the present with a focus on the experience of German Jewry. Students may not hold credit for HIST 3062 and any of: HIST 3064 or HIST 3066 or the former HIST 3060 (011.306). Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3064 German and German-Jewish History, 1618-1900 (E) Cr.Hrs. 3
The history of Germany from 1618 to 1900 with a focus on the experience of German Jewry. Students may not hold credit for HIST 3064 and any of: HIST 3062 or the former HIST 3060 (011.306). Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3066 German and German-Jewish History, 1900 to the Present (E) Cr.Hrs. 3

The history of Germany from 1900 to the present with a focus on the experience of German Jewry. Students may not hold credit for both HIST 3066 and HIST 3062. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3070 History of the United States from 1877 to 1939 (A) Cr.Hrs. 6
(Formerly 011.307) This course will trace the political, social, economic, and cultural history of the United States from the period of Reconstruction to the start of the Second World War. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3080 History of American Consumer Culture (A) Cr.Hrs. 3
(Formerly 011.308) This course will trace the development of American consumer society from the colonial era to the present. Topics addressed include the histories of: branding, mass distribution, department stores, advertising, mass-market magazines, consumer organizing, and consumer protest. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3090 Studies in Asian History (B) Cr.Hrs. 3
(Formerly 011.309) The content of this course will vary. It is designed to provide in-depth examination of specialized themes or areas in modern Asian history. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

HIST 3110 Topics in History 1 (G) Cr.Hrs. 3
(Formerly 011.311) An opportunity for the intensive study of selected topics or themes in history. The content varies, but may include work in social and cultural history or on specialized subjects. Consult the History Department and the Registration Guide for particulars. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

HIST 3136 History of Medieval Italy, 568-1300 (D) Cr.Hrs. 3
An examination of the political, social, economic and cultural history of the Italian peninsula from the arrival of the Lombards to the development of city republics. Students may not hold credit for both HIST 3136 and HIST 3140. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3138 History of Medieval Italy, 1300-1500 (D) Cr.Hrs. 3
An examination of the political, social, economic and cultural history of the Italian peninsula during the later Middle Ages. Students may not hold credit for both HIST 3138 and HIST 3140. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3140 Medieval Italy (D) Cr.Hrs. 6
A study of topics in the history of the Italian peninsula between the 6th and 15th centuries, with emphasis on urban life, gender, and religious culture. Students may not hold credit for HIST 3140 and any of: HIST 3136 or HIST 3138. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3210 The History of Popular Radicalism in the Twentieth Century (M) Cr.Hrs. 6
(Formerly 011.321) Studies in the history of popular radicalism since the Bolshevik Revolution. Topics will include the development of communist and social democratic movements in the West, socialist revolutions in the underdeveloped world, the nature of communist workers' states and the development of radical theory. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3212 Global Sweatshops, Global Struggles (M) Cr.Hrs. 3
This course explores the past and present of sweated work in various industries in the Global North and South. We explore circumstances that support sweatshops, including off-shoring and the new international division of labour, migrant, child and female labour forces; global supply chains and the role of retailers and contractors. We also compare and evaluate strategies to eliminate sweatshops, include NGO activities, government regulations, consumer boycotts and the international labour, student and social justice movements. Also offered as Labour Studies LABR 3220. Students may not hold credit for both HIST 3212 and LABR 3220. Prerequisite: [a grade of "C" or better in six credit hours of History or written consent of the department head] or [a grade of "C" or better in three credit hours of 1000 level Labour Studies or written consent of the Labour Studies coordinator].

HIST 3220 The History of Canadian-American Relations (A,C) Cr.Hrs. 6
(Formerly 011.322) A detailed and comprehensive study of the diplomatic relations between Canada and the United States from 1783 to the present. Students may not hold credit for both HIST 3220 (011.322) and HIST 3054. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3250 Canada and the World, 1867 to the Present (C) Cr.Hrs. 6
(Formerly 011.325) A study of selected aspects of Canada's external relations since Confederation. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3260 Commerce, Rights and Empire in European Thought, 500-2000 (M) Cr.Hrs. 3
This course will scrutinize the intersection of commerce and governance in Europe from c.500 to the present, paying particular attention to the way that debates about commerce, war and peace have generated notions of human rights over the past three centuries. We will explore whether and how debates about the proper way to govern trade played important roles not only in the creation of the modern categories of the "state" and the "economy," but also in understandings of the person as a rational actor of politics with substantial rights. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3290 The United States since 1939 (A) Cr.Hrs. 6
(Formerly 011.329) A survey of political, social, economic, and cultural history of the United States since the beginning of the Second World War. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3340 Studies in the History of Digital Culture (G) Cr.Hrs. 3
This course will examine the social-cultural meanings of computer and communications technologies. The course will predominantly treat the twentieth and twenty-first centuries, examining the evolution of technologies from the 1930s to today. Focused on the global west, the course will also consider the worldwide implications and reach of digital cultures and technologies. Students may not hold credit for both HIST 3340 and the former HIST 3120 with the topic "History of Digital Culture." Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3430 Britain, 1714-1815 (E) Cr.Hrs. 6

(Formerly 011.343) An examination of the political structure, constitutional developments, colonial problems, and social and religious changes, the impact of the industrial revolution, and the reaction to the French Revolution in Britain during this period. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3442 Race, Ethnicity, Immigration, and Nation in Canadian History (C) Cr.Hrs. 3

This course examines topics in the history of immigration, colonization, race, and ethnicity in Canada. Beginning with the incursions of European immigrants onto First Nations territories, the course investigates attitudes and policies concerning immigration, the interaction of colonization and immigration, discourses of race and ethnicity, and race and ethnic relations within Canadian society. Students may not hold credit for both HIST 3442 and HIST 3780 (011.378) with the topic "Race and Immigration in Canadian History." Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3480 The Margins of the Middle Ages (D) Cr.Hrs. 3

(Formerly 011.348) A study of groups and movements situated on the periphery of European society between 1100 and 1500. Prerequisite: [a grade of "C" or better in HIST 2420 (011.242)] or written consent of department head.

HIST 3550 Popular Culture, Crime and Punishment in England, 1550-1850 (E) Cr.Hrs. 3

(Formerly 011.355) A history of crime and the institutions for its control and punishment in England from the Tudor period to the turn of the nineteenth century. We will trace the connections between crime and larger processes such as war, the economy and urbanization. Topics will include the changing patterns of crime, the role of gender in the application of law, the reform of the criminal law and the emergence of imprisonment. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3572 The History of Women, Gender, and Sexuality in Canada (C) Cr.Hrs. 6

This course examines the history of women, gender, and sexuality in Canada's past and how gender and sexuality have structured the histories of Indigenous people, English and French colonization, nation-building, immigration and urbanization, politics, war, and protest. Students may not hold credit for both HIST 3572 and the former HIST 3570 (011.357). Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3574 Disease and Society in the Modern World (G,M) Cr.Hrs. 3

This course will emphasize the relationship between disease and imperialism, capitalist development, and war; and examine social and state responses. The course will explore connections between the biological and the cultural aspects of infectious disease experiences. Students may not hold credit for both HIST 3574 and HIST 3110 (011.311) with the topics "History of Disease" and/or "History of Health and Disease." Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3580 Topics in Recent World History 1 (M) Cr.Hrs. 3

(Formerly 011.358) An in-depth treatment of selected topics in world history since 1945. The content of the course will vary from year to year, and a precise description is available in advance from the History department office. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

HIST 3590 Topics in Recent World History 2 (M) Cr.Hrs. 3

(Formerly 011.359) An in-depth treatment of selected topics in world history since 1945. The content of the course will vary from year to year, and a precise description is available in advance from the History department office. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

HIST 3680 Europe, 1870-1945 (E) Cr.Hrs. 6

(Formerly 011.368) Europe at the zenith of its power. The course examines the dominant forces and personalities of the period between Bismarck and Hitler. It emphasizes nationalism and minorities questions; the origins and events of the two world wars; and the domestic concerns of the major European states. Students may not hold credit for HIST 3680 (011.368) and any of: HIST 3682 or HIST 3684. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3682 Europe 1870-1918 (E) Cr.Hrs. 3

Europe at the zenith of its power. The course examines the dominant forces and personalities of the period from Bismarck to the end of the First World War. It emphasizes the domestic and international concerns of the major European powers, the industrial revolution, and the partition of Africa, as well as the causes and events of the First World War. Students may not hold credit for both HIST 3682 and HIST 3680 (011.368). Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3684 Europe 1918-1945 (E) Cr.Hrs. 3

Europe in decline. The course examines the peace settlement of 1919, and the balance of power generally. It also considers fascism, the Russian Revolution, the rise of Nazism, the Spanish Civil War in addition to the origins and events of the Second World War. Students may not hold credit for both HIST 3684 and HIST 3680 (011.368). Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3690 History of Northern Canada (C) Cr.Hrs. 6

(Formerly 011.369) A regional history of northern Canada with particular emphasis on native people. Themes will include culture contact, economic exploitation of northern territories, and the political relationship of metropolis and hinterland in Canada. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3700 History of Working People and Labour Movements 1700 to the Present (G) Cr.Hrs. 6

(Formerly 011.370) A survey of working class history with emphasis upon the varieties of labour movements and trade unions. The course will refer to the social and political experience of working people in Great Britain, Europe and the United States and will devote one term to Canadian topics. Also offered as Labour Studies LABR 3700. May not be held with LABR 3700 (153.370). Prerequisite: [a grade of "C" or better in six credit hours of history or labour studies] or written consent of department head.

HIST 3730 A History of Western Canada (C) Cr.Hrs. 6

(Formerly 011.373) A regional history emphasizing the development of a Western perspective upon the nation. Topics include the fur trade and Red River Settlement, transition to Canadian institutions, the wheat economy, immigration, labour and political movements, cultural changes. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3740 Topics in Latin American History (A) Cr.Hrs. 3

(Formerly 011.374) The contents of this course will be announced each year. Consult the History Department. It is designed to provide in-depth studies of specialized subjects and themes in modern Latin American history. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

HIST 3750 Indigenous Peoples in Modern Latin America (A) Cr.Hrs. 3

A study of indigenous peoples in modern Latin America. Topics to be discussed will include the construction of racial hierarchies and exclusionary nation-states, indigenous engagements with leftist politics and revolution as well as struggles for political autonomy and cultural rights. Students may not hold credit for both HIST 3750 and HIST 3740 with the topic "Indigenous Peoples and the Nation-State in Modern Latin America." Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3760 Problems in American History 1 (A) Cr.Hrs. 3

(Formerly 011.376) The subject matter of this course will be announced each year. Consult the History department. Students may not hold credit for both HIST 3760 (011.376) and HIST 3761 (011.376). Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

HIST 3780 Studies in Canadian History 1 (C) Cr.Hrs. 3

(Formerly 011.378) The content of this course will vary. It is designed to provide in-depth studies of specialized topics and themes in Canadian history. A precise description of the course is available in advance at the History department office. Students may not hold credit for both HIST 3780 (011.378) and HIST 3781 (011.378). Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

HIST 3800 History of Winnipeg from 1870-2000 (C) Cr.Hrs. 3

A study of the social history of the city of Winnipeg from its origins through to the Aboriginal Justice Inquiry (1991). Students may not hold credit for both HIST 3800 and the former HIST 3790 (011.379) with the topic "History of Winnipeg." Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3880 Europe in Transition: 1348-1648 (E) Cr.Hrs. 6

(Formerly 011.388) A study of the transition from the medieval to the modern world. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3910 The Ukrainians in Canada (C) Cr.Hrs. 3

(Formerly 011.391) A history of the Ukrainian community in Canada. Topics to be discussed will include immigration, social and political organizations, churches, cultural assimilation, Ukrainian contributions to Canada, and relations with Ukraine. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3980 Nationalism on the Indian Sub-Continent in the Twentieth-Century (B) Cr.Hrs. 3

(Formerly 011.398) A study of the emergence and consolidation of the nations of India, Pakistan and Bangladesh, 1909 to the present. Prerequisite: [a grade of "C" or better in six credit hours of history] or written consent of department head.

HIST 3990 Seminar in Selected History Topics (G) Cr.Hrs. 6

This course will provide a systematic introduction to advanced research seminars, paying particular attention to the development of: oral skills and public presentation of ideas and research; focused historiographical

discussion and analysis; and advanced historical research and writing skills. This course provides the skills and preparation for Year IV of the History Honours program. Prerequisite: [a grade of "C" or better in six credit hours of History] and written consent of department head.

History Course Descriptions-4000 Level

HIST 4000 Topics in History (G) Cr.Hrs. 3

The content of this course will vary. It is designed to provide students with specialized topics and themes in History. A description of the course is available in advance at the History Department Office. Prerequisite: written consent of department head. As the course will vary from year to year, students may take this course more than once for credit.

HIST 4010 Imperialism, Decolonization and Neo-Colonialism, 1700 to the Present (G,M) Cr.Hrs. 6

(Formerly 011.401) Studies in the theories and practise of imperialism from an historical perspective. Prerequisite: written consent of department head.

HIST 4040 The Later Middle Ages (D) Cr.Hrs. 6

(Formerly 011.404) Selected topics in economics, social, cultural, art, and religious history of the later medieval world. Prerequisite: written consent of department head.

HIST 4050 England in the Long Eighteenth Century (E) Cr.Hrs. 6

(Formerly 011.405) Selected themes in the history of England's long eighteenth century, from 1660-1840. Specific topics will vary from year to year, but will generally include the transformation of political culture, the consequences of war, the question of national identities, the emergence of commercial society and the changes in social structure. Prerequisite: written consent of the department head.

HIST 4060 Gender History in Canada (C) Cr.Hrs. 6

(Formerly 011.406) Gender history explores the roles, images, and experiences of masculinity and femininity in the past. This course will familiarize students with the changing theoretical and historiographical terrain of gender history. It will draw on the international literature but focus on the history of gender in Canada, examining how historians analyse masculinity, femininity, the family, sexuality, politics, race/ethnicity, moral regulation, class, nation, and colonialism. Prerequisite: written consent of department head.

HIST 4070 Issues in Modern Asian History 1: Selected Topics (M,B) Cr.Hrs. 3

(Formerly 011.407) The content of this course will vary. Emphasis will be on analysis of important issues and recent developments in the history and historiography of modern Asia. Consult the History Department for particulars. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

HIST 4100 Studies in American History since 1877 (A) Cr.Hrs. 6

(Formerly 011.410) An examination of selected topics in American history from Reconstruction to the present. Particular topics will be announced each year. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

HIST 4110 Selected Topics in British History (E) Cr.Hrs. 6

(Formerly 011.411) A seminar course whose content will vary. A description of the course is available in advance at the History department office. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

HIST 4120 History of Aboriginal Rights (C) Cr.Hrs. 6

(Formerly 011.412) A study of Aboriginal rights from early contact to the present with a particular emphasis on treaties, the courts, and Aboriginal efforts to enforce specific forms of rights. Prerequisite: written consent of department head.

HIST 4150 The Social History of the Latin American State (A) Cr.Hrs. 6

Readings on the history of Latin America since colonial times, focused on the dynamic relationship between different social groups and the state. Based on an interdisciplinary theoretical framework, this historical overview will cover different geographical areas, issues, and social factors. Prerequisite: written consent of department head.

HIST 4280 Topics in the Cultural History of Canada (C) Cr.Hrs. 6

(Formerly 011.428) Studies in Canadian cultural, communications, and intellectual history. Topics will vary from year to year but a description is available in advance at the History department office. Prerequisite: written consent of department head.

HIST 4300 Problems in Modern Russian and Soviet History (E) Cr.Hrs. 6

(Formerly 011.430) A study of selective historical problems from 1861 to the present. The focus will shift from year to year. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

HIST 4310 Topics in Social History (G) Cr.Hrs. 6

(Formerly 011.431) The content of this course will vary. It is designed to provide students with specialized topics and themes in Social history. A description of the course is available in advance at the History department office. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

HIST 4320 Studies in World History since 1945 (G,M) Cr.Hrs. 6

(Formerly 011.432) A comparative approach to recent world history, utilizing area and thematic studies. Prerequisite: written consent of department head.

HIST 4340 Introduction to Archival Science (G) Cr.Hrs. 6

(Formerly 011.434) A thorough introduction to archival theory and practise with special emphasis on the history and development of archives and their place in modern society, terminology, collection development, appraisal arrangement, access, conservation, research aids and related archival principles. Prerequisite: written consent of department head.

HIST 4400 Historical Method and Historiography (G) Cr.Hrs. 6

(Formerly 011.440) A study of historical methods and historiography. Prerequisite: written consent of department head.

HIST 4500 Jewish and European History and Historiography (E) Cr.Hrs. 6

This seminar examines issues relating to Jewish history and historiography in the context of European history and historiography. Prerequisite: written consent of department head.

HIST 4580 The Great Historians (G) Cr.Hrs. 6

(Formerly 011.458) The readings of a select number of modern and classical historians. Preparation of a research paper on a particular historiographic problem. Prerequisite: written consent of department head.

HIST 4660 History of Health and Disease (G) Cr.Hrs. 6

Introduction to some of the principal issues and approaches in the history of health and disease. It is not meant to be a strictly chronological survey. Topics and themes may include the development of nursing and medical professions; transformation of the hospital; mental health; alternative therapies; colonization, infectious disease and aboriginal health; and health and the state. Prerequisite: written consent of department head.

HIST 4680 Social History of Health and Disease in Modern Canada (C) Cr.Hrs. 6

This course explores the history of health and health care in Canada, with a focus on the late 19th and 20th centuries. Topics will include colonization, infectious disease, and Aboriginal health; the evolution of medical and nursing professions; the emergence of the modern hospital; mental health, psychiatry and the asylum; cancer; alternative therapies; childbirth; health and old age; and health and the state. Analytical categories of gender, race, ethnicity, class, and sexuality will run throughout the material. Prerequisite: written consent of department head.

HIST 4870 Contemporary Latin America (A) Cr.Hrs. 6

(Formerly 011.487) A study of selected historical developments in Latin America since the Cuban Revolution, with emphasis on most recent themes. Prerequisite: written consent of department head.

HIST 4890 Canadian Social History (C) Cr.Hrs. 6

(Formerly 011.489) A study of the evolution of Canadian society with intensive analysis of topics such as the pioneer community, immigration, ethnic history, urban development. Prerequisite: written consent of department head.

HIST 4960 Special Studies in European History (E) Cr.Hrs. 6

(Formerly 011.496) A seminar course whose content will vary from year to year. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

HIST 4990 Selected Topics Cr.Hrs. 6

(Formerly 011.499) A program of independent reading and/or research on selected topics, undertaken and arranged by a student in consultation with prospective instructor, upon the written approval of the department head. As the course content will vary from year to year, students may take this course more than once for credit.

8.15 Department of Icelandic

Head: (Acting Head) Peter Buchan

Campus Address & General Office: 357 University College

Telephone: 204 474 8487

Email Address: um_icelandic@umanitoba.ca

Website: umanitoba.ca/icelandic

8.15.1 Program Information

The department offers a study of a cultural heritage that crosses centuries, oceans and continents, which includes courses in Icelandic language and literature and the poetics of immigration. The study of Icelandic prepares students for opportunities in research, teaching, translation, writing, interpretation and publishing.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in either ICEL 1200 or ICEL 2200. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in ICEL 1400 and ICEL 1410, or ICEL 1200 or ICEL 2200.

Honours Program

The Honours program is not currently offered.

For information on reciprocal recognition of credit for Scandinavian/ Icelandic courses given by the University of Alberta and the University of Manitoba, see the department.

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR (OPTION 1) TOTAL: 30 CREDIT HOURS			
ICEL 1200 ¹	ICEL 2200	18 credit hours in Icelandic courses numbered at the 2000, 3000, or 4000 level	
GENERAL MAJOR (OPTION 2) TOTAL: 30 CREDIT HOURS			
ICEL 2200	24 credit hours in Icelandic courses numbered at the 2000, 3000, or 4000 level		
MINOR (CONCENTRATION) (OPTION 1) TOTAL: 18 CREDIT HOURS			
ICEL 1200 ¹	ICEL 2200	6 credit hours in Icelandic	
MINOR (CONCENTRATION) (OPTION 2) TOTAL: 18 CREDIT HOURS			
ICEL 1400 and ICEL 1410, or ICEL 1200	12 credit hours in Icelandic		
SINGLE HONOURS²			
ICEL 2200	ICEL 2220, ICEL 2420, ICEL 2430	ICEL 2310, ICEL 3400	• ICEL 4420, ICEL 4440, ICEL 4460 • 3 credit hours in Icelandic courses numbered at the 3000 level
	<ul style="list-style-type: none"> • 21 credit hours of courses selected from: Classics, English, French, German, History, Philosophy or Russian, to be approved by the department head • 24 credit hours of ancillary options³ • 12 credit hours of free options⁴ 		
DOUBLE HONOURS²			
ICEL 2200	ICEL 2220, ICEL 2420, ICEL 2430	ICEL 2310, ICEL 3400	• ICEL 4420, ICEL 4440, ICEL 4460 • 3 credit hours in Icelandic courses numbered at the 3000 level
	<ul style="list-style-type: none"> • 3 credit hours of courses selected from: Classics, English, French, German, History, Philosophy or Russian, to be approved by the department head • 6 credit hours of ancillary options³ • 12 credit hours of free options⁴ • At least 36 credit hours in second Honours field 		

NOTES:

¹ Students with superior language ability will not be required to complete ICE 1200 upon successful completion of a written test administered by the department.

² Honours courses: ICEL 2310, ICEL 2420, ICEL 2430, ICEL 3400 and all 4000 level courses.

³ Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Icelandic courses).

⁴ Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Icelandic courses).

8.15.3 Icelandic Course Descriptions

Icelandic Course Descriptions-1000 Level

ICEL 1200 Introduction to Icelandic Cr.Hrs. 6

The course is intended for students with little or no previous knowledge of Icelandic. Emphasis will be placed on reading comprehension and conversation skills, and students will also learn the basic grammatical structure of Icelandic and how to write short compositions. Pronunciation is developed in weekly language laboratory exercises. Students may not hold credit for both ICEL 1200 and the former ICEL 1240 (012.124).

ICEL 1210 Conversational Icelandic Cr.Hrs. 3

This course is offered as part of the Summer Session course offerings. Intensive study of conversational Icelandic during a field trip to Iceland. Students will be trained in groups in a classroom setting before they try their language skills in authentic situations. The course is designed for beginners as well as intermediate students. Regular attendance is obligatory. Taught in English. Open to all students.

ICEL 1300 Introduction to Swedish Cr.Hrs. 3

The course is intended for beginners. Emphasis will be placed on conversation skills and reading comprehension, and students will also learn the basic grammatical structures of the language and how to write short compositions. Pronunciation is developed in weekly language laboratory exercises. Open to all students.

ICEL 1400 Introduction to Contemporary Culture in Iceland Cr.Hrs. 3

The aim of this course is to study and explore a selection of literature, music, and visual art, and cultural critique. Students will also get an opportunity to study and explore both global and local Icelandic cultural characteristics and the fusion of cultural influences in contemporary Iceland. Open to all students. Taught in English. Students may not hold credit for both ICEL 1400 and the former ICEL 1220 (012.122).

ICEL 1410 Introduction to Culture in Medieval Iceland Cr.Hrs. 3

The aim of this course is to study a selection of sagas, history fragments and mythological sources. Students will also get an opportunity to explore the way in which world-renowned modern poets and writers have been drawn to, and seriously seduced by, the culture of medieval Iceland. Open to all students. Taught in English. Students may not hold credit for both ICEL 1410 and the former ICEL 1220 (012.122).

Icelandic Course Descriptions-2000 Level

ICEL 2200 Intermediate Icelandic 1 Cr.Hrs. 6

Emphasis on expanding the vocabulary. Students are trained to read texts with more complex grammatical structures by studying fictional as well as non-fictional texts. Conducted in Icelandic. Students may not hold credit for both ICEL 2200 and the former ICEL 2240 (012.224). Prerequisite: [a grade of "C" or better in ICEL 1200 or the former ICEL 1240 (012.124)] or written consent of instructor.

ICEL 2220 Modern Icelandic Literature in Translation Cr.Hrs. 3

(Formerly 012.222) A study of modern Icelandic literature through an analysis of a selection of works by Icelandic writers in English translation from around 1900 until the present.

ICEL 2230 Contemporary Icelandic-Canadian Literature Cr.Hrs. 3

(Formerly 012.223) An examination of contemporary Icelandic-Canadian literature in English, its individual characteristics and place within the broader field of Canadian literature.

ICEL 2310 An Introduction to Old Icelandic Language and Literature Cr. Hrs. 6

(Formerly 012.231) Text: Sigrid Valfell and James E. Cathey. Old Icelandic: An Introductory Course (Oxford, 1981). Prerequisite: written consent of department head.

ICEL 2400 Icelandic Folktales in a European Context Cr.Hrs. 3

Reading of Icelandic legends and fairy tales and how they compare with stories from Northern and Central Europe. For the analysis, students will be introduced to central concepts and approaches to the study of folktales. Open to all students. Taught in English. Students may not hold credit for both ICEL 2400 and the former ICEL 2250 (012.225).

ICEL 2410 Special Topics Cr.Hrs. 3

Topics dealing with Icelandic literature, culture or language. Course content will vary from year to year depending on interest and needs of students and staff. As the course content will vary from year to year, students may take this course more than once for credit.

ICEL 2420 Poetics of Immigration in Icelandic-Canadian Literature Cr. Hrs. 3

A study of Icelandic-Canadian literature, focusing on the poetics of immigration in the writings of Icelandic settlers and the first generation of Icelandic-Canadians. As a special assignment, students will study the voice of the poet, philosopher, and social prophet Stephan G. Stephansson, and the universal references of his poetics. Taught in English. Open to all students. Students may not hold credit for both ICEL 2420 and the former ICEL 2300 (012.230).

ICEL 2430 Translation of Cultures in Icelandic-Canadian Literature Cr. Hrs. 3

A study of Icelandic-Canadian literature, focusing on the translation of cultures in the writings of modern and contemporary Icelandic-Canadian poets and writers. Students will read a selection of prose and poetry. They will also study ideas on the indispensable role of the translation of cultures in the context of world literature. Open to all students. Taught in English. Students may not hold credit for both ICEL 2430 and the former ICEL 2300 (012.230).

Icelandic Course Descriptions-3000 Level

ICEL 3200 Intermediate Icelandic 2 Cr.Hrs. 6

Reading of selected fictional and non-fictional texts. Translation exercises and composition followed by relevant review of grammar. A special focus is placed on syntax, word formation, and the use of idiomatic phrases. Conducted in Icelandic. Students may not hold credit for both ICEL 3200 and the former ICEL 3230 (012.323). Prerequisite: [a grade of "C" or better in ICEL 2200 or the former ICEL 2240 (012.224)] or written consent of instructor. Prerequisite or corequisite: [LING 1200 (126.120) or LING 1440 (126.144) or the former ENGL 2470 (004.247)] or written consent of instructor.

ICEL 3210 Romanticism in Icelandic Literature Cr.Hrs. 3

The aim of this course is to study the concept of Romanticism in Icelandic literature and the key players in the Romantic movement in nineteenth century Iceland. A selection of poems, prose texts, and fragments will be read carefully, in particular the writings of Jónas Hallgrímsson. Taught in English. Prerequisite: [a grade of "C" or better in a minimum of 30 credit hours of university level coursework] or written consent of department head

ICEL 3320 Old Norse Mythology Cr.Hrs. 3

(Formerly 012.332) The myths and cults of the pre-Christian gods in the Nordic countries studied on the basis of the original sources (in English translation) and related to pre-Christian Nordic society. Open to all students; taught in English.

ICEL 3330 Icelandic Sagas in Translation Cr.Hrs. 3

(Formerly 012.333) A study of the Icelandic sagas based on the original sources in English translation. Open to all students; taught in English. ICEL 3320 (012.332) is recommended but not required.

ICEL 3400 Old Icelandic Literature Cr.Hrs. 6

(Formerly 012.340) A study of selected Icelandic sagas and Eddic poems. Prerequisite: written consent of department head.

Icelandic Course Descriptions-4000 Level

ICEL 4420 History of the Icelandic Language Cr.Hrs. 3

(Formerly 012.442) A study of the development of the Icelandic language from the twelfth century to the present day. Prerequisite: written consent of department head.

ICEL 4440 The Icelanders in Canada Cr.Hrs. 3

(Formerly 012.444) A history of the emigration of Icelanders to North America and the Icelandic communities in Canada, their social and political organizations, churches, and cultural assimilation. Prerequisite: written consent of department head.

ICEL 4460 Special Topics Cr.Hrs. 3

(Formerly 012.446) A seminar course whose content will vary from year to year. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

8.16 Interdisciplinary Courses

The Faculty of Arts offers a number of interdisciplinary courses designed by a course committee consisting of members of a number of departments. Interdisciplinary courses are free options, and a student may register for more than one.

Cross-disciplinary programs are available in:

Asian Studies	See Section 8.2
Canadian Studies	See Section 8.3
Catholic Studies	See Section 8.4
Central and East European Studies	See Section 8.5
The Changing Workplace	See Section 8.6
Global Political Economy	See Section 8.13
History of Art	See Section 9.1
Labour Studies	See Section 8.18
Latin American Studies	See Section 8.19
Medieval and Early Modern Studies	See Section 8.21
Ukrainian Canadian Heritage Studies	See Section 8.28
Women's and Gender Studies	See Section 8.29

8.16.1 Interdisciplinary-Others Course Descriptions

ARTS 1110 Introduction to University Cr.Hrs. 3

(Formerly 099.111) A seminar course designed to help students make the transition to university by imparting the knowledge, skills, and attitudes requisite for success in university study. Each section limited to 30 students. Open only to students who have completed fewer than 60 credit hours of course work. Students may not hold credit for both ARTS 1110 (099.111) and ARTS 1111 (099.111).

ARTS 1160 Leadership: An Interdisciplinary Approach Cr.Hrs. 3

This course provides an introduction to the key issues and concerns of leadership and leadership studies, focusing on the central question of "what is leadership." Students will examine the philosophical and historical foundations of leadership theory and practice, along with the more contemporary (and often more theoretical) reflections on both leadership practices and the varied disciplines that study them. This course will satisfy the Faculty of Arts Social Science requirement. Students may not hold credit for both ARTS 1160 and LEAD 2010.

8.17 Judaic Studies

Program Coordinator: Haskel Greenfield
General Office: 328 Fletcher Argue
Telephone: 204 474 6691
E-mail: Judaic_Studies@umanitoba.ca
Website: umanitoba.ca/judaic_studies

8.17.1 Program Information

The Judaic Studies Program promotes the study of Jewish civilization, of Jewish religious expressions and traditions, and of Jewish cultural, social, linguistic, and political formations and movements in all their variety. It supports teaching and research on Jewish life and Judaism from the Biblical period to the twenty-first century, in all parts of the world where Jews have lived. Judaic Studies approaches these subjects from all disciplinary angles and scholarly perspectives, and equally welcomes Jewish and non-Jewish scholars and students. The program includes the official non-English languages of Israel (Hebrew and Arabic).

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

Effective the 1989-1990 Regular Session, the General Major and Single Advanced Major in Judaic Studies will not be offered until further notice.

Minor (Concentration) Program

A) Judaic Studies

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in the first six credit hours of Judaic Studies and/or List A courses.

B) Yiddish

Effective with the 1989-1990 Regular Session, the Minor (Concentration) in Yiddish will not be offered until further notice.

8.17.2 Judaic Studies

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR JUDAIC STUDIES [NOT CURRENTLY OFFERED] TOTAL: 30 CREDIT HOURS			
• 6 credit hours in Language and Literature (Hebrew ¹ , Yiddish, or Arabic ²)			
• 6 credit hours in Judaic Civilization			
• 18 credit hours in Judaic Studies			
SINGLE ADVANCED MAJOR JUDAIC STUDIES [NOT CURRENTLY OFFERED] TOTAL: 48 CREDIT HOURS			
• 12 credit hours in Language and Literature (Hebrew ¹ , Yiddish, or Arabic ²)			
• 12 credit hours in Judaic Civilization			
• 24 credit hours in Judaic Studies			
MINOR (CONCENTRATION) JUDAIC STUDIES TOTAL: 18 CREDIT HOURS			
18 credit hours in Judaic Studies and/or List A			
MINOR (CONCENTRATION) YIDDISH [NOT CURRENTLY OFFERED] TOTAL: 18 CREDIT HOURS			
YDSH 1220	YDSH 2320	6 credit hours in Hebrew Language and Literature or Judaic Civilization	

NOTES:

¹ A language-placement interview is required before registration. Normally, elementary Hebrew day school graduates begin with HEB 1260 while secondary Hebrew day school graduates begin with language courses numbered at the 2000 or 3000 level.

² A language-placement interview is required before registration.

List A	Courses Acceptable for Judaic Studies Credit	
With written consent of the program coordinator courses not on this list may be taken for credit if they include sufficient Judaic Studies content.		
Course No.	Credit Hours	
Faculty of Arts		
Classics		
CLAS 3260	Hellenistic Civilization: History and Archaeology	3
GRK 2810	Prose Writings of the Hellenistic and Greco-Roman Periods	3
German and Slavic Studies		
GRMN 3260	Representations of the Holocaust (B)	3
GRMN 3262	Representations of the Holocaust in English Translation (C)	3
UKRN 2820	Holodomor and Holocaust in Ukrainian Literature and Culture	3
History		
HIST 2240	History of Antisemitism and the Holocaust (E)	6
HIST 2250	Social History of the Jews: Antiquity to Present (G)	6
HIST 3062	German and German-Jewish History, 1618 to the Present (E)	6
HIST 3064	German and German-Jewish History, 1618-1900 (E)	3
HIST 3066	German and German-Jewish History, 1900 to the Present (E)	3
HIST 4500	Jewish and European History and Historiography (E)	6
Political Studies		
POLS 3340	Middle East Politics	3
Religion		
RLGN 1120	Biblical Hebrew	6
RLGN 1390	Readings in Biblical Hebrew 1	3
RLGN 1400	Readings in Biblical Hebrew 2	3
RLGN 2140	Introduction to Judaism	3
RLGN 2150*	The Talmud (A)	3
RLGN 2160	Introduction to Hebrew Scriptures	3
RLGN 2231*	Étude de l'Ancien Testament (A)	6
RLGN 2760	Rabbinic Judaism	3
RLGN 2770	Contemporary Judaism	3
RLGN 3280	Hasidism	3
RLGN 3790*	Prophets of Ancient Israel (A)	6
RLGN 3800	Selected Old Testament Literature and Themes	6
RLGN 3810	The Talmud	3
RLGN 3824	Kabbalah	3
RLGN 3830	The Bible as Story	3
RLGN 4300	Advanced Topics in Judaism	3

* Indicates course no longer offered.

8.17.3 Judaic Studies Course Descriptions

Judaic Studies Course Descriptions-Arabic

ARA 1000 Elementary Arabic Cr.Hrs. 6

(Lab required) An introductory course in written and oral Arabic, for students with little or no previous knowledge of the language. Language laboratory exercises will be included in addition to class time. Students may not hold credit for ARA 1000 and any of: the former ARA 2260 or the former SEM 2260 (055.226). Not open to students who have previously obtained credit in ARA 2000. Prerequisite: written consent of instructor.

ARA 2000 Intermediate Arabic Cr.Hrs. 6

(Lab required) This intermediate class will improve writing, reading, conversation and listening comprehension for everyday Arabic, and cover many of the important grammatical features of the language. By the end of this course, the learner should be able to communicate in many situations with fluency or near fluency. Prerequisite: [a grade of "C" or better in ARA 1000 or the former ARA 2260 or the former SEM 2260 (055.226)] or written consent of instructor.

ARA 3000 Advanced Arabic Cr.Hrs. 6

Students who have already mastered beginning and intermediate vocabulary and grammar will learn to use the language in a broader cultural context, developing their skills in reading and writing Arabic. The course utilizes communication-based activities and interactive learning techniques. Prerequisite: [a grade of "C" or better in ARA 2000] or written consent of instructor.

Judaic Studies Course Descriptions-Hebrew

HEB 1120 Biblical Hebrew (A) Cr.Hrs. 6

(Formerly SEM 1120 or 055.112) An introductory course with emphasis on basic grammar and syntax. Students will learn to read simple biblical narratives. Students may not hold credit for HEB 1120 and any of: RLGN 1120 (020.112) or the former SEM 1120 (055.112).

HEB 1250 Hebrew 1 Cr.Hrs. 6

(Formerly SEM 1250 or 055.125) For students with a minimal experience with the language yet with a basic ability to read it. Following current methods in the teaching of a second/ foreign language, the listening-comprehension, speaking, reading and writing skills are developed. Language lab and organized conversation are part of the course. Intended for students with a strictly elementary standing. Students may not hold credit for both HEB 1250 and the former SEM 1250 (055.125). Prerequisite: written consent of program coordinator.

HEB 1260 Hebrew 2 Cr.Hrs. 6

(Formerly SEM 1260 or 055.126) For students who have taken HEB 1250 or the former SEM 1250 (055.125) or the equivalent. Spoken and written Hebrew - vocabulary and grammar, organized conversation and reading of selected texts. In addition to regular sessions, either one hour of lab or directed conversation per week is required. Students may not hold credit for both HEB 1260 and the former SEM 1260 (055.126). Prerequisite: written consent of program coordinator.

HEB 2210 Modern Hebrew Literature Cr.Hrs. 6

(Formerly SEM 2210 or 055.221) Uri Zvi Greenberg, Lamdan, Sholonsky, Agnon, Burla, Hazzaz, Yizhar, Shamir Amihay, S. Shalom - poetry and prose. The modern Israeli short story. Students may not hold credit for both HEB 2210 and the former SEM 2210 (055.221). Prerequisite: written consent of program coordinator.

HEB 2250 Rabbinic Hebrew Cr.Hrs. 6

(Formerly SEM 2250 or 055.225) Study of the style, vocabulary, grammar, and syntax of halakhic and aggadic rabbinic texts. A representative selection of Talmud, Midrashim Codes, and Responsa will be drawn from both the medieval and modern periods. Students may not hold credit for both HEB 2250 and the former SEM 2250 (055.225). Prerequisite: written consent of program coordinator.

HEB 2280 Introduction to Hebrew Literature Cr.Hrs. 6

(Formerly SEM 2280 or 055.228) A study of the history and forms of Hebrew Literature from biblical to modern times. Students may not hold credit for both HEB 2280 and the former SEM 2280 (055.228). Prerequisite: [a grade of "C" or better in HEB 1260 or the former SEM 1260 (055.126)] or written consent of program coordinator.

HEB 2350 Hebrew 3 Cr.Hrs. 6

(Formerly SEM 2350 or 055.235) For students who have taken HEB 1260 or the former SEM 1260 (055.126) or the equivalent. Further oral practise, vocabulary expansion and grammar review, and development of reading and writing skills. Students may not hold credit for both HEB 2350 and the former SEM 2350 (055.235). Prerequisite: written consent of program coordinator.

HEB 3360 Hebrew Communication Arts Cr.Hrs. 6

(Formerly SEM 3360 or 055.336) A study of all aspects of Hebrew communication. For advanced students with reasonable fluency in the language. The writing skill on general subjects will be developed as well as comprehension and vocabulary expansion in the reading of more technical texts. Students may not hold credit for both HEB 3360 and the former SEM 3360 (055.336). Prerequisite: written consent of program coordinator.

HEB 3370 Hebrew Language and Literature Cr.Hrs. 6

(Formerly SEM 3370 or 055.337) A study of the structure and usage of modern Hebrew, examination of selections of Major modern writers and development of speaking and writing skills. Review of the history of Hebrew and the application of linguistics to the understanding of the language. Students may not hold credit for both HEB 3370 and the former SEM 3370 (055.337). Prerequisite: written consent of program coordinator.

HEB 3380 The Creation of Modern Hebrew Cr.Hrs. 6

(Formerly SEM 3380 or 055.338) An advanced study of the revival of Hebrew as a spoken language. Other attempts at language planning and revival will be observed. Lectures and discussions will be in Hebrew. Students may not hold credit for both HEB 3380 and the former SEM 3380 (055.338). Prerequisite: written consent of program coordinator.

Judaic Studies Course Descriptions-Judaic Civilization**JUD 2340 Contemporary Israel Cr.Hrs. 3**

(Formerly 055.234) A study of the history and development of modern Israel. Topics discussed include the economic, social, cultural and religious structures of the contemporary Jewish state. Attention will also be focused on the status of Israeli minorities such as Moslems and Christians.

JUD 2370 Jewish-Gentile Relations Cr.Hrs. 3

(Formerly 055.237) A socio-historical study of the cultural, religious, and intellectual interaction between Jewish and non-Jewish cultures, e.g., the relationship of Judaism with other cultures of the ancient Near East and Hellenism, with medieval and modern Christendom and Islam, and with modern/contemporary secularism.

JUD 2650 Field Studies in Biblical Lands Cr.Hrs. 6

(Formerly 055.265) Offered as a Travel/Study course, the course consists of an on-campus orientation session followed by a period of travel while visiting and studying at some major sites and points of interest. Prerequisite: written consent of instructor.

JUD 3010 Topics in Jewish Studies Cr.Hrs. 3

An opportunity for the study of selected topics or themes in Jewish Studies. Consult the Judaic Studies program office or website for details. As the course content will vary from year to year, students may take this course more than once for credit.

Judaic Studies Course Descriptions-Yiddish**YDSH 1220 Yiddish Cr.Hrs. 6**

(Formerly 055.122) This course is intended for those who have little or no experience with the Yiddish language, and may not normally be taken by students who have attended a Yiddish day school. Emphasis on conversational Yiddish and reading comprehension. Prerequisite: written consent of program coordinator.

YDSH 2320 Yiddish Literature and Language Cr.Hrs. 6

(Formerly 055.232) Survey of Yiddish literature; review of Yiddish language skills. This course is intended for graduates of Yiddish day schools, those who have completed YDSH 1220 (055.122) or equivalent, and students with other previous training in Yiddish. Prerequisite: [a grade of "C" or better in YDSH 1220 (055.122)] or written consent of program coordinator.

8.18 Labour Studies Program

Program Coordinator: Julie Guard
Program Office: 114 Isbister
Telephone: 204 474 8356
E-mail: labour_studies@umanitoba.ca
Website: umanitoba.ca/labour_studies

8.18.1 Program Information

This interdisciplinary program examines the social, economic and political realities of work. Social justice and fundamental rights, the way work is organized, the dynamics of power in the workplace and the political economy of labour are examined critically. We explore the past, present and future of the labour movement and the wide-ranging effects of globalization on our daily lives. Using theoretical and practical approaches, we examine the forces that shape working people's lives and our responses to them.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in both LABR 1260 (the former LABR 1270) and LABR 1290 (the former 153.128). For students who have taken additional courses toward the Major, a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor, the prerequisite is a grade of "C" or better in both LABR 1260 (the former LABR 1270) and LABR 1290 (the former 153.128).

All Programs

While ECON 1210 Introduction to Canadian Economic Issues and Policies and ECON 1220 Introduction to Global and Environmental Economic Issues and Policies, and SOC 1200 Introduction to Sociology are not required, they are highly recommended. Students are encouraged to select additional courses from the List of Core Courses and the List of Electives (see below).

Courses used towards a Labour Studies Major or Minor (Concentration) may not be used towards a Major/Minor (Concentration) or Honours in the second field.

8.18.2 Labour Studies

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR TOTAL: 30 CREDIT HOURS			
LABR 1260 and LABR 1290	<ul style="list-style-type: none"> • 6 credit hours of LABR courses at the 2000 level • 6 credit hours of LABR courses at the 3000 level • 12 credit hours from LABR courses and/or the list of electives below 		
SINGLE ADVANCED MAJOR TOTAL: 54 CREDIT HOURS			
LABR 1260 and LABR 1290	<ul style="list-style-type: none"> • 6 credit hours of LABR courses at the 2000 level • 21 credit hours of LABR courses at the 3000 level • 9 credit hours of LABR courses at the 4000 level • 12 credit hours from LABR courses and/or the list of electives below 		
MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS			
LABR 1260 and LABR 1290	<ul style="list-style-type: none"> • 6 credit hours of LABR courses at the 2000 level • 6 credit hours of LABR courses at the 3000 level 		

List of Electives

The following courses may be selected to fulfill the requirements for a degree in Labour Studies (see the table above for details). Other courses might be chosen for this purpose, in accordance with students' individual interests, but require advance permission from the Labour Studies coordinator. Students are responsible for ensuring that all prerequisites have been met. In the following list (H) indicates an Honours course.

Faculty of Arts		
Economics		
ECON 2280*	Social Welfare and Human Resources	6
ECON 2350	Community Economic Development	3
ECON 2360*	Women in the Canadian Economy	6
ECON 2362	Economics of Gender	3
ECON 2500*	Labour and Technology (same as former Labour Studies LABR 2450)	3
ECON 2540	Political Economy 1: Production and Distribution	3
ECON 2550	Political Economy 2: Economic Growth and Fluctuations in a Global Economic Environment	3
ECON 3170*	Introduction to Quantitative Methods in Economics	3
ECON 3300*	Canadian Economic History	6
ECON 3360*	Labour Economics	6
ECON 3362	Labour Economics 1	3
ECON 3364	Labour Economics 2	3
ECON 3510*	Industrial Relations (same as Labour Studies LABR 3510)	6
ECON 3660*	Economic Ideas and Social Institutions	6
History		
HIST 2282	Inventing Canada (C)	3
HIST 2284*	Democracy and Dissent in Canada: Social Movements in the 20th Century (C)	3
HIST 2286	Modern Canada (C)	3
HIST 2288	History of Social Movements in Canada (C)	3
HIST 2400	History of Human Rights and Social Justice in the Modern World (G,M)	3
HIST 2670	History of Capitalism (M)	3
HIST 2671	Histoire du capitalisme (M) (USB)	3
HIST 2680	A History of Socialism from the French Revolution to the Present (M)	3
HIST 2690*	The Common People in Industrial Society (G)	6
HIST 2710*	Women in History (G)	6
HIST 2720	The World Since 1945 (G,M)	6
HIST 2970*	Modern Canada: 1921 to the Present (C)	6
HIST 2971	Le Canada moderne: de 1921 à nos jours (C) (USB)	6
HIST 3050	Canada since 1945 (C)	6
HIST 3210	The History of Popular Radicalism in the Twentieth Century (M)	6
HIST 3212	Global Sweatshops, Global Struggles (M)	3
HIST 3570*	History of Women in Canada (C)	6
HIST 3572	The History of Women, Gender, and Sexuality in Canada (C)	6
HIST 3700	History of Working People and Labour Movements 1700 to the Present (G) (same as Labour Studies LABR 3700)	6
HIST 3730	A History of Western Canada (C)	6
HIST 3800	History of Winnipeg from 1870-2000 (C)	3
HIST 4030*	The History of Communism and Socialism since 1945 (M) (H)	6
Native Studies		
NATV 3320*	Aboriginal Organizations	3
Philosophy		
PHIL 2290	Ethics and Society	6
PHIL 2830	Business Ethics	3
PHIL 3710*	Critiques of Contemporary Society	6
Political Studies		
POLS 3470	Canadian Public Management	3
POLS 3570	Administrative Theory in the Public Sector	3
POLS 3810	Introduction to Marxism	3
POLS 4370	Comparative Public Administration (H)	3
POLS 4570*	Public Organizational Management (H)	6
POLS 4660	The State in the Economy (H)	6
019.487*	Government and Public Sector Unionism (H)	3
Psychology		
PSYC 3510*	Organizational Psychology	3
PSYC 3600*	Environmental Psychology	3
Sociology		
SOC 2290	Introduction to Research Methods	6
SOC 3370	Sociology of Work	3
SOC 3371	Sociologie du travail (USB)	3
SOC 3380	Power, Politics and the Welfare State	3
SOC 3470*	Political Sociology	3
SOC 3471	Sociologie politique (USB)	3
SOC 3820	Qualitative and Historical Methods in Sociology	3
SOC 3870*	Social Inequality	3
SOC 3871	Inégalités sociales (USB)	3
SOC 3890	Power and Inequality in Comparative Perspective	3
Women's and Gender Studies		
WOMN 2500	Race, Class and Sexuality	3
WOMN 3550	Feminist Community Organizing: Theories and Practices	3

I.H. Asper School of Business (Faculty of Management)		
Business Administration		
GMGT 2030*	Administrative Theory	3
GMGT 2060	Management and Organizational Theory	3
GMGT 2070	Introduction to Organizational Behaviour	3
GMGT 2080*	Introduction to Management and Organization Theory	3
GMGT 3030	Contemporary Social Issues in Business	3
GMGT 4210	Seminar in Management and Capitalism	3
HRIR 2440	Human Resource Management	3
HRIR 3430	Selected Topics in Industrial Relations	3
HRIR 3450	Labour and Employment Relations (or the former 027.341)	3
HRIR 4420	Compensation	3
HRIR 4480	Collective Bargaining and Administration	3
HRIR 4520	Comparative Industrial Relations and Human Resource Management	3
Interdepartmental Courses		
IDM 3000*	Aboriginal Business Context: Influences and Impacts	3
IDM 4090*	Aboriginal Business Leadership	3

* Indicates course no longer offered.

For course descriptions, see departmental listings.

18.3 Labour Studies Course Descriptions

Labour Studies Course Descriptions-1000 Level

LABR 1260 Working for a Living Cr.Hrs. 3

An introduction to the study of working lives in the contemporary world and the global transformation that has made working for wages central to human existence. Students may not hold credit for both LABR 1260 and the former LABR 1270 (153.127).

LABR 1290 Introduction to the Canadian Labour Movement Cr.Hrs. 3
(Formerly 153.129) An introduction to the development of the contemporary working-class movement in Canada and to workplace issues today.

Labour Studies Course Descriptions-2000 Level

LABR 2100 The Political Economy of Labour Cr.Hrs. 3

This course examines the dynamics of work organization, the production and reproduction of labour power, labour markets and class conflict in capitalist societies, with attention to contemporary Canada. Students may not hold credit for LABR 2100 and any of: LABR 2420 (153.242) or the former ECON 2420 (018.242). Prerequisite: [a grade of "C" or better in three credit hours of 1000 level Labour Studies] or written consent of the Labour Studies coordinator.

LABR 2300 Workers, Employers and the State Cr.Hrs. 3

This course examines the social, economic and political contexts of work and the relations, rules and structures that shape the interactions between workers, employers and the state. Topics include workers' and management rights, the rights, obligations and functions of unions, the legal contexts of labour/management relations, and initiatives for increasing equity. Students may not hold credit for both LABR 2300 and the former LABR 3300. Prerequisite: [a grade of "C" or better in three credit hours of 1000 level Labour Studies] or written consent of the Labour Studies coordinator.

LABR 2420 Economics of the Labour Process and Labour Relations Cr. Hrs. 6

(Formerly 153.242) An examination of theoretical approaches to paid and unpaid work, the organization of labour processes, the production and reproduction of labour, and labour markets in Canada today, as well as possible alternatives. Students may not hold credit for LABR 2420 (153.242) and any of: LABR 2100 or the former ECON 2420 (018.242). Prerequisite: [a grade of "C" or better in both LABR 1260 (the former LABR 1270 or 153.127) and LABR 1290 (153.129)] or [a grade of "C" or better in six credit hours of 1000 level Economics].

Labour Studies Course Descriptions-3000 Level

LABR 3010 Labour Law Cr.Hrs. 3

(Formerly 153.301) An introduction to legislation and interpretation, legal procedures, and quasi-judicial boards as they concern the organization of trade unions, collective bargaining, settlement of disputes, labour standards, workers' compensation, unemployment insurance and human rights. Prerequisite: [a grade of "C" or better in both LABR 1260 (the former LABR 1270 or 153.127) and LABR 1290 (153.129)] or [a grade of "C" or better in both HRIR 3450 (027.345) and 6 credit hours of other HRIR courses] or written consent of the Labour Studies coordinator.

LABR 3030 Labour and the Bargaining Process Cr.Hrs. 3

(Formerly 153.303) A course to explain labour's involvement in the negotiation process including the mechanics and the theoretical issues of bargaining. The course focuses on contemporary issues. Prerequisite: [a grade of "C" or better in both LABR 1260 (the former LABR 1270 or 153.127) and LABR 1290 (153.129)] or written consent of the Labour Studies coordinator.

LABR 3050 Issues in Occupational Health and Safety and Workers' Compensation Cr.Hrs. 3

This course will explore historical, legal and political issues surrounding health and safety in Canadian workplaces with an emphasis on Manitoba. It will critically examine both the Workers' Compensation and the Workplace Health and Safety systems as they currently exist and review the role of workers, employers, unions and government in these processes. It will investigate various challenges and emerging issues in health and safety including but not limited to industrial disease, gender concerns, precarious employment and globalization. Prerequisite: [a grade of "C" or better in three credit hours of 1000 level Labour Studies] or [a grade of "C" or better in both HRIR 3450 (027.345) and an additional 6 credit hours of HRIR courses] or written consent of the Labour Studies coordinator.

LABR 3060 Workplace Health and Safety Cr.Hrs. 3

(Formerly 153.306) An introduction to occupational health, industrial hygiene and industrial safety emphasizing the impact of chemical hazards on the body, the measure and control of hazards and the causes and prevention of industrial accidents. Prerequisite: [a grade of "C" or better in both LABR 1260 (the former LABR 1270 or 153.127) and LABR 1290 (153.129)] or [a grade of "C" or better in both HRIR 3450 (027.345) and 6 credit hours of other HRIR courses] or written consent of the Labour Studies coordinator.

LABR 3070 Labour Relations and Occupational Health and Safety Law Cr.Hrs. 3

(Formerly 153.307) The economic costs of workplace injuries and sickness; the history of occupational health and safety laws and their implementation; the history and functions of workers' compensation; collective bargaining on health and safety. Prerequisite: [a grade of "C" or better in both LABR 1260 (the former LABR 1270 or 153.127) and LABR 1290 (153.129)] or [a grade of "C" or better in both HRIR 3450 (027.345) and 6 credit hours of other HRIR courses] or written consent of the Labour Studies coordinator.

LABR 3080 Labour and Community Organizing Cr.Hrs. 3

This course examines the theory and practice of collaborative community and labour organizing, with particular emphasis on Latin America, to identify the strengths and limitations of this approach for reviving unions, protecting workers' rights and advancing social justice. Prerequisite: [a grade of "C" or better in both LABR 1260 (the former LABR 1270 or 153.127) and LABR 1290 (153.129)] or written consent of the Labour Studies coordinator.

LABR 3090 Globalization and Labour Cr.Hrs. 3

An examination of the impact of global capitalism on the lives of workers (both paid and unpaid) in the Global South and North in the early 21st century. Using concepts of class, gender and "race," the course addresses key challenges facing working people, the crisis of workers' movements, and new movements emerging in response to this crisis. Prerequisite: written consent of instructor.

LABR 3110 Special Studies in Labour Studies Cr.Hrs. 3

(Formerly 153.311) This course will vary from year to year depending on the needs of students and the interests of the instructor. Prerequisite: [a grade of "C" or better in six credit hours of 1000 level Labour Studies] or written consent of the Labour Studies coordinator. As the course content will vary from year to year, students may take this course more than once for credit.

LABR 3120 Special Studies in Labour Studies Cr.Hrs. 3

(Formerly 153.312) This course will vary from year to year depending on the needs of students and the interests of the instructor. Prerequisite: [a grade of "C" or better in six credit hours of 1000 level Labour Studies] or written consent of the Labour Studies coordinator. As the course content will vary from year to year, students may take this course more than once for credit.

LABR 3130 Employment Legislation and the Protection of Workers Cr. Hrs. 3

(Formerly 153.313) An examination of the legal rights and obligations of workers and employers, and the enforcement mechanisms for the non-unionized workplace, over the course of the employment relationship from hiring through to termination or retirement. Special emphasis will be placed on statutory and common law, personal employment contracts, wrongful and constructive dismissal, human rights legislation and jurisprudence. Prerequisite: [a grade of "C" or better in both LABR 1260 (the former LABR 1270 or 153.127) and LABR 1290 (153.129)] or [a grade of "C" or better in both HRIR 3450 (027.345) and 6 credit hours of other HRIR courses] or written consent of the Labour Studies coordinator.

LABR 3140 Pensions and Benefits Cr.Hrs. 3

(Formerly 153.314) The nature and role of pensions in the life cycle of workers and the issue of pension funds control on distribution. The role of non-wage benefits in the labour compensation package. Prerequisite: [a grade of "C" or better in both LABR 1260 (the former LABR 1270 or 153.127) and LABR 1290 (153.129)] or [a grade of "C" or better in both HRIR 3450 (027.345) and 6 credit hours of other HRIR courses] or written consent of the Labour Studies coordinator.

LABR 3200 Workers' Self-Management Cr.Hrs. 3

(Formerly 153.320) An examination of historical and contemporary examples of self-managed workplaces and the theory of a participatory economy based on workers' self-management. Prerequisite: [a grade of "C" or better in six credit hours of 1000 level Labour Studies] or written consent of the Labour Studies coordinator.

LABR 3210 Working People in Hard Times Cr.Hrs. 3

What have recent changes in work and society meant for people who work for wages or who live with those who do? How did these changes happen? What do they mean for youth today? How do the growing demands of our jobs affect our lives with family and friends? How have employers' actions affected unions, and how have unions responded? This course will explore these questions and others that arise from them. Prerequisite: [a grade of "C" or better in three credit hours of 1000 level Labour Studies] or written consent of the Labour Studies coordinator.

LABR 3220 Global Sweatshops, Global Struggles Cr.Hrs. 3

This course explores the past and present of sweated work in various industries in the Global North and South. We explore circumstances that support sweatshops, including off-shoring and the new international division of labour, migrant, child and female labour forces; global supply chains and the role of retailers and contractors. We also compare and evaluate strategies to eliminate sweatshops, including NGO activities, government regulations, consumer boycotts and the international labour, student and social justice movements. Also offered as HIST 3212. Students may not hold credit for both LABR 3220 and HIST 3212. Prerequisite: [a grade of "C" or better in three credit hours of 1000 level Labour Studies or written consent of the Labour Studies coordinator] or [a grade of "C" or better in six credit hours of History or written consent of the department head].

LABR 3400 Racism and Work Cr.Hrs. 3

This course explores three central questions: What are racism and colonialism? How do racism and colonialism shape work in Canada? What strategies exist for combating racism at work, and which are most effective? Students may not hold credit for both LABR 3400 and LABR 3110 when titled "Racism and Work." Prerequisite: [a grade of "C" or better in three credit hours of 1000 level Labour Studies] or written consent of the Labour Studies coordinator.

LABR 3510 Industrial Relations Cr.Hrs. 6

(Formerly 153.351) A study of comparative employer-employee relationships in Canada and other selected countries as affected by market forces, social traditions, and government action. Students may not hold credit for both LABR 3510 (153.351) and the former ECON 3510 (018.351). Prerequisite: [a grade of "C" or better in both LABR 1260 (the former LABR 1270 or 153.127) and LABR 1290 (153.129)] or [a grade of "C" or better in six credit hours of 1000 level Economics].

LABR 3700 History of Working People and Labour Movements 1700 to the Present (M) Cr.Hrs. 6

(Formerly 153.370) A survey of working class history with emphasis upon the varieties of labour movements and trade unions. The course will refer to the social and political experience of working people in Great Britain, Europe and the United States and will devote one term to Canadian topics. Also offered as History HIST 3700. May not be held with HIST 3700 (011.370). Prerequisite: [a grade of "C" or better in six credit hours of Labour Studies or History] or written consent of the Labour Studies coordinator.

Labour Studies Course Descriptions-4000 Level**LABR 4110 Selected Topics in Labour Studies Cr.Hrs. 3**

This course will vary from year to year depending on the needs of students and the interests of the instructor. Prerequisite: written consent of the Labour Studies coordinator. As the course content will vary from year to year, students may take this course more than once for credit.

LABR 4510 Labour Studies Field Placement Seminar Cr.Hrs. 3

(Formerly 153.451) A seminar to be taken concurrently with LABR 4520 in which each student will relate theory and practice. Corequisite: LABR 4520. Prerequisite: formal declaration of the Labour Studies Advanced Major and written consent of the Labour Studies coordinator.

LABR 4520 Labour Studies Field Placement Cr.Hrs. 6

(Formerly 153.452) An educationally directed field experience in which the student will undertake specific tasks and assignments in some aspects of labour relations. Field placement options include a labour union, professional association, employer, provincial department of labour, public archives. Corequisite: LABR 4510. Prerequisite: formal declaration of the Labour Studies Advanced Major and written consent of the Labour Studies coordinator.

ACADEMIC CALENDAR 2015-2016

8.19 Latin American Studies Program

Program Coordinator: Maria Ines Martinez
Program Office: 424 Fletcher Argue Building
Telephone: 204 474 9311
E-mail: Marines.Martinez@umanitoba.ca

8.19.1 Program Information

Through varied courses students may explore the cultural, political, historical, economic, and social structures and dynamics of Latin America. This interdisciplinary Minor includes courses from different departments and allows students to gain a deeper understanding of the subject field without being restricted to one discipline. Students are encouraged to participate in international exchange programs in Latin America which may also count toward the Minor.

A Minor (Concentration) in Latin American Studies consists of at least 18 credit hours from a minimum of two different departments chosen from the following list.

Faculty of Arts		
Anthropology		
ANTH 2690	Peoples and Cultures of Contemporary Latin America	3
French, Spanish and Italian		
SPAN 2200	Spanish American Culture and Civilization	3
SPAN 2210	Voices and Images of Latin America	3
SPAN 2540	Spanish-American Literature 2	3
SPAN 2570	Special Studies (Acceptable for credit only when course content is on Latin American studies) ¹	3
SPAN 3080	Contemporary Latin American Novel	3
SPAN 3270	Special Studies (Acceptable for credit only when course content is on Latin American studies) ¹	3
SPAN 3300	Cinema and Literature	3
SPAN 3320	Testimony and Human Rights in Latin America	3
SPAN 3780	Short Fiction in Spanish	3
SPAN 3790	Latin American Cinema and Society	3
History		
HIST 2140	Colonial Latin America (A)	3
HIST 2150	Independent Latin America (A)	3
HIST 2900	Topics in Social History (G) (Acceptable for credit only when course content is on Latin American studies) ¹	6
HIST 3020	South America Since 1945 (A)	3
HIST 3040	Mexico, Central America, and Cuba Since 1945 (A)	3
HIST 3110	Topics in History 1 (G) (Acceptable for credit only when course content is on Latin American studies) ¹	3
HIST 3120*	Topics in History 2 (G) (Acceptable for credit only when course content is on Latin American studies) ¹	3
HIST 3740	Topics in Latin American History (A)	3
HIST 3750	Indigenous Peoples in Modern Latin America (A)	3
HIST 4000	Topics in History (G) (Acceptable for credit only when course content is on Latin American studies) ¹	3
HIST 4150	The Social History of the Latin American State (A)	6
HIST 4870	Contemporary Latin America (A)	6
* Indicates course no longer offered.		
NOTE:		
¹ Written consent of program coordinator required to use course in the Minor (Concentration).		

For entry to the Minor (Concentration) in Latin American Studies, the prerequisite is a grade of "C" or better in six credit hours from the approved list.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

For course descriptions, see departmental listings.

8.20 Department of Linguistics

Head: Terry Janzen
Campus Address & General Office: 534 Fletcher Argue Building
Telephone: 204 474 9596
Email Address: lingdpt@cc.umanitoba.ca
Website: umanitoba.ca/linguistics

8.20.1 Program Information

The linguistics approach to language is based on the analysis of sound, the structure of words and sentences, and the meanings they transmit. But it also has to deal with the way sounds change, words come and go, and meanings shift. Linguistics is the humanities discipline that is closest to being a science in the generally accepted sense of the word. Partly because human language, the subject of linguistics, is almost entirely acquired subconsciously, it is a massive and intricate structure that is free to develop in accordance with natural rather than with consciously determined social laws.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in LING 1200 or written consent of the department head. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in LING 1200, or written consent of the department head.

Other

In addition to its core concentration in Linguistic Theory and Analysis and such other areas of study as Applied Linguistics, Verbal Arts, etc., Linguistics also offers:

- A pre-professional concentration in Applied Linguistic Science, which will be of special interest to students planning a career in speech/language pathology; contact department general office for information; and
- A program in American Sign Language/English Interpretation, offered jointly with Red River College; see below for details.

Students intending to Major in Linguistics are strongly encouraged to undertake the in-depth study of a second language.

8.20.2 Linguistics

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR TOTAL: 30 CREDIT HOURS			
LING 1200 ¹	<ul style="list-style-type: none"> • at least 9 credit hours chosen from the core courses² numbered at the 2000 level • at least 6 credit hours chosen from the core courses² numbered at the 3000 level • 9 additional credit hours of Linguistics 		
SINGLE ADVANCED MAJOR TOTAL: 48 CREDIT HOURS			
LING 1200 ¹	<ul style="list-style-type: none"> • at least 12 credit hours chosen from the core courses² numbered at the 2000 level • LING 3200 or LING 3300 or LING 3400 • LING 3120 or LING 3140 • 3 additional credit hours chosen from the core courses² numbered at the 3000 level • 18 additional credit hours of Linguistics 		

ACADEMIC CALENDAR 2015-2016

DOUBLE ADVANCED MAJOR TOTAL: 42 CREDIT HOURS		
LING 1200 ¹	<ul style="list-style-type: none"> • at least 12 credit hours chosen from the core courses² numbered at the 2000 level • LING 3200 or LING 3300 or LING 3400 • LING 3120 or LING 3140 • 3 additional credit hours chosen from the core courses² numbered at the 3000 level • 12 additional credit hours of Linguistics 	
MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS		
LING 1200 ¹	<ul style="list-style-type: none"> • at least 6 credit hours chosen from the core courses² numbered at or above the 2000 level • 6 additional credit hours of Linguistics 	
NOTES:		
<p>¹ Students are advised to take LING 1380 General Phonetics as early as possible in their program (ideally during their first year, in addition to LING 1200 Introduction to Linguistics) as this course is a prerequisite for many of the advanced courses.</p> <p>² Not all of the core courses listed below will necessarily be offered every year; this includes even those at the 2000 level which are prerequisites for courses at the 3000 level. Students intending to Major in Linguistics are advised to plan their programs well in advance, and to consult the Linguistics department at the beginning of each academic year.</p>		

Core Courses		
LING 2200	Syntax	6
LING 2420	Phonology	3
LING 2440	Analytic Techniques	3
LING 2460	Morphology	3
LING 2640	Comparative Linguistics	3
LING 3120	Syntactic Theory	3
LING 3140	Phonological Theory	3
LING 3200	The Structure of a non-Indoeuropean Language	6
LING 3300	The Structure of ASL	6
LING 3400	Field Methods	6
LING 3800*	Seminar	6
LING 3820	Selected Topics	3
LING 3840	Special Topics in ASL	3

* Indicates course no longer offered.

Program in Linguistics and American Sign Language/English Interpretation taught jointly with Red River College leading to a B.A. General Degree
Students who wish to pursue this program must seek separate admission to both the University of Manitoba and Red River College.

Students must successfully complete all requirements for Deaf Studies and the American Sign Language/English Interpretation Program at Red River College only. Specific courses (42 credit hours) completed in this program will be considered acceptable for university degree credit, will satisfy a humanities requirement and will become the declared Minor for purposes of the degree. For the purposes of satisfying the distribution requirement, completion of the Deaf Studies Certificate will qualify as six hours in a field and completion of the Joint ASL Program will qualify as six hours in a field.

The entire joint program is described below:

Deaf Studies Program (prerequisite) – RRC

Course No.		Credit Hours
DSP-D101	American Sign Language 1	
DSP-D201	American Sign Language 2	
DSP-D300	American Sign Language 3	These 3 courses count as 6 credit hours
DSP-D100	Deaf Culture	3
DSP-D202	Deaf History	3
DSP-D301	Cross-cultural Interaction	(no U of M credit)
	Total Hours	12

Deaf Studies Program (prerequisite) - U of M

LING 1200	Introduction to Linguistics	6
ANTH 1220	Cultural Anthropology (A)	3
	or	
ANTH 1520	Critical Cultural Anthropology (A)	3
	Science	3
	(In the Deaf Studies Certificate Program (RRC) and in Year 1 of the Joint Linguistics (U of M) and ASL (RRC) Program students must complete a 3 credit hour Science course for a total of 6 credit hours of Science. A minimum of 3 credit hours of the Science courses must be in mathematics, statistics, or physics. Students seeking a second degree are not required to complete a mathematics, statistics, or physics course.)	
	Total Hours	12

Following successful completion of this prerequisite year, a Certificate in Deaf Studies is awarded by Red River College and selection for continuation for the joint degree program is made by RRC and the Linguistics department.

Linguistics (U of M) and American Sign Language/English Interpretation (RRC)

Year 1 RRC		
AEI-I320	Cross-language Processing in Interpretation	3
AEI-I120	Language Processing in Interpretation-English	3
AEI-I220	Language Processing in Interpretation-ASL	3
AEI-I101	English Comprehension and Expression	3
	Total Hours	12
Year 1 - U of M		
LING 2200	Syntax	6
LING 2460	Morphology	3
LING 2740	Interpretation Theory	3
ENGL XXXX	English	6
	Science	3
	(In the Deaf Studies Certificate Program (RRC) and in Year 1 of the Joint Linguistics (U of M) and ASL (RRC) Program students must complete a 3 credit hour Science course for a total of 6 credit hours of Science. A minimum of 3 credit hours of the Science courses must be in mathematics, statistics, or physics. Students seeking a second degree are not required to complete a mathematics, statistics, or physics course.)	
	Total Hours	21
Year 2 - RRC		
AEI-A420	Advanced ASL	3
AEI-P120	Interpretation Lab 1	6
AEI-I290	Ethics 1	3
AEI-I390	Ethics 2	3
AEI-I280	Interpretation Settings 1	(no U of M credit)
AEI-I380	Interpretation Settings 2	(no U of M credit)
	Total Hours	15
Year 2 - U of M		
LING 3300	The Structure of ASL	6
LING XXXX	Linguistics elective	3
	Total Hours	9
Year 3 - RRC		
AEI-P220	Interpretation Lab 2	3
AEI-P500	Practicum	(no U of M credit)
AEI-P454	Practicum Seminar	(no U of M credit)
	Total Hours	3
Year 3 - U of M		
LING 3840	Special Topics in ASL	3
	UM Electives (non linguistics courses) (Before selecting the 6 credit hours of electives, contact the General Office to ensure the selection satisfies the subject field requirement.)	6
	Total Hours	9

8.20.3 Linguistics Course Descriptions-

Linguistics Course Descriptions-1000 Level

LING 1200 Introduction to Linguistics Cr.Hrs. 6

(Formerly 126.120) Language as a communication system composed of sound, grammatical and semantic subsystems. Development of a theoretical framework. Exercises in a variety of languages.

LING 1340 Semantics Cr.Hrs. 3

(Formerly 126.134) An introduction to linguistic approaches to meaning, with special emphasis on the analysis of lexical domains.

LING 1360 Languages of Canada Cr.Hrs. 3

(Formerly 126.136) A survey of languages and linguistic problems encountered in North America, with particular attention to questions of relationship and classification. Examples will be drawn from both indigenous and immigrant languages.

LING 1380 General Phonetics Cr.Hrs. 3

(Formerly 126.138) The articulatory and acoustic analysis of speech sounds. Transcription exercises in a variety of languages.

LING 1420 Language and Gender Cr.Hrs. 3

(Formerly 126.142) In exploring the relationship between language and gender, this course addresses such questions as: how are gender differences manifested and perpetuated through language use?; is there such a thing as "women's language"?; how do gender differences influence communication between women and men?; how does gender interact with (for example) race, class and sexuality with respect to language use? In addition, we consider issues of language structure, including sexism in English and the relative success of gender-based language reform efforts.

LING 1440 Rules of English Grammar Cr.Hrs. 3

(Formerly 126.144) What are the criteria that are used to distinguish "good" from "bad" grammar? What are the rules we need to know in order to speak and write "properly"? In focusing on basic concepts in traditional grammar, this course reviews parts of speech, the English tense system, sentence types (active vs. passive), question formation and types of embedded clauses. It examines the rules of traditional grammar and explores the linguistic structures that lie behind the rules. This course is not intended for students learning English; it presupposes native or near-native competence in English. Not open to students who are currently enrolled in, or have previously obtained credit in LING 2200 (126.220).

Linguistics Course Descriptions-2000 Level

LING 2200 Syntax Cr.Hrs. 6

(Formerly 126.220) Sentences are complex arrangements of words and other elements, and syntactic structures have long been at the centre of theoretical controversy. A typological survey of syntactic patterns, introducing formal and functional approaches to syntactic analysis. Prerequisite: [a grade of "C" or better in LING 1200 (126.120)] or written consent of instructor.

LING 2420 Phonology Cr.Hrs. 3

(Formerly 126.242) Each language relies on a finite set of distinctive sounds. Based on physical features which are universal, sound systems are language-specific, abstract structures. Prerequisite: [a grade of "C" or better in LING 1200 (126.120)] or written consent of instructor.

LING 2440 Analytic Techniques Cr.Hrs. 3

(Formerly 126.244) Techniques for recognizing the structure of words and sentences in a variety of languages. The formulation of linguistic rules, especially at the interface of morphology and phonology. Prerequisite: [a grade of "C" or better in LING 1200 (126.120)] or written consent of instructor.

LING 2460 Morphology Cr.Hrs. 3

(Formerly 126.246) The internal structure of words: the traditional distinction between inflection and derivation, types of word structures, word-formation rules, levels of word-formation. The relationship of morphology to phonology and syntax. Prerequisite: [a grade of "C" or better in LING 1200 (126.120)] or written consent of instructor.

LING 2600 Verbal Art Cr.Hrs. 3

(Formerly 126.260) Puns, punchlines, slogans and the chant of the auctioneer are as much instances of verbal art as are rhetorical flourishes and formal literary structures. With spoken language as its major focus, this course draws on a variety of languages, sources and genres to study artistic and playful uses of language. Prerequisite: [a grade of "C" or better in LING 1200 (126.120)] or written consent of instructor.

LING 2620 Language in Society Cr.Hrs. 3

(Formerly 126.262) Language is embedded in a social context: dialect variability, the choice of speech registers, the use of special-purpose languages, code-switching, sexual specialization are instances of language behaviour reflecting non-linguistic reality. Prerequisite: [a grade of "C" or better in LING 1200 (126.120)] or written consent of instructor.

LING 2640 Comparative Linguistics Cr.Hrs. 3

(Formerly 126.264) Language change and its consequences; aspects of historical linguistics, language classification and linguistic prehistory. Examples from Indoeuropean and North American Indian languages. Prerequisite: [a grade of "C" or better in LING 1200 (126.120)] or written consent of instructor.

LING 2720 Applied Linguistics Cr.Hrs. 3

(Formerly 126.272) The practical implications of linguistic analysis in such areas as the formal or informal acquisition of a second language, the establishment of standards for spoken and written usage, language maintenance and other aspects of language planning. Prerequisite: [a grade of "C" or better in LING 1200 (126.120)] or written consent of instructor.

LING 2740 Introduction to Interpretation Theory Cr.Hrs. 3

(Formerly 126.274) A survey of interpretation theory, including specifics of language use and problems in the transfer of cultural context for both source and target language, the history of language awareness on the part of the interpreter, and the development of theories of interpretation. This course will draw heavily on the field of ASL/English interpretation for illustration. Prerequisite: [a grade of "C" or better in LING 1200 (126.120)] or written consent of instructor.

LING 2800 Communication Disorders Cr.Hrs. 3

(Formerly 126.280) A general introduction to the major pathologies of speech, language and hearing as viewed against the background of normal linguistic structures and functions. The distinction between mechanically- and neurologically-based disorders is illustrated in terms of aetiology, diagnosis and approaches to treatment. Prerequisite: [a grade of "C" or better in LING 1200 (126.120)] or written consent of instructor.

LING 2830 Linguistic Anatomy and Physiology 1 Cr.Hrs. 3

(Formerly 126.283) An intensive survey of the principal organs of speech and hearing, their embryology, and the general features of their evolutionary history. Some consideration will also be given to their pathological impairment. Prerequisite: [a grade of "C" or better in both LING 1200 (126.120) and LING 1380 (126.138)] or written consent of instructor.

LING 2850 Linguistic Anatomy and Physiology 2 Cr.Hrs. 3

(Formerly 126.285) A survey of the structures of the central and peripheral nervous systems as they relate to the production and perception of speech and the processing of language. Includes a survey of linguistic aphasiology and a review of neurological deficits associated with abnormal language behaviour. Prerequisite: [a grade of "C" or better in both LING 1200 (126.120) and LING 1380 (126.138)] or written consent of instructor.

LING 2880 Acoustic Phonetics Cr.Hrs. 3

(Formerly 126.288) The physical principles involved in the production, propagation and reception of sound. The subjective characteristics of sounds (loudness, pitch and quality) are related to their objective parameters (intensity, frequency and spectrum). The physical methods and the types of equipment used to analyze the basic physical properties of sounds will be demonstrated. Prerequisite: [a grade of "C" or better in both LING 1200 (126.120) and LING 1380 (126.138)] or written consent of instructor.

Linguistics Course Descriptions-3000 Level**LING 3120 Syntactic Theory Cr.Hrs. 3**

(Formerly 126.312) Formal and functional analyses of specific syntactic issues, such as the representation of grammatical relations, the formulation and explanation of universals, the "learnability criterion" as a test for theoretical adequacy and the rôle of semantics and pragmatics in syntactic theory. Prerequisite: [a grade of "C+" or better in LING 2200 (126.220)] or written consent of instructor.

LING 3140 Phonological Theory Cr.Hrs. 3

(Formerly 126.314) The nature of phonological representations: prosodic hierarchies, multi-tiered structures, the underspecification of segments. Types of phonological rules, rule ordering, the cycle. Prerequisite: [a grade of "C+" or better in LING 2420 (126.242)] or written consent of instructor.

LING 3200 The Structure of a non-Indo-European Language Cr.Hrs. 6

(Formerly 126.320) Every "new" language challenges accepted doctrine and helps us to evaluate competing hypotheses: in this course, a non-Indo-European language (which may vary from Hua to Hungarian) is systematically explored on the basis of field records and descriptions which have become classics. Prerequisite: [a grade of "C+" or better in each of LING 2200 (126.220) and LING 2420 (126.242) and LING 2440 (126.244)] or written consent of instructor.

LING 3300 The Structure of ASL Cr.Hrs. 6

Formerly 126.330) An examination of ASL as a signed, as opposed to spoken, language. Topics include phonetic, phonological, morphological and syntactic structures. Prerequisite: [a grade of "C+" or better in each of LING 1200 (126.120) and LING 2200 (126.220) and LING 2460 (126.246)] or written consent of instructor.

LING 3400 Field Methods Cr.Hrs. 6

(Formerly 126.340) Working with a speaker of an unfamiliar (and, usually, unrecorded) language, students are apprenticed in the collection, analysis and interpretation of raw data. Prerequisite: [a grade of "C+" or better in each of LING 2200 (126.220) and LING 2420 (126.242) and LING 2440 (126.244)] or written consent of instructor.

LING 3820 Special Topics Cr.Hrs. 3

(Formerly 126.382) Topics of current interest in the language sciences. Prerequisite: written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

LING 3840 Special Topics in ASL Cr.Hrs. 3

(Formerly 126.384) Topics of current interest in ASL linguistics. Prerequisite: written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

LING 3860 Language Acquisition Cr.Hrs. 3

The study of first language acquisition from infancy through childhood. Aspects of phonology, morphology, pragmatics and syntax acquisition are discussed, as well as formal theories of acquisition, second language and bilingual acquisition, atypical development and the relationship of language acquisition with literacy. Also offered as PSYC 3860. Students may not hold credit for LING 3860 and any of: PSYC 3860 or the former LING 2860 (126.286) or the former PSYC 2860. Prerequisite: [a grade of "C" or better in 9 credit hours of Linguistics courses] or [a grade of "C" or better in PSYC 2290 (017.229) or PSYC 2291 (017.229)] or written consent of department head.

LING 3920 Special Studies Cr.Hrs. 3

(Formerly 126.392) Supervised study. Prerequisite: written consent of instructor. As the course content will vary from year to year, students may take this course more than once for credit.

8.21 Medieval and Early Modern Studies Program

Program Advisor: Roisin Cossar

Program Office: 454 Fletcher Argue Building

Telephone: 204 474 8885

8.21.1 Program Information

The millennium from the end of the Roman empire to the Renaissance is the formative period of European civilization. The Middle Ages and the Dark Ages were periods of human drama full of change and growth and a struggle to regain a civilized way of life. The Age of Chivalry with its crusades, the flowering of the arts and architecture, and the emergence of new philosophical concepts and ideologies found culmination in the Renaissance. For those interested in the pre-modern world, this program permits a broad approach to the subject.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

The following entries contain information which is not contained in Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in HIST 2390 or HIST 2420, and 6 credit hours in Greek (GRK) or Latin (LATN) courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in HIST 2390 or HIST 2420.

Other

Students should note that courses used towards the Major(s) or Minor (Concentration) in this area may not be used for Major, Minor (Concentration) or Honours in a second field.

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR^{1,2} TOTAL: 30 CREDIT HOURS			
<ul style="list-style-type: none"> 6 credit hours in Greek (GRK) or Latin (LATN) courses HIST 2390 or HIST 2420 	<ul style="list-style-type: none"> 6 credit hours from Group 1 courses listed below 6 credit hours from Group 2 courses listed below 6 credit hours from Group 1 or Group 2 courses listed below 		
SINGLE ADVANCED MAJOR^{1,2} TOTAL: 48 CREDIT HOURS			
<ul style="list-style-type: none"> 6 credit hours in Greek (GRK) or Latin (LATN) courses HIST 2390 or HIST 2420 	<ul style="list-style-type: none"> 6 credit hours from Group 1 courses listed below 6 credit hours from Group 2 courses listed below 9 credit hours from Group 1 or Group 2 courses listed below 9 additional credit hours in Greek (GRK) or Latin (LATN) courses 6 credit hours from a modern language (any language offered by the Faculty of Arts outside of courses offered in Greek and Latin) 		
MINOR (CONCENTRATION)^{1,2} TOTAL: 18 CREDIT HOURS			
HIST 2390 or HIST 2420	12 credit hours to be selected from Group 1 or Group 2 courses below, Greek (GRK) courses ³ , or Latin (LATN) courses ³		
NOTES:			
¹ Students may not use individual courses to satisfy both Major and Minor (Concentration) requirements.			
² Students are strongly encouraged to complete introductory courses from subject areas from the Group 1 and Group 2 listings in order to satisfy possible prerequisites for courses they may select in Years 2, 3 and 4.			
³ If Latin (LATN) or Greek (GRK) courses are selected to satisfy the Minor (Concentration) requirements, a minimum of 6 credit hours must be selected from either LATN or GRK.			

Group 1: History, Philosophy and Religions

See the departmental Calendar section for full course descriptions. With written consent of the program coordinator courses not on this list may be used to satisfy the Group 1 requirement.

Faculty of Arts		
Classics		
CLAS 1280	Introduction to Ancient Roman Culture	3
CLAS 2170	Roman History: The Roman Empire, 30 BC-AD 337	3
CLAS 3270	The World of Late Antiquity: History and Archaeology	3
History		
HIST 2080	The Byzantine Empire and the Slavic World (D)	3
HIST 2180	The History of Catholicism to 1540 (G)	3
HIST 2930	The History of the British Isles, 412-1485 (D)	6
HIST 3136	History of Medieval Italy, 568-1300 (D)	3
HIST 3138	History of Medieval Italy, 1300-1500 (D)	3
HIST 3140	Medieval Italy (D)	6
HIST 3480	The Margins of the Middle Ages (D)	3
HIST 3550	Popular Culture, Crime and Punishment in England, 1550-1850 (E)	3
HIST 3880	Europe in Transition: 1348-1648 (E)	6
HIST 4040	The Later Middle Ages (D)	6
HIST 4050	England in the Long Eighteenth Century (E)	6
Philosophy		
PHIL 2780	Thomas Aquinas	3
Religion		
RLGN 2550	History of Early Christian Thought	3
RLGN 2560	History of Medieval Christian Thought	3
RLGN 2730	Jews and Judaism in Antiquity	3
RLGN 2760	Rabbinic Judaism	3
RLGN 2780	Classical Islam	3
RLGN 3194	Islamic Philosophy	3
RLGN 3230	Gender in Early Christianity	3
RLGN 3824	Kabbalah	3

Group 2: Literatures, Art and Languages

See the departmental Calendar section for full course descriptions. With written consent of the program coordinator courses not on this list may be used to satisfy the Group 2 requirement.

Faculty of Arts		
Classics		
LATN 2800	Readings in Medieval or Renaissance Latin	3
English, Film, and Theatre		
ENGL 2070	Literature of the Sixteenth Century	6
ENGL 2080	Medieval Literature	6
ENGL 3000	Chaucer	6
ENGL 3010	Shakespeare	6
ENGL 3020	Milton	6
ENGL 3030	Studies in Sixteenth-Century Literature	3
ENGL 3050	Studies in Old English	6
ENGL 3080	Studies in Medieval Literature	3
ENGL 3090	Studies in Seventeenth-Century Literature	3
ENGL 3180	Studies in Renaissance Literature	3
French, Spanish and Italian		
FREN 3500	Littérature du 17e siècle (B)	3
SPAN 3670	Poetry and Novel of the Golden Age	3

ACADEMIC CALENDAR 2015-2016

SPAN 3680	Drama of the Golden Age	3
Icelandic		
ICEL 1410	Introduction to Culture in Medieval Iceland	3
ICEL 2310	An Introduction to Old Icelandic Language and Literature	6
ICEL 3320	Old Norse Mythology	3
ICEL 3330	Icelandic Sagas in Translation	3
ICEL 3400	Old Icelandic Literature	6
ICEL 4420	History of the Icelandic Language	3
School of Art		
FAAH 1030	Introduction to Art 1A	3
FAAH 2060	Medieval to Early Renaissance Art and Architecture	3
FAAH 2070	Renaissance to Baroque Art and Architecture	3
FAAH 3130	Topics in Medieval Art and Architecture	3
FAAH 3140	Topics in Renaissance and Baroque Art and Architecture	3
FAAH 3280	Early Byzantine Art and Architecture	3
FAAH 3290	Later Byzantine Art and Architecture	3

8.22 Department of Native Studies

Head: (Acting Head) Niigaan Sinclair

Campus Address & General Office: 204 Isbister Building

Telephone: 204 474 9266

Email Address: native_studies@umanitoba.ca

Website: umanitoba.ca/native_studies

8.22.1 Program Information

Courses in this department examine the history, art, literature, and the philosophical and religious traditions of Canada's original inhabitants. Other courses explore the legal, political, and health care systems in relation to Aboriginal people. Aboriginal and non-Aboriginal students may specialize in either Native studies or Native languages, Cree and Ojibway.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in NATV 1200 or "C" or better in both NATV 1220 and NATV 1240. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

A) Native Studies

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in one of NATV 1200 or "C" or better in both NATV 1220 and NATV 1240.

B) Native Languages

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in both NATV 1250 and NATV 1260; or "C" or better in both NATV 1270 and NATV 1280; or "C" or better in NATV 2250, and both NATV 2272 and NATV 2274 (the former NATV 2270).

Other

Students will be permitted to register for a Major in Native Studies and a Minor in Native Languages but may not complete both a Major and Minor in Native Studies.

Before registering for approved cross-listed courses, students should consult the Calendar or the departments regarding prerequisites for specific courses.

YEAR 1	YEAR 2	YEAR 3	YEAR 4
NATIVE STUDIES GENERAL MAJOR TOTAL: 30 CREDIT HOURS			
NATV 1200 or NATV 1220 and NATV 1240	<ul style="list-style-type: none"> • 18 credit hours in Native Studies numbered at the 2000 level or above¹ • 6 credit hours in Native Studies or Native Language courses numbered at the 3000 level or above. 		
NATIVE STUDIES SINGLE ADVANCED MAJOR TOTAL: 48 CREDIT HOURS			
NATV 1200 or NATV 1220 and NATV 1240	<ul style="list-style-type: none"> • 21 credit hours in courses offered by Native Studies² • 12 credit hours in courses offered by Native Studies numbered at the 3000 level • 9 credit hours in courses offered by Native Studies numbered at the 4000 level 		
NATIVE STUDIES MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS			
NATV 1200 or NATV 1220 and NATV 1240	12 credit hours in courses offered by Native Studies numbered at the 2000 level or above ²		
NATIVE LANGUAGES MINOR (CONCENTRATION)⁵ (OPTION 1) TOTAL: 18 CREDIT HOURS			
NATV 1250 and NATV 1260 or NATV 1270 and NATV 1280	NATV 2250, or both NATV 2272 and NATV 2274	NATV 2300 and NATV 2320, or NATV 2310 and NATV 2330, or 6 credit hours approved by the department ^{3,4}	
NATIVE LANGUAGES MINOR (CONCENTRATION)⁵ (OPTION 2) TOTAL: 18 CREDIT HOURS			
NATV 2250, or both NATV 2272 and NATV 2274	NATV 2300 and NATV 2320, or NATV 2310 and NATV 2330	6 credit hours in Native languages or 6 credit hours approved by the department ^{3,4}	
NOTES:			
The following courses count as Native Language courses: NATV 1250, NATV 1260, NATV 1270, NATV 1280, NATV 1290, NATV 2250, NATV 2272, NATV 2274, NATV 2300, NATV 2310, NATV 2320, NATV 2330 and NATV 3300.			
¹ Students may substitute up to 12 credit hours from the approved cross-listed courses and/or 12 hours of Native Language courses numbered at the 1000 or 2000 level in lieu of Native Studies but must have six credit hours in Native Studies or Native Languages courses offered by Native Studies numbered at the 3000 level or above.			
² Students may substitute up to six credit hours from the list of approved courses and/or six hours of Native Language courses in lieu of Native Studies courses.			
³ No more than 12 credit hours may be taken from NATV 1200, NATV 1220, NATV 1240, NATV 1250, NATV 1260, NATV 1270, NATV 1280, NATV 2250, NATV 2272, NATV 2274.			
⁴ Six credit hours may be from related linguistics courses approved by the department.			
⁵ Students who wish to declare a Minor should consult with the department head.			

8.22.3 Native Studies Aboriginal Governance Stream

Students interested in pursuing an Single Advanced Major in Aboriginal Governance are required to take a Minor in Business. The requirements for both are set out below. For course descriptions, including any prerequisites and/ or restrictions see the appropriate departmental listing in this Calendar. The conditions for entry, continuation and graduation requirements may be found in Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Advanced Major, Aboriginal Governance Stream, the prerequisite is a grade of “C” or better in NATV 1200 or a “C” or better in both NATV 1220 and NATV 1240.

For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

Minor Program

For entry to the required Minor in Business for students who wish the Aboriginal Governance Stream, the prerequisite is 6 credit hours from ACC 1100, GMGT 2060, HRIR 2440 or MKT 2210 with a grade of “C” or better in each.

For information on this program contact the Department of Native Studies.

8.22.4 Native Studies Aboriginal Governance Stream

YEAR 1	YEAR 2	YEAR 3	YEAR 4
NATIVE STUDIES SINGLE ADVANCED MAJOR - ABORIGINAL GOVERNANCE STREAM TOTAL: 51 CREDIT HOURS			
NATV 1200 or NATV 1220 and NATV 1240	<ul style="list-style-type: none"> • ECON 1010 or ECON 1210 or ECON 1220 • NATV 2110, POLS 2070, STAT 1000 • 12 credit hours from Political Governance courses: NATV 2220, NATV 3310, NATV 3280, NATV 3370, NATV 4200, POLS 4150 • 12 credit hours from Aboriginal Business and Economics courses: NATV 3120, NATV 3160, NATV 3350, NATV 4320 • 6 credit hours from Traditional Knowledge courses: NATV 2030, NATV 3330, NATV 4220, NATV 4230 		
REQUIRED MINOR IN BUSINESS FOR THOSE STUDENTS IN A DECLARED ABORIGINAL GOVERNANCE STREAM TOTAL: 18 CREDIT HOURS			
ACC 1100, GMGT 2060, HRIR 2440, MKT 2210	6 credit hours from: ACC 1110, COMP 1260, ENTR 2010, ENTR 2020, GMGT 2010, GMGT 3300, LEAD 2010, FIN 2200, FIN 3470, HRIR 4410, MIS 2000		
NOTE:			
¹ Students must ensure that all course prerequisites are met when selecting courses for the Minor.			

List of Approved Courses in Native Studies

Approved courses from other faculties/schools for partial fulfilment of the Major and Minor in Native Studies are given below

Asper School of Business		
IDM 3000*	Aboriginal Business Context: Influences and Impacts	3
IDM 4090*	Aboriginal Business Leadership	3
School of Art		
FAAH 2090	Art of the North American Aboriginal Peoples	3
FAAH 3430	Inuit Art	3
054.358*	Inuit Culture and Art	3
054.373*	Art of the North American Native Peoples	3
Marcel A. Desautels Faculty of Music		
033.386*	Topics in Music (when the topic is "Music in Traditional Aboriginal Society")	3

* Indicates course no longer offered.

8.22.5 Native Studies Course Descriptions-**Native Studies Course Descriptions-1000 Level****NATV 1000 Orientation Course: The Colonizers and the Colonized Cr. Hrs. 3**

(Formerly 032.100) The course which is offered as part of the summer session consists of an introduction to the colonization process as it regards Aboriginal people and the processes of decolonization undertaken by the people since 1970. Prerequisite: this is a special course designed for first year entering Aboriginal students. Registration is restricted and written consent must be obtained from the instructor prior to registration.

NATV 1200 The Native Peoples of Canada Cr.Hrs. 6

(Formerly 032.120) A survey of the political, social, and economic situations of the contemporary First Nations, Métis, and Inuit Peoples of Canada. Students may not hold credit for both NATV 1200 (032.120) and any of: NATV 1220 (032.122) or NATV 1240 (032.124).

NATV 1220 The Native Peoples of Canada, Part 1 Cr.Hrs. 3

(Formerly 032.122) A survey of the political, social, and economic situations of the contemporary First Nations, Métis, and Inuit Peoples of Canada from pre-contact to 1945. Students may not hold credit for both NATV 1220 (032.122) and NATV 1200 (032.120).

NATV 1240 The Native Peoples of Canada, Part 2 Cr.Hrs. 3

(Formerly 032.124) A survey of the political, social, and economic situations of the contemporary First Nations, Métis, and Inuit Peoples of Canada from 1945 to the present. This course may include a field trip component. Students may not hold credit for both NATV 1240 (032.124) and NATV 1200 (032.120).

NATV 1250 Introductory Cree 1 Cr.Hrs. 3

(Formerly 032.125) (Lab required) Practical course intended for students who are not fluent in Cree. Emphasis will be on oral work for the purpose of learning basic sounds and grammatical patterns. Some attention will be given to the structural differences between Cree and English. Regular attendance and active participation are obligatory. This course is a prerequisite for NATV 1260 Introductory Cree 2.

NATV 1260 Introductory Cree 2 Cr.Hrs. 3

(Formerly 032.126) (Lab required) Continuation of NATV 1250 (032.125) Introductory Cree 1. Practical course intended for students who are not fluent in Cree. Emphasis will be on oral work for the purpose of learning basic sounds and grammatical patterns. Some attention will be given to the structural differences between Cree and English. Regular attendance and active participation are obligatory. Prerequisite: a grade of "C" or better in NATV 1250 (032.125).

NATV 1270 Introductory Ojibway 1 Cr.Hrs. 3

(Formerly 032.127) Practical course intended for students who are not fluent in Ojibway. Emphasis will be on oral work for the purpose of learning basic sounds and grammatical patterns. Some attention will be given to the structural differences between Ojibway and English. Regular attendance and active participation are obligatory. This course is a prerequisite for NATV 1280 Introductory Ojibway 2.

NATV 1280 Introductory Ojibway 2 Cr.Hrs. 3

(Formerly 032.128) Continuation of NATV 1270 (032.127) Introductory Ojibway 1. Practical course intended for students who are not fluent in Ojibway. Emphasis will be on oral work for the purpose of learning basic sounds and grammatical patterns. Some attention will be given to the structural differences between Ojibway and English. Regular attendance and active participation are obligatory. Prerequisite: a grade of "C" or better in NATV 1270 (032.127).

NATV 1290 Introductory Inuktitut Cr.Hrs. 3

(Formerly 032.129) A practical course in conversational Inuktitut focusing on basic grammatical structures, everyday vocabulary, and using syllabics. This course is offered as part of the Pangnirtung Summer Travel/Study Program. Prerequisite: written consent of department head.

Native Studies Course Descriptions-2000 Level**NATV 2000 Selected Topics in Native Studies Cr.Hrs. 3**

(Formerly 032.200) The content of this course will vary. Depending on instructor, this course may have a field component. Contact the Department of Native Studies for details. Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

NATV 2020 The Métis of Canada Cr.Hrs. 3

(Formerly 032.202) A history of the Métis of Canada.

NATV 2030 Working with Aboriginal Elders Cr.Hrs. 3

This course provides an opportunity for students to develop culturally relevant community service skills in Native Studies and to acquire an understanding of traditional teachings by Elders from the Cree and Ojibway traditions. The course includes participation in the annual Elders and Traditional Teachers Gathering conference. Students may not hold credit for both NATV 2030 and NATV 2000 when titled "Working with Elders." Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of instructor or department head.

NATV 2040 The Native Peoples of the Northern Plains Cr.Hrs. 3

(Formerly 032.204) An interdisciplinary study of the history and traditional cultures of the Native Peoples of the Northern Plains. Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of department head.

NATV 2060 The Native Peoples of the Eastern Woodlands Cr.Hrs. 3

(Formerly 032.206) An interdisciplinary study of the history and traditional cultures of the Native peoples of the Great Lakes and Maritimes. Emphasis will be on the Anishinabe (Ojibway, Saulteaux). Depending on instructor, this course may have a field component. Contact the Department of Native Studies for details. Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of department head.

NATV 2070 The Native Peoples of the Subarctic Cr.Hrs. 3

(Formerly 032.207) This course will examine the subsistence organization, social organization and cosmology of both the Cree and Dene. We will further examine the history of the aboriginal-European encounter and the impact of colonialism on contemporary political and land rights struggles. While we will consider the region as a whole, we will specifically focus on the James Bay Cree and Rock Cree of Northern Manitoba, and secondly on the Saisi Dene, north of the Churchill River. This course may include a field trip component. Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of department head.

NATV 2080 Inuit Society and Culture Cr.Hrs. 3

(Formerly 032.208) An examination of the subsistence organization, social organization, cosmology and ceremonies of Inuit from a regional and comparative perspective. While this course will focus on Eastern Arctic Inuit comparison will also be made to Greenlanders, Inuvialuit, Inupiat and Yup'ik. We will conclude the course by examining colonial history and the rise of Nunavut. The course may include a field trip component.

Students may not hold credit for both NATV 2080 (032.208) and NATV 2000 (032.200) with the topic "Inuit Society and Culture." Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of department head.

NATV 2100 Aboriginal Spirituality Cr.Hrs. 3

(Formerly 032.210) This course allows students to work with Aboriginal elders or traditional teachers, exposing them to cultural and spiritual concepts. Emphasis is on Anishinabe or Cree teachings, though other First Nations approaches may be offered. This course may include a field trip component. Students may not hold credit for both NATV 2100 (032.210) and NATV 3000 (032.300) when titled "Aboriginal Wisdom and Spirituality."

NATV 2110 Introduction to Aboriginal Community Development Cr. Hrs. 3

Community development is the main strategy available for achieving the level of governance that most Aboriginal communities seek. It involves a plan that captures the spirit of a community and stirs the imagination of the members. Obstacles include lack of time, resources, vision and understanding of what a community plan for development can accomplish. This course will examine community development within an Aboriginal context. Students may not hold credit for both NATV 2110 and NATV 2000 (032.200) when titled "Introduction to Aboriginal Community Development." Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of department head.

NATV 2220 Native Societies and the Political Process Cr.Hrs. 3

(Formerly 032.222) An analysis of contemporary Canadian (and U. S.) political and administrative processes as they affect Native people. Depending on instructor, this course may have a weekend field trip. Contact the Department of Native Studies for details.

NATV 2250 Intermediate Cree Cr.Hrs. 6

(Formerly 032.225) Continuation of introductory courses and entry-level course for fluent speakers. Development of conversational fluency. Cree orthography, composition and translation, introduction to the linguistic structure of Cree. Prerequisite: [a grade of "C" or better in both NATV 1250 (032.125) and NATV 1260 (032.126)] or [Matriculation Cree] or written consent of instructor or department head.

NATV 2272 Intermediate Ojibway 1 Cr.Hrs. 3

This course is a continuation of Introductory Ojibway 1 and 2 and the entry-level course for fluent speakers. It focuses on development of conversational fluency, Ojibway orthography, composition and translation. Students may not hold credit for both NATV 2272 and the former NATV 2270 (032.227). Prerequisite: [a grade of "C" or better in both NATV 1270 (032.127) and NATV 1280 (032.128)] or [Matriculation Ojibway] or written consent of instructor or department head.

NATV 2274 Intermediate Ojibway 2 Cr.Hrs. 3

This course is a continuation of Intermediate Ojibway 1. It focuses on the further development of conversational fluency, Ojibway orthography, and translation and also offers an introduction to the linguistic structure of Ojibway. Students may not hold credit for both NATV 2274 and the former NATV 2270 (032.227). Prerequisite: [a grade of "C" or better in NATV 2272] or written consent of instructor or department head.

NATV 2300 Cree Literature Cr.Hrs. 3

(Formerly 032.230) A survey of Cree literature based on the extensive study of particular texts in cultural, historical and spiritual contexts. Prerequisite: [a grade of "C" or better in NATV 2250 (032.225) or NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of department head.

NATV 2310 Ojibway Literature Cr.Hrs. 3

(Formerly 032.231) A survey of Ojibway (Eastern, Western, Chippewa, Saulteaux, Odawa, others) literature based on the extensive study of particular texts in cultural, historical and spiritual contexts. Prerequisite: [a grade of "C" or better in both NATV 2272 and NATV 2274] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or [a grade of "C" or better in NATV 1200 (032.120) or the former NATV 2270 (032.227)] or written consent of department head.

NATV 2320 Structure of the Cree Language Cr.Hrs. 3

(Formerly 032.232) A detailed structural analysis of Cree with special attention to the problem of dialect variation and to the contrastive analysis of Cree and English. Prerequisite: [a grade of "C" or better in NATV 2250 (032.225)] or written consent of department head.

NATV 2330 Structure of the Ojibway Language Cr.Hrs. 3

(Formerly 032.233) A detailed structural analysis of Ojibway with special attention to the problem of dialect variation and to the contrastive analysis of Ojibway and English. Prerequisite: [a grade of "C" or better in both NATV 2272 and NATV 2274] or [a grade of "C" or better in the former NATV 2270 (or 032.227)] or written consent of department head.

NATV 2410 Canadian Native Literature Cr.Hrs. 3

(Formerly 032.241) A study of literature by and about Canadian Native peoples, Indian mythology, personal narratives, protest literature, poetry, plays and novels will be explored to give an appreciation of Native philosophies, experiences, traditions and cultures. Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of department head.

NATV 2420 Inuit Literature in Translation Cr.Hrs. 3

(Formerly 032.242) An examination of various literary forms produced by Inuit including traditional myths and songs, life histories, contemporary novels and modern political writings. Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of instructor or department head.

NATV 2430 Indigenous Women's Stories Cr.Hrs. 3

This course will investigate through the medium of literature - life writing, fiction, creative non-fiction, poetry - and film experiences of Indigenous women in North America, particularly in Canada, as articulated in their own voices. Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of instructor or department head.

NATV 2450 Images of Indian People in North American Society Cr.Hrs. 3

(Formerly 032.245) Will trace the portrayal of Indian peoples 1492 to the present. Emphasis will be on material and theoretical depictions, and will require reading as well as study of art pieces, tourist objects, cartoons, movies and so forth. Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of department head.

Native Studies Course Descriptions-3000 Level

NATV 3000 Selected Topics Cr.Hrs. 3

(Formerly 032.300) The content of this course will vary. Contact the department for a course description. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

NATV 3100 Aboriginal Healing Ways Cr.Hrs. 3

(Formerly 032.310) This course allows students to work with Aboriginal elders or traditional teachers on concepts of healing and wellness. Emphasis is on Anishinabe or Cree healing practices, though other First Nations approaches may be offered. This course may include a field trip component. Students may not hold credit for both NATV 3100 (032.310) and NATV 3000 (032.300) when titled "Exploring Aboriginal Healing." Prerequisite: [a grade of "C" or better in NATV 2100 (032.210)] or written consent of the department head.

NATV 3110 Indigenous Environmental Discourse Cr.Hrs. 3

This course is designed to further an in-depth understanding of Indigenous perspectives on the environment (rural and urban) through the critical analysis of poetry, essays, fiction, film and art by Indigenous writers, scholars and (media) artists. Prerequisite: [a grade of "C" or better in NATV 2410 (032.241)] or written consent of instructor or department head.

NATV 3120 Exploring Aboriginal Economic Perspectives Cr.Hrs. 3

Explore the impact of legal, constitutional and governance issues on the internal and external operating environment affecting economic development by Aboriginal peoples. Current strategies for successful partnerships between industry and Aboriginal peoples will also be examined. Students may not hold credit for NATV 3120 and any of: ECON 2350 (018.235) or the former IDM 3000 (098.300) or the former NATV 4310 (032.431). Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of instructor or department head.

NATV 3130 International Indigenous Literatures Cr.Hrs. 3

This course will compare selected texts by Indigenous authors from Canada, U.S.A., New Zealand and Australia. Following the history of the respective literature in each country, it will examine the role of Indigenous writing – poetry, fiction, plays – in de/colonization processes in settler societies. Prerequisite: [a grade of "C" or better in NATV 2410 (032.241)] or written consent of instructor or department head.

NATV 3140 Aboriginal Resistance Writing Cr.Hrs. 3

This course will trace and explore the history and practice of Canadian Aboriginal resistance writing. Attention will be given to political and creative writing in contrapuntal response to the Canadian colonial situation. Classes will be based largely on seminar discussions and readings. Prerequisite: [a grade of "C" or better in NATV 2410 (032.241)] or written consent of instructor or department head.

NATV 3150 Residential School Literature Cr.Hrs. 3

This course focuses on the analysis of literary responses to Residential Schools in the form of memoirs, fiction, poetry, and plays; it will also include aesthetic representations of school experiences through other media like film and art. Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of instructor or department head.

NATV 3160 Fundraising for Aboriginal Organizations Cr.Hrs. 3

This course examines effective fundraising skills as critical for the longevity of many programs in the Aboriginal community. While government fundraising is an important source, understanding grantsmanship and other funding strategies are critical for sustained program existence and effective use of scarce human and financial resources. Students may not hold credit for both NATV 3160 and NATV 3000 (032.300) when titled "Financing Strategies for Aboriginal Non-Profit Initiatives." Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of department head.

NATV 3170 Aboriginal Peoples and Racism in Canada Cr.Hrs. 3

This course will trace the historical and colonial roots of racism as experienced by Aboriginal Peoples in Canada as well as examine its practices in contemporary society and culture. Concepts such as systemic racism, cultural difference and anti-racist education may be explored. Class format will include readings, seminar discussions, some films and lectures. Critical reading and analysis is expected. Students may not hold credit for both NATV 3170 and NATV 3000 when titled "Racism and Aboriginal Peoples." Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of instructor or department head.

NATV 3240 Native Medicine and Health Cr.Hrs. 3

(Formerly 032.324) The health, disease, and medical practices of North American Native peoples. A survey of the health and health care of North American Native people from pre-contact to modern times. Special attention will be paid to traditional concepts of health and healing practices.

NATV 3270 The Métis Nation: The Modern Era Cr.Hrs. 3

(Formerly 032.327) A study of the dispossession of the Métis Nation after 1870, their resurgence in the 1950s and contemporary issues affecting Métis people in Canada. Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of department head.

NATV 3280 Aboriginal Peoples and the Canadian Justice System Cr.Hrs. 3

(Formerly 032.328) A study of Native peoples' relationships to civil and criminal law in modern Canadian society. Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of department head.

NATV 3290 Independent Research Cr.Hrs. 3

(Formerly 032.329) Supervised research or field work. Results will be presented in a form appropriate to the subject of study. Written consent of department head, based on a written research proposal, must be obtained before registration. As the course content will vary from year to year, students may take this course more than once for credit.

NATV 3300 Native Language Planning and Development Cr.Hrs. 3

(Formerly 032.330) The social and political setting of the indigenous languages of North America. Issues and methods in language policy development, maintenance, standardization, and innovation. Prerequisite: a grade of "C" or better in six credit hours of Native Languages at the second year level.

NATV 3310 Canadian Law and Aboriginal Peoples Cr.Hrs. 3

(Formerly 032.331) A survey of laws relating to Native peoples in Canada. Topics will include legal aspects of aboriginal title, Indian treaties, Indian and Métis land claims, the Indian Act, hunting and fishing rights, self-government, and constitutional issues. Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of department head.

NATV 3330 Aboriginal People, Science and the Environment Cr.Hrs. 3

(Formerly 032.333) This course will examine current Aboriginal environmental and development issues both locally and internationally. The basic principles of Aboriginal philosophy and how present forms of development on Aboriginal land has conflicted with this philosophy will be examined. Prerequisite: written consent of department head.

NATV 3340 Circumpolar Cultures and Lifestyles Cr.Hrs. 3

(Formerly 032.334) An interdisciplinary study of inter-relationships between the history, traditional lifestyles, politics, and environment of circumpolar Indigenous peoples. Prerequisite: written consent of department head.

NATV 3350 Aboriginal Organizations Cr.Hrs. 6

(Formerly 032.335) A study of local, regional and national Aboriginal organizations in contemporary North America and their interaction with government and private agencies. A field component may be included depending on instructor. Contact the Department of Native Studies for details. Students may not hold credit for both NATV 3350 (032.335) and the former NATV 3320 (032.332). Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of department head.

NATV 3360 Aboriginal Women of Canada Cr.Hrs. 3

(Formerly 032.336) This course explores and critically examines from interdisciplinary and post-colonial perspectives historical and contemporary processes, representation, experiences and social issues specific to Aboriginal women of Canada. Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of instructor or department head.

NATV 3370 Political Development in the North Cr.Hrs. 3

(Formerly 032.337) An examination of historical and contemporary political processes in Nunavut, Northwest Territories, and Yukon including the negotiation and implementation of Aboriginal land claims. Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of instructor.

NATV 3380 Cultural Constructions of Gender in Canadian Aboriginal Societies Cr.Hrs. 3

(Formerly 032.338) An examination of the theoretical issues that surround the cultural construction of gender leading into detailed ethnographic and historical case studies. Prerequisites: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of instructor.

NATV 3390 Cultural Continuity and Change in Cumberland Sound Cr.Hrs. 3

(Formerly 032.339) This course examines the rich and complex history of Cumberland Sound. The course also discusses the specific character of Inuit culture in Cumberland Sound and, in a series of lectures on contemporary community dynamics, looks at recent expressions of culture. Students may not hold credit for both NATV 3390 (032.339) and NATV 3000 (032.300) when titled "Culture and History in Cumberland Sound."

Native Studies Course Descriptions-4000 Level

NATV 4200 First Nations' Government Cr.Hrs. 3

(Formerly 032.420) A review and critical examination of the evolution of First Nations' self-government with a focus on contemporary issues, models and trends. Prerequisite: written consent of department head.

NATV 4210 Seminar in Contemporary and Historical Métis Issues Cr.Hrs. 3

(Formerly 032.421) A study of the literature, both primary and secondary, dealing with the Métis people in Canada. Prerequisite: written consent of department head.

NATV 4220 Environment, Economy and Aboriginal Peoples Cr.Hrs. 3

(Formerly 032.422) An analysis of sustainable development issues discussed within a cultural context. Depending on the instructor, this course may have a field component. Contact the Department of Native Studies for details. Prerequisite: written consent of department head.

NATV 4230 Traditional Knowledge and Native Studies Research Cr.Hrs. 3

(Formerly 032.423) A study of issues influencing oral histories, case studies, interviews, and other techniques used in research with Aboriginal people. Depending on instructor this course may have a field component. Contact the Department of Native Studies for details. Prerequisite: written consent of department head.

NATV 4240 Arctic Lifestyles Cr.Hrs. 3

(Formerly 032.424) An interdisciplinary study of the interrelationships between culture, economy, and ecology in the Arctic region. Depending on instructor, this course may have a field component. Contact the Department of Native Studies for details. Prerequisite: written consent of department head.

NATV 4250 Topics on Aboriginal Identities Cr.Hrs. 3

(Formerly 032.425) An interdisciplinary study of Aboriginal values, cultures and contemporary identities with emphasis on the impact of colonization. Prerequisite: [a grade of "C" or better in NATV 1200 (032.120) or "C+" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] and [a grade of "C+" or better in 6 credit hours in Native Studies] or written consent of instructor.

NATV 4280 Missionaries, Colonialism and Aboriginal Peoples Cr.Hrs. 3

(Formerly 032.428) A study of Aboriginal responses to Christian missions with a particular emphasis on resistance, syncretism, and "prophet" movements. Prerequisite: [a grade of "C" or better in 15 credit hours of Native Studies] or written consent of instructor.

NATV 4290 Independent Research Cr.Hrs. 3

(Formerly 032.429) Supervised research or field work. Results will be presented in a form appropriate to the subject of study. Prerequisite: written consent of department head, based on a written research proposal, must be obtained before registration. As the course content will vary from year to year, students may take this course more than once for credit.

NATV 4300 Advanced Selected Topics in Native Studies Cr.Hrs. 3

(Formerly 032.430) The content of this course will vary from year to year. Contact the Department for a course description. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

NATV 4320 Aboriginal Economic Leadership Cr.Hrs. 3

(Formerly 032.432) An analysis of current leadership strengths and challenges facing Aboriginal organizations. Out of this analysis will come understanding of strategies for working effectively with Aboriginal organizations. Students may not hold credit for both NATV 4320 (032.432) and the former IDM 4090 (098.409). Prerequisite: [a grade of "C" or better in NATV 1200 (032.120)] or [a grade of "C" or better in both NATV 1220 (032.122) and NATV 1240 (032.124)] or written consent of instructor.

NATV 4330 Indigenous Aesthetics Cr.Hrs. 3

This course will be centered on Indigenous philosophies and aesthetic theories regarding literature, film, theatre and visual arts produced by Indigenous writers, artists and filmmakers in Canada with special emphasis on conceptualizations of an oral "communitist," activist and resistance aesthetics. Prerequisite: [a grade of "C" or better in 15 credit hours of Native Studies courses which must include NATV 2410 (032.241)] or written consent of instructor or department head.

NATV 4340 Text, Representation and Discourse Cr.Hrs. 3

This course examines the discourse of representation surrounding Aboriginal Peoples and Canada's historical and cultural productions. Although the focus is on Canadian material and experience, the course draws on international post-colonial approach in the critical study of archival and historical records, literary works and contemporary Aboriginal expressions. Method of study includes historiography, film and literary criticism and post-colonial theory. Prerequisite: [a grade of "C" or better in NATV 2410 (032.241)] or written consent of instructor or department head.

8.23 Department of Philosophy

Head: (Acting Head) Rhonda Martens
Campus Address & General Office: 453 University College
Telephone: 204 474 6878
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8.23.1 Program Information

Philosophy is composed of several areas of study: these include logic, metaphysics, ethics, political philosophy, philosophy of science, philosophy of language, and aesthetics. Philosophers use the tools of rigorous logic and clear conceptual analysis. Their goal is to understand things such as the nature of reason, the physical universe, right and wrong, the human mind, and sometimes even the meaning of life. There are good arguments and bad arguments. Training in philosophy will help the student not only consider these important questions but also to improve his or her clarity of expression and ability to think critically.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of “C” or better in six credit hours in Philosophy. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

The General Major may consist entirely of courses numbered beyond the 1000 level.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of “C” or better in six credit hours in Philosophy.

The Minor (Concentration) may consist entirely of courses numbered beyond the 1000 level.

Honours Program

For entry to the Honours program, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

8.23.2 Philosophy

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR¹ TOTAL: 30 CREDIT HOURS			
6 credit hours in Philosophy courses numbered at the 1000 level	<ul style="list-style-type: none"> • 6 credit hours of History of Philosophy courses • an additional 18 credit hours in Philosophy courses 		
SINGLE ADVANCED MAJOR¹ TOTAL: 48 CREDIT HOURS			
48 credit hours in Philosophy satisfying the following requirements:			
<ul style="list-style-type: none"> • at least 6 credit hours from PHIL 1200 or PHIL 1320 • at least 12 credit hours from History of Philosophy courses • at least 6 credit hours from PHIL 2430 or PHIL 2760 • at least 12 credit hours from Philosophy courses numbered at the 3000 level and above. (Students must obtain written permission of the department head to take honours courses) 			
MINOR (CONCENTRATION)¹ TOTAL 18 CREDIT HOURS			
6 credit hours in Philosophy	12 credit hours in Philosophy courses		

ACADEMIC CALENDAR 2015-2016

SINGLE HONOURS^{1,2,6}			
6 credit hours in Philosophy courses numbered at the 1000 level	<ul style="list-style-type: none"> • PHIL 2430³ • PHIL 2760 • 6 credit hours from PHIL 2612, PHIL 2614, PHIL 2630, PHIL 2640, PHIL 2650, PHIL 2660, PHIL 2780, PHIL 2790, PHIL 3580 • 12 credit hours of ancillary options⁴ 	<ul style="list-style-type: none"> • 9 credit hours in Honours Philosophy courses • 3 credit hours from PHIL 2612, PHIL 2614, PHIL 2630, PHIL 2640, PHIL 2650, PHIL 2660, PHIL 2780, PHIL 2790, PHIL 3580 • an additional 3 credit hours from History of Philosophy courses • 3 credit hours in Honours Philosophy courses or History of Philosophy courses • 6 credit hours of ancillary options⁴ • 6 credit hours of free options⁵ 	<ul style="list-style-type: none"> • 12 credit hours in Honours Philosophy courses • 6 credit hours in Philosophy courses numbered at the 2000 level and above • 6 credit hours of ancillary options⁴ • 6 credit hours of free options⁵
DOUBLE HONOURS^{1,2,6}			
6 credit hours in Philosophy courses numbered at the 1000 level	<ul style="list-style-type: none"> • 6 credit hours from History of Philosophy courses • PHIL 2430 or PHIL 2760 • 18 credit hours of ancillary options⁴ 	<ul style="list-style-type: none"> • 6 credit hours in Honours Philosophy courses • 3 credit hours from PHIL 2612, PHIL 2614, PHIL 2630, PHIL 2640, PHIL 2650, PHIL 2660, PHIL 2780, PHIL 2790, PHIL 3580 • an additional 3 credit hours from History of Philosophy courses • 12 credit hours of ancillary options⁴ • 6 credit hours of free options⁵ 	<ul style="list-style-type: none"> • 6 credit hours in Honours Philosophy courses • 6 credit hours in Philosophy courses numbered at the 2000 level and above • 12 credit hours of ancillary options⁴ • 6 credit hours of free options⁵
NOTES:			
¹ At most 12 credit hours in Philosophy numbered at the 1000 level may count towards any degree program. In addition, no student may hold credit in both PHIL 1200 and the former PHIL 1510.			
² Courses listed may be taken in years other than the ones specified; however, the total set of courses taken must conform to these requirements in other respects.			
³ Students who took the former PHIL 1330 in their first year will substitute six other credit hours in Philosophy for PHIL 2430 in Year 2.			
⁴ Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Philosophy courses).			
⁵ Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Philosophy courses).			
⁶ Honours courses: PHIL 3430, PHIL 3440, PHIL 3580, PHIL 3630, PHIL 3640, PHIL 3650, PHIL 3760, PHIL 3770 and all 4000 level courses.			

History of Philosophy		
Course	Credit Hours	
PHIL 1510*	Historical Introduction to Philosophy	6
PHIL 2300	Political Philosophy	6
PHIL 2610*	The History and Philosophy of Science	6
PHIL 2612	A Philosophical History of Science	3
PHIL 2630	Continental Rationalism	3
PHIL 2640	British Empiricism	3
PHIL 2650	Plato	3
PHIL 2660	Aristotle	3
PHIL 2710	Twentieth-Century European Philosophy: Existentialism	3
PHIL 2720*	Twentieth-Century European Philosophy: Phenomenology	3
PHIL 2780	Thomas Aquinas	3
PHIL 2790	Moral Philosophy	6
PHIL 2820*	Existentialism	6
PHIL 3580	Kant	3
PHIL 3690*	The Rise of Analytic Philosophy	3

* indicates course no longer offered

8.23.3 Philosophy Course Descriptions**Philosophy Course Descriptions-1000 Level****PHIL 1200 Introduction to Philosophy Cr.Hrs. 6**

(Formerly 015.120) An introduction to five main areas of philosophy. Topics are logical thinking; the criteria and limits of human knowledge; and three of: God, right and wrong, free will and the nature of consciousness, scientific inquiry, and social justice. Students may not hold credit for PHIL 1200 (015.120) and any of: PHIL 1511 (015.151) or the former PHIL 1510 (015.151) or or the former PHIL 1261 (015.126).

PHIL 1290 Critical Thinking Cr.Hrs. 3

(Formerly 015.129) A course which helps students to think clearly and critically, and to present, defend, and evaluate arguments. The instructor will discuss good and bad reasoning, everyday fallacies, some specific argument forms such as the categorical syllogism, and ways and means of defining words. Students may not hold credit for PHIL 1290 (015.129) and any of: PHIL 1291 or PHIL 1320 (015.132) or PHIL 1321 (015.132).

PHIL 1320 Introductory Logic Cr.Hrs. 6

(Formerly 015.132) A course which helps students to think clearly and critically, and to present, defend and evaluate arguments. The course deals with categorical logic, non-formal fallacies, definition, modern symbolic logic and scientific method. Not open to students who have previously obtained credit for PHIL 2430 (015.243) or the former PHIL 3750 (015.375). Students may not hold credit for PHIL 1320 (015.132) and any of: PHIL 1321 (015.132) or PHIL 1290 (015.129) or PHIL 1291 or the former PHIL 1330 (015.133).

Philosophy Course Descriptions-2000 Level**PHIL 2150 Mind and Body Cr.Hrs. 3**

(Formerly 015.215) An introduction to theories of the mind and body, including dualism, identity theory and functionalism. The course deals with topics such as consciousness, thought, and desire. Prerequisite: [a grade of "C" or better in six credit hours of 1000-level philosophy] or [successful completion of 30 hours of university credit].

PHIL 2160 Fundamentals of the Philosophy of Language Cr.Hrs. 3

(Formerly 015.216) An introduction to theories of language, including those of Gottlob Frege and Bertrand Russell. The course deals with a variety of linguistic phenomena pertaining to names, definite descriptions, demonstratives, identity sentences, and belief reports. Prerequisite: [a grade of "C" or better in six credit hours of 1000-level philosophy] or [successful completion of 30 hours of university credit].

PHIL 2170 Special Topics 1 Cr.Hrs. 3

(Formerly 015.217) Topics will vary. Prerequisite: [a grade of "C" or better in three credit hours of philosophy] or [successful completion of 30 hours of university credit]. As the course content will vary from year to year, students may take this course more than once for credit.

PHIL 2180 Special Topics 2 Cr.Hrs. 3

(Formerly 015.218) Topics will vary. Prerequisite: [a grade of "C" or better in three credit hours of philosophy] or [successful completion of 30 hours of university credit]. As the course content will vary from year to year, students may take this course more than once for credit.

PHIL 2190 Philosophy and Sexuality Cr.Hrs. 3

Course examines various moral and legal issues related to sexuality. Topics may include: casual sex, monogamy, love, and commitment; the definition of marriage; the meaning of gender; the nature of consent; the moral and legal status of prostitution and pornography; the scope of sexual privacy and other moral challenges presented by new technology. Students may not hold credit for both PHIL 2190 and PHIL 2170 (015.217) when titled "Sexuality." Prerequisite: successful completion of 24 hours of university credit.

PHIL 2290 Ethics and Society Cr.Hrs. 6

(Formerly 015.229) An examination of some contemporary ethical theories and their application to a number of practical issues. Current issues to be discussed may include: ethics and the environment; abortion and euthanasia; sexual freedom and human equality; civil disobedience; individual liberty vs. state authority; punishment; and, justice and utility. Students may not hold credit for PHIL 2290 (015.229) and any of: PHIL 2531 (015.253) or PHIL 2740 (015.274) or PHIL 2741 or PHIL 2750 (015.275) or PHIL 2751. Prerequisite: successful completion of 30 hours of university credit.

PHIL 2300 Political Philosophy Cr.Hrs. 6

(Formerly 015.230) An analysis and evaluation of the main ideals - justice, freedom, happiness, equality, and self-realization - of the great political philosophers (e.g., Plato, Hobbes, Locke, Mill, and Marx) and of their theories of human nature and their blueprints for society. Students may not hold credit for both PHIL 2300 (015.230) and PHIL 2301 (015.230). Prerequisite: successful completion of 30 hours of university credit.

PHIL 2430 Modern Logic and the Philosophy of Logic Cr.Hrs. 6

(Formerly 015.243) A systematic introduction to the theory and techniques of modern symbolic logic, with an examination of contributions made by contemporary philosophers in dealing with philosophical problems closely connected with logic. Students may not hold credit for both PHIL 2430 (015.243) and any of: the former PHIL 1330 (015.133) or the former PHIL 3750 (015.375).

PHIL 2580 Metaphysics Cr.Hrs. 3

(Formerly 015.258) A study of some fundamental problems relating to the nature of reality, e.g., mind and body, cause and effect, human freedom, and the problem of universals. Students may not hold credit for both PHIL 2580 (015.258) and the former PHIL 2450 (015.245). Prerequisite: a grade of "C" or better in six credit hours of Philosophy at the 1000 level.

PHIL 2612 A Philosophical History of Science Cr.Hrs. 3

A philosophical study of the evolution of science and scientific methodology from the ancient Greeks to the present. A background in science is not required. Students may not hold credit for both PHIL 2612 and the former PHIL 2610 (015.261). Prerequisite: successful completion of 30 hours of university credit.

PHIL 2614 Philosophy of Science Cr.Hrs. 3

A critical study of the nature of scientific knowledge. A background in science is not required. Students may not hold credit for both PHIL 2614 and the former PHIL 2610 (015.261). Prerequisite: successful completion of 30 hours of university credit.

PHIL 2630 Continental Rationalism Cr.Hrs. 3

(Formerly 015.263) A study of the great Continental philosophers, Descartes, Spinoza, and Leibniz, who viewed reason, rather than experience, as the key to knowledge of the universe. Students may not hold credit for both PHIL 2630 (015.263) and PHIL 2631 (015.263). Prerequisite: [a grade of "C" or better in six credit hours of 1000-level Philosophy] or written consent of department head.

PHIL 2640 British Empiricism Cr.Hrs. 3

(Formerly 015.264) The course surveys and analyzes the theories of the great British empiricists, Locke, Berkeley, and Hume, on the nature and foundations of human knowledge and its relation to experience. Students may not hold credit for both PHIL 2640 (015.264) and PHIL 2641 (015.264). Prerequisite: [a grade of "C" or better in six credit hours of 1000-level Philosophy] or written consent of department head.

PHIL 2650 Plato Cr.Hrs. 3

(Formerly 015.265) An examination of Plato's views on reality, "man", politics, and morals through a study of his most significant dialogues. The course will begin with a discussion of the main pre-socratic philosophers. Students may not hold credit for both PHIL 2650 (015.265) and the former PHIL 2651 (015.265). Prerequisite: [a grade of "C" or better in six credit hours of 1000-level Philosophy] or written consent of department head.

PHIL 2660 Aristotle Cr.Hrs. 3

(Formerly 015.266) A study of Aristotle's most important views on reality, knowledge, morals, and politics, and of the late classical philosophies: epicureanism and stoicism. Students may not hold credit for both PHIL 2660 (015.266) and PHIL 2661 (015.266). Prerequisite: [a grade of "C" or better in six credit hours of 1000-level Philosophy] or written consent of department head.

PHIL 2710 Twentieth-Century European Philosophy: Existentialism Cr. Hrs. 3

(Formerly 015.271) This course will be devoted to a study of existentialist themes as they appear in the writings, both literary and philosophical, of some of the following: Beckett, Camus, de Beauvoir, Hesse, Heidegger, Kafka, Kierkegaard, Marcel, Nietzsche, Sartre, Buber, R.D. Laing, and various existential psychologists. Students may not hold credit for PHIL 2710 (015.271) and any of: the former PHIL 2820 (015.282) or the former PHIL 2821 (015.282).

PHIL 2730 Fundamentals of the Philosophy of Religion Cr.Hrs. 3

(Formerly 015.273) A critical study of some fundamental problems in the philosophy of religion, such as the existence and nature of God, the justification of religious beliefs, the status of mystical and other religious experiences, and the significance of religious discourse. Students may not hold credit for PHIL 2730 (015.273) and any of: PHIL 2701 (015.270) or the former PHIL 2700 (015.270).

PHIL 2740 Ethics and Biomedicine Cr.Hrs. 3

(Formerly 015.274) An examination of some important ethical issues arising out of recent developments in biology and medicine. Examples of topics to be covered include: the allocation of scarce medical resources; genetic engineering; euthanasia vs. the prolongation of life; abortion and infanticide, and experimentation on human subjects. Students may not hold credit for PHIL 2740 (015.274) and any of: PHIL 2741 or PHIL 2290 (015.229) or PHIL 2531 (015.253). Prerequisite: successful completion of 30 hours of university credit.

PHIL 2750 Ethics and the Environment Cr.Hrs. 3

(Formerly 015.275) An examination of some important ethical issues connected with environmental pollution and resource depletion. Examples to be covered include: the ideal of liberty and environmental limits; scarcity and the ideal of justice; growth vs. steady-state economics; animal rights, and survival ethics vs. welfare ethics. Students may not hold credit for PHIL 2750 (015.275) and any of: PHIL 2751 or PHIL 2290 (015.229) or PHIL 2531 (015.253). Prerequisite: successful completion of 30 hours of university credit.

PHIL 2760 Introduction to the Theory of Knowledge Cr.Hrs. 6

(Formerly 015.276) This course challenges and investigates our claims to knowledge. Problems dealt with normally include: the nature of knowledge, sense experience, truth and necessary truth, the analytic-synthetic distinction, memory, induction, etc. Prerequisite: [a grade of "C" or better in six credit hours of Philosophy] or written consent of department head.

PHIL 2770 Philosophy of Art Cr.Hrs. 6

(Formerly 015.277) An introductory analysis of some contemporary aesthetic theories and an examination of such problems as the relation between art and morality, meaning and expression in art, the nature and functioning of criticism, and the justification of standards of aesthetic evaluation.

PHIL 2780 Thomas Aquinas Cr.Hrs. 3

(Formerly 015.278) A study of Aquinas' views on topics such as humans, universals, truth, the existence and nature of God, morality and natural law, and the relation of philosophy to religious faith. Students may not hold credit for PHIL 2780 (015.278) and any of: PHIL 2320 (015.232) or the former PHIL 2321 (015.232).

PHIL 2790 Moral Philosophy Cr.Hrs. 6

(Formerly 015.279) An introduction to moral philosophy and influential moral philosophers of the past and present. The main emphasis will be on the nature and justification of moral judgement. Philosophers such as Plato, Hobbes, Hume, Kant, Moore, Stevenson, Hare and Rawls will be discussed. Prerequisite: [a grade of "C" or better in six credit hours of 1000-level Philosophy] or written consent of department head.

PHIL 2800 Contemporary Political Philosophy Cr.Hrs. 3

(Formerly 015.280) An examination of recent theories about whether there should be political authority, who should wield it, what is its proper scope and what are the duties and rights of citizens. The course will deal with representatives of such positions as anarchism, communism, conservatism, liberalism. Students may not hold credit for both PHIL 2800 (015.280) and the former PHIL 3710 (015.371). Prerequisite: successful completion of 30 hours of university credit.

PHIL 2830 Business Ethics Cr.Hrs. 3

(Formerly 015.283) The course will explore the application of ethical theory to business. Topics to be discussed will normally include: theories of justice, corporate responsibility, the ethics of advertising, consumer and environmental protection, and preferential hiring. Students may not hold credit for both PHIL 2830 (015.283) and PHIL 2831. Prerequisite: successful completion of 30 hours of university credit.

PHIL 2840 The Ethics of War and Peace Cr.Hrs. 3

(Formerly 015.284) A study of the ethical issues connected with war and the securing of peace, as articulated in the writings of major philosophers and selected political and military thinkers. Relevant moral theories, such as non-violence, holy war, the just war, the ethical reasoning underlying policies of deterrence, will be critically examined in historical and contemporary context. Students may not hold credit for both PHIL 2840 (015.284) and PHIL 2841.

PHIL 2860 Philosophy of Law Cr.Hrs. 3

(Formerly 015.286) An introduction to the philosophy of law and to rule systems generally. Sample topics include the concept of law (law and religion; natural law; and the "laws of the books"); the connection, if any, between law and morality; and the politics of law in Canada and elsewhere. Students may not hold credit for both PHIL 2860 (015.286) and PHIL 2861.

PHIL 2870 Philosophy and Law Cr.Hrs. 3

(Formerly 015.287) An inquiry into the philosophy of law, on issues not covered in PHIL 2860 (015.286). Students will examine such topics as: guilt and responsibility; theories of punishment; the right to dissent; legal reasoning; and, "professional ethics." Students may not hold credit for both PHIL 2870 (015.287) and PHIL 2871.

Philosophy Course Descriptions-3000 Level**PHIL 3220 Feminist Philosophy Cr.Hrs. 3**

(Formerly 015.322) An examination of philosophical issues of special interest to students of feminism and women's issues. Topics typically include: feminist epistemology, metaphysical implications of feminism, and feminist ethics. Prerequisite: [a grade of "C" or better in six credit hours in Philosophy] or written consent of department head.

PHIL 3430 Problems in Legal Philosophy Cr.Hrs. 3

(Formerly 015.343) A treatment of some problems arising in the philosophy of law including responsibility and the doctrine of mens rea, theories of punishment, law and morality, and the concept of law. Prerequisite: written consent of department head.

PHIL 3440 Problems in Social and Political Philosophy Cr.Hrs. 3

(Formerly 015.344) A treatment of selected problems arising in social and political philosophy, e.g., the philosophy of the state, distributive justice, and the ethics of revolution. Prerequisite: written consent of department head.

PHIL 3580 Kant Cr.Hrs. 3

(Formerly 015.358) A study of the 18th-century German thinker, Immanuel Kant, focusing on the revolutionary theories about reality and human knowledge contained in his major metaphysical work, *The Critique of Pure Reason*. Prerequisite: [a grade of "C" or better in one of: PHIL 2630 (015.263) or PHIL 2631 (015.263) or PHIL 2640 (015.264) or PHIL 2641 (015.264)] or written consent of department head. PHIL 3580 (015.358) counts as a Group 2 and Group 4 course.

PHIL 3630 Contemporary Epistemology 1 Cr.Hrs. 3

(Formerly 015.363) A critical examination of contemporary issues in the theory of knowledge including recent empiricist attempts to resolve the problem of justifying belief. Typical topics include foundations of knowledge, the concept of "truth", radical scepticism, the new riddle of induction, normative epistemology, the psychology and sociology of knowledge. Prerequisite: [a grade of "C" or better in PHIL 2760 (015.276)] or written consent of department head.

PHIL 3640 Contemporary Epistemology 2 Cr.Hrs. 3

(Formerly 015.364) A critical examination of some contemporary issues in the theory of knowledge not covered in PHIL 3630 (015.363). There is evidence that empiricism is a mistaken theory of knowledge. The aim is to bring the student up-to-date on the details of this current conflict and to proceed further on our own, if possible. Readings are from the current literature. A natural sequel to PHIL 3630 (015.363), but can be taken independently. Prerequisite: written consent of department head.

PHIL 3650 Contemporary Metaphysics 1 Cr.Hrs. 3

(Formerly 015.365) A survey of recent issues of ontology, reference and existence, ontological commitment, realism vs. nominalism, Quine's notion of ontological relativity, etc. Prerequisite: written consent of department head

PHIL 3660 Contemporary Metaphysics 2 Cr.Hrs. 3

(Formerly 015.366) An intensive investigation of the most significant recent scholarly research into metaphysics. Problem areas to be studied will vary from year to year. Prerequisite: written consent of department head.

PHIL 3760 Topics in Moral Theory 1 Cr.Hrs. 3

(Formerly 015.376) A critical examination of such issues in moral theory as moral scepticism, contractarianism, moral realism, utilitarianism and justice. Prerequisite: [a grade of "C" or better in PHIL 2790 (015.279)] or written consent of department head.

PHIL 3770 Topics in Moral Theory 2 Cr.Hrs. 3

(Formerly 015.377) A critical examination of such issues in moral theory as moral realism, naturalism, moral epistemology, feminist ethics, moral language, egoism and justice. Prerequisite: [a grade of "C" or better in PHIL 2790 (015.279)] or written consent of department head.

Philosophy Course Descriptions-4000 Level**PHIL 4460 Contemporary Issues 1 Cr.Hrs. 3**

(Formerly 015.446) An intensive study of specially selected topics in contemporary philosophy. The subject matter of the course will vary from year to year. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

PHIL 4470 Contemporary Issues 2 Cr.Hrs. 3

(Formerly 015.447) A course of the same description as PHIL 4460 (015.446), but with subject matter drawn from a different area of contemporary philosophy. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

PHIL 4490 Philosophy of Mind Cr.Hrs. 3

(Formerly 015.449) A seminar concentrating on the analysis of consciousness. Topics include: mind and brain, the explanation of human behaviour, and whether or not machines and animals can think. Prerequisite: written consent of department head.

PHIL 4510 Philosophy of Language Cr.Hrs. 3

(Formerly 015.451) An examination of problems such as the nature of meaning, grammar, semantics, reference, truth, and methodology in the study of language. Prerequisite: written consent of department head.

PHIL 4520 Historical Topics 1 Cr.Hrs. 3

(Formerly 015.452) Selected topics in the history of philosophy. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

PHIL 4580 Honours Seminar Cr.Hrs. 6

(Formerly 015.458) A seminar course with subject matter varying from year to year, designed to meet special needs of Honours Philosophy students. Prerequisite: written consent of department head.

PHIL 4600 Science and Philosophy since Newton Cr.Hrs. 3

(Formerly 015.460) This course traces the major threads of humankind's intellectual evolution from the time of Newton to the present. Figures studied include Newton, Kant, Maxwell, Darwin, Peirce, and Einstein. Issues include the nature of space and time, of matter and energy, of living organisms, and the nature and evolution of human consciousness. Prerequisite: fourth year standing in any faculty or written consent of department head.

PHIL 4610 Directed Reading in Philosophy 1 Cr.Hrs. 3

(Formerly 015.461) Subject matter will vary from year to year. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

PHIL 4620 Directed Reading in Philosophy 2 Cr.Hrs. 3

(Formerly 015.462) Subject matter will vary from year to year. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit

PHIL 4630 Symbolic Logic 1 Cr.Hrs. 3

(Formerly 015.463) Selected topics in mathematical logic, including propositional and quantificational logic, number theory, and the major metatheoretical results. Prerequisite: written consent of department head.

PHIL 4640 Symbolic Logic 2 Cr.Hrs. 3

(Formerly 015.464) Selected topics in mathematical logic, including propositional and quantificational logic, number theory, and the major metatheoretical results. Prerequisite: written consent of department head.

8.24 Department of Political Studies

Head: (Acting Head) James Fergusson

Campus Address & General Office: 532 Fletcher Argue

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8.24.1 Program Information

Political Studies examines the dynamics of human interaction in which individuals and groups compete to achieve their goals. The study of politics involves a consideration of the interactions between the individual, the state, government, public affairs and public policy. Political Studies examines the dynamics of these interactions in the context of competing visions, values and interests, particularly in the pursuit of varying public goals, including the quest for political power and the control of government. Politics is thus both a study of conflict between competing interests and a study of how these competing interests achieve compromise and cooperation.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in six credit hours in Political Studies. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

A maximum of six credit hours in Political Studies courses numbered at the 1000 level may be used towards the 30 credit hours for a General Major or the 48 credit hours for a Single Advanced Major.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in six credit hours in Political Studies.

A maximum of six credit hours in Political Studies courses numbered at the 1000 level may be used toward the 18 credit hours for a Minor.

Honours Program

For entry to the Honours program, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Honours in Political Studies may be taken in combination with the program of Central and East European Studies. See Section 8.5.

Other

Combinations of courses for the Major, Minor and Honours programs, other than those listed above may be permitted by written consent of the department head. Similarly, Honours courses may be taken by students in the General or Advanced Major programs with the written consent of the department head.

Honours courses are open to Honours students and other advanced undergraduate students with written consent of instructor or department head.

8.24.2 Political Studies

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR TOTAL: 30 CREDIT HOURS			
6 credit hours in Political Studies courses numbered at or above the 1000 level	<ul style="list-style-type: none"> • 18 credit hours in Political Studies courses numbered at or above the 2000 level • 6 credit hours in Political Studies courses numbered at or above the 3000 level 		
SINGLE ADVANCED MAJOR TOTAL: 48 CREDIT HOURS			
6 credit hours in Political Studies courses numbered at or above the 1000 level	<ul style="list-style-type: none"> • 6 credit hours in Political Studies courses numbered at the 2000 level • 6 credit hours in Political Studies courses numbered at the 3000 level • 6 credit hours in Political Studies courses numbered at the 4000 level • an additional 24 credit hours in Political Studies courses numbered at or above the 2000 level 		
MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS			
6 credit hours in Political Studies courses numbered at or above the 1000 level	12 credit hours in Political Studies courses numbered at or above the 2000 level		
SINGLE HONOURS⁵			
6 credit hours in Political Studies courses numbered at or above the 1000 level	<ul style="list-style-type: none"> • POLS 2000, POLS 2040, POLS 2070, POLS 2510 • 6 credit hours in ancillary options³ 	<ul style="list-style-type: none"> • POLS 3950 • 21 credit hours in Political Studies courses numbered at the 3000 level² • 6 credit hours in ancillary options³ 	<ul style="list-style-type: none"> • 18 credit hours in Political Studies courses numbered at the 4000 level • 12 credit hours in ancillary options³
DOUBLE HONOURS^{1,5}			
6 credit hours in Political Studies courses numbered at or above the 1000 level	<ul style="list-style-type: none"> • 12 credit hours from POLS 2000, POLS 2040, POLS 2070, POLS 2510 • 6 credit hours in ancillary options³ • 12 credit hours in other Honours field 	<ul style="list-style-type: none"> • 12 credit hours in Political Studies courses numbered at the 3000 level² • 6 credit hours in free options⁴ • 12 credit hours in other Honours field 	<ul style="list-style-type: none"> • 12 credit hours in Political Studies courses numbered at the 4000 level • 6 credit hours in free options⁴ • 12 credit hours in other Honours field
NOTES:			
<p>¹ A student must include at least six credit hours in political theory (POLS 2510, POLS 3240, POLS 3510, POLS 3600, POLS 3710, POLS 3810, POLS 4510, POLS 4610, POLS 4710).</p> <p>² A student in Single or Double Honours may, with written permission of the department head, substitute: six credit hours in Honours courses numbered at the 4000-level in place of six credit hours numbered at the 3000-level.</p> <p>³ Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Political Studies courses).</p> <p>⁴ Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Political Studies courses).</p> <p>⁵ Honours courses: all 4000 level courses</p>			

8.24.3 Political Studies Course Descriptions

Political Studies Course Descriptions-1000 Level

POLS 1000 Democracy and Development Cr.Hrs. 3

An examination of development and democracy as desiderata of good societies and an examination of historical conditions in which individual and collective freedom on the one hand, and economic prosperity on the other, have been achieved in the various countries of the world.

POLS 1010 Political Ideas and Ideologies Cr.Hrs. 3

Lab required. An introduction to different philosophical systems of political beliefs and values that structure contemporary political discourse and practise.

POLS 1040 Global Political Issues Cr.Hrs. 3

Lab required. An investigation of the most pressing global issues facing the world today, including debates over globalization, the rise of trans-sovereign problems, and current theories about the future of the state.

POLS 1070 Law, Politics, and Power in Canada Cr.Hrs. 3

Lab required. An introduction to the basic structures and processes of politics, law and power in Canada with the aim of explaining and assessing contemporary issues and events.

POLS 1500 Introduction to Politics Cr.Hrs. 6

(Formerly 019.150) A survey and appraisal of contemporary ideology, government, and international problems. Students may not hold credit for POLS 1500 (019.150) and any of: POLS 1503 or POLS 1505 or the former POLS 1501 (019.150).

Political Studies Course Descriptions-2000 Level

POLS 2000 Introduction to Comparative Politics Cr.Hrs. 6

(Formerly 019.200) An introduction to the methodology and scope of comparative politics, examining political processes and public policies in a variety of political systems, including liberal democracies, post-Communist, newly industrializing, and developing nations.

POLS 2040 Introduction to International Relations Cr.Hrs. 6

(Formerly 019.204) An introduction to the analysis of international political action and interaction. The course examines the manner in which the foreign policies of states are formulated and the conflict, competition and cooperation produced by state interaction. Examples are drawn mainly from international events since 1945, with appropriate references to earlier periods. Students may not hold credit for POLS 2040 (019.204) and any of: POLS 2043 or POLS 2045 or the former POLS 2041 (019.204).

POLS 2070 Introduction to Canadian Government Cr.Hrs. 6

(Formerly 019.207) A survey of the Canadian political institutions and processes including contemporary Canadian federalism, the parliamentary system, political parties and interest groups. Students may not hold credit for both POLS 2070 (019.207) and POLS 2071 (019.207).

POLS 2510 Great Political Thinkers Cr.Hrs. 6

(Formerly 019.251) A survey and evaluation of major political theorists from ancient to modern times. Students may not hold credit for POLS 2510 (019.251) and any of: POLS 2513 or POLS 2515 or the former POLS 2511 (019.251).

Political Studies Course Descriptions-3000 Level

POLS 3100 Gender and Politics in Canada Cr.Hrs. 3

(Formerly 019.310) This course introduces the principal themes in the study of gender and politics in Canada. Topics may include women's political organizing and activism, representation in political institutions, the gendered division of labour in the private and public spheres, gender and public policy, and the gendered nature of political behaviour. Prerequisite: [a grade of "C" or better in POLS 2070 (019.207) or POLS 2071 (019.207)] or written consent of instructor or department head.

POLS 3140 Selected Topics in Politics 1 Cr.Hrs. 3

(Formerly 019.314) The content of this course will vary. Contact the department for a course description. Prerequisite: written consent of instructor or department head. As the course content will vary from year to year, students may take this course more than once for credit.

POLS 3150 Selected Topics in Politics 2 Cr.Hrs. 3

(Formerly 019.315) The content of this course will vary. Contact department for a course description. Prerequisite: written consent of instructor or department head. As the course content will vary from year to year, students may take this course more than once for credit.

POLS 3160 Human Rights and Civil Liberties Cr.Hrs. 3

(Formerly 019.316) An examination of the foundations of modern human rights systems in liberal democracies. Topics addressed include the main philosophical arguments on human rights, dominant legal theories of rights, and international conventions and systems of human rights protection. Prerequisite: [a grade of "C" or better in one of: POLS 2510 (019.251) or POLS 2515 or the former POLS 2511 (019.251)] or written consent of instructor or department head.

POLS 3170 The Canadian Charter of Rights and Freedoms Cr.Hrs. 3

(Formerly 019.317) A systematic examination of the rights and freedoms contained in the Charter through Supreme Court decisions. Additional topics addressed include the historical, political and intellectual sources of rights protection in Canada and a review of Canadian human rights legislation. Prerequisite: [a grade of "C" or better in one of: POLS 2070 (019.207) or POLS 2071 (019.207)] or written consent of instructor or department head.

POLS 3200 International Security and Conflict Management Cr.Hrs. 6

(Formerly 019.320) A study of contemporary world conflict, conflict management, and issues of global security. Prerequisite: [a grade of "C" or better in POLS 2040 (019.204) or POLS 2045 or the former POLS 2041 (019.204)] or written consent of instructor or department head.

POLS 3220 Globalization and the World Economy Cr.Hrs. 3

(Formerly 019.322) An exploration of issues relating to globalization, including regionalism, economic structures and regimes, multinational corporations, global debt, problems in the developing world, and the future for leadership in the international system. Prerequisite: [a grade of "C" or better in POLS 2040 (019.204) or POLS 2045 or the former POLS 2041 (019.204)] or written consent of instructor or department head.

POLS 3240 Feminist Political Theory Cr.Hrs. 3

(Formerly 019.324) An examination of feminist approaches to the status and participation of women in political life. The course also includes feminist discourse on ethical issues and state policy.

POLS 3250 International Political Economy Cr.Hrs. 3

(Formerly 019.325) A survey of the relationship between political authority and the production and distribution of global wealth. Emphasis is placed on the historical development of international political economy, its fundamentals, as well as major theoretical perspectives. Students may not hold credit for both POLS 3250 (019.325) and POLS 3251 (019.325). Prerequisite: [a grade of "C" or better in POLS 2040 (019.204) or POLS 2045 or the former POLS 2041 (019.204)] or written consent of instructor or department head.

POLS 3270 Theories of the Capitalist World Order Cr.Hrs. 3

A critical survey of major theories that have successively dominated understandings of the modern capitalist world order including mercantilism, free trade, imperialism, hegemonic stability theory, globalization, regionalism, empire and multipolarity, paying particular attention to the political economy underlying each. Prerequisite: [a grade of "C" or better in POLS 2040 (019.204) or POLS 2045 or the former POLS 2041 (019.204)] or written consent of instructor or department head.

POLS 3330 Politics of the European Union Cr.Hrs. 3

A study of the creation and evolution of the "European movement" which began after World War II as well as the various stages of European integration to the present day. Topics include institutional development; economic, monetary, and political union; and the global relations of the modern EU. Students may not hold credit for both POLS 3330 and the former POLS 2430 (019.243). Prerequisite: [a grade of "C" or better in one of: POLS 2000 (019.200) or POLS 2040 (019.204) or POLS 2005 or POLS 2045 or the former POLS 2041 (019.204)] or written consent of instructor or department head.

POLS 3340 Middle East Politics Cr.Hrs. 3

An examination of the Middle East as a region of global strategic significance, with an emphasis on the major issues related to war and peace in selected Middle Eastern conflicts. Students may not hold credit for both POLS 3340 and POLS 3140 (019.314) when offered with the topic "Arab Israeli Conflict."

POLS 3342 Arab-Israeli Conflict Cr.Hrs. 3

An examination of the history and politics of the longstanding conflict between Israel and the Arab world with particular focus on the Israel-Palestinian context. Students may not hold credit for both POLS 3342 and POLS 3140 (019.314) when offered with the topic "Arab-Israeli Conflict."

POLS 3470 Canadian Public Management Cr.Hrs. 3

An introduction to the internal and external factors affecting contemporary public sector management in Canada. The course will examine the primary values, policies, processes, and structures within the civil service. Prerequisite: [a grade of "C" or better in one of: POLS 2070 (019.207) or POLS 2071 (019.207) or POLS 2571 (019.257) or the former POLS 2570 (019.257)] or written consent of instructor or department head.

POLS 3510 Political Doctrines of the Twentieth Century Cr.Hrs. 6

(Formerly 019.351) A survey of major contemporary systems of ideas which seek to explain or justify political behaviour.

POLS 3520 Canadian Foreign and Defence Policy Cr.Hrs. 6

(Formerly 019.352) An examination of Canadian foreign and defence policy, with attention to contemporary events and issues. The course is designed to examine both foreign and defence policies as interdependent issues for Canadian interests. The course will assess the evolution and changing priorities of Canadian foreign and defence issues, with particular attention to Canada's relations with the United States, Europe, Asia and the Third World. Students may not hold credit for POLS 3520 (019.352) and any of: POLS 3563 or the former POLS 3561 (019.356). Prerequisite: [a grade of "C" or better in POLS 2040 (019.204) or POLS 2045 or the former POLS 2041 (019.204)] or written consent of instructor or department head.

POLS 3570 Administrative Theory in the Public Sector Cr.Hrs. 3

A study of the fundamental principles with which to understand human behaviour inside public organizations. The course addresses a diverse but comprehensive set of historical and current theories, concepts and approaches in the field of public administration. Prerequisite: [a grade of "C" or better in one of: POLS 2000 (019.200) or POLS 2070 (019.207) or POLS 3470 or POLS 2005 or POLS 2571 (019.257) or the former POLS 2570 (019.257)] or written consent of instructor or department head.

POLS 3600 Political Concepts Cr.Hrs. 3

(Formerly 019.360) An exposition and analysis of the role and meaning of terms central to political discourse. Among concepts to be studied are power, community, justice, freedom, equality and obligation. Prerequisite: [a grade of "C" or better in POLS 2510 (019.251) or POLS 2515 or the former POLS 2511 (019.251)] or written consent of instructor or department head.

POLS 3640 Comparative Defence Policy Cr.Hrs. 3

(Formerly 019.364) The examination within a comparative framework of the factors determining the making and implementation of the defence

policies of a number of representative and significant countries. Prerequisite: [a grade of "C" or better in POLS 2040 (019.204) or POLS 2045 or the former POLS 2041 (019.204)] or written consent of instructor or department head.

POLS 3670 Canadian Political Parties Cr.Hrs. 3

(Formerly 019.367) This course provides students with an understanding of the origins, evolution, operation and programmes of Canadian political parties. Topics addressed include party types, party systems, party organization and financing, electoral activities and party leadership. Prerequisite: [a grade of "C" or better in one of: POLS 2070 (019.207) or POLS 2071 (019.207)] or written consent of instructor or department head.

POLS 3710 Distributive Justice Cr.Hrs. 3

A study of the question of whether, and to what extent, inequalities of various kinds are compatible with the demands of both justice and community. This course examines contending answers to the question by investigating classical and/or contemporary theories of distributive justice. Prerequisite: a grade of "C" or better in POLS 2510 (019.251) or POLS 2515 or the former POLS 2511 (019.251).

POLS 3720 Politics, Government and Society in Ukraine Cr.Hrs. 3

An analysis of political transition and development in Ukraine. Ukraine's international relations will also be examined. Students may not hold credit for both POLS 3720 and POLS 3140 (019.314) when offered with the topic "Government Politics in Ukraine" or the former POLS 2920 (019.292). Prerequisite: [a grade of "C" or better in one of: POLS 2000 (019.200) or POLS 2040 (019.204) or POLS 2005 or POLS 2045 or the former POLS 2041 (019.204)] or written consent of instructor or department head.

POLS 3810 Introduction to Marxism Cr.Hrs. 3

An overview of the thought of Karl Marx and Fredrick Engels, focusing on its philosophical origins, key concepts and ideas of their historical materialism, critique of political economy, political theory and philosophy. The development of Marxism after Marx and Engels, particularly in the tradition of Western Marxism, will be traced in the case of each concept and idea. Students may not hold credit for both POLS 3810 and the former POLS 4810 (019.481).

POLS 3840 Approaches to the Study of International Relations Cr.Hrs. 3

(Formerly 019.384) An overview of the various competing theoretical approaches used in the analysis of international relations, as well as the methodologies used by international politics analysts. Students may not hold credit for both POLS 3840 (019.384) and POLS 3841. Prerequisite: [a grade of "C" or better in POLS 2040 (019.204) or POLS 2045 or the former POLS 2041 (019.204)] or written consent of instructor or department head.

POLS 3860 Canadian Federalism Cr.Hrs. 3

(Formerly 019.386) An examination of Canadian federal structures and processes with emphasis on constitutional influences, the evolution of jurisdictions, province-building and contemporary federal issues.

POLS 3880 Comparative Foreign Policy Cr.Hrs. 3

(Formerly 019.388) A comparative study of the factors affecting foreign policy in selected countries including, but not limited to, Canada, the United States, Russia, China, Japan, Great Britain, France, and Germany. The course also includes an examination of international, regional, and domestic factors affecting the creation of foreign policy by states. Students may not hold credit for both POLS 3880 and POLS 3881. Prerequisite: [a grade of "C" or better in POLS 2040 (019.204) or POLS 2041 (019.204)] or written consent of instructor or department head.

POLS 3920 American Politics Cr.Hrs. 6

(Formerly 019.392) An examination of institutions, processes, public policies, and current public affairs in the United States. Prerequisite: [a grade of "C" or better in POLS 2000 (019.200) or POLS 2005] or written consent of instructor or department head.

POLS 3930 Foreign Policy Decision-Making Cr.Hrs. 6

(Formerly 019.393) The analysis and construction of selected theoretical models of the foreign policy decision-making process. The case studies examined will refer primarily, but not exclusively, to U.S. foreign policy decision-making. Students may not hold credit for both POLS 3930 (019.393) and the former POLS 3931 (019.393).

POLS 3950 Research Methods in the Study of Politics Cr.Hrs. 3

(Formerly 019.395) An introduction to the major quantitative and qualitative research strategies employed in the study of politics. The topics addressed include interviewing, content analysis, comparative studies, survey design, sampling, research ethics and basic statistical analysis. Students may not hold credit for POLS 3950 (or 019.395) and any of: POLS 3951 or the former 019.390. Prerequisite: [a grade of "C" or better in six credit hours of Political Studies at the 2000 level] or written consent of instructor or department head.

POLS 3960 Canadian Politics Cr.Hrs. 6

(Formerly 019.396) An examination of recurrent issues and problems in the Canadian political culture including the evolution of parties and ideologies, and issues such as regionalism, dualism, continentalism, civil liberties and the interventionist state. Prerequisite: [a grade of "C" or better in POLS 2070 (019.207) or POLS 2071 (019.207)] or written consent of instructor or department head.

Political Studies Course Descriptions-4000 Level

POLS 4070 Advanced Seminar: Canadian Government Cr.Hrs. 3

Examines the core institutions of Canadian government and politics including parliamentary government, federalism, the Constitution and the Charter of Rights and Freedoms. Prerequisite: written consent of instructor or department head.

POLS 4080 Advanced Seminar: Canadian Democracy Cr.Hrs. 3

Examines the core institutions and processes of Canadian democracy including political parties, elections, social movements and interest groups, representation and public opinion. Students may not hold credit for both POLS 4080 and POLS 4160 (019.416) when offered with the topic "Canadian Democracy." Prerequisite: written consent of instructor or department head.

POLS 4140 Canadian Political Ideas Cr.Hrs. 3

An examination of the ideas that underlie Canadian politics. What are the values at the centre of political movements in Canada and where do they come from? How have these values changed over time and why? We will attempt to answer these questions by exploring the development of Canadian political ideas as well as our current ideological context in Canada. Effort will be made to reflect on ideological debate on contemporary issues of the day. Prerequisite: written consent of instructor or department head.

POLS 4150 Indigenous Governance Cr.Hrs. 3

An examination of Indigenous governance before and since the 'European invasion' which introduces key themes, debates and controversies pertaining to Indigenous governance and its study. Students may not hold credit for both POLS 4150 and POLS 4160 (019.416) when offered with the topic "Indigenous Governance." Prerequisite: written consent of instructor or department head.

POLS 4160 Selected Topics in Politics 3 Cr.Hrs. 3

(Formerly 019.416) The content of this course will vary. Contact department for a course description. Prerequisite: written consent of instructor or department head. As the course content will vary from year to year, students may take this course more than once for credit.

POLS 4170 Selected Topics in Politics 4 Cr.Hrs. 3

(Formerly 019.417) The content of this course will vary. Contact department for a course description. Prerequisite: written consent of instructor or department head. As the course content will vary from year to year, students may take this course more than once for credit.

POLS 4180 Provincial Politics in Canada Cr.Hrs. 3

(Formerly 019.418) The course focuses on politics at the provincial level in Canada and on the politics of the regions: Atlantic, Quebec, Ontario, the West and BC. Emphasis is on a comparison of political cultures, governments, budgets, parties, elections, and political change across the regions. Prerequisite: written consent of instructor or department head.

POLS 4190 Manitoba Politics and Government Cr.Hrs. 3

(Formerly 019.419) An examination of politics and government in modern Manitoba. Topics addressed include federal-provincial relations, parties and elections, political culture, the legislative process and public policy. Prerequisite: written consent of instructor or department head.

POLS 4200 Politics of Development Cr.Hrs. 3

A survey of the problems and prospects facing developing countries with a particular focus on the changes in international economic governance in the aftermath of the financial crisis and the Great Recession, the role of the state in development and the political economy of emerging economies. Students may not hold credit for both POLS 4200 and POLS 4160 when titled "Politics of Development." Prerequisite: written consent of instructor or department head.

POLS 4370 Comparative Public Administration Cr.Hrs. 3

A study of the systems, processes, and values of public administration in an international comparative context. Topics include public sector organization and reform, international standards of policy and practice, and the role of international institutions in promoting public sector modernization. The course covers countries from several geographic zones and places domestic issues in the larger, global political economy. Prerequisite: written consent of instructor or department head.

POLS 4470 Managing Modern Government Cr.Hrs. 3

A study of the skills required to effectively manage in the public sector. Topics covered include: managerial effectiveness, written and interpersonal communication, gaining power and influence, working with political staff and politicians, conflict management, risk management, performance management, creating and working through teams, decision-making, motivation, and empowerment. Students may not hold credit for both POLS 4470 and the former POLS 4570 (019.457). Prerequisite: written consent of instructor or department head.

POLS 4510 Advanced History of Political Ideas Cr.Hrs. 3

(Formerly 019.451) An in-depth analysis of selected texts in the history of political theory with a focus on ideas and concerns relevant to contemporary political life. Prerequisite: written consent of instructor or department head.

POLS 4530 Regionalism in International Relations Cr.Hrs. 3

(Formerly 019.453) This course examines the nature and substance of political relations among states in the international system to institutionalize relations for economic, political, or security reasons. Emphasis is given to post-1945 and contemporary regional relationships. Regional arrangements studied in the course include, but are not necessarily limited to, North America, Europe, the Asia-Pacific rim, the Middle East, Latin America, and Africa. Students may not hold credit for POLS 4530 (019.453) and any of: POLS 4531 or the former POLS 4830 (019.483). Prerequisite: written consent of instructor or department head.

POLS 4610 Contemporary Political Theory Cr.Hrs. 3

(Formerly 019.461) An examination of recent developments in the analysis of political ideas, institutions, and behaviour. Prerequisite: written consent of instructor or department head.

POLS 4660 The State in the Economy Cr.Hrs. 6

(Formerly 019.466) Drawing from literature in Canadian political economy, this course will examine historical and contemporary patterns and forms of Canadian state involvement in the economy. Both federal and provincial contexts will be studied and selected areas of current interest, such as the role of crown corporations and industrial policy, will be emphasized. Prerequisite: written consent of instructor or department head.

POLS 4710 Political Theory and the Family Cr.Hrs. 3

An examination of the normative aspects of the relations between children, families and the state. Prerequisite: written consent of instructor or department head.

POLS 4730 Strategic Studies Cr.Hrs. 6

(Formerly 019.473) An examination of the role, management, and politics of organized force in the international system. Prerequisite: written consent of instructor or department head.

POLS 4860 The Canadian Policy Process Cr.Hrs. 6

(Formerly 019.486) This course will examine a number of conceptual frameworks for the analysis of the policy process, will analyze the role of different institutions and actors in the policy process, and will appraise current government responses to problems within Canadian society. Prerequisite: written consent of instructor or department head.

POLS 4940 American Foreign Policy Cr.Hrs. 6

(Formerly 019.494) An analysis of the foreign policy of the United States from 1945 to the present, focusing on the explanation of the foreign policy decisions taken and the policy-making process giving rise to them. Prerequisite: written consent of instructor or department head.

8.25 Department of Psychology

Head: Dan Bailis

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8.25.1 Program Information

Psychology is a discipline that examines questions concerning behaviour and mental processes. Cognitive processes such as perceiving, learning, remembering, thinking, talking, and social interactions as well as the biological basis for behaviour and human development are among the issues explored. Psychology on the one hand helps us understand human and animal behaviour, but on the other also provides insights that can help and benefit individuals and society. A degree program is also offered in the Faculty of Science.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in PSYC 1200 or a grade of "C" or better in both PSYC 1211 and PSYC 1221. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in PSYC 1200 or a grade of "C" or better in both PSYC 1211 and PSYC 1221, or written consent of the department head.

Honours Program

For entry to the Honours program, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

8.25.2 Psychology

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR TOTAL: 30 CREDIT HOURS			
PSYC 1200 or PSYC 1211 and PSYC 1221	<ul style="list-style-type: none"> • PSYC 2250 and PSYC 2260 • 6 additional credit hours in Psychology courses numbered at the 2000 level (3 hours from each of two different lettered menu categories)¹ 	12 credit hours in Psychology courses numbered at the 2000 or 3000 level (3 hours from each of two different lettered menu courses not taken in Year 2) ¹	
SINGLE ADVANCED MAJOR TOTAL: 48 CREDIT HOURS			
PSYC 1200 or PSYC 1211 and PSYC 1221	<ul style="list-style-type: none"> • PSYC 2250 and PSYC 2260 • 6 additional credit hours in Psychology courses numbered at the 2000 level (3 hours from each of two different lettered menu categories)¹ 	12 credit hours in Psychology courses numbered at the 2000 or 3000 level (3 hours from each of two different lettered menu courses not taken in Year 2) ¹	18 credit hours in Psychology courses numbered at the 2000 or 3000 level (3 hours from any remaining lettered menu category) ¹
MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS			
PSYC 1200 or PSYC 1211 and PSYC 1221	6 credit hours in Psychology courses numbered at the 2000 or 3000 level	6 credit hours in Psychology courses numbered at the 2000 or 3000 level	

SINGLE HONOURS⁴			
PSYC 1200 or PSYC 1211 and PSYC 1221	<ul style="list-style-type: none"> • PSYC 2250 and PSYC 2260 • 6 credit hours in Psychology courses numbered at the 2000 or 3000 level: (3 hours from each of two different lettered menu categories)¹ • 15 credit hours in ancillary options² • 3 credit hours in free options³ 	<ul style="list-style-type: none"> • PSYC 3200 and PSYC 3340 and PSYC 3630 • 9 credit hours in Psychology courses numbered at the 2000 or 3000 level (3 hours each of at least two different lettered menu courses not taken in Year 2) • 3 credit hours in Psychology courses numbered at the 4000 level or one of: PSYC 3520, PSYC 3560 or PSYC 3590 • 9 credit hours in ancillary options² 	<ul style="list-style-type: none"> • PSYC 4520 • 6 credit hours in Psychology courses numbered at the 4000 level • 9 credit hours in Psychology courses numbered at the 2000 or 3000 level, including any remaining menu category • 3 credit hours in free options³ • 6 credit hours in ancillary options²
DOUBLE HONOURS⁴			
PSYC 1200 or PSYC 1211 and PSYC 1221	<ul style="list-style-type: none"> • PSYC 2250 and PSYC 2260 • 6 credit hours in Psychology courses numbered at the 2000 level: (3 hours from each of two different lettered menu categories)¹ • 12 credit hours in other Honours field • 6 credit hours in an ancillary option² 	<ul style="list-style-type: none"> • PSYC 3200 and PSYC 3340 and PSYC 3630 • 3 credit hours in Psychology courses numbered at the 2000 level: (3 hours from one of the remaining different lettered menu categories)¹ • 12 credit hours in other Honours field • 6 credit hours in free options³ 	<ul style="list-style-type: none"> • PSYC 4520 • 6 credit hours in Psychology courses numbered at the 4000 level • 12 credit hours in other Honours field • 6 credit hours in free options^{3,5}
NOTES:			
<p>¹ Lettered menu categories are as follows: Category A: Personality/Social PSYC 2410, PSYC 2420, PSYC 2490, PSYC 2530 Category B: Developmental PSYC 2290 Category C: Learning PSYC 2440, PSYC 2470 Category D: Cognitive PSYC 2480 Category E: Biological PSYC 2360</p> <p>² Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Psychology courses).</p> <p>³ Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Psychology courses).</p> <p>⁴ Honours courses: PSYC 3340 and all 4000 level courses.</p> <p>⁵ Students hoping to pursue graduate studies should also consider adding an additional 4000 level course, or PSYC 3520 or PSYC 3560 or PSYC 3590 as a free option in Year 4.</p>			

8.25.3 Psychology Course Descriptions

Psychology Course Descriptions-1000 Level

PSYC 1200 Introduction to Psychology Cr.Hrs. 6

(Formerly 017.120) Basic concepts and principles of individual behaviour are examined, particularly those of human development, normal and abnormal behaviour, social psychology, learning, perception, and psychological measurement. Students may not hold credit for PSYC 1200 (017.120) and any of: PSYC 1211 (017.121) or PSYC 1221 (017.122) or the former PSYC 1201 (017.120). Prerequisite for all other courses in Psychology.

Psychology Course Descriptions-2000 Level

PSYC 2250 Introduction to Psychological Research Cr.Hrs. 3

(Formerly 017.225) Examines psychology as a scientific discipline and describes methods of collecting and interpreting psychological data. Required of all Majors and normally taken in the second year. Students may not hold credit for both PSYC 2250 (017.225) and PSYC 2251 (017.225). Prerequisite: [a grade of "C" or better in PSYC 1200 (017.120) or the former PSYC 1201 (017.120)] or [a grade of "C" or better in both PSYC 1211 (017.121) and PSYC 1221 (017.122)] or written consent of department head.

PSYC 2260 Introduction to Research Methods in Psychology Cr.Hrs. 3

(Formerly 017.226) Discusses concepts of inductive inference and explanation. The nature of research designs is emphasized. Required of all Majors and normally taken in the second year. Students may not hold credit for both PSYC 2260 (017.226) and PSYC 2261 (017.226). Prerequisite: a grade of "C" or better in PSYC 2250 (017.225) or PSYC 2251 (017.225).

PSYC 2290 Child Development Cr.Hrs. 3

(Formerly 017.229) The course deals with normal psychological development from prenatal life until puberty. The scientific approach to child study is emphasized. Students may not hold credit for both PSYC 2290 (017.229) and PSYC 2291 (017.229). Prerequisite: [a grade of "C" or better in PSYC 1200 (017.120) or the former PSYC 1201 (017.120)] or [a grade of "C" or better in both PSYC 1211 (017.121) and PSYC 1221 (017.122)] or written consent of department head.

PSYC 2360 Brain and Behaviour Cr.Hrs. 3

(Formerly 017.236) This course explores the relationship between brain and behaviour. The student will first learn about the fundamental elements of the nervous system. Lectures will integrate these elements into discussions of systems responsible for sensation, motor control, emotion, sleep, learning and memory. Clinical scenarios will be used to illuminate function. Students may not hold credit for PSYC 2360 (017.236) and any of: PSYC 2361, or PSYC 3530 (017.353) or PSYC 3531 (017.353) or PSYC 3540 (017.354) or the former PSYC 3541 (017.354) when titled Brain and Behaviour. Prerequisite: [a grade of "C" or better in PSYC 1200 (017.120) or the former PSYC 1201 (017.120)] or [a grade of "C" or better in both PSYC 1211 (017.121) and PSYC 1221 (017.122)] or written consent of department head.

PSYC 2390 Psychology of Women Cr.Hrs. 3

(Formerly 017.239) A critical re-examination of existing assumptions about women in the light of contemporary research. Psychology as a discipline and a methodology for investigating human behaviour will be stressed. Prerequisite: [a grade of "C" or better in PSYC 1200 (017.120) or the former PSYC 1201 (017.120)] or [a grade of "C" or better in both PSYC 1211 (017.121) and PSYC 1221 (017.122)] or written consent of department head.

PSYC 2400 The Psychology of Sex Differences Cr.Hrs. 3

(Formerly 017.240) Course explores the relationship between: human behaviour, physiology, and sex roles for males and females in our society. Prerequisite: [a grade of "C" or better in PSYC 1200 (017.120) or the former PSYC 1201 (017.120)] or [a grade of "C" or better in both PSYC 1211 (017.121) and PSYC 1221 (017.122)] or written consent of department head.

PSYC 2410 Social Psychology 1 Cr.Hrs. 3

(Formerly 017.241) This course provides a basic introduction to the ways in which we affect and are affected by the behaviour of others. Topics typically include: methods used by social psychologists, attitudes and attitude change, social beliefs and judgements, conformity, and persuasion. Students may not hold credit for both PSYC 2410 (017.241) and PSYC 2411 (017.241). Prerequisite: [a grade of "C" or better in PSYC 1200 (017.120) or the former PSYC 1201 (017.120)] or [a grade of "C" or better in both PSYC 1211 (017.121) and PSYC 1221 (017.122)] or written consent of department head.

PSYC 2420 Social Psychology 2 Cr.Hrs. 3

(Formerly 017.242) This course provides an introduction to basic social psychology topics not covered in PSYC 2410 (017.241) or PSYC 2411 (017.241), such as social norms and roles, group dynamics, prejudice, aggression, altruism, attraction and close relationships, and intergroup conflict. Students may not hold credit for both PSYC 2420 (017.242) and PSYC 2421. Prerequisite: [a grade of "C" or better in PSYC 1200 (017.120) or the former PSYC 1201 (017.120)] or [a grade of "C" or better in both PSYC 1211 (017.121) and PSYC 1221 (017.122)] or written consent of department head.

PSYC 2430 Humanistic and Transpersonal Psychology Cr.Hrs. 3

(Formerly 017.243) A survey of such topics as search for meaning, personal growth, self-actualization, electric stimulation of the brain, meditation, and extra-sensory perception. Prerequisite: [a grade of "C" or better in PSYC 1200 (017.120) or the former PSYC 1201 (017.120)] or [a grade of "C" or better in both PSYC 1211 (017.121) and PSYC 1221 (017.122)] or written consent of department head.

PSYC 2440 Behaviour Modification Principles Cr.Hrs. 3

(Formerly 017.244) The fundamental assumptions, principles, and procedures of behaviour modification are described and illustrated by applications to normal and abnormal human behaviour. Students may also conduct supervised projects in applied areas or in basic behavioural research. Students may not hold credit for both PSYC 2440 (017.244) and PSYC 2441 (017.244). Prerequisite: [a grade of "C" or better in PSYC 1200 (017.120) or the former PSYC 1201 (017.120)] or [a grade of "C" or better in both PSYC 1211 (017.121) and PSYC 1221 (017.122)] or written consent of department head.

PSYC 2470 Learning Foundations of Psychology Cr.Hrs. 3

(Formerly 017.247) Examines basic learning processes, along with examples of how psychologists study them. Emphasis is placed on how knowledge of basic learning processes can help us understand complex human behaviour. Prerequisite: [a grade of "C" or better in PSYC 1200 (017.120) or the former PSYC 1201 (017.120)] or [a grade of "C" or better in both PSYC 1211 (017.121) and PSYC 1221 (017.122)] or written consent of department head.

PSYC 2480 Cognitive Processes Cr.Hrs. 3

(Formerly 017.248) An introduction to the higher mental processes from an information processing perspective. Topics include attention, cognitive development, imagery, language, memory and problem-solving. Extensive reference will be made to recent experimental findings. Students may not hold credit for both PSYC 2480 (017.248) and PSYC 2481 (017.248). Prerequisite: [a grade of "C" or better in PSYC 1200 (017.120) or the former PSYC 1201 (017.120)] or [a grade of "C" or better in both PSYC 1211 (017.121) and PSYC 1221 (017.122)] or written consent of department head.

PSYC 2490 Abnormal Psychology Cr.Hrs. 3

The study of theory and research on abnormal human behaviour. The major forms of psychological disturbance are discussed. An introduction to the prevention and treatment of psychological disturbances is given. Students may not hold credit for PSYC 2490 and any of: PSYC 2491 or the former PSYC 3460 (017.346) or the former PSYC 3461 (017.346). Prerequisite: [a grade of "C" or better in PSYC 1200 (017.120) or the former PSYC 1201 (017.120)] or [a grade of "C" or better in both PSYC 1211 (017.121) and PSYC 1221 (017.122)] or written consent of department head.

PSYC 2500 Elements of Ethology Cr.Hrs. 3

(Formerly 017.250) This course involves one three-hour lecture meeting and one laboratory per week and concerns the study of animal behaviour through lectures, films, and field trips. Parakeets, flies, and/or ducklings plus one animal of the student's choice will be observed. Prerequisite: [a grade of "C" or better in PSYC 1200 (017.120) or the former PSYC 1201 (017.120)] or [a grade of "C" or better in both PSYC 1211 (017.121) and PSYC 1221 (017.122)] or written consent of department head.

PSYC 2510 Comparative Psychology Cr.Hrs. 3

(Formerly 017.251) This course examines the viability of comparative psychology today, the type of subjects used in comparative psychology research, its history and background, some applications and contemporary viewpoints, and its current status. Prerequisite: [a grade of "C" or better in PSYC 1200 (017.120) or the former PSYC 1201 (017.120)] or [a grade of "C" or better in both PSYC 1211 (017.121) and PSYC 1221 (017.122)] or written consent of department head.

PSYC 2520 Orientations to Psychological Systems Cr.Hrs. 3

(Formerly 017.252) Examines and contrasts humanistic, psychodynamic, cognitive, and behavioural psychology with regard to consciousness vs. the unconscious, free-will vs. determinism, holism vs. analysis, purpose vs. past influences, transcendentalism vs. physicalism, and focus on the person vs. focus on problems. Prerequisite: [a grade of "C" or better in PSYC 1200 (017.120) or the former PSYC 1201 (017.120)] or [a grade of "C" or better in both PSYC 1211 (017.121) and PSYC 1221 (017.122)] or written consent of department head.

PSYC 2530 Psychology of Personality Cr.Hrs. 3

The study of theory and research on the principles affecting personality development and structure. Students may not hold credit for PSYC 2530 and any of: PSYC 2531 or the former PSYC 3450 (017.345) or the former PSYC 3451 (017.345). Prerequisite: [a grade of "C" or better in PSYC 1200 (017.120) or the former PSYC 1201 (017.120)] or [a grade of "C" or better in both PSYC 1211 (017.121) and PSYC 1221 (017.122)] or written consent of department head.

PSYC 2660 Sport Psychology Cr.Hrs. 3

This course examines the use of psychological knowledge to enhance the development of performance and satisfaction of athletes and others associated with sports. Topics include improving skills of athletes, motivating practice performance, increasing the effectiveness of coaches, and mental preparation for competition. Students may not hold credit for both PSYC 2660 and the former PSYC 3660 (017.366). Prerequisite: [a grade of "C" or better in PSYC 1200 or the former PSYC 1201 (017.120)] or [a grade of "C" or better in both PSYC 1211 (017.121) and PSYC 1221 (017.122)] or written consent of department head.

Psychology Course Descriptions-3000 Level**PSYC 3070 Adult Development Cr.Hrs. 3**

This course deals with psychological changes during young adulthood, middle age, and old age. Students may not hold credit for both PSYC 3070 and the former PSYC 2370 (017.237). Prerequisite: [a grade of "C" or better in PSYC 2290 (017.229) or PSYC 2291 (017.229)] or written consent of department head.

PSYC 3110 Research in Social Psychology Cr.Hrs. 3

This course will provide an introduction to conducting research in social psychology. Students will gain experience in all facets of the research process including experimental design and preparation, human ethical review, data collection and analysis, and report writing. Activities may include research critiques, research proposals, individual and/or group research projects and presentations, and research reports. Prerequisite: [a grade of "C" or better in PSYC 2260 (017.226) or PSYC 2261 (017.226)] and [a grade of "C" or better in one of: PSYC 2410 (017.241) or PSYC 2411 (017.241) or PSYC 2420 (017.242) or PSYC 2421 (017.242)].

PSYC 3130 Introduction to Health Psychology Cr.Hrs. 3

This course offers a survey of psychological issues in health and illness. Major topics will include the biopsychosocial approach, mental models of illness, pain, stress and coping, health-damaging and health-promoting behaviours, and psychological issues in medical care. Students may not hold credit for PSYC 3130 and any of: PSYC 3131 or PSYC 3530 when titled "Health Psychology." Prerequisite: [a grade of "C" or better in PSYC 2410 (017.241) or PSYC 2411 (017.241) or PSYC 2420 (017.242) or PSYC 2421 (017.242)] or written consent of department head.

PSYC 3150 Behavioural Modification Applications Cr.Hrs. 3

Guidelines for designing, implementing, and evaluating behaviour modification applications are described in detail. Students may also conduct supervised projects in applied areas or in basic behavioural research. Students may not hold credit for PSYC 3150 and any of: PSYC 3151 or the former PSYC 2450 (017.245) or the former PSYC 2451 (017.245). Prerequisite: [a grade of "C" or better in PSYC 2440 (017.244) or PSYC 2441 (017.244)] or written consent of department head.

PSYC 3160 Perception and Attention Cr.Hrs. 3

This lecture course will provide you with a basic introduction to the characteristics and processes of human perception. A scientific approach will be used with specific emphasis on exploring the relation between experimental evidence and theory. Topics to be covered include transmission of information through the visual and auditory systems, visual and auditory pattern recognition, selective and divided attention, and the role of attention and interpretation in perception. Students may not hold credit for both PSYC 3160 and PSYC 3441 (017.344). Prerequisite: [a grade of "C" or better in PSYC 2480 (017.248) or PSYC 2481 (017.248)] or written consent of department head.

PSYC 3170 Research in Cognitive Psychology Cr.Hrs. 3

This course will provide an introduction to conducting research in human perception and cognition. Students will gain experience in all facets of the research process including: critical reading of relevant literature, experimental design and preparation, data collection and analysis, and report writing. Activities may include critiques of published research, research proposals, individual and/or group projects, research reports, and individual and/or group presentations. Prerequisite: [a grade of "C" or better PSYC 2480 (017.248) or PSYC 2481 (017.248)] or written consent of department head.

PSYC 3200 Thinking Critically About Psychological Research Cr.Hrs. 3

This course will teach students to apply critical thinking skills in the evaluation of psychological research. Core components will include the logic of research design, analysis and interpretation, the description of psychological studies, and the critical reading of published research. Activities will include the preparation of critiques of research claims published in both academic journals and in the main-stream press, sample research proposals, individual and/or group projects, and individual and/or group presentations. Prerequisite: [a grade of "B" or better in PSYC 2260 (017.226) or PSYC 2261 (017.226) or the former PSYC 2300 (017.230)] and written consent of department head.

PSYC 3310 Adolescent Development Cr.Hrs. 3

This course deals with normal psychological development from puberty until adulthood. Results of scientific research are emphasized. Students may not hold credit for PSYC 3310 and any of: PSYC 3311 or the former PSYC 2310 (017.231) or the former PSYC 2311 (017.231). Prerequisite: [a grade of "C" or better in PSYC 2290 (017.229) or PSYC 2291 (017.229)] or written consent of department head.

PSYC 3340 Design and Analysis for Psychological Experiments Cr.Hrs. 3

Methods for controlling sources of internal validity in psychological experiments, such as randomization, blocking, factorial configuration, and repeated measurements, will be discussed. Descriptive and multivariate methods of analysis will also be introduced. The use of statistical packages will be illustrated. Students may not hold credit for PSYC 3340 and any of: PSYC 3341 or the former PSYC 4570 (017.457). Prerequisite: [a grade of "B" or better in PSYC 2260 (017.226) or PSYC 2261 (017.226) or the former PSYC 2300 (017.230)] and written consent of department head.

PSYC 3350 Behavioural Neuroscience Cr.Hrs. 3

This course presents the fundamentals of the neurobiology of behaviour. Special importance is placed on the information-processing properties of the nervous system in order to provide a uniform framework for the understanding of such topics as perception, attention, sleep and wakefulness, motivation, and learning. Students may not hold credit for PSYC 3350 and any of: PSYC 3351 or the former PSYC 3330 (017.333) or the former PSYC 3331 (017.333). Prerequisite: [a grade of "C" or better in PSYC 2360 (017.236) or PSYC 2361] or written consent of department head.

PSYC 3360 Experimental Child Psychology Cr.Hrs. 3

(Formerly 017.336) Research methods for developmental psychology are reviewed: ethics, conducting experiments with child participants in a group project, research design, data analysis, writing research papers in APA format, and creating a poster presentation. Prerequisite: a grade of "C" or better in PSYC 2290 (017.229) or PSYC 2291 (017.229).

PSYC 3380 Nature, Nurture and Behaviour Cr.Hrs. 3

This course provides an overview of behavioural genetics. It will introduce students to the basic principles of Mendelian, population, and quantitative genetics, as well as how they are used for the study of neuro-behavioural phenotypes, characteristics and traits in human, animal and insect systems, and how genes contribute to behaviour. Societal and ethical implications of the results of behavioural genetics are considered. Students may not hold credit for both PSYC 3380 and PSYC 3530 (017.353) when titled "Nature, Nurture, and Behaviour." Prerequisite: [a grade of "C" or better in PSYC 2360 (017.236) or PSYC 2361] or written consent of department head.

PSYC 3390 Thinking Cr.Hrs. 3

(Formerly 017.339) The class surveys work in cognitive science. Topics include probabilistic reasoning, heuristics and biases, artificial neural networks, mental representation of number, and the cognitive unconscious. Prerequisite: [a grade of "C" or better in PSYC 2480 (017.248) or PSYC 2481 (017.248)] or written consent of department head.

PSYC 3430 Sensory Processes Cr.Hrs. 3

(Formerly 017.343) A review of the structure and function of biological receptor systems and how they mediate information about the environment. It includes such topics as receptor transduction, neural correlates of sensation, and neural models of sensory discrimination. Prerequisite: [a grade of "C" or better in PSYC 2360 (017.236) or PSYC 2361] or written consent of department head.

PSYC 3470 Dyadic Relations Cr.Hrs. 3

This course covers friendship formation and dyadic relations – linking, liking, loving, and leaving from an empirically oriented psychological perspective. Students may not hold credit for both PSYC 3470 and the former PSYC 2460 (017.246). Prerequisite: [a grade of "C" or better in PSYC 2410 (017.241) or PSYC 2411 (017.241) or PSYC 2420 (017.242) or PSYC 2421 (017.242)] or written consent of department head.

PSYC 3490 Individual Differences Cr.Hrs. 3

(Formerly 017.349) This course is concerned with the systematic way in which individuals vary. Topics include individual differences as a function of sex, age, race, and socioeconomic status. Specific behaviours to be studied include reaction-time differences, differences in intelligence, differences in aptitudes and interests, and differences in motor abilities. The reasons for some of these differences will also be delineated. Hence genetic and physiological factors, as well as psychological explanations for individual differences, will be studied. Prerequisite: [a grade of "C" or better in PSYC 1200 (017.120) or the former PSYC 1201 (017.120)] or [a grade of "C" or better in both PSYC 1211 (017.121) and PSYC 1221 (017.122)] or written consent of department head.

PSYC 3520 Independent Research in Psychology 1 Cr.Hrs. 3

(Formerly 017.352) Students carry out a research project and write a paper. Research may include historical, theoretical or experimental analyses of psychological problems. Normally available only to third and fourth year students who are in Honours Psychology or who are Psychology Majors and have completed one of: both PSYC 2250 (017.225) and PSYC 2260 (017.226), or both PSYC 2251 (017.225) and PSYC 2261 (017.226), or the former PSYC 2300 (017.230). A student may not hold credit for more than two of PSYC 3520 (017.352) or PSYC 3560 (017.356) or PSYC 3590 (017.359). Prerequisite: prearranged written consent of an individual instructor and written consent of department head.

PSYC 3530 Contemporary Issues 1 Cr.Hrs. 3

(Formerly 017.353) The content of this course will vary from year to year, but in general it will entail either some specific topic of prominent interest in psychology or a psychological analysis of some problem of current public interest. Students may not hold credit for both PSYC 3530 (017.353) and PSYC 3531 (017.353). Prerequisite: [a grade of "C" or better in PSYC 1200 (017.120) or the former PSYC 1201 (017.120)] or [a grade of "C" or better in both PSYC 1211 (017.121) and PSYC 1221 (017.122)] and written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

PSYC 3540 Contemporary Issues 2 Cr.Hrs. 3

(Formerly 017.354) The content of this course will vary from year to year, but in general it will entail either some specific topic of prominent interest in psychology or a psychological analysis of some problem of current public interest. Students may not hold credit for both PSYC 3540 (017.354) and the former PSYC 3541 (017.354). Prerequisite: [a grade of "C" or better in PSYC 1200 (017.120) or the former PSYC 1201 (017.120)] or [a grade of "C" or better in both PSYC 1211 (017.121) and PSYC 1221 (017.122)] and written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

PSYC 3560 Supervised Field Study in Psychology Cr.Hrs. 3

(Formerly 017.356) Students usually do supervised field work in a community setting and write a paper. Normally available only to third and fourth year students who are in Honours Psychology or who are Psychology Majors. A student may not hold credit for more than two of: PSYC 3520 (017.352), PSYC 3560 (017.356), PSYC 3590 (017.359). Prerequisite: prearranged written consent of an individual instructor and written consent of department head.

PSYC 3580 Language and Thought Cr.Hrs. 3

(Formerly 017.358) An examination of recent investigations of human language behaviour. Emphasis will be placed on natural language phenomena, which will be examined within the framework of modern theories of thought. Some of the topics considered include communication, the development of language, and natural language comprehension. Prerequisite: [a grade of "C" or better in PSYC 2480 (017.248) or PSYC 2481 (017.248)] or written consent of department head.

PSYC 3590 Independent Research in Psychology 2 Cr.Hrs. 3

(Formerly 017.359) Students carry out a research project and write a paper. Research may include historical, theoretical or experimental analysis of psychological problems. Normally available only to third and fourth year students who are in Honours Psychology or who are Psychology Majors and have completed one of: both PSYC 2250 (017.225) and PSYC 2260 (017.226), or both PSYC 2251 (017.225) and PSYC 2261 (017.226), or the former PSYC 2300 (017.230). A student may not hold credit for more than two of: PSYC 3520 (017.352), PSYC 3560 (017.356), PSYC 3590 (017.359). Prerequisite: prearranged written consent of an individual instructor and written consent of department head.

PSYC 3610 Memory Cr.Hrs. 3

(Formerly 017.361) Selected topics in human memory are reviewed, including the physiological and chemical bases for learning and memory, primary determinants of forgetting, memory models, nonverbal memory, organization in memory, and the use of mnemonic schemes to improve memory. Prerequisite: [a grade of "C" or better in PSYC 2480 (017.248) or PSYC 2481 (017.248)] or written consent of department head.

PSYC 3630 Psychological Measurement and Assessment Cr.Hrs. 3

(Formerly 017.363) A study of the basic concepts of measurement in psychology and the application of these concepts in selected areas of psychology. The principal topics of the course will be historical foundations, basic concepts such as reliability, validity, and invariance, the use of different tests and instruments, scaling, and the unique aspects of measurement encountered in different areas of psychology. Students may not hold credit for both PSYC 3630 (017.363) and PSYC 3631 (017.363). Prerequisite: [a grade of "B" or better in PSYC 2260 (017.226) or PSYC 2261 (017.226) or the former PSYC 2300 (017.230)] and written consent of department head.

PSYC 3650 Introduction to Clinical Psychology Cr.Hrs. 3

(Formerly 017.365) Clinical psychology is presented as both a scientific and an applied discipline. Such topics as assessment, intervention, research, and professional issues are covered. Prerequisite: [a grade of "C" or better in PSYC 2490 or PSYC 2491 or the former PSYC 3460 (017.346) or PSYC 3461 (017.346)] or written consent of department head.

PSYC 3860 Language Acquisition Cr.Hrs. 3

The study of first language acquisition from infancy through childhood. Aspects of phonology, morphology, pragmatics and syntax acquisition are discussed, as well as formal theories of acquisition, second language and bilingual acquisition, atypical development and the relationship of language acquisition with literacy. Also offered as LING 3860. Students may not hold credit for PSYC 3860 and any of: LING 3860 or the former PSYC 2860 or the former LING 2860 (126.286). Prerequisite: [a grade of "C" or better in PSYC 2290 (017.229) or PSYC 2291 (017.229)] or [a grade of "C" or better in 9 credit hours of Linguistics courses] or written consent of department head.

Psychology Course Descriptions-4000 Level**PSYC 4370 Brain Plasticity Cr.Hrs. 3**

The course will feature the relationship between the brain and experience. Brain plasticity refers to the ability of the brain to change its structure and function. Experience, which includes development, learning, and damage,

is a major cause of plasticity in all organisms. Students will be exposed to theories on how much plasticity is possible, how it can be measured, how it can be used, and whether it can be enhanced. Students may not hold credit for both PSYC 4370 and PSYC 4540 (017.454) when titled "Brain Plasticity." Prerequisite: [a grade of "C" or better in PSYC 2360 (017.236) or PSYC 2361] or written consent of department head.

PSYC 4400 Theories of Close Relationships Cr.Hrs. 3

Students will be exposed to theories that apply to the initiation, development, maintenance, and dissolution of relationships. The primary focus will be on evolutionary theory, attachment styles, communal and exchange relationships, equity theory, interdependence theory and the investment model, attributional theories, and theories of love. Students may not hold credit for both PSYC 4400 and PSYC 4540 (017.454) with the topic "Theories of Close Relationships." Prerequisite: written consent of department head.

PSYC 4410 Cross-cultural Social Psychology Cr.Hrs. 3

Cross-cultural psychology is the critical and comparative study of the linkages between cultural norms and thoughts, feeling and behaviour. This course focuses on Cross-cultural Social Psychology. Therefore the assigned readings deal with topics that Social Psychology, in general, examines. Students may not hold credit for both PSYC 4410 and PSYC 4540 (017.454) with the topic "Cross-cultural Social Psychology." Prerequisite: written consent of department head.

PSYC 4420 Neuroimaging: Imaging Thoughts Cr.Hrs. 3

This course will explore how neuroimaging can illuminate our models of various aspects of cognition, including attention, vision, language, memory and learning, executive functions, emotion and various neuropathologies. Students may not hold credit for both PSYC 4420 and PSYC 4540 (017.454) with the topic "Imaging Thoughts." Prerequisite: written consent of department head.

PSYC 4430 Vision: Perception and Action Cr.Hrs. 3

An intensive review of current research and theories in visual processes. Both behavioural and physiological aspects of vision will be considered. Course goals are directed at offering a better understanding of visual perception and the visual control of action. Students may not hold credit for both PSYC 4430 and PSYC 4540 (017.454) with the topic "Vision Science." Prerequisite: written consent of department head.

PSYC 4440 Readings in Autism Spectrum Disorders Cr.Hrs. 3

Students will read recent research in Autism Spectrum Disorders, acquire skills to critically evaluate empirical evidence, and examine implications for practice. Among the topics covered will be assessment, diagnosis, epidemiology, and applied behaviour analysis early intervention. Students may not hold credit for both PSYC 4440 and PSYC 4540 (017.454) with the topic "Autism Spectrum Disorders." Prerequisite: written consent of department head.

PSYC 4450 Animal Behaviour 1 Cr.Hrs. 3

(Formerly 017.445) The nature-nurture controversy will be discussed, followed by a survey of the diverse behaviours relating to the physical environment (e.g., food storage); predation (e.g. trapping); defence (e.g., camouflage); and migration. Prerequisite: written consent of department head.

PSYC 4460 Animal Behaviour 2 Cr.Hrs. 3

(Formerly 017.446) A more detailed analysis of selected topics including communication, animal populations, and the social use of space in humans and infrahumans. Prerequisite: written consent of department head.

PSYC 4490 Comparative Psychology Cr.Hrs. 3

(Formerly 017.449) A survey of similarities and differences of behaviour at various phylogenetic levels. Topics include evolution, genetics, sensory processes, neuropsychology, learning processes, and social behaviour. Prerequisite: written consent of department head.

PSYC 4492 Psychology of Addiction Cr.Hrs. 3

This course will introduce the psychology of addictive disorders, including their history, prevalence and incidence, and basic drug actions. It will also survey research on biological, psychological, and social factors that contribute to the development and maintenance of addictive disorders. Students may not hold credit for both PSYC 4492 and PSYC 4540 (017.454) when titled "Introduction to the Psychology of Addiction." Prerequisite: written consent of department head.

PSYC 4510 Applied Behaviour Analysis in Developmental Disabilities Cr.Hrs. 3

Students will read recent applied behaviour analytic research in behavioural assessments and interventions for people with developmental disabilities, acquire skills to critically evaluate empirical evidence, and examine implications for practice. Students may not hold credit for both PSYC 4510 and PSYC 4540 (017.454) with the topic "Research in Developmental Disabilities." Prerequisite: written consent of department head.

PSYC 4520 Honours Research Seminar Cr.Hrs. 6

(Formerly 017.452) In first term there will be an examination of important experimental issues, and several experimental assignments. In addition, each student will propose a research project of greater scope to be conducted under the supervision of a Psychology staff member. In second term, students will carry out their projects and report their findings. Prerequisite: [90 credit hours towards honours program, including a grade of "C" or better in PSYC 3200, and three credit hours in PSYC 3340 or PSYC 3341 or the former PSYC 4570 (017.457), and three credit hours in PSYC 3630 (017.363) or PSYC 3631 (017.363) or the former PSYC 4500 (017.450)] and written consent of department head.

PSYC 4540 Contemporary Issues 1 Cr.Hrs. 3

(Formerly 017.454) Course content may vary from year to year, but in general it will entail either some specific topic of prominent interest in psychology or a psychological analysis of some problem of current public interest. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

PSYC 4560 Health Psychology Cr.Hrs. 3

(Formerly 017.456) This course focuses on understanding how psychological factors contribute to the promotion and maintenance of good health, to the prevention and treatment of illness, and to recovery from or adjustment to existing illness. Prerequisite: written consent of department head.

PSYC 4562 Social Psychology and Health Cr.Hrs. 3

This course uses theories and concepts from social/personality psychology to gain a better appreciation of what health is and how to achieve it, at the individual and population levels. Students may not hold credit for both PSYC 4562 and PSYC 4540 (017.454) with the topic "Social Psychology and Health." Prerequisite: [a grade of "C" or better in one of: PSYC 2410 (017.241) or PSYC 2411 (017.241) or PSYC 2420 (017.242) or PSYC 2421 (017.242) or PSYC 3130 or PSYC 3131 or PSYC 2530 or PSYC 2531 or the former PSYC 3450 (017.345) or the former PSYC 3451 (017.345)] and written consent of department head.

PSYC 4564 Self-regulation and Health Cr.Hrs. 3

This course examines how self-regulatory processes such as goal-setting and self-awareness can affect behaviours that promote or undermine human health. A wide range of health-related behaviours is considered such

as smoking, exercise, safe-sex practices, and eating. Students may not hold credit for both PSYC 4564 and PSYC 4540 (017.454) with the topic "Self-regulation and Health." Prerequisite: written consent of department head.

PSYC 4566 Psychology of Health and Aging Cr.Hrs. 3

This course considers how adults adapt to the challenges of aging and the accompanying health problems. Seminar discussions will focus on selected psychological theories and related empirical literature regarding belief systems that operate in the face of health- and age-related challenges. Students may not hold credit for both PSYC 4566 and PSYC 4540 (017.454) with the topic "Health and Aging." Prerequisite: written consent of department head.

PSYC 4580 Elements of Behavioural Pharmacology Cr.Hrs. 3

(Formerly 017.458) Data and theories related to psychoactive agents are introduced, with emphasis on therapeutic drug classes, drugs of abuse, and methodological issues in drug research. The focus is on the behavioural analysis of drug action, but a neuropharmacological analysis is developed where it has a firm relationship to the behavioural analysis. Prerequisite: written consent of department head.

PSYC 4590 Selected Topics in Social Psychology Cr.Hrs. 3

(Formerly 017.459) A seminar in Social Psychology whose content shall vary from year to year. A description of the course is available in advance at the Psychology general office. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

PSYC 4600 Selected Topics in Developmental Psychology Cr.Hrs. 3

(Formerly 017.460) The specific content of this course will vary from year to year. A description of the course is available in advance at the Psychology general office. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

PSYC 4610 Social Cognition Cr.Hrs. 3

(Formerly 017.461) Focus on the processes determining how people perceive themselves and others in their social world. From topics such as causal attribution, psychological control, person memory, and social inference, the course will address selected issues from theoretical and empirical perspectives. Prerequisite: written consent of department head.

PSYC 4620 Community Mental Health Cr.Hrs. 3

(Formerly 017.462) A seminar covering contemporary issues in community mental health and their relation to psychological services. Topics include the history of the community mental health movement, de-institutionalization as a social policy, the etiology and epidemiology of mental disorders, recognition of and response to mental disorders, mental health systems, community-based mental health services, and prevention of mental disorders. Students may not hold credit for both PSYC 4620 (017.462) and PSYC 4540 (017.454) offered as Community Mental Health. Prerequisite: written consent of department head.

PSYC 4630 Behavioural Endocrinology Cr.Hrs. 3

(Formerly 017.463) A comparative approach is adopted to examine how hormones influence a diversity of behaviours through their actions on brain function, the physiological substrates of the behaviours, and their development as evolutionary adaptations. Techniques used by behavioural neuroscientists to study the behavioural and neuroendocrine interactions are surveyed. Prerequisite: [a grade of "C" or better in PSYC 3350 or PSYC 3351 or the former PSYC 3330 (017.333) or the former PSYC 3331 (017.333)] and written consent of department head.

PSYC 4640 Person X Situation Interactionism Cr.Hrs. 3

We will first explore research demonstrating the impact of personality and situations, separately, on behaviour. We then examine the debate that arose about whether understanding the person or situation would have the most scientific merit. We spend the remainder (and the majority) of the course discussing the theories and research that arose from that debate. The majority of this research has an interactionist perspective, taking both the person and his/her situation into account. Students may not hold credit for both PSYC 4640 and PSYC 4540 (017.454) with the topic "Person X Situation Interactionism." Prerequisite: written consent of department head.

PSYC 4650 The Self and Social Perception Cr.Hrs. 3

This course examines: 1) bases of self-knowledge such as social comparison, feedback from others, and introspection, 2) recent perspectives on the nature of the self-concept and self-presentation, and 3) motivational and cognitive mechanisms guiding self-relevant information processing. Activities may include participating in class discussions, giving presentations, writing several short papers and a research proposal. Students may not hold credit for both PSYC 4650 and PSYC 4590 (017.459) when titled "Self and Social Perception." Prerequisite: [a grade of "C" or better in PSYC 2410 (017.241) or PSYC 2411 (017.241)] and written consent of department head.

PSYC 4660 Intergroup Relations Cr.Hrs. 3

This course examines intergroup relations from a social psychological perspective. Key topics include sources of prejudice and discrimination, the "target's" perspective, and strategies for reducing prejudice and discrimination. Activities may include participating in class discussions, giving presentations, and writing several short papers and a research proposal. Students may not hold credit for both PSYC 4660 and PSYC 4540 (017.454) when titled "Intergroup Relations." Prerequisite: [a grade of "C" or better in PSYC 2420 (017.242) or PSYC 2421 (017.242)] and written consent of department head.

8.26 Department of Religion

Head: Ian Whicher
Campus Address & General Office: 328 Fletcher Argue Building
Telephone: 204 474 9516
Email Address: religion@umanitoba.ca
Website: umanitoba.ca/religion

8.26.1 Program Information

We are a world religions department. Our approach is interdisciplinary and engages a wide range of human activity commonly deemed “religious,” seeking to understand how religions function, how religious discourse evolves, why certain religious perspectives gain prominence and how they are contested. We research and teach about a range of religions, past and present, from around the world, investigating the languages, ethical systems, practices, organizations, and institutions within which such religions are defined, refined, rejected, or renewed. Given the diversity of this study, such theoretical and methodological questions are viewed as central to the coherence of our courses, programs, and fields.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of “C” or better in six credit hours in Religion. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of “C” or better in six credit hours in Religion.

Honours Program

For entry to the Honours program, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Other

In addition to courses numbered at the 1000-level, the Department of Religion offers a number of upper-level courses for which there are prerequisites; see course descriptions.

It is not necessary for students to enter the offerings in Religion by way of courses numbered at the 1000-level. Students in any year or program may register for any course in Religion provided they satisfy course and program prerequisites. With written permission of the department head students may take courses numbered at the 4000-level.

In cooperation with St. Paul’s College, the Department of Religion offers an arrangement of courses with special emphasis in Catholic studies as an option for students intending to Major or Minor in Religion. This special emphasis involves completing course RLGN 2850 Contemporary Issues in Roman Catholicism and selecting relevant courses offered in the Faculty of Arts and the School of Art. Contact the Department of Religion prior to registration in order to select appropriate courses.

8.26.2 Religion

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR TOTAL: 30 CREDIT HOURS			
6 credit hours in Religion courses	<ul style="list-style-type: none"> • 6 credit hours in Religion courses numbered at the 3000 level (with written consent of the department head, students are permitted to substitute Honours courses in the Major) • 18 credit hours in Religion courses 		
<ul style="list-style-type: none"> • Within the courses required above, only 12 credit hours are permitted to be numbered at the 1000 level • Within the courses required above, students must complete courses from at least two religious traditions: Buddhism, Christianity, Hinduism, Islam, Judaism¹ 			
SINGLE ADVANCED MAJOR TOTAL: 48 CREDIT HOURS			
6 credit hours in Religion courses	<ul style="list-style-type: none"> • 12 credit hours in Religion courses numbered at the 4000 level (with written consent of the department head, students may be permitted to substitute courses numbered at the 3000 level) • 30 credit hours in Religion courses 		
<ul style="list-style-type: none"> • Within the courses required above, only 12 credit hours are permitted to be numbered at the 1000 level • Within the courses required above, students must complete courses from at least three religious traditions: Buddhism, Christianity, Hinduism, Islam, Judaism¹ 			

MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS			
6 credit hours in Religion courses	6 credit hours in Religion courses	6 credit hours in Religion courses	
Within the courses required above, only 12 credit hours are permitted to be numbered at the 1000 level			
SINGLE HONOURS¹			
6 credit hours in Religion courses	<ul style="list-style-type: none"> • 18 credit hours in Religion courses numbered at the 2000 level • 12 credit hours in ancillary options² 	<ul style="list-style-type: none"> • 12 credit hours in Religion courses numbered at the 3000 level • 18 credit hours in Religion courses numbered at the 4000 level • RLGN 4260, RLGN 4270 • 12 credit hours in free options³ • 12 credit hours in ancillary options² 	
Within the courses required above, students must complete courses from at least three religious traditions: Buddhism, Christianity, Hinduism, Islam, Judaism ¹			
DOUBLE HONOURS⁴			
6 credit hours in Religion courses	<ul style="list-style-type: none"> • 12 credit hours in Religion courses numbered at the 2000 level • 6 credit hours in ancillary options² • 12 credit hours in other Honours field 	<ul style="list-style-type: none"> • 6 credit hours in Religion courses numbered at the 3000 level • 12 credit hours in Religion courses numbered at the 4000 level • RLGN 4260, RLGN 4270 • 12 credit hours in free options³ • 24 credit hours in other Honours field 	
Within the courses required above, students must complete courses from at least three religious traditions: Buddhism, Christianity, Hinduism, Islam, Judaism ¹			
NOTES:			
<p>¹ Religious traditions are categorized as follows:</p> <p>Buddhism includes: RLGN 2020, RLGN 3150, RLGN 3260, RLGN 3266, RLGN 4100.</p> <p>Christianity includes: RLGN 1350, RLGN 2036, RLGN 2040, RLGN 2050, RLGN 2170, RLGN 2520, RLGN 2530, RLGN 2550, RLGN 2560, RLGN 2840, RLGN 2850, RLGN 3200, RLGN 3230, RLGN 3240, RLGN 3780, RLGN 3870, RLGN 4200, RLGN 4280.</p> <p>Hinduism includes: RLGN 2010, RLGN 3210, RLGN 4060, RLGN 4190.</p> <p>Islam includes: RLGN 2100, RLGN 2780, RLGN 2790, RLGN 3190, RLGN 3194, RLGN 4180.</p> <p>Judaism includes: RLGN 1120, RLGN 1390, RLGN 1400, RLGN 2140, RLGN 2160, RLGN 2730, RLGN 2760, RLGN 2770, RLGN 3280, RLGN 3800, RLGN 3810, RLGN 3824.</p> <p>² Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Religion courses).</p> <p>³ Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Religion courses).</p> <p>⁴ Honours courses: all 4000 level courses.</p>			

8.26.3 Religion Course Descriptions

Religion Course Descriptions-1000 Level

RLGN 1120 Biblical Hebrew Cr.Hrs. 6

(Formerly 020.112) An introductory course with emphasis on basic grammar and syntax. Students will learn to read simple biblical narratives. (Not acceptable for credit towards a Major or Minor in Religion.) Students may not hold credit for RLGN 1120 (020.112) and any of: HEB 1120 or the former SEM 1120 (055.112).

RLGN 1320 Introduction to World Religions Cr.Hrs. 6

(Formerly 020.132) An historical survey of the major living religions in terms of their development, ideas and practices as reflected in their literature. Students may not hold credit for RLGN 1320 (020.132) and any of: RLGN 1323 or RLGN 1325 or the former RLGN 1321 (020.132).

RLGN 1350 The History of Eastern Christianity Cr.Hrs. 6

(Formerly 020.135) This course examines the general history of Eastern Christianity. It studies the doctrines and organization of the churches, their spirit and attitude to church unity.

RLGN 1390 Readings in Biblical Hebrew 1 Cr.Hrs. 3

(Formerly 020.139) Reading and translation of selected prose portions of the Hebrew Bible. Vocabulary building and review of basic Hebrew grammar. Prerequisite: [a grade of "C" or better in RLGN 1120 (020.112) or HEB 1120 or the former SEM 1120 (055.112)] or written consent of instructor or department head.

RLGN 1400 Readings in Biblical Hebrew 2 Cr.Hrs. 3

(Formerly 020.140) Reading and translation of selected poetic portions of the Hebrew Bible. Vocabulary building and advanced grammar. Prerequisite: [a grade of "C" or better in RLGN 1390 (020.139)] or written consent of instructor or department head.

RLGN 1410 Death and Concepts of the Future Cr.Hrs. 3

(Formerly 020.141) The course investigates theories, images, and rituals of death, dying and the afterlife in selected world religions.

RLGN 1420 Ethics in World Religions Cr.Hrs. 3

(Formerly 020.142) Examination of the ethical teachings of world religious traditions. Attention will be given to such questions as the nature of the good or virtue, the place of law or commandments, the relationship between religion and morality, the concepts of moral community and the moral self. Students may not hold credit for both RLGN 1420 (020.142) and RLGN 1421 (020.142).

RLGN 1424 Religion and Sexuality Cr.Hrs. 3

An introduction to world religions through the lens of sexuality, exploring how sexual desires and practices are celebrated, regulated, imagined and constructed in different religions. Topics may include pleasure, procreation, sexual and gender identities, marriage, asceticism, erotic imagery of divine beings and divine-human relations.

RLGN 1430 Food: Religious Concepts and Practices Cr.Hrs. 3

(Formerly 020.143) This course explores the cultural (communal and social) dimensions of the major world religions through examination of food concepts and practices. Topics studied include: food symbols and rituals in the theory of religion; food proscription and endorsements ("dietary laws"); food in ritual time and space ("menus" and "liturgies"); concepts of plenty and concepts of dearth (ethics of food distribution); food and communication; food and gender/food and the body; feasting and fasting; food, religion and "consumer culture."

RLGN 1440 Evil in World Religions Cr.Hrs. 3

(Formerly 020.144) The course introduces students to perspectives on evil in selected world religions.

RLGN 1450 Religion and the Media Cr.Hrs. 3

(Formerly 020.145) This course investigates representations of religion in popular media. Through study of a range of media, from newspapers to the internet, the course explores cultural stereotypes about religion, asking how religions are represented, and how they represent themselves, in popular culture.

Religion Course Descriptions-2000 Level

RLGN 2010 Introduction to Hinduism Cr.Hrs. 3

An overview of the rich and multi-faceted tradition of Hinduism, dealing with its history and development from ancient to modern times. Students may not hold credit for both RLGN 2010 and the former RLGN 2860 (020.286).

RLGN 2020 Introduction to Buddhism Cr.Hrs. 3

A general introduction to the beliefs, practices, and history of the main forms of Buddhism, including Indian Buddhism, Tibetan Buddhism, and Zen. Students may not hold credit for both RLGN 2020 and the former RLGN 2830 (020.283).

RLGN 2030 Psychology and Religion Cr.Hrs. 3

(Formerly 020.203) An examination of selected modern and contemporary psychology and religion interactions. Students may not hold credit for both RLGN 2030 (020.203) and the former RLGN 2211 (020.221).

RLGN 2036 Introduction to Christianity Cr.Hrs. 3

This course provides an introduction to the history of Christianity from its earliest beginnings to the present. It will also focus on Christianity's main ideas and practices. Students will also be introduced to key concepts and debates in the study of religion using Christianity as a test case.

RLGN 2040 Early Modern/Modern Christianity Cr.Hrs. 3

(Formerly 020.204) A chronological survey of Christian practices and teachings from 1500-1900. This course examines dimensions of the "modernization" of Western Christianity, giving particular emphasis to the Protestant and Catholic Reformations, including changes in ritual practice, major theological and other doctrinal disputes, social formations, "elite" and "popular" religion, institutional developments, artistic and literary production. These will be considered in the larger context of the development of "national" churches and the complicated role of Christian ideas and institutions in colonial enterprises, with attention given both to propagation of Western Christianity and its establishment as a "world religion", and to particular local varieties and conditions of Western Christianity.

RLGN 2050 Modern and Contemporary Christianity Cr.Hrs. 3

(Formerly 020.205) A survey of 20th century Christianity. The course will include an examination of the changing religious, social, and political practices and institutional forms of Christianity since 1900. Students may not hold credit for both RLGN 2050 (020.205) and the former 020.228.

RLGN 2060 Religion and Violence Cr.Hrs. 3

(Formerly 020.206) Violence of many kinds - physical and non-physical, by and against individuals, within and amongst religious groups - plays an integral role in all religious traditions and systems. This course explores this role within the framework of an historical approach to world religions. Themes covered may include: theories of religion and violence; sacrifice; martyrdom; symbolic violence; iconoclasm; blasphemy; heterodoxy and discipline; religious toleration; religious warfare; religion and cultural resistance; religion and domestic violence; religion and non-violence.

RLGN 2072 Storytelling and Religion Cr.Hrs. 3

Storytelling is a way of making sense of, and transforming, the world: so is religion. This course explores story, imagination, and performance in the context of religion and spirituality. Course work may involve textual study, writing, and the practice of storytelling. Students may not hold credit for both RLGN 2072 and the former RLGN 3850 (020.385).

RLGN 2090 Issues in Science and Religion Cr.Hrs. 3

A consideration of some of the major issues arising from the intersection of the concepts and interests of the natural sciences with those of the religions of the world.

RLGN 2100 Approaches to the Qur'an Cr.Hrs. 3

An introduction to the main features, structure, and contents of the Qur'an as a text and to the manifold ways it has been received, understood, and interpreted by Muslims for over 1400 years

RLGN 2110 Religion and Healing Cr.Hrs. 3

A study of concepts of illness, health and healing, of therapeutic rituals, and of healing figures, in selected world religions.

RLGN 2120 Problems of Faith and Reason Cr.Hrs. 3

An historical and critical study of selected attempts to solve problems concerning the relationship between religious faith and natural reason. Students may not hold credit for both RLGN 2120 and the former RLGN 2630 (020.263)

RLGN 2130 Religion and Dance Cr.Hrs. 3

An examination of the role of movement and dance in world religions and of attempts to establish a theoretical framework for the study of movement within the discipline.

RLGN 2140 Introduction to Judaism Cr.Hrs. 3

An exploration of Jewish religious experience: the rhythms of time, the sensory life, sacred texts, collective memory, rules and resistance to rules. The course will introduce Jewish ways of learning, and consider Judaism as a test case for concepts in religious studies, including "religion" itself.

RLGN 2160 Introduction to the Hebrew Scriptures Cr.Hrs. 3

(Formerly 020.216) An introduction to the historical and critical study of the writings of the "Old Testament," the Hebrew Scriptures. Students may not hold credit for both RLGN 2160 and RLGN 2161.

RLGN 2170 Introduction to the New Testament Cr.Hrs. 3

(Formerly 020.217) An introduction to the historical and critical study of the Christian "New Testament." Students may not hold credit for both RLGN 2170 and RLGN 2171.

RLGN 2180 Theory of Nature Cr.Hrs. 3

(Formerly 020.218) While the content of this course will vary year-to-year, its constant purpose will be to introduce students to some of the many ways in which "nature" has been theorized. The course will explore historical and cultural contexts in which selected theories of nature have developed. It will also explore implications of different theories of nature for environmental ethics.

RLGN 2222 The Supernatural in Popular Culture Cr.Hrs. 3

This course provides a survey of the supernatural, superhuman, and paranormal in popular culture, focusing on non-institutionalized forms of religious thought and practice as well as in the popular media (comic books, movies, music, fantasy and science fiction novels, television). Topics may include phenomena such as divination, ghosts, and speaking with the dead as well as fascination with apocalypses, superheroes, time travel, vampires, and zombies. Emphasis will be given to religious expressions not usually recognized as "religious."

RLGN 2520 Eastern Christianity in North America Cr.Hrs. 3

(Formerly 020.252) A survey of the history and institutions of the major Eastern Christian bodies in North America. Particular reference will be made to the sociological and economic problems, the question of identity and survival, the problem of unity. Prerequisite: [a grade of "C" or better in RLGN 1350 (020.135)] or written consent of department head.

RLGN 2530 Eastern Christianity in the Contemporary World Cr.Hrs. 3

(Formerly 020.253) A study of some modern-day problems such as: politics, nationalism, geography, culture, secularization, and the question of unity. Particular reference will be made to the problem of the church in Eastern Europe. Prerequisite: [a grade of "C" or better in RLGN 1350 (020.135)] or written consent of department head.

RLGN 2550 History of Early Christian Thought Cr.Hrs. 3

(Formerly 020.255) Christian thought from the second century to Augustine.

RLGN 2560 History of Medieval Christian Thought Cr.Hrs. 3

(Formerly 020.256) Christian thought from Augustine to the end of the medieval period.

RLGN 2570 Indian Religious Art and Architecture Cr.Hrs. 3

(Formerly 020.257) A survey of Major periods and themes in Indian art and architecture (Buddhist, Jain, Hindu); iconography, temples, canons of Indian art; life of Buddha, Rama-cycle and Krsna-complex; socioeconomic background.

RLGN 2590 Religion and Social Issues Cr.Hrs. 3

(Formerly 020.259) The course examines selected ethical-social issues such as abortion, euthanasia, new genetic and reproductive technologies, and environmental and ecological issues, with reference to one or more of the world's religious traditions. Students may not hold credit for both RLGN 2590 (020.259) and RLGN 2591 (020.259).

RLGN 2600 Critical Animal Studies: An Introduction Cr.Hrs. 3

This course will introduce students to "the animal" question that has emerged with such significance in recent decades, surveying some key theoretical and ethical issues under debate around the meaning of animality and the difference between human and animal life, and pointing to future challenges posed by "Critical Animal Studies" for the discipline of Religion.

RLGN 2680 Women and Religion 1 Cr.Hrs. 3

(Formerly 020.268) Content of this course may vary from year to year. It will address, through contemporary interpretive models, topics of current and ongoing interest in relation to the understanding and role of women in the world's religious traditions. Students may not hold credit for both RLGN 2680 (020.268) and RLGN 2681.

RLGN 2690 Women and Religion 2 Cr.Hrs. 3

(Formerly 020.269) Content of this course may vary from year to year. It will address, through contemporary interpretive models, topics of current and ongoing interest in relation to the understanding and role of women in the world's religious traditions.

RLGN 2700 Religions of China and Japan Cr.Hrs. 6

(Formerly 020.270) A study of the history, teachings and developments of Confucianism, Taoism, Shinto and Buddhism in China and Japan from their beginning to the present.

RLGN 2730 Jews and Judaism in Antiquity Cr.Hrs. 3

(Formerly 020.273) The study of the Jewish people and their civilization from its origins in the ancient Near East to the completion of the Hebrew Bible and the redaction of the Talmud.

RLGN 2760 Rabbinic Judaism Cr.Hrs. 3

(Formerly 020.276) A study of the development of classical rabbinic Judaism from its roots in the Hebrew Bible and the Talmud to the end of the 18th century. Talmud, Law, Mysticism, Theology and Biblical Exegesis are some of the subjects examined.

RLGN 2770 Contemporary Judaism Cr.Hrs. 3

(Formerly 020.277) A study of contemporary denominational Judaism and its origins in the classical rabbinic tradition. The focus will be on the denominations active in North America.

RLGN 2780 Classical Islam Cr.Hrs. 3

(Formerly 020.278) An examination of the formation, development and expression of classical Islam. Emphasis is placed on the life and teachings of the Prophet Muhammad, the Qur'an, the Sunna, and the Shi'ism.

RLGN 2790 Contemporary Islam Cr.Hrs. 3

(Formerly 020.279) A study of the responses of Islamic communities to the pressures of the modern world. Special note will be taken of the relation between Islam and power.

RLGN 2840 The Second Vatican Council Cr.Hrs. 3

(Formerly 020.284) An historical and theological analysis of the Second Vatican Council, beginning with the situation of the Roman Catholic Church subsequent to the French Revolution. The course will include study of major Vatican II documents. Particular attention will be given to the legacy of Vatican II and to assessment of the Council's impact on the life of the Roman Catholic Church.

RLGN 2850 Contemporary Issues in Roman Catholicism Cr.Hrs. 3

(Formerly 020.285) A survey of major movements, thinkers, debates and issues in twentieth-century post-Vatican II Roman Catholicism. Particular attention will be given to the following: magisterium and dissent, social justice, women in the church, ecumenical and inter-religious dialogue, and emergent theologies.

Religion Course Descriptions-3000 Level

RLGN 3100 Rituals of Death and Mourning Cr.Hrs. 3

(Formerly 020.310) An exploration of the ritual dimensions of death and mourning in selected religious traditions, including such topics as: burial rites, cremation, funeral ceremonies, gender and mourning, grave goods and grave markers, lamentation and social protest, mortuary practices.

RLGN 3110 Issues in the Study of Religion and Evil Cr.Hrs. 3

(Formerly 020.311) An examination of the construction of evil in discourse and ritual, including such topics as: purity and pollution; social boundaries and identity; norms of conformity and non-conformity; institutions of power and authority; morality and evil.

RLGN 3120 Religion and Bioethics Cr.Hrs. 3

(Formerly 020.312) An examination of theoretical and practical bioethical issues and how these are engaged by various religious traditions.

RLGN 3130 Religion and Modern Thought Cr.Hrs. 3

(Formerly 020.313) The idea that religion is a distinct and unique aspect of human activity is a defining feature of modern thought. This course explores aspects of this understanding of religion in various modern intellectual movements from the sixteenth century to the nineteenth century, considering these movements in their particular historical contexts. Topics covered may include: skepticism, northern humanism, religion and European expansion, atheism, religion and the nation state, religion and early modern science, enlightenment, religion and bourgeoisie, imperialism, religion and revolution, religion and evolution. Students may not hold credit for RLGN 3130 (020.313) and any of: RLGN 3131 or RLGN 3251 (020.325).

RLGN 3150 Buddhism in East Asia Cr.Hrs. 3

(Formerly 020.315) An examination of the history and teachings of Buddhism in China and Japan, giving particular attention to processes of adaptation and transformation within the East Asian context.

RLGN 3160 Tibetan Religious Traditions Cr.Hrs. 3

(Formerly 020.316) A study of the religious traditions, particularly Buddhism, that have developed from antiquity in Tibet. Students may not hold credit for both RLGN 3160 (020.316) and the former 020.374

RLGN 3170 Eastern Religions in the West Cr.Hrs. 3

(Formerly 020.317) This course considers historical Western interactions with, and representations of, Asian religious traditions. Students may not hold credit for both RLGN 3170 (020.317) and the former 020.374.

RLGN 3190 Images of the Prophet Muhammad: Classical and Contemporary Perspectives Cr.Hrs. 3

This course addresses the central place of the Prophet Muhammad in Muslim life and religious practice. It examines sources for the life of Muhammad, considers the Prophet as a model of piety, and gives careful attention to methodological approaches to the study of Islam.

RLGN 3194 Islamic Philosophy Cr.Hrs. 3

This course explores the history of Islamic philosophy (falsafa) from the translation movement of Greek philosophical, scientific and medical texts under the Abbasid dynasty (8-9th Centuries), until the golden age of interdisciplinary intellectual, scientific and theological debates in the post-classical period of Islamic intellectual history.

RLGN 3200 Paul and the Letters Cr.Hrs. 3

A study of Paul of Tarsus and his writings, this course will address topics pertaining to the historical Paul, the Pauline and deutero-Pauline letters, the social history of Pauline communities, and approaches to the study of Paul and his communities. Students may not hold credit for both RLGN 3200 and the former RLGN 3770 (020.377). Prerequisite: written consent of instructor or department head.

RLGN 3210 Indian Philosophy Cr.Hrs. 3

(Formerly 020.321) This course introduces some of the main philosophical schools of Hindu and Buddhist thought, emphasizing the living history of interaction and debate between the various traditions.

RLGN 3220 Indian Religion and Society Cr.Hrs. 3

(Formerly 020.322) This course investigates selected topics in religion and society in the region of the Indian sub-continent. Topics will vary from year to year, ranging from a focus on marriage to a study of Buddhist monks and the politics of civil war in Sri Lanka.

RLGN 3230 Gender in Early Christianity Cr.Hrs. 3

(Formerly 020.323) This course examines the light shed by ancient writings on the role(s) of women in ancient Christian groups, and on the ideologies of gender promoted or assumed by these groups. Thus the focus, while predominately on women, will extend to the way in which gender identities were constructed and adhered to by males and females in early Christianity.

RLGN 3240 Jesus and the Gospel Writings Cr.Hrs. 3

(Formerly 020.324) The aim of this course is to develop a sophisticated understanding of the New Testament Gospels and their sources, and the ideas these writings were intended to communicate; also to reconstruct the outlines of a history of the earliest traditions about Jesus based on the analysis of these writings.

RLGN 3260 Indian Buddhism Cr.Hrs. 3

A thematic and historical study of Indian Buddhism from its origin to its disappearance. Topics covered include early Buddhism, Buddhist doctrine and philosophy, and the development of Mahāyāna and Vajrayāna.

RLGN 3266 Readings in Buddhist Texts Cr.Hrs. 3

This is a course intended for students who have completed RLGN 2020 Introduction to Buddhism, and are interested in pursuing a more in-depth study of Buddhism. Following a discussion format, we will investigate Buddhist texts and ethnographic case studies and material from a range of traditions and historical periods. Prerequisite: [a grade of "C" or better in RLGN 2020] or written consent of instructor.

RLGN 3270 Guru and Disciple Cr.Hrs. 3

A study of the role of the guru in India, and of the dynamic of guru and disciple, utilizing traditional Hindu sources as well as contemporary writings.

RLGN 3280 Hasidism Cr.Hrs. 3

Hasidic Jews, known for their tales, melodies, distinctive garb and strict traditionalism, belong to one of the most successful modern Jewish religious movements. This course explores Hasidism, from its origins in eighteenth-century Ukraine to the present, through its own stories and spiritual teachings as well as scholarly perspectives.

RLGN 3400 Zionism: Religious Perspectives Cr.Hrs. 3

Zionism is a modern political and social movement which has a close but ambivalent relationship with the Jewish religious tradition. This course will explore topics such as secular adaptations of religious motifs; religious critiques of Zionism; religious Zionism as a new form of Judaism; and Christian approaches to Zionism and the State of Israel.

RLGN 3530 Contemporary Issues 1 Cr.Hrs. 3

(Formerly 020.353) Content of this course will vary from year to year but it will deal with some specific topic of current interest in religion, some aspect of methodology in the study of religion, or an analysis from a religious perspective of some problem of current public interest. Students may not hold credit for both RLGN 3530 (020.353) and RLGN 3531 (020.353). Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

RLGN 3540 Contemporary Issues 2 Cr.Hrs. 3

(Formerly 020.354) Content of this course will vary from year to year but it will deal with some specific topic of current interest in religion, some aspect of methodology in the study of religion, or an analysis from a religious perspective of some problem of current public interest. Students may not hold credit for RLGN 3540 (020.354) and RLGN 3541 (020.354). Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

RLGN 3560 Texts in Original Languages Cr.Hrs. 3

The subject matter of this course will vary from year to year. It will give students the opportunity to study texts in languages other than English and to develop reading skills in those languages. The emphasis may be on language learning or on working with texts in a language already studied. As the course content will vary from year to year, students may take this course more than once for credit.

RLGN 3640 Religion in the Hellenistic and Roman Mediterranean Cr. Hrs. 3

This course explores the wide variety of religious traditions, practices, and beliefs of the Mediterranean region in the Hellenistic and Roman period (c. 300 BCE to 300 CE). This period is exemplified by a great deal of continuity, but it was also a time of experimentation, innovation, and cultural entrepreneurship. Also offered by Classics as CLAS 3670. Students may not hold credit for both RLGN 3640 (020.364) and CLAS 3670.

RLGN 3750 Topics in Indian Religious Art and Architecture Cr.Hrs. 3

(Formerly 020.375) The course will focus on one or more of the religious dimensions of the following: selected motifs in Indian art, the art and architecture of a particular region or epoch, the theoretical assumptions underlying Indian art.

RLGN 3780 Selected New Testament Literature and Themes Cr.Hrs. 6

(Formerly 020.378) An intensive study of selected documents and/or themes from the New Testament. Prerequisite: [a grade of "C" or better in RLGN 2160 (020.216) or RLGN 2161] and [a grade of "C" or better in RLGN 2170 (020.217) or RLGN 2171] or written consent of instructor or department head.

RLGN 3800 Selected Old Testament Literature and Themes Cr.Hrs. 6

(Formerly 020.380) An intensive study of selected writings or themes of the Old Testament (the Tanach). Prerequisite: [a grade of "C" or better in RLGN 2160 (020.216) or RLGN 2161] and [a grade of "C" or better in RLGN 2170 (020.217) or RLGN 2171] or written consent of instructor or department head.

RLGN 3810 The Talmud Cr.Hrs. 3

The Talmud is as important as the Bible in Jewish life and thought. It is not simply a book to read; it has to be studied with other people. Students will learn the skills of studying this polyvocal text, and engage with scholarship on the Talmud's literary techniques, laws, folklore, gender politics, and theology. Students may not hold credit for both RLGN 3810 and the former RLGN 2150.

RLGN 3824 Kabbalah Cr.Hrs. 3

Kabbalah is a centuries-old stream of Jewish thought and practice which encompasses mysticism, ethics, spiritual practice and magic. Students will come away from this course with a working knowledge of the Zohar, the central text of Kabbalah, its radical theology and its mythical-symbolic mode of expression. The course also explores the influence of the Zohar within Judaism and beyond and related scholarly debates. Students may not hold credit for both RLGN 3824 and the former JUD 3390 (055.339).

RLGN 3830 The Bible as Story Cr.Hrs. 3

A study of the manner in which biblical storytellers present their tales and the ways in which these narratives have been retold ever since. Particular attention will be paid to Midrash, the tradition of creative retelling of biblical tales. Students may not hold credit for both RLGN 3830 and the former RLGN 3840 (020.384). Prerequisite: written consent of instructor or department head.

RLGN 3870 The Thought of Bernard Lonergan Cr.Hrs. 3

(Formerly 020.387) A study of the thought of the twentieth-century Canadian Jesuit, Bernard Lonergan, including his work on method in theology, on ways of knowing and on ethics.

Religion Course Descriptions-4000 Level**RLGN 4060 The Yoga Tradition Cr.Hrs. 3**

(Formerly 020.406) This course explores the rich, diverse, and highly complex Yoga tradition, emphasizing classical and medieval forms of Yoga philosophy and practice within Hinduism. As well as tracing historical development of the Yoga tradition, the course highlights the meaning and purpose of Yoga in its classical expression and considers the growing popularity and relevance of Yoga in the modern world. Prerequisite: written consent of department head.

RLGN 4080 Critical Theory and Religion Cr.Hrs. 3

(Formerly 020.408) An examination of the work of the Frankfurt School (Theodor Adorno, Max Horkheimer, and Herbert Marcuse) and Jürgen Habermas as it relates to the study of religion. Topics will include: the nature and scope of reason and enlightenment, disenchantment and modernity, ideology and ideology critique, and the separation of science, morality, and art. Prerequisite: written consent of department head.

RLGN 4100 Advanced Studies in Buddhism Cr.Hrs. 3

(Formerly 020.410) An in-depth study of selected topics from the wide cultural and historical range of Buddhist traditions. Prerequisite: written consent of department head.

RLGN 4110 Studies in Religion and Cultural Memory Cr.Hrs. 3

(Formerly 020.411) An examination of selected cultural memory and religion topics. Prerequisite: written consent of department head

RLGN 4160 Religion and Philosophy Cr.Hrs. 3

(Formerly 020.416) An examination of the relation between philosophical and religious thought through in-depth study of a selected thinker or thinkers. Prerequisite: written consent of department head.

RLGN 4180 Advanced Studies in Islam Cr.Hrs. 3

(Formerly 020.418) An in-depth study of selected topics in Islamic philosophy and tradition. Prerequisite: written consent of department head.

RLGN 4190 Advanced Studies in Hinduism Cr.Hrs. 3

(Formerly 020.419) An in-depth study of selected topics in the philosophy, history, literature, and practices of Hinduism. Prerequisite: written consent of department head.

RLGN 4200 Early Christian Gnosticism Cr.Hrs. 3

(Formerly 020.420) This course constitutes a partial introduction to the historical and critical study of earliest Christianity and the writings of the Christian "New Testament." The main emphasis will lie on a study of the New Testament and contemporary writings that show strong mystical and Gnostic-leaning tendencies. Above all, the course will focus on the Gospel of Thomas, the Gospel of John, and other New Testament writings related to the Gospel of John. Prerequisite: written consent of the department head.

RLGN 4230 Studies in Body History Cr.Hrs. 3

(Formerly 020.423) A study in the religious-cultural history of the body, this course explores the multiple meanings given to the body, sexuality and sexual difference in historical and contemporary religious traditions. The course gives particular attention to theories of representation of body, and includes study of both written and performative sources. Prerequisite: written consent of the department head.

RLGN 4260 Theoretical Approaches: Western Religions Cr.Hrs. 3

(Formerly 020.426) This course explores theoretical approaches to the study of western religions, focusing in any given year on one of the following: theories of representation, theories of interpretation, theories of contestation. Prerequisite: written consent of the department head.

RLGN 4270 Theoretical Approaches: Eastern Religions Cr.Hrs. 3

(Formerly 020.427) This course explores theoretical approaches to the study of eastern religions, focusing in any given year on one of the following: theories of representation, theories of interpretation, theories of contestation. Prerequisite: written consent of the department head.

RLGN 4280 Advanced Studies in Christian Origins Cr.Hrs. 3

With content varying year to year, this course will engage topics pertaining to the first 300 years of Christianity. Theoretical and methodological issues will be considered, as will literary and archaeological data for the study of nascent Christianity. Prerequisite: written consent of instructor or department head.

RLGN 4290 Advanced Studies in Mysticism Cr.Hrs. 3

With religious traditions of focus varying year to year, this course considers current scholarly approaches to the understanding of mysticism and sainthood. It includes study of mystic texts and treatises; the mystic body; mystic communities; ascetic ritual and practice. Prerequisite: written consent of instructor or department head.

RLGN 4300 Advanced Topics in Judaism Cr.Hrs. 3

An in-depth study of selected Jewish texts from the fields of halakhah, aggadah or spirituality, drawing on various theoretical perspectives. Prerequisite: written consent of department head. As the course content will vary from term to term, students may take this course more than once for credit.

RLGN 4430 Selected Topics in Religion 1 Cr.Hrs. 3

(Formerly 020.443) An intensive study of specially selected topics in the field of religion. The subject matter of the course will vary from year to year. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

RLGN 4440 Selected Topics in Religion 2 Cr.Hrs. 3

(Formerly 020.444) An intensive study of specially selected topics in the field of religion. The subject matter of the course will vary from year to year. Prerequisite: written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

8.27 Department of Sociology

Head: Andrew Woolford
Campus Address & General Office: 318B Isbister Building
Telephone: 204 474 9260
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8.27.1 Sociology Program Information

Sociology examines the patterns of interaction among individuals and the group activity that emerges from such interaction. A basic premise is that social behaviour, and society itself, cannot be fully understood simply by studying the individuals involved. Sociology has a special interest in all those intermediate forms of association between the family and the state which together comprise much of the basis for social solidarity and cohesion. Whether individuals cooperate, compete, or fight is in large measure determined by forces outside themselves, by social forces that encourage or restrain their behaviour.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of “C” or better in SOC 1200 or a grade of “C” or better in both SOC 1211 and SOC 1221. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of “C” or better in SOC 1200 or a grade of “C” or better in both SOC 1211 and SOC 1221.

Honours Program

For entry to the Honours program, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

8.27.2 Sociology

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR TOTAL: 30 CREDIT HOURS			
SOC 1200 or SOC 1211 and SOC 1221	<ul style="list-style-type: none"> • SOC 2220, SOC 2290 • one of SOC 3310, SOC 3330, SOC 3350, SOC 3360, SOC 3380, SOC 3390, SOC 3700 • 12 credit hours in Sociology courses numbered at the 2000 or 3000 level 		
SINGLE ADVANCED MAJOR TOTAL: 48 CREDIT HOURS			
SOC 1200 or SOC 1211 and SOC 1221	<ul style="list-style-type: none"> • SOC 2220, SOC 2290 • 6 credit hours from SOC 3310, SOC 3330, SOC 3350, SOC 3360, SOC 3380, SOC 3390, SOC 3700 • 9 credit hours in Sociology courses numbered at the 2000 or 3000 level 		18 credit hours in Sociology courses numbered at the 2000 or 3000 level
MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS			
SOC 1200 or SOC 1211 and SOC 1221	12 credit hours in Sociology courses numbered at the 2000 or 3000 level		
SINGLE HONOURS³			
SOC 1200 or SOC 1211 and SOC 1221	<ul style="list-style-type: none"> • SOC 2010, SOC 2220, SOC 2290 • 6 credit hours in Sociology • 12 credit hours in ancillary options¹ 	<ul style="list-style-type: none"> • 6 credit hours from SOC 3310, SOC 3330, SOC 3350, SOC 3360, SOC 3380, SOC 3390, SOC 3700 • 12 credit hours in Sociology courses numbered at the 2000 or 3000 level • 12 credit hours in ancillary options¹ 	<ul style="list-style-type: none"> • SOC 4450, SOC 4460, SOC 4560, SOC 4570 • 3 credit hours from SOC 3820, SOC 4580 • 12 credit hours in ancillary options¹
DOUBLE HONOURS³			
SOC 1200 or SOC 1211 and SOC 1221	<ul style="list-style-type: none"> • SOC 2010, SOC 2220, SOC 2290 • 6 credit hours in ancillary options¹ 	<ul style="list-style-type: none"> • 6 credit hours from SOC 3310, SOC 3330, SOC 3350, SOC 3360, SOC 3380, SOC 3390, SOC 3700 • 3 credit hours in Sociology courses numbered at the 2000 or 3000 level • 6 credit hours in free options² 	<ul style="list-style-type: none"> • SOC 4450, SOC 4460, SOC 4560, SOC 4570 • 3 credit hours from SOC 3820, SOC 4580 • 6 credit hours in free options²
	At least 36 credit hours in other Honours field		

NOTES:

¹ Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Sociology courses).

² Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Sociology courses).

³ Honours courses: SOC 2010 and all 4000 level courses.

8.27.3 Criminology Program Information

Criminology is concerned with the complex social phenomena of crime and criminalization. The criminology program engages students in a systematic study of the nature and extent of crime and criminalization along with the array of agencies and programs designed to prevent, control, and respond to criminal activity over time and place. Attention is given to specific issues related to gender, race, class and crime, youth and crime, violence and victimization, criminal law and procedure, policing and crime prevention, restorative justice, and global criminology. Courses in the criminology program are taught primarily from a sociological perspective, with emphasis placed on research, program development, and policy analysis.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of “C” or better in SOC 1200 or a grade of “C” or better in both SOC 1211 and SOC 1221. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

It is not possible to have a Major in Criminology and a Minor in Sociology.

Honours Program

For entry to the Honours program, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

8.27.4 Criminology

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR TOTAL: 30 CREDIT HOURS			
SOC 1200 or SOC 1211 and SOC 1221	SOC 2290, SOC 2510, SOC 2610	12 credit hours from SOC 3100, SOC 3310, SOC 3400, SOC 3410, SOC 3700, SOC 3710, SOC 3720, SOC 3740, SOC 3750, SOC 3790, SOC 3830, SOC 3850, SOC 3860, SOC 3880	
SINGLE HONOURS			
SOC 1200 or SOC 1211 and SOC 1221	<ul style="list-style-type: none"> • SOC 2010, SOC 2220, SOC 2290, SOC 2510, SOC 2610 • 12 credit hours in ancillary options¹ 	<ul style="list-style-type: none"> • 3 credit hours of criminology-related theory courses from SOC 3310 or SOC 3700 • 3 credit hours² of criminology or sociology-related theory courses from SOC 3310, SOC 3330, SOC 3350, SOC 3360, SOC 3380, SOC 3390, SOC 3700 • 12 credit hours² from SOC 3100, SOC 3310, SOC 3400, SOC 3410, SOC 3700, SOC 3710, SOC 3720, SOC 3740, SOC 3750, SOC 3790, SOC 3830, SOC 3850, SOC 3860, SOC 3880 • 12 credit hours in ancillary options¹ 	<ul style="list-style-type: none"> • SOC 4450, SOC 4490, SOC 4570 • 3 credit hours of research methods courses from SOC 3820 or SOC 4580 • 3 credit hours of advanced theory courses from SOC 4460 or SOC 4560 • 12 credit hours in ancillary options¹

NOTES:

¹ Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Sociology courses).

² These courses can include SOC 3310 or SOC 3700 if not already completed as a criminology or sociology-related theory requirement.

8.27.5 Sociology Course Descriptions

Sociology Course Descriptions-1000 Level

SOC 1200 Introduction to Sociology Cr.Hrs. 6

(Formerly 077.120) A systematic introduction to the scientific perspective of sociology. The following areas will be treated: culture, socialization, groups, social stratification, associations, collective behaviour, and urban and political institutions. Students may not hold credit for SOC 1200 (077.120) and any of: SOC 1211 (077.121) or SOC 1221 (077.122) or the former SOC 1201 (077.120).

Sociology Course Descriptions-2000 Level

SOC 2010 Critical Issues in Sociology Cr.Hrs. 3

(Formerly 077.201) A form-specific, content variable course especially designed for Honours students. The intent of this course is to develop critical thinking and improve students' oral, writing and research skills. It is also designed to facilitate the creation of a cohesive cohort of Honours students through the use of group work and assignments. Prerequisite: written consent of department head.

SOC 2200 Sociology Through Film Cr.Hrs. 3

Using film as a method, this course will be organized around the broad themes of social inequality and social justice. It will engage in a critical sociological analysis of issues such as health and well-being, poverty, genocide and violence, globalization and consumer culture.

SOC 2220 Sociological Theoretical Foundations Cr.Hrs. 3

(Formerly 077.222) A review of classical sociological theory. The focus will be on the central figures and schools of thought in Sociology. Students may not hold credit for both SOC 2220 (077.222) and SOC 2221 (077.222). Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 2240 Sociology of Globalization Cr.Hrs. 3

Explores various sociological theories of globalization, stratification, local-global linkages, transnational social movements, and migration, in order to grasp what globalization is, its extent, its driving forces, and its effects. Students may not hold credit for both SOC 2240 and SOC 3460 (077.346) when titled "Sociology of Globalization." Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 2260 Cities and Urban Life Cr.Hrs. 3

A consideration of the social, cultural and urban processes and their relationship to urban life, with an emphasis on urban experience, sociality, and social inequality. Students may not hold credit for SOC 2260 and any of: SOC 2261 or the former SOC 2270 (077.227) or the former SOC 2271 (077.227). Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 2290 Introduction to Research Methods Cr.Hrs. 6

(Formerly 077.229) An introduction to quantitative and qualitative scientific methods of investigating social phenomena. The course will include introductions to the assumptions of scientific inquiry, the conceptualization of research problems, basic statistical analysis, and use of a packaged computer program. Students may not hold credit for both SOC 2290 (077.229) and SOC 2291 (077.229). Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 2310 Selected Social Problems Cr.Hrs. 3

(Formerly 077.231) An examination of one or more contemporary social problems, other than crime and delinquency. Issues that might be addressed include poverty, war, environment, licit and illicit drugs, and death and dying. Consult the Registration Guide or contact the instructor for specific content in any particular academic year. Students may not hold credit for both SOC 2310 (077.231) and SOC 2311 (077.231). Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)]. As the course content will vary from year to year, students may take this course more than once for credit.

SOC 2320 Canadian Society and Culture Cr.Hrs. 3

(Formerly 077.232) A sociological analysis of Canadian institutions with reference to historical, cultural, economic, and political perspectives. Students may not hold credit for both SOC 2320 (077.232) and SOC 2321 (077.232). Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 2330 Social Psychology in Sociological Perspective Cr.Hrs. 3

(Formerly 077.233) The course examines the interrelations of the individual, the group, and society, with emphasis on interaction as the process that gives form, direction, and meaning to the everyday lives of people. Topics to be discussed may include: self esteem, identity, impression management, motivation and emotion. Students may not hold credit for both SOC 2330 (077.233) and SOC 2331 (077.233). Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 2350 Collective Behaviour Cr.Hrs. 3

(Formerly 077.235) The analysis of various forms of collective behaviour, such as crowds, mobs, and social movements. The underlying social conditions, action processes, and consequences of such behaviour will be considered. Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 2360 Small Group Interaction Cr.Hrs. 3

(Formerly 077.236) The basic sociological concepts and methods used in analyzing and designing small groups such as the family, children's groups, work groups, and friendship groups. Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)]. SOC 2330 (077.233) or SOC 2331 (077.233) is recommended.

SOC 2370 Ethnic Relations Cr.Hrs. 3

(Formerly 077.237) Introduction to the social and social psychological aspects of ethnic relations in Canada. Students may not hold credit for both SOC 2370 (077.237) and SOC 2371 (077.237). Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 2380 Sociology of Religion Cr.Hrs. 3

(Formerly 077.238) A study of the nature and function of religion as a social institution with emphasis on early theorists, primitive religions, belief systems, and typologies. Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 2390 Social Organization Cr.Hrs. 3

(Formerly 077.239) The process of ordering social life and the structures that result. Power, conflict, social control, bureaucracy, industrialization, urbanization, and centralization. Students may not hold credit for both SOC 2390 (077.239) and SOC 2391 (077.239). Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 2450 Sociology of the Body Cr.Hrs. 3

Despite its centrality in social life, the human body is too often taken-for-granted. This course explores a variety of sociological perspectives on the socially constructed nature of bodies to understand how society and social relations both shape and are shaped by the human body. Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 2460 The Family Cr.Hrs. 3

(Formerly 077.246) A sociological analysis of the various family arrangements and practices in contemporary societies and their historical roots. An examination of the relationships between family and other institutions in the context of widespread social changes. Students may not hold credit for both SOC 2460 (077.246) and SOC 2461 (077.246). Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 2470 Courtship and Marriage Cr.Hrs. 3

(Formerly 077.247) Mate selection, marital interaction, adjustment, changing roles of wives and husbands, with special emphasis on division of labour, power relations, and sexual adjustment in contemporary Western marriage and across cultures. Experimental marriage forms will be examined. Students may not hold credit for both SOC 2470 (077.247) and the former SOC 2471 (077.247). Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 2480 Population Problems Cr.Hrs. 3

(Formerly 077.248) A survey of the impact of population growth, contraction, density and distribution on the social, political and economic institutions of developing and developed societies. Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 2490 Sociology of Health and Illness Cr.Hrs. 3

(Formerly 077.249) A general introduction to health sociology. The course examines health and illness as social concepts by exploring the personal and structural determinants of health status, and everyday health care practices in which people engage to maintain their health and to manage illness. Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 2510 Criminology Cr.Hrs. 3

(Formerly 077.251) A general introduction to theories of deviant behaviour and criminology. The explanation of crime with reference to physical, psychological, and social factors. Students may not hold credit for both SOC 2510 (077.251) and SOC 2511 (077.251). Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 2610 Sociology of Criminal Justice and Corrections Cr.Hrs. 3

(Formerly 077.261) The sociological study of the criminal justice system, including the police, the courts, prisons and other correctional agencies. Prerequisite: [a grade of "C" or better in SOC 2510 (077.251) or SOC 2511 (077.251)] or written consent of department head.

SOC 2620 The Sociology of Aging Cr.Hrs. 3

(Formerly 077.262) An analysis of social and socio-cultural aspects of aging and old age. An orientation to social gerontology and an overview of the situation of the elderly in Canada. Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 2630 Social Change Cr.Hrs. 3

(Formerly 077.263) Major trends of social changes in society, revolutionary and evolutionary change; problems in the measurement and prediction of social change patterns, consequences and problems of future change. Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

Sociology Course Descriptions-3000 Level

SOC 3100 Practicum in Criminological/Sociological Research Cr.Hrs. 6

This course is designed to develop students' research skills and experience through placement in a criminal justice or other social service agency having a mandate relevant to the study of sociology. The course consists of supervised work within the agency and classroom instruction, culminating in the production of a research report. Enrolment is competitive and special advance permission is required to register. To be considered for admission, students must complete an application form (available from the Department of Sociology website) by the last day of May preceding the Fall term in which the student intends to take the course. Students may not hold credit for both SOC 3100 and the former SOC 3760 (077.376). Prerequisite: written consent of department head.

SOC 3310 Theorizing Crime, Law, and Social Justice Cr.Hrs. 3

Through investigation of a variety of theoretical approaches, this course fosters an appreciation of the relevance of theorizing for addressing contemporary issues related to crime, law, and social justice. Prerequisite: [a grade of "C" or better in SOC 2510 (077.251) or SOC 2511 (077.251)] or written consent of department head.

SOC 3330 Origins of Sociological Thought Cr.Hrs. 3

(Formerly 077.333) A systematic introduction to sociological thought from ancient philosophy to the middle of the 19th century. Emphasis is placed on social thought that is to become the foundations of sociological theory. Students may not hold credit for both SOC 3330 (077.333) and SOC 3331 (077.333). Prerequisite: [a grade of "C" or better in SOC 2220 (077.222) or SOC 2221 (077.222)] or written consent of department head.

SOC 3350 Feminism and Sociological Theory Cr.Hrs. 3

(Formerly 077.335) A critical examination of how gender has been addressed in classical and contemporary sociological theories, with consideration of how sociological inquiry is being transformed through feminist theory and practice. Prerequisite: [a grade of "C" or better in SOC 2220 (077.222) or SOC 2221 (077.222)] or written consent of department head.

SOC 3360 Theories in Social Psychology Cr.Hrs. 3

(Formerly 077.336) A review of the predominant theoretical perspectives currently utilized in social psychology in relation to contemporary sociological concerns. Prerequisite: [a grade of "C" or better in SOC 2220 (077.222) or SOC 2221 (077.222)] or written consent of department head.

SOC 3370 Sociology of Work Cr.Hrs. 3

(Formerly 077.337) An examination of work as a central aspect of human social life; its changing nature and content in response to technological, political, and social change; how work is organized and understood by employers and workers; its consequences for individuals, social institutions, and society. Students may not hold credit for both SOC 3370 (077.337) and SOC 3371. Prerequisite: [a grade of "C" or better in SOC 1200 or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 3380 Power, Politics and the Welfare State Cr.Hrs. 3

A critical evaluation of sociological theory and research focusing on power and politics in society. Topics covered include: the dimensions of power (economic, political, ideological), classes and class conflict, political socialization, the origin and nature of the state, and the welfare state. Students may not hold credit for SOC 3380 and any of: SOC 3471 (077.347) or the former SOC 3470 (077.347). Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)] or written consent of department head.

SOC 3390 Contemporary Sociological Theory Cr.Hrs. 3

(Formerly 077.339) A critical examination of contemporary theoretical perspectives and developments in sociology, highlighting the contributions of some major theorists. Course content may vary from year to year depending upon the instructor's interest. Students may not hold credit for both SOC 3390 (077.339) and SOC 3391 (077.339). Prerequisite: [a grade of "C" or better in SOC 2220 (077.222) or SOC 2221 (077.222)] or written consent of department head.

SOC 3400 Policing and Crime Prevention Cr.Hrs. 3

The sociological study of the organization and operation of the police and the evidence-based prevention of crime. Topics include the history and role and functions of the police, police culture and socialization, strategies and tactics, police deviance and ethics, future policing trends, and methods of crime prevention. Students may not hold credit for both SOC 3400 and SOC 3740 (077.374) with topic "Policing and Crime Prevention." Prerequisite: [a grade of "C" or better in SOC 2510 (077.251) or SOC 2511 (077.251)] or written consent of department head.

SOC 3410 Critical Victimology Cr.Hrs. 3

Through investigating a variety of theoretical perspectives, this course fosters an appreciation of forms of and factors leading to victimization and the experiences of victims in the criminal justice system. Students may not hold credit for both SOC 3410 and SOC 3740 when titled "Victims and the Criminal Justice System." Prerequisite: [a grade of "C" or better in SOC 2510 (077.251) or SOC 2511 (077.251)] or written consent of department head.

SOC 3450 Sociological Perspectives on the Social Determinants of Health Cr.Hrs. 3

This course will apply a sociological perspective to a critical and theoretically informed study of the social structures influencing personal and population health, including intersections of class, gender, ethnicity, and aging as sources of health inequities. Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 3460 Selected Topics Cr.Hrs. 3

(Formerly 077.346) The content of this course will vary from year to year, but will consist of a thorough sociological treatment of some topic of current interest. Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)]. As the course content will vary from year to year, students may take this course more than once for credit.

SOC 3540 The Sociology of Health Care Systems Cr.Hrs. 3

(Formerly 077.354) An analysis of the social organization of formal and informal health care, including topics such as professionalism and health care, the nature of therapeutic relationships, institutional vs. community-based care, social reform and health care policy, medicine and the state, and emerging patterns of health care. Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)]. SOC 2490 (077.249) is recommended.

SOC 3580 Media, Culture and Society Cr.Hrs. 3

A consideration of the influence of media on contemporary society, analyzing the production, circulation and consumption of various media forms and their relationship to social life. Students may not hold credit for SOC 3580 and any of: SOC 3581 or the former SOC 3590 (077.359) or the former SOC 3591 (077.359). Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)]. SOC 2330 (077.233) or SOC 2331 (077.233) is recommended.

SOC 3660 Sociology of Mental Disorder Cr.Hrs. 3

(Formerly 077.366) A study of the social processes involved in becoming and being mentally ill. Topics such as the public imagery of madness, decision-making rules in psychiatry, life in the mental hospital, and community attitudes toward the mentally ill will be considered. Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)]. SOC 2490 (077.249) is recommended.

SOC 3700 Sociology of Law Cr.Hrs. 3

(Formerly 077.370) The aim of this course is to gain an understanding of the law-society relationship. Different theoretical approaches will be used to investigate substantive issues that pertain to the role of law in (re)producing social inequalities and its potential for alleviating them. Prerequisite: [a grade of "C" or better in SOC 2510 (077.251) or SOC 2511 (077.251)] or written consent of department head.

SOC 3710 Sociology of Criminal Careers Cr.Hrs. 3

(Formerly 077.371) An examination of patterns of criminal behaviour focusing on the sociological aspects of selected offences, the criminal career of the offender, and on societal reaction and legal processing. Prerequisite: [a grade of "C" or better in SOC 2510 (077.251) or SOC 2511 (077.251)] or written consent of department head.

SOC 3720 The Criminal Law and Its Procedure Cr.Hrs. 3

(Formerly 077.372) An introduction to the criminal law and an overview of the system by which the criminal law is administered. Prerequisite: [a grade of "C" or better in SOC 2510 (077.251) or SOC 2511 (077.251)] or written consent of department head.

SOC 3730 Society and Education Cr.Hrs. 3

(Formerly 077.373) A critical examination of schools at all levels and the challenges they face. Issues such as, curriculum, classroom interaction, gender, race, class and equality of educational opportunities will be explored. The course should be useful to students interested in careers in education and counselling. Students may not hold credit for both SOC 3730 (077.373) and SOC 3731 (077.373). Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 3740 Selected Topics in Criminology Cr.Hrs. 3

(Formerly 077.374) The specific content of this course will vary, but in general it will consist of an examination of a specialized topics relevant to Criminology. Prerequisite: [a grade of "C" or better in SOC 2510 (077.251) or SOC 2511 (077.251)] or written consent of department head. As the course content will vary from year to year, students may take this course more than once for credit.

SOC 3750 Institutional Responses to Violence in Family and Intimate Relationships Cr.Hrs. 3

This course will focus on the growing public awareness of the prevalence of interpersonal violence in Canada, examining studies of prevalence from victimization surveys and criminal justice statistics. We examine various criminological and sociological theories of the causes, dynamics and interventions in family and interpersonal violence, legislation and policy and assess these changes from the perspective of victims and accusers. Students may not hold credit for both SOC 3750 and SOC 3460 (077.346) when titled "Interpersonal Violence and Institutional Responses." Prerequisite: a grade of "C" or better in SOC 2510 (077.251) or SOC 2511 (077.251).

SOC 3770 Women, Health and Medicine Cr.Hrs. 3

(Formerly 077.377) A systematic sociological analysis of women's participation in the health care system, as consumers as well as providers. Historical and contemporary health issues of women are explored, as are women's efforts to control their experiences and improve their well-being. Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)]. SOC 2490 (077.249) is recommended.

SOC 3790 Women, Crime and Social Justice Cr.Hrs. 3

(Formerly 077.379) The course examines gender differences in crime, theories of women's crime and the treatment of women offenders and victims by the criminal justice system. Prerequisite: [a grade of "C" or better in SOC 2510 (077.251) or SOC 2511 (077.251)] or written consent of department head.

SOC 3810 Sociological Perspectives on Gender and Sexuality Cr.Hrs. 3

(Formerly 077.381) An exploration of the relations between men and women in contemporary society. This course will use historical and cross-cultural standpoints to examine the social construction of gender and sexuality, and the ideological and material structures which (re)produce gender difference. Students may not hold credit for both SOC 3810 (077.381) and SOC 3811 (077.381). Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 3820 Qualitative and Historical Methods in Sociology Cr.Hrs. 3

(Formerly 077.382) An introduction to a variety of data gathering techniques such as participant observation, interviewing, life histories, archival research, document analysis, and the use of case studies. Emphasis will be placed on the use of inductive/deductive procedures in the transformation of raw data into theoretical interpretations. Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 3830 Youth, Crime, and Society Cr.Hrs. 3

(Formerly 077.383) An analysis of issues surrounding the treatment of children and youth in the Canadian criminal justice system. Topics include: historical changes in the role of children and youth; young offender legislation; young offenders and media; and current research on youth crime and its prevention in Canada and other countries. Prerequisite: [a grade of "C" or better in SOC 2510 (077.251) or SOC 2511 (077.251)] or written consent of department head.

SOC 3838 Ecology and Society Cr.Hrs. 3

Examines changing patterns of social organizations of civilizations, the resultant social constructions of the human/nature interface, the human social contribution to the global ecological crisis, and possible strategies to create sustainable societies. Consideration of topics such as population, consumption, capitalism, and agricultural practices. Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 3840 Community and Social Reconstruction Cr.Hrs. 3

(Formerly 077.384) An examination of the changing relationships between the global economic market, the declining resource base of the nation state, and the shift to local control within civil society. Topics may include: the central role of the household in civil society, the informal sector, local initiatives (e.g., co-housing, cooperative, land trusts), and community development. Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 3850 Restorative Justice Cr.Hrs. 3

(Formerly 077.385) A general introduction to the social theory and practice of restorative justice. Prerequisite: [a grade of "C" or better in SOC 2510 (077.251) or SOC 2511 (077.251)] or written consent of department head.

SOC 3860 Genocide, Crime and Society Cr.Hrs. 3

A critical sociological and criminological examination of comparative genocide studies. Emphasis is placed on the utility of sociological and criminological theoretical frameworks for understanding and explaining genocide, as well as the conceptual and moral failings of criminology and sociology in the face of genocide. Students may not hold credit for both SOC 3860 and SOC 3740 (077.374) when titled "Genocide." Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or the former SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

SOC 3880 Global Criminology and Criminal Justice Cr.Hrs. 3

This course examines current developments and issues in the field of global criminology and criminal justice. Topics include: crime and globalization; transnational policing and security; world criminal justice systems; global criminal justice policy transfer; and international criminal justice. Students may not hold credit for both SOC 3880 and the former SOC 3780 (077.378). Prerequisite: [a grade of "C" or better in SOC 2510 (077.251) or SOC 2511 (077.251)] or written consent of department head. SOC 2610 (077.261) is strongly recommended.

SOC 3890 Power and Inequality in Comparative Perspective Cr.Hrs. 3

Engaging in a cross-temporal and cross-national investigation, this course critically surveys classical and contemporary debates around the inevitability of social inequality, and explores the ways that inequalities have been reproduced and rationalized, or attenuated and challenged, throughout human history. Key facets and indicators of inequality (such as poverty, homelessness, social exclusion and the distribution of income and wealth) and their relation to central axes of social inequality (class, gender, race/ethnicity and age) are considered. Put simply, this course is concerned with 'who gets what and why?' Students may not hold credit for SOC 3890 and any of: SOC 3871 (077.387) or the former SOC 3870 (077.387). Prerequisite: [a grade of "C" or better in SOC 1200 (077.120) or SOC 1201 (077.120)] or [a grade of "C" or better in both SOC 1211 (077.121) and SOC 1221 (077.122)].

Sociology Course Descriptions-4000 Level

SOC 4450 Honours Seminar Cr.Hrs. 6

(Formerly 077.445) An intensive discussion of selected sociological problems, culminating in a major Honours thesis. Prerequisite: written consent of department head.

SOC 4460 Advanced Sociological Theory Cr.Hrs. 3

(Formerly 077.446) A critical examination and analysis of sociological theories. Prerequisite: written consent of department head.

SOC 4490 Advanced Seminar in Criminology Cr.Hrs. 3

A critical examination of the field of criminology and the work of criminologists in shaping modern sensibilities about crime, law, and social justice. Topics include the origins of modern criminology, the development of competing knowledge frameworks in criminology (including the impact of feminist, post-modern, and post-colonial criminologies), and trajectories of 21st century criminology (including scientific, global, and public criminology). Prerequisite: written consent of department head.

SOC 4530 Readings in Sociology Cr.Hrs. 3

(Formerly 077.453) A reading course for undergraduates and pre-Master's in sociology. Prerequisite: written consent of department head. As the course content will vary from term to term, students may take this course more than once for credit.

SOC 4560 Advanced Sociological Theory Cr.Hrs. 3

(Formerly 077.456) A critical examination and analysis of selected sociological theories. Course content may vary from year to year depending upon the instructor's interest. Prerequisite: written consent of department head.

SOC 4570 Quantitative Social Analysis Cr.Hrs. 3

The application of quantitative data analysis in the social sciences, including the following procedures: multiple regression, dummy variable regression, simple analysis of variance and covariance, and an introduction to path analysis. Students may not hold credit for both SOC 4570 and the former SOC 4480 (077.448). Prerequisite: written consent of department head.

SOC 4580 Social Research Methods Cr.Hrs. 3

An introduction to the philosophy of science and logic of scientific method, as well as a survey of research methods and issues. Students are expected to gain a working knowledge of the research process. Students may not hold credit for both SOC 4580 and the former SOC 4470 (077.447). Prerequisite: written consent of department head.

ACADEMIC CALENDAR 2015-2016

8.28 Ukrainian Canadian Heritage Studies Program

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Email Address: cucs@cc.umanitoba.ca

Website: http://umanitoba.ca/ukrainian_canadian_studies/

8.28.1 Program Information

Canada is a multicultural nation to which people of Ukrainian origin have made a significant contribution. The study of this community, its past and present, provides a general understanding of the Ukrainian heritage and its role in Canadian society. The program is cross-disciplinary and leads to a Major, Advanced Major, or Minor. In addition to its Canadian focus, the program also examines historical and contemporary issues in Ukraine.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of "C" or better in six credit hours from List A below. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of "C" or better in six credit hours from List A below.

8.28.2 Ukrainian Canadian Heritage Studies

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR TOTAL: 30 CREDIT HOURS			
6 credit hours from List A	<ul style="list-style-type: none"> • 12 credit hours from List B taken from each of 3 different departments • 12 credit hours from List C taken from each of 2 different departments 		
SINGLE ADVANCED MAJOR TOTAL: 48 CREDIT HOURS			
6 credit hours from List A	<ul style="list-style-type: none"> • 15 credit hours from List B • 27 credit hours from List C 		
MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS			
6 credit hours from List A	<ul style="list-style-type: none"> • 6 credit hours from List B taken from each of 2 different departments • 6 credit hours from List C 		

List A		
Faculty of Arts		
Economics		
ECON 1200*	Principles of Economics	6
German and Slavic Studies		
UKRN 1270*	Conversational Ukrainian	6
	or	
UKRN 2720	Intermediate Ukrainian	6
	or	
052.264*	Ukrainian 1	6
History		
HIST 1200	An Introduction to the History of Western Civilization (G)	6
HIST 1350	An Introduction to the History of Western Civilization to 1500 (G)	3
HIST 1360	An Introduction to the History of Western Civilization from 1500 (G)	3
HIST 1390	History of Colonial Canada: 1500-1885 (C)	3
HIST 1400	History of the Canadian Nation Since 1867 (C)	3
Political Studies		
POLS 1500	Introduction to Politics	6
	or	

POLS 2040	Introduction to International Relations	6
	or	
POLS 2070	Introduction to Canadian Government	6
	or	
019.151*	Introduction to Contemporary Ideologies	6
	or	
019.153*	Introduction to International Relations	6
	or	
019.156*	Introduction to Canadian Government	6
Religion		
RLGN 1320	Introduction to World Religion	6
	or	
RLGN 1350	The History of Eastern Christianity	6
	or	
020.134*	Religion and Modern Thought	6
Sociology		
SOC 1200	Introduction to Sociology	6
Clayton H. Riddell Faculty of Environment, Earth, and Resources		
Geography		
GEOG 1200*	Introductory Geography	6
GEOG 1280	Introduction to Human Geography	3
GEOG 1290	Introduction to Physical Geography	3
School of Art		
FAAH 1030	Introduction to Art 1A and	3
FAAH 1040	Introduction to Art 2A or	3
FAAH 1050*	Introduction to Art 1B and	3
FAAH 1060*	Introduction to Art 2B	3

* Indicates course no longer offered.

List B		
Faculty of Arts		
German and Slavic Studies		
UKRN 2420*	Ukrainian Canadian Literature	3
UKRN 2430*	Ukrainian Canadian Folklore	3
History		
HIST 3910	The Ukrainians in Canada (C)	3
Religion		
RLGN 2520	Eastern Christianity in North America	3
Ukrainian Canadian Heritage Studies		
UCHS 3100	The Ukrainian Arts in Canada	3

* Indicates course no longer offered.

List C		
Faculty of Arts		
Economics		
ECON 2510	The Economy of Ukraine	3
German and Slavic Studies		
UKRN 2710*	Ukrainian Literature of the 16th to 18th Centuries	3
UKRN 3700*	Church Slavic: Ukrainian Version	3
History		
HIST 2600	Introduction to Ukraine (E)	3
HIST 2610	Making of Modern Ukraine (E)	3

ACADEMIC CALENDAR 2015-2016

HIST 3030*	Issues in Ukrainian History (E)	3
011.255*	The History of Ukraine (E)	6
Political Studies		
POLS 2920*	Government, Politics and Society in Ukraine	6
POLS 3720	Politics, Government and Society in Ukraine	3
Religion		
RLGN 1350	The History of Eastern Christianity	6
RLGN 2530	Eastern Christianity in the Contemporary World	3
RLGN 3570*	Major Thinkers in the Eastern Christian Tradition (A)	6
Clayton H. Riddell Faculty of Environment, Earth, and Resources		
Geography		
GEOG 3600*	Geography of Ukraine (A)	3
School of Art		
FAAH 3280	Early Byzantine Art and Architecture	3
FAAH 3290	Later Byzantine Art and Architecture	3
* Indicates course no longer offered.		

8.28.3 Ukrainian Canadian Heritage Studies Course Descriptions

UCHS 3100 The Ukrainian Arts in Canada Cr.Hrs. 3

(Formerly 155.310) A study of varied aspects of artistic performance and production among Ukrainians in Canada, past and present: music, theatre, dance, cinema, fine arts and architecture. The course will focus on crucial trends and processes and adopt an evaluative approach in its exploration of the above artistic phenomena.

8.29 Women’s and Gender Studies Program

Program Coordinator: Janice Dodd
Program Office: 114 Isbister Building
Telephone: 204 474 6984
E-mail: womens_gender_studies@umanitoba.ca
Website: umanitoba.ca/womens_gender_studies

8.29.1 Program Information

Fundamental questions of equality and social justice are still very much with us, and as a dynamic interdisciplinary program, we explore both current and historical debates about women’s experiences, gender relations, and feminism. Courses take diverse theoretical and practical approaches, including feminist cultural studies and studies of popular culture, violence against women, lesbian and queer studies, women in science and technology, gendered violence in urban spaces, sex work and sex workers, feminist geography, indigenous feminisms, masculinity studies, and reconstructing indigenous art histories that recontextualize museum collections and reclaim women’s voices and lives.

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

The following entries contain information which is not contained in Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Major Program

For entry to the Major, the prerequisite is a grade of “C” or better in each of two 3 credit hour courses in Women’s and Gender Studies. It is suggested that students wishing to Major in Women’s and Gender Studies take both WOMN 1500 and WOMN 1600. For students who have taken additional courses toward the Major, then a minimum cumulative GPA of 2.00 is required on all courses including the higher grade of repeated courses and excluding failed courses.

A minimum cumulative GPA of 2.00 in all courses that comprise the Major is required to graduate including the higher grade of repeated courses and excluding failed courses.

Minor (Concentration) Program

For entry to the Minor (Concentration), the prerequisite is a grade of “C” or better in each of two 3 credit hour courses in Women’s and Gender Studies.

Honours Program

For entry to the Honours program, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs.

Coordinated Programs in Women’s and Gender Studies

Students may take courses in the Women’s and Gender Studies program at the University of Winnipeg and, where applicable, have these courses credited to their degree at the University of Manitoba. The coordinated program offers students access to more faculty resources, greater course selection and additional library facilities and thus can enrich their Women’s and Gender Studies program.

Students are advised to consult with the Women’s and Gender Studies coordinator for information on courses available for credit in Women’s and Gender Studies.

In addition, special courses under the rubric of selected topics or contemporary issues may be available in various Arts departments, particularly Anthropology, English, Psychology, and Sociology, for Women’s and Gender Studies credit in any given academic term.

8.29.2 Women’s and Gender Studies

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR TOTAL: 30 CREDIT HOURS			
WOMN 1500 or WOMN 1600	<ul style="list-style-type: none"> • WOMN 2000 and WOMN 3000 • 21 credit hours from Women’s and Gender Studies courses and/or List A 		
SINGLE ADVANCED MAJOR TOTAL: 48 CREDIT HOURS			
WOMN 1500 or WOMN 1600	<ul style="list-style-type: none"> • WOMN 2000 and WOMN 3000 • 9 credit hours from Women’s and Gender Studies courses • 9 credit hours from courses numbered at or above the 3000 level from Women’s and Gender Studies courses and/or List A • 21 credit hours from Women’s and Gender Studies courses and/or List A 		

ACADEMIC CALENDAR 2015-2016

DOUBLE ADVANCED MAJOR TOTAL: 42 CREDIT HOURS	
WOMN 1500 or WOMN 1600	<ul style="list-style-type: none"> • WOMN 2000 and WOMN 3000 • 9 credit hours from Women's and Gender Studies courses • 9 credit hours from courses numbered at or above the 3000 level from Women's and Gender Studies courses and/or List A • 15 credit hours from Women's and Gender Studies courses and/or List A
MINOR (CONCENTRATION) TOTAL: 18 CREDIT HOURS	
WOMN 1500 or WOMN 1600	<ul style="list-style-type: none"> • 6 credit hours from Women's and Gender Studies courses • 9 credit hours from Women's and Gender Studies courses and/or List A
SINGLE HONOURS ³	
WOMN 1500 and WOMN 1600	<ul style="list-style-type: none"> • WOMN 2000, WOMN 3000, WOMN 4100, WOMN 4200 • 15 credit hours from Women's and Gender Studies courses • 12 credit hours from courses numbered at or above the 3000 level from Women's and Gender Studies courses and/or List A • 12 credit hours from Women's and Gender Studies courses and/or List A • 24 credit hours in ancillary options¹ • 12 credit hours in free options²
DOUBLE HONOURS ³	
WOMN 1500 and WOMN 1600	<ul style="list-style-type: none"> • WOMN 2000, WOMN 3000, WOMN 4100, WOMN 4200 • 9 credit hours from Women's and Gender Studies courses • 12 credit hours from courses numbered at or above the 3000 level from Women's and Gender Studies courses and/or List A • 36 credit hours in other Honours field • 6 credit hours in ancillary options¹ • 12 credit hours in free options²
NOTES:	
¹ Ancillary options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (excluding Women's and Gender Studies courses).	
² Free options are to be chosen from courses that are acceptable for credit in the Faculty of Arts (including Women's and Gender Studies courses). WOMN 4120 is strongly recommended although not required.	
³ Honours courses: all 4000 level courses.	

List A		
Faculty of Arts		
Anthropology		
ANTH 3320	Women in Cross-Cultural Perspective	3
ANTH 3321	Femmes, société et cultures (USB)	3
ANTH 3330	Sex and Sexualities	3
ANTH 3350*	Anthropology of Sex and Sexualities (B)	3
Classics		
CLAS 2210	Women in Ancient Greece and Rome	3
Economics		
ECON 2360*	Women in the Canadian Economy	6
ECON 2362	Economics of Gender	3
French, Spanish and Italian		
FREN 2680	Littérature féminine française (B)	3
FREN 3860	Études sur Beauvoir (B)	3
German		
GRMN 1310	Love in German Culture in English Translation (C)	3

GRMN 3280	Sex, Gender and Cultural Politics in the German-Speaking World (B)	3
GRMN 3282	Sex, Gender and Cultural Politics in the German-Speaking World in English Translation (C)	3
History		
HIST 2400	History of Human Rights and Social Justice in the Modern World (G,M)	3
HIST 2710*	Women in History (G)	6
HIST 3570*	History of Women in Canada (C)	6
HIST 3572	The History of Women, Gender, and Sexuality in Canada (C)	6
HIST 3760	Problems in American History 1	3
	Acceptable for credit only when the topic is "Gender and Sexuality in 20th Century America."	
HIST 3810*	The Family, Love and Marriage in Western Society, 1500-1800 (E)	6
HIST 3811	Famille, amour et mariage dans la société occidentale, 1500-1800 (E)	6
HIST 3820*	The Women's Movement, 1850 to the Present (G)	6
HIST 4060	Gender History in Canada (C)	6
Native Studies		
NATV 2430	Indigenous Women's Stories	3
NATV 3360	Aboriginal Women of Canada	3
NATV 3380	Cultural Constructions of Gender in Canadian Aboriginal Societies	3
Philosophy		
PHIL 3220	Feminist Philosophy	3
Political Studies		
POLS 3100	Gender and Politics in Canada	3
POLS 3240	Feminist Political Theory	3
Psychology		
PSYC 2390	Psychology of Women	3
PSYC 2400	The Psychology of Sex Differences	3
Religion		
RLGN 2680	Women and Religion 1	3
RLGN 2690	Women and Religion 2	3
Slavic Studies		
RUSN 2350*	Russian Women's Writing from the 1950s to the Present Day	3
RUSN 3980	Women and Russian Literature	3
UKRN 3970	Women and Ukrainian Literature	3
Sociology		
SOC 2460	The Family	3
SOC 2461	La famille (USB)	3
SOC 2470	Courtship and Marriage	3
SOC 2471*	Les fréquentations et le mariage (USB)	3
SOC 3770	Women, Health and Medicine	3
SOC 3790	Women, Crime and Social Justice	3
SOC 3810	Sociological Perspectives on Gender and Sexuality	3
SOC 3811	Sociologie de la sexualité et des rôles sexuels (USB)	3
School of Art		
FAAH 2110	Women and Art	3
FAAH 4090	Seminar on Contemporary Issues in Art	3
	Acceptable for credit only when the topic is "Women Artists."	
Clayton H. Riddell Faculty of Environment, Earth, and Resources		
GEOG 4280	Gender and the Human Environment	3
Marcel A. Desautels Faculty of Music		
MUSC 4130	History of Women in Music	3
Faculty of Nursing		
NURS 3330	Women and Health	3

* Indicates course no longer offered.
For course descriptions, see departmental listings.

NOTE: List A courses are identified in Aurora Student with the course attribute of "Women's Studies Requirement."

8.29.3 Women's and Gender Studies Course Descriptions

Women's and Gender Studies Course Descriptions-1000 Level

WOMN 1500 Introduction to Women's and Gender Studies in the Humanities Cr.Hrs. 3

Examination of the central concerns of women and gender in the Humanities. A focus on representation, voice, knowledge, and subjectivity. Students may not hold credit for both WOMN 1500 and the former WOMN 1530 (156.153).

WOMN 1600 Introduction to Women's and Gender Studies in the Social Sciences Cr.Hrs. 3

Examination of women's historical and contemporary roles in the economy, family, and society from the perspective of the social sciences. Introduction of feminist theories, with emphasis on the role of gender. Topics covered focus on the social conditions of women's lives: work, health, violence and organizing for change. Students may not hold credit for both WOMN 1600 and the former WOMN 1540 (156.154).

Women's and Gender Studies Course Descriptions-2000 Level

WOMN 2000 Feminist Thought Cr.Hrs. 3

Survey of the varieties of historical and contemporary feminist ideas. Students may not hold credit for both WOMN 2000 and the former WOMN 2520 (156.252). Prerequisite: [a grade of "C" or better in a minimum of three credit hours of Women's and Gender Studies courses] or written consent of the Women's and Gender Studies coordinator.

WOMN 2500 Race, Class and Sexuality Cr.Hrs. 3

(Formerly 156.250) An exploration of the various ways race, class, and sexual orientation impact on women's lives and identities. Focus is on how racism, classism and heterosexism are produced and reproduced both within and outside of the feminist movement. Prerequisite: [a grade of "C" or better in a minimum of three credit hours of Women's and Gender Studies courses] or written consent of the Women's and Gender Studies coordinator.

WOMN 2510 Women and Education Cr.Hrs. 3

(Formerly 156.251) An examination of school knowledge and organization as they affect the experiences of girls and women as students and teachers. Includes an exploration of the interaction between schooling and women's work as mothers, and between education and femininity.

WOMN 2530 Writing Women's Lives Cr.Hrs. 3

(Formerly 156.253) Examination of the ways that traditional scripts for women have been rewritten in literature and film. Topics include coming-of-age, madness, utopia, motherhood, and romantic love as represented in fairytales, autobiographies, documentaries, contemporary novels, and Hollywood films.

WOMN 2540 Special Topics in Women's Studies Cr.Hrs. 3

(Formerly 156.254) Course content will vary according to the needs and interests of students and instructors. Consult the Women's and Gender Studies Program office for information as to specific topics offered. As the course content will vary from year to year, students may take this course more than once for credit.

WOMN 2560 Women, Science and Technology Cr.Hrs. 3

(Formerly 156.256) An overview of women's historical and contemporary participation in science, issues in science and math education, feminist critiques and theories on science and gender, and the impact of technology on women's lives.

WOMN 2570 Soap Operas, Harlequins, and Talk Shows Cr.Hrs. 3

(Formerly 156.257) This course looks at gender-specific forms of entertainment that have been identified with women. Using postmodern feminist approaches to media, the course looks at how these forms are scripted for TV and cheap paperbacks, and at how the media constructs women as a marketing category for cultural and product consumption. Students may not hold credit for both WOMN 2570 (156.257) and WOMN 2540 (156.254) with the topic "Soaps, Harlequins, Talk Shows."

WOMN 2600 Sex, Gender, Space and Place Cr.Hrs. 3

An examination of how we use places and spaces in our everyday lives to produce and maintain social differences of gender, sexuality, race, class, and citizenship. Drawing on perspectives from feminist geography and history, this course explores ideas about places (for example, homes) and spaces (for example, regions), as well as historical claims that women belong in place but men should control space. Students may not hold credit for both WOMN 2600 and WOMN 2540 (156.254) with the topic "Sex, Gender, Space and Place."

WOMN 2610 Gender, Transport and Social Justice Cr.Hrs. 3

Examines the gendered impact of uneven access to transportation. Using feminist theories of gender and mobility, it considers claims that mobile women are in danger, and that different forms of transportation have gendered cultures. It studies the links between imperialism, development, and transportation. The course also examines the particular ways in which transportation disadvantage, automobility, limited public transit services, and aging in place affect women as well as initiatives to promote sustainable transportation. Students may not hold credit for both WOMN 2610 and WOMN 2540 with the topic "Gender, Transport and Social Justice."

Women's and Gender Studies Course Descriptions-3000 Level

WOMN 3000 Interdisciplinary Research in Women's and Gender Studies Cr.Hrs. 3

An introduction to the approaches scholars use to challenge the dominant theories of knowledge and the major methodologies used to produce it. The course examines the influence of gender theory and feminism on the research questions we ask, the types of materials we use, and the methods we employ. Students may not hold credit for both WOMN 3000 and the former WOMN 3580 (156.358). Prerequisite: [a grade of "C" or better in a minimum of three credit hours of Women's and Gender Studies courses] or written consent of the Women's and Gender Studies coordinator.

WOMN 3100 Sex Work in Contemporary Canadian Culture Cr.Hrs. 3

This course examines cultural linkages between femininity and prostitution in the context of contemporary Canadian culture. The course begins by considering historical cultural and feminist discourses about sex work and sex workers. Keeping in mind that the actual exchange of sexual services for money is currently legal in Canada, course discussions will interrogate enduring representations of sex work/ers. The course also examines some prostitution-related legislation, ideological and "real world" linkages between violence and prostitution, and ongoing activism that reinforce or resist negative representations and the violent realities of sex work/ers in Canada today. Students may not hold credit for both WOMN 3100 and WOMN 2540 with the topic "Sex Work in Contemporary Canadian Culture." Prerequisite: [a grade of "C" or better in a minimum of three credit hours of Women's and Gender Studies courses] or written consent of the Women's and Gender Studies coordinator.

WOMN 3330 Sex and Sexualities Cr.Hrs. 3

Comparative approaches to the study of human sexuality and the diversity of sexual expression and identification from a feminist and cross-cultural ethnographic perspective. Sex and sexualities are examined as social and cultural constructions, experiences, discourses, identities, and practices located in specific local contexts and shaped by wider social processes including colonialism and globalization. This course is also offered as ANTH 3330. Students may not hold credit for WOMN 3330 and any of: ANTH 3330 or the former ANTH 3350 or WOMN 3500 (156.350) with the topic "Anthropology of Sex and Sexualities." Prerequisite: [a grade of "C" or better in a minimum of three credit hours of Women's and Gender Studies or Anthropology courses] or written permission of instructor.

WOMN 3500 Selected Topics in Women's Studies Cr.Hrs. 3

(Formerly 156.350) Course in which content varies from year to year according to needs and interests of students and instructors. Prerequisite: [a grade of "C" or better in a minimum of three credit hours of Women's and Gender Studies courses] or written consent of the Women's and Gender Studies coordinator. As the course content will vary from year to year, students may take this course more than once for credit.

WOMN 3520 Transnational Feminisms Cr.Hrs. 3

Introduction to transnational feminist perspectives in order to analyse our contemporary world, including gendered, racialized, and classed power relations and inequalities. Focus is placed on how current global phenomena such as neoliberalism, structural adjustment, and migration shape people's lived experiences in different regions of the world. Students may not hold credit for both WOMN 3520 and the former WOMN 3510 (156.351). Prerequisite: [a grade of "C" or better in a minimum of three credit hours of Women's and Gender Studies courses] or written consent of instructor.

WOMN 3530 Readings in Women's Studies Cr.Hrs. 6

(Formerly 156.353) Directed readings in a range of Women's Studies literature. This is an independent study course. Prerequisite: written consent of instructor and Women's and Gender Studies coordinator. As the course content will vary from year to year, students may take this course more than once for credit.

WOMN 3540 Readings in Women's Studies Cr.Hrs. 3

(Formerly 156.354) Directed readings in a range of Women's Studies literature. This is an independent study course. Prerequisite: written consent of instructor and Women's and Gender Studies coordinator. As the course content will vary from year to year, students may take this course more than once for credit.

WOMN 3550 Feminist Community Organizing: Theories and Practices Cr.Hrs. 3

(Formerly 156.355) Overview of organizing efforts and techniques, community issues and strategies that women have developed in North American and especially Canadian communities. Focus is on a synthesis of thought and action, theory and practise. Prerequisite: [a grade of "C" or better in a minimum of three credit hours of Women's and Gender Studies courses] or written consent of the Women's and Gender Studies coordinator.

WOMN 3560 Feminist Perspectives on Violence Against Women Cr.Hrs. 3

(Formerly 156.356) An overview of feminist research and theories on violence against women as an integral component of our social structure, and on issues of social change to alleviate the problem. Prerequisite: [a grade of "C" or better in a minimum of three credit hours of Women's and Gender Studies courses] or written consent of the Women's and Gender Studies coordinator.

WOMN 3600 Good Girls/Bad Girls Cr.Hrs. 3

(Formerly 156.360) This course challenges the good girl/bad girl binary as a way of defining the complex reality of women's lives by closely examining regimes of mental and physical hygiene. The course also considers how the media use this binary to sensationalize women like Princess Diana, Madonna, Amy Fisher, and Monica Lewinsky. Students may not hold credit for both WOMN 3600 (156.360) and WOMN 3500 (156.350) with the topic "Good Girls/Bad Girls." Prerequisite: [a grade of "C" or better in a minimum of three credit hours of Women's and Gender Studies courses] or written consent of the Women's and Gender Studies coordinator.

WOMN 3620 Masculinities Cr.Hrs. 3

An introduction to the key debates in masculinity studies from a feminist perspective. Considering the idea of "hegemonic masculinity" and the practice of creating a typology of masculinity, this course examines the changing forms of masculinity as a political and cultural category, using historical examples from the 19th century and the 1970s and considers the influence of feminist theories on men's engagement with masculinity in North America. Students may not hold credit for both WOMN 3620 and WOMN 3500 (156.350) with the topic "Masculinities." Prerequisite: [a grade of "C" or better in a minimum of three credit hours of Women's and Gender Studies courses] or written consent of the Women's and Gender Studies coordinator.

Women's and Gender Studies Course Descriptions-4000 Level**WOMN 4100 Honours Thesis Cr.Hrs. 6**

(Formerly 156.410) The Thesis presents the results of an independent research project supervised by a faculty member. Prerequisite: written consent of the Women's and Gender Studies coordinator.

WOMN 4120 Practicum in Feminist Organizing Cr.Hrs. 6

(Formerly 156.412) Between September and March, the student will complete a minimum of 80 hours of unpaid independent work in a feminist or woman-centered organization and meet regularly with the instructor and other practicum students. Students will reflect critically on the work experience in course assignments. Prerequisite: [a grade of "C" or better in at least 24 credit hours in Women's and Gender Studies courses] and written consent of the Women's and Gender Studies coordinator.

WOMN 4200 Seminar in Women's and Gender Studies Cr.Hrs. 3

An advanced seminar on a contemporary theme in Women's and Gender Studies. The theme will vary from year to year in accordance with the research interests of the instructor and new developments in the field. Student presentations and discussions will be emphasized. Students may not hold credit for both WOMN 4200 and the former WOMN 4110 (156.411). Prerequisite: [a grade of "C" or better in WOMN 2000 or the former WOMN 2520 (156.252)] and written consent of the Women's and Gender Studies coordinator.

SECTION 9: COURSES AND PROGRAMS OFFERED BY OTHER FACULTIES AND SCHOOLS FOR CREDIT IN ARTS

Courses

All degree credit courses offered by other Faculties or Schools at the University of Manitoba are acceptable for credit in Arts (excludes Pass/Fail courses) subject to the Faculty of Arts overall degree requirements. Such courses taken prior to admission to Arts will be included on transfer and will also be used in determining eligibility for admission. For details see Section 5.3. For course descriptions see the departmental listing in this Calendar.

Programs

Also listed below are eight programs which can be used by Faculty of Arts students to satisfy the Major or Minor requirement for graduation with a Bachelor of Arts degree. These programs are:

History of Art General Major	Mathematics General Major
History of Art Minor	Mathematics Advanced Major
Minor in Management	Mathematics Minor

Effective September 2009 Arts students may complete Minor programs offered by other Faculties/Schools not listed above providing the Minor program consists of a minimum of 18 credit hours and all other degree requirements are satisfied.

9.1 School of Art: Art History

Program Coordinator: L. Stirling
Program Office: 349 University College
Telephone: 204 474 7357

9.1.1 Program Information

For entry, continuation and graduation requirements for the General Degree, Advanced Degree and Honours Degree, see Section 3: Basic Faculty Regulations for the B.A. General, Advanced and Honours Degree Programs. NOTE: It is strongly recommended that students majoring in Art History have competence in a second language.

9.1.2 Art History

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR TOTAL: 30 CREDIT HOURS			
FAAH 1030, FAAH 1040	<ul style="list-style-type: none"> • FA 1990 • 12 credit hours from List A • FAAH 3260 or FAAH 3270 • FA 3440 • 9 credit hours from either List A or List B 		
MINOR TOTAL: 18 CREDIT HOURS			
FAAH 1030, FAAH 1040	<ul style="list-style-type: none"> • FA 1990 • 12 credit hours from either List A or List B 		

Introductory Courses		
FAAH 1030	Introduction to Art 1A	3
FAAH 1040	Introduction to Art 2A	3
FAAH 1050*	Introduction to Art 1B	3
FAAH 1060*	Introduction to Art 2B	3
FA 1990	First Year Field Trip	0
FA 3440	Field Trip	0

List A		
Faculty of Arts		
Classics		
CLAS 2670	Greek Art and Archaeology	3
CLAS 2680	Roman Art and Archaeology	3
School of Art		
Art History		

FAAH 1100	Survey of Asian Art	3
FAAH 2060	Medieval to Early Renaissance Art and Architecture	3
FAAH 2070	Renaissance to Baroque Art and Architecture	3
FAAH 2080	Modern to Contemporary Art	3
FAAH 2090	Art of the North American Aboriginal Peoples	3
FAAH 2100*	Survey of Asian Art	3
FAAH 2110	Women and Art	3
List B		
School of Art		
FA 2620*	Writing About Art	3
FAAH 2910	Field Studies in Art History 1	3
FAAH 2920	Field Studies in Art History 2	6
FAAH 2930	Writing about Art	3
FAAH 3130	Topics in Medieval Art and Architecture	3
FAAH 3140	Topics in Renaissance and Baroque Art and Architecture	3
FAAH 3150	Topics in 18th and 19th Century Art	3
FAAH 3160	Topics in 20th Century Art	3
FAAH 3170*	Contemporary Art	3
FAAH 3180	History of Photography	3
FAAH 3190	History of Ceramics	3
FAAH 3200	Art in New Media	3
FAAH 3202	Contemporary Art History	3
FAAH 3210*	Introduction to the Theory and Criticism of Art	3
FAAH 3212	Introduction to the Theory of Art	3
FAAH 3220	Topics in Aboriginal Art	3
FAAH 3230	Chinese Art and Architecture	3
FAAH 3240	Japanese Art and Architecture	3
FAAH 3250	Topics in Art History	3
FAAH 3260	Canadian Art and Architecture to World War II	3
FAAH 3270	Canadian Art Since World War II	3
FAAH 3280	Early Byzantine Art and Architecture	3
FAAH 3290	Later Byzantine Art and Architecture	3
FAAH 3430	Inuit Art	3
FAAH 3590	Islamic Art and Architecture	3
FAAH 3780	Twentieth Century American Art Until 1950	3
FAAH 3910*	Field Studies in Art History 3	3
FAAH 3920*	Field Studies in Art History 4	3
FAAH 4060	Seminar on the Theory and Criticism of Art	3
FAAH 4070	Seminar in Art History 1	3
FAAH 4080*	Seminar in Art History 2	3
FAAH 4090	Seminar on Contemporary Issues in Art	3
FAAH 4710	Directed Study 1	3
FAAH 4720	Directed Study 2	3
* Indicates course no longer offered.		

ACADEMIC CALENDAR 2015-2016

9.2 Faculty of Management/I.H. Asper School of Business

All courses offered by the Asper School of Business in the Faculty of Management are acceptable for credit in the Faculty of Arts. Management courses may be taken by Faculty of Arts students subject to availability of space and satisfaction of prerequisites.

Minor in Management

For entry to the Minor, the prerequisite is a grade of "C" or better in the first 6 hours of Management courses. The Management Minor will consist of any 18 credit hours in the Faculty of Management/Asper School of Business courses.

9.3 Faculty of Science

All Minors offered by the Faculty of Science can be used as satisfying the Faculty of Arts requirement of a Minor (Concentration); (for details, see the Faculty of Science chapter of this Calendar). In addition, Arts students may also choose a General or Advanced Major, or a Minor in Mathematics as described below.

The Mathematics General Major offered at the Université de Saint-Boniface differs from the one offered at the Fort Garry campus. For a complete description, consult the Université de Saint-Boniface's Calendar.

9.3.1 Mathematics

YEAR 1	YEAR 2	YEAR 3	YEAR 4
GENERAL MAJOR TOTAL: 30 CREDIT HOURS			
MATH 1220 ¹ , MATH 1230 ¹ , MATH 1232 ¹ , MATH 1240 ¹	18 credit hours of 2000, 3000 and/or 4000 level Mathematics courses (of these a minimum of 3 credit hours must be at the 3000 or 4000 level)		
SINGLE ADVANCED MAJOR TOTAL: 48 CREDIT HOURS			
MATH 1220 ¹ , MATH 1230 ¹ , MATH 1232 ¹ , MATH 1240 ¹	MATH 2080, MATH 2090, MATH 2150	<ul style="list-style-type: none"> • MATH 2020, MATH 2180, MATH 3470 • MATH 2160 or MATH 3440 • 15 credit hours from the following list of which at least 3 credit hours must be at the 3000 or 4000 level: MATH 2030, MATH 2040, MATH 2070, MATH 2140, MATH 2160, MATH 2170, or any 3000 or 4000 level Mathematics course 	
MINOR TOTAL: 18 CREDIT HOURS			
<ul style="list-style-type: none"> • MATH 1220¹, MATH 1230¹, MATH 1232¹ 			
<ul style="list-style-type: none"> • 9 credit hours from: MATH 1240¹ and 2000 and/or 3000 level Mathematics courses 			
NOTES:			
¹ MATH 1500 or MATH 1510 may be taken in place of MATH 1230; MATH 1300 or MATH 1310 may be taken in place of MATH 1220; MATH 1700 or MATH 1710 may be taken in place of MATH 1232; MATH 1200 may be taken in place of MATH 1240, but these courses are not equivalent, i.e., students should note that MATH 1240 is a prerequisite to some 2 nd year Mathematics courses for which MATH 1200 is not a prerequisite.			
For entry to either Major in Mathematics, the prerequisite is a grade of "C+" or better in six hours of Mathematics courses taken.			
For entry to the Minor in Mathematics, the prerequisite is a grade of "C" or better in six hours of Mathematics courses taken.			
A detailed listing of courses in the Department of Mathematics is available in the <i>Calendar</i> entries of the Faculty of Science.			

9.4 Interfaculty Option in Aging

Program Coordinator: Laura Funk
Program Office: 307 Isbister Building
Telephone: 204 474 6678
E-mail: laura.funk@ad.umanitoba.ca

The Interfaculty Option in Aging Concentration is available to students in all B.A. degree programs.

This Concentration is offered by: Arts, Nursing, Kinesiology and Recreation Management, and Social Work. To complete the Concentration, Arts students will need to complete each of the following: a) The Social Aspects of Aging, HMEC 2650 or REC 2650 or SWRK 2650; and b) Health and Physical Aspects of Aging, NURS 2610 or KIN 2610; and c) an additional twelve credit hours from the following courses:

Faculty of Arts

English, Film, and Theatre

FILM 3420	Film Theory	3
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Psychology

PSYC 2360	Brain and Behaviour	3
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PSYC 2370*	Developmental Psychology from Adolescence to Old Age	3
------------	--	---

PSYC 2490	Abnormal Psychology	3
-----------	---------------------	---

PSYC 3070	Adult Development	3
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PSYC 3350	Behaviour Neuroscience	3
-----------	------------------------	---

PSYC 3460*	Abnormal Psychology	3
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PSYC 3490	Individual Differences	3
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PSYC 3610	Memory	3
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PSYC 4420	Neuroimaging: Imaging and Thoughts	3
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PSYC 4430	Vision: Perception and Action	3
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PSYC 4566	Psychology of Health and Aging	3
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Religion

RLGN 1410	Death and Concepts of the Future (C)	3
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Sociology

SOC 2310	Selected Social Problems (acceptable for credit only when topic is "Canadian Social Issues")	3
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SOC 2490	Sociology of Health and Illness	3
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SOC 2620	Sociology of Aging	3
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SOC 3510*	Population Dynamics and Change	3
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SOC 3540	The Sociology of Health Care Systems	3
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Clayton H. Riddell Faculty of Environment, Earth, and Resources

Geography

GEOG 4710*	Geography of the Elderly and Aging	3
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* Indicates course no longer offered.

Upon completion of these requirements, the Option in Aging will be recorded as a concentration on the student's official transcript. For information concerning the option, interested students are directed to faculty general offices.

FACULTY OF EDUCATION

Dean: David Mandzuk

Associate Dean: Melanie Janzen (Undergraduate); Charlotte Enns (Graduate & Professional Programs, and Research)

Campus Address & General Office: 203 Education Building

Telephone: (204) 474-9004

Fax: (204) 474-7551

Website: umanitoba.ca/education

Academic Staff: Please refer to the Faculty website at umanitoba.ca/faculties/education/directory/faculty-directory-index.html

Student Services

B.Ed. Programs (including Integrated Music/Education)

Telephone: (204) 474-9004

Fax: (204) 474-7551

E-mail: bachofed@umanitoba.ca

Website: umanitoba.ca/education

Post Baccalaureate Diploma in Education (PBDE)

Telephone: (204) 474-7886

Fax: (204) 474-7551

E-mail: pbde@umanitoba.ca

Website: umanitoba.ca/education

Graduate Studies in Education

Telephone: (204) 474-7886

Fax: (204) 474-7551

E-mail: edgradpr@umanitoba.ca

Website: umanitoba.ca/education

Chapter Contents

SECTION 1: DEGREE AND DIPLOMA PROGRAMS OFFERED

1.1 Faculty of Education Programs

1.2 Professional Teacher Certification Requirements for Manitoba Education

1.3 Specialized Certificate Programs

SECTION 2: ADMISSION TO BACHELOR OF EDUCATION & INTEGRATED BACHELOR OF MUSIC/BACHELOR OF EDUCATION PROGRAMS

2.1 Admission Requirements for Bachelor of Education After-Degree Program

2.2 Admission Requirements for Integrated Bachelor of Music/Bachelor of Education Degrees

2.3 Other Admission Requirements for After-Degree Bachelor of Education

2.4 Other Admission Requirements for After-Degree Bachelor of Education and Integrated Bachelor of Music/Bachelor of Education

2.5 Special Consideration Category (currently under review)

2.6 Criminal Records and Child Abuse Registry

2.7 Post Baccalaureate Diploma in Education

SECTION 3: AFTER-DEGREE BACHELOR OF EDUCATION

3.1 Program Requirements for After-Degree Bachelor of Education

3.2 Early Years Stream Chart

3.3 Middle Years Stream Chart

3.4 Senior Years Stream Chart

SECTION 4: INTEGRATED BACHELOR OF MUSIC/BACHELOR OF EDUCATION

4.1 Program Requirements for Integrated Bachelor of Music/Bachelor of Education

4.2 Integrated Music/Education Program Chart

SECTION 5: ACADEMIC REGULATIONS FOR BACHELOR OF EDUCATION

5.1 Academic Regulations for All Bachelor of Education Programs

5.2 Academic Regulations for the After-Degree Bachelor of Education

5.3 Academic Regulations for the Integrated Bachelor of Music/Bachelor of Education

SECTION 6: POST BACCALAUREATE DIPLOMA IN EDUCATION

6.1 Admission Requirements

6.2 Admission Procedure

6.3 Program Requirements

6.4 Academic Regulations

6.5 Transfer of Credit

6.6 Courses Grouped by Subject

SECTION 7: ADDITIONAL INFORMATION

7.1 Information Updates

7.2 Other Students

7.3 Program Days

7.4 Registration, Voluntary Withdrawal and Fee Refund Deadlines

SECTION 8: COURSE DESCRIPTIONS

SECTION 1: DEGREE AND DIPLOMA PROGRAMS OFFERED

1.1 Faculty of Education Programs

Program/Degree	Years to Complete	Total Credit Hours
After-Degree Bachelor of Education	*2	60
Integrated Bachelor of Music/Bachelor of Education	**5	174-177
Post Baccalaureate Diploma in Education	*1	30

* Requires previous degree for entry.

** This includes two years (67 credit hours) of study in the Marcel A. Desautels Faculty of Music.

The educational objective of the Faculty of Education is to prepare students for a career in the teaching profession. Attaining the Bachelor of Education (B.Ed.) degree leads to professional certification by Manitoba Education and the opportunity to attain initial employment as a classroom teacher in Manitoba and elsewhere. Those desiring other roles in education can achieve the professional requirements via the Post Baccalaureate Diploma in Education (PBDE) or graduate degrees in education (M.Ed. or Ph.D.)

1.1.1 After-Degree Bachelor of Education: Early Years, Middle Years and Senior Years

Following the completion of a first bachelor's degree of at least 90 credit hours (three years in duration), the After-Degree B.Ed. is a two year program consisting of 60 credit hours of coursework taken within the Faculty of Education and leads to general certification and a B.Ed. degree. Current certification requirements for the Province of Manitoba require twenty-four weeks of practicum which are completed as part of the 60 credit hours required for the After-Degree B.Ed.

1.1.2 Integrated Bachelor of Music/Bachelor of Education Degrees

The Marcel A. Desautels Faculty of Music offers a degree program that integrates the requirements of its degree program with those of the Faculty of Education After-Degree B.Ed. program. The integrated program is five years in length, leading to general certification and preparing of teachers for specialist Music and classroom teaching. Both degrees are awarded upon completion of the five year program. See sections 1 and 5 of the chapter for the Marcel A. Desautels Faculty of Music for information.

1.1.3 Post Baccalaureate Diploma in Education

Designed for teacher professional development, the Post Baccalaureate Diploma in Education (PBDE) is a 30 credit hour program following completion of an undergraduate degree, normally a B.Ed. degree.

1.2 Professional Teacher Certification Requirements for Manitoba Education

During the final year of the B.Ed. degree, the university will provide a list of potential B.Ed. graduates to the Professional Certification Unit, Manitoba Education and make a recommendation that they be granted the Professional Certificate which is permanent and entitles the holder to teach any subject at any level (K-12) in Manitoba. Students are required to apply for certification. The application form and specific requirements for certification can be found at <http://www.edu.gov.mb.ca/k12/profcert/certificates/bedgradap.html>.

1.3 Specialized Certificate Programs

1.3.1 Certificate in Adult and Continuing Education

The following four courses in addition to 100 hours in elective courses offered through Extended Education will complete a Certificate in Adult and Continuing Education (CACE). For further information contact Extended Education @ (204) 474-6685.

EDUA 1560 Adult Learning and Development (3)

EDUA 1570 Foundations of Adult Education (3)

EDUA 1580 Program Planning in Adult Education (3)

EDUA 1590 Facilitating Adult Education (3)

1.3.2 Certificate in Teaching English as a Second Language

Extended Education, in collaboration with the Faculty of Education, offers a 15 credit hour (200 hour) Certificate in Teaching English as a Second Language (CTESL). Education students may take courses in this program to fulfill elective course requirements of their B.Ed degree. CTESL courses include:

EDUB 1604 Academic and Professional English for Multilingual Teachers (3)

EDUB 1606 Teaching ESL Foundational Literacy, Academics & Language (LAL) Students (3)

EDUB 1608 Assessment & Testing of EAL/ESL Learners (3)

EDUB 1612 Adult ESL and the Canadian Language Benchmarks (3)

EDUB 1620 Principles and Procedures of Second Language Teaching (3)

EDUB 1640 Teaching ESL Vocabulary and Pronunciation (3)

EDUB 1650 Teaching ESL Grammar (3)

EDUB 1660 Computers in Second Language Teaching (3)

EDUB 1820 Language and Content Instruction of ESL/Bilingual Students (3)

EDUB 1860 Practicum in Teaching English as a Second Language (TESL) (3)

And additional Special Topics courses, as approved. For further information, contact Heather McIntosh at (204) 474-9861 or heather.mcintosh@umanitoba.ca.

SECTION 2: ADMISSION TO BACHELOR OF EDUCATION & INTEGRATED BACHELOR OF MUSIC/BACHELOR OF EDUCATION PROGRAMS

2.1 Admission Requirements for After-Degree Program

All applicants must choose a stream: Early, Middle or Senior and must meet the requirements outlined below (see 2.1.1 and 2.1.2). In addition, (see sections 2.3 Other Admission Requirements; 2.4 Other Admission Requirements for After-Degree Bachelor of Education and Integrated Bachelor of Music/ Bachelor of Education; 2.5 Special Consideration Category; and 2.6 Criminal Records and Child Abuse Registry).

2.1.1 Early and Middle Years Programs

A recognized bachelor’s degree of a minimum of 90 credit hours and the requirements for two different subjects plus a breadth component as follows:

- 18 credit hours in a teachable major¹
- 12 credit hours in a teachable minor¹
- 6 credit hours English or French literature
- 6 credit hours Social Studies (History or Geography)
- 9 credit hours Mathematics (or Statistics) and Science (Biology, Chemistry, Environmental Science, Geology or Physics. Must have 3 credits from Mathematics and 3 credits from Science. Remaining 3 credits can be from either Mathematics or Science.

¹See Chart 2.1.1.1 below.

2.1.2 Senior Years Programs

A recognized bachelor’s degree of a minimum of 90 credit hours and the requirements for two different subjects:

- 30 credit hours in a teachable major 218 credit hours in a teachable minor²

²See Chart 2.1.2.1 below.

2.1.1.1 Applicable Early and Middle Years teachable majors and minors			
Applicable subjects for both majors & minors			
Art ¹	Computer Science ² (Middle Years Only)	Drama/Theatre	English (Language Arts)
French	General Science ³ (Major only)	Geography ⁴	History ⁵
Human Ecology ⁶ (Home Economics) (Middle Years Only)	Mathematics ⁷	Music ⁸	Native Studies ⁹
Physical Education ¹⁰	Second Language ¹¹		

¹ Art: Middle Years applicants must possess a minimum of 12 credit hours of studio courses for a major and 9 credit hours of studio courses for a minor. Early Years applicants have no specific course requirements.

² Computer Science: Applicable for Middle Years applicants only.

³ General Science: Major only. This is not available as a minor teachable area. Must include three (3) (only) Science disciplines (Biology/Biological Science, Chemistry, Computer Science, Environment Science, Geological Science, and Physics. Does not include Geography courses). A minimum of 3 credit hours is required in each of the three disciplines. Additionally, 3 credit hours must be at the 2000 level or above.

⁴ Geography: Must include 6 credit hours of Canadian and/or North American content.

⁵ History: Must include 6 credit hours of Canadian and/or North American content.

⁶ Human Ecology: Applicable for Middle Years applicants only. Consists of courses with the designation of HNSC (Human Nutritional Sciences), FMLY (Family Social Science), TXSC (Textile Science) and/or HMEC (General Human Ecology) or their equivalents.

⁷ Mathematics: A minimum of 6 credit hours must be above the 1000 level. Both major and minor may include courses from either the department of Mathematics and/or the department of Statistics.

⁸ Music: Middle Years applicants must possess a major or minor in one of the following specializations: Choral, Early/Middle or Instrumental music. (See 4.2.1 *Integrated Music Specializations and Music Education Electives Chart* for list of acceptable courses). Applicants must declare two different subjects areas as their teachables (Example: A major in Music: Choral and a minor in Mathematics). Early Years applicants have no specific course requirements.

⁹ Native Studies: May include 6 credit hours of a Native Language course.

¹⁰ Physical Education: Courses with a PHED designation will fulfill this requirement. In addition, PERS 1200, 1500, 2200, 3100, 3170, 3340 & 3460 will meet the teachable requirements.

¹¹ Second Language: Language other than English or French

Addition teachable minors: in addition to the teachable areas above, the Minister of Education recognizes the following as minors only.			
Anthropology	Classics	Dance	Developmental Studies ¹
Earth Science (Geological Science)	Economics	Environmental Science (Environmental Studies)	Law
Philosophy	Political Studies (Political Science)	Psychology	Sociology

¹ For applicable coursework see the Faculty of Education website <http://umanitoba.ca/faculties/education/future/developmental-minor-courses.html>

2.1.2.1 Applicable Senior Years teachable majors and minors			
Applicable subjects for both majors & minors			
Art ¹	Biology	Chemistry	Computer Science
Drama/Theatre	English (Language Arts)	French	General Science ²
Geography	History	Human Ecology ³ (Home Economics)	Mathematics ⁴
Music ⁵	Native Studies ⁶	Physical Education ⁷	Physics
Second Language ⁸			

¹ Art: Applicants must possess a minimum of 18 credit hours of studio courses for a major and 12 credit hours of studio courses for a minor.

² General Science: Must include two (only) Science disciplines (Biology/Biological Science, Chemistry, Computer Science, Environment Science, Geological Science, and Physics. Does not include Geography courses). A minimum of 3 credit hours is required in each of the two disciplines. Additionally, applicants selecting this major must present 3 credit hours at the 3000 level or above; and, applicants selecting this minor must present 6 credit hours at the 2000 level or above.

³ Human Ecology: Consists of courses with the designation of HNSC (Human Nutritional Sciences), FMLY (Family Social Science), TXSC (Textile Science) and/or HMEC (General Human Ecology) or their equivalents.

⁴ Mathematics: A minimum of 6 credit hours must be above the 1000 level. Both major and minor may include courses from either the department of Mathematics and/or the department of Statistics.

⁵ Music: Applicants must possess a major or minor in one of the following specializations: Choral, Early/Middle or Instrumental music. (See 4.2.1 *Integrated Music Specializations and Music Education Electives Chart* for list of acceptable courses). Applicants must declare two different subjects areas as their teachables (Example: A major in Music - Choral and a minor in Mathematics).

⁶ Native Studies: May include 6 credit hours of a Native Language course.

⁷ Physical Education: Courses with a PHED designation will fulfill this requirement. In addition, PERS 1200, 1500, 2200, 3100, 3170, 3340 & 3460 will meet the teachable requirements.

⁸ Second Language: Language other than English or French

2.2 Admission Requirements for Integrated Bachelor or Music/Bachelor of Education Degrees

All applicants must have successful completion of second year prescribed coursework (see 4.2 Integrated Music/Education program chart below) in the Desautels Faculty of Music. A minimum Degree Grade Point Average (DGPA) of 2.50 and be in good academic standing by May 1st of the year of application is required for admissions. In addition, the writing skills exercise and references (as indicated in 2.4 below) are required.

2.3 Other Admission Requirements for After-Degree Bachelor of Education

Minimum admission GPA for consideration: 2.50 on university coursework with a minimum grade of "C" in each teachable major/minor course and in breadth component coursework, if required. The admission GPA is calculated on the most recent 30 credit hours of university coursework available at February 1 of admission year.

To be eligible for the After-Degree program, applicants must have a conferred bachelor's degree and teachable courses at the 1000 level or higher completed from a recognized institutions by May 1 of the year of application.

2.4 Other Admission Requirements for After-Degree Bachelor of Education and Integrated Bachelor of Music/Bachelor of Education

In addition to criteria outlined above, all applicants must complete:

- writing skills exercise
- references

Selection criteria: 69.0% on GPA; and 31.0% on writing skills.

2.5 Special Consideration Category (currently under review)

The Faculty of Education has a Special Consideration Category. The Faculty recognizes the importance of providing the highest quality of education to all students in Manitoba via a teaching force that is fully representative of the cultural, ethnic and racial diversity of the province.

As the largest teacher education institution in the province, the Faculty recognizes its responsibility to facilitate the development of such a teaching force.

Furthermore, the Faculty recognizes the need to ensure that its recruitment and admission policies and procedures do not inappropriately obstruct the achievement of such a goal, but rather actively promote its attainment.

ACADEMIC CALENDAR 2015-2016

In keeping with the above, the Faculty will admit up to ten percent (10%) of the After-Degree B.Ed. applicants under this category. The Special Consideration Category includes: Canadian Aboriginal peoples, members of a visible minority or persons with disabilities.

Canadian Indigenous/Aboriginal Peoples – An Indigenous/Aboriginal person is a member of a Canadian First Nation, Métis, or Inuit Community.

Visible Minority – Persons other than Aboriginal People who, because of their colour, are a visible minority in Canada.

Persons with Disabilities – Persons with disabilities are those who would consider themselves disadvantaged by reason of any physical, intellectual, mental, sensory or learning impairment.

All information on admission requirements are described in detail in the applicant information bulletin that includes application deadline dates and information about applying online. This material is available from Student Affairs: Enrolment Services: Admissions, 424 University Centre or online at: <http://umanitoba.ca/student/admissions/application/programs/education-application.html>.

The criteria outlined in this section are applicable for the 2015-2016 session only. Please refer to the Faculty of Education website for updates.

2.6 Criminal Records and Child Abuse Registry

All applicants offered admission to the After-Degree Bachelor of Education and the Integrated Bachelor of Music/Bachelor of Education programs are required to complete the “Self-Declaration for Newly Admitted Students: Child Abuse Registry and Statement of Criminal Records” form as a condition of final acceptance to the program. Only adult convictions must be disclosed, and the existence of such a record will not automatically exclude applicants.

In addition to the above self-declaration, all successful applicants will be conditionally admitted pending clearance of an official Criminal Record Search (including vulnerable sector screening) and clearance from the Child Abuse Registry. Registration will not be permitted until these clearances are received. Failure to clear or failure to provide these documents by the stated deadline will result in admission offer being revoked.

2.7 Post Baccalaureate Diploma in Education

Designed for teacher professional development, the Post Baccalaureate Diploma in Education is a 30 credit program following completion of a Bachelor's degree, normally a B.Ed.

SECTION 3: PROGRAM REQUIREMENTS AFTER-DEGREE BACHELOR OF EDUCATION

The following program requirements are for students accepted into the After-Degree B.Ed. program commencing September 2015.

For students admitted prior to September 2015, please refer to 2014-2015 Academic Calendar - Undergraduate PDF or Archived Academic Calendars at: <http://umanitoba.ca> (Studying at the U of M / Academic Calendar)

REMINDER: While Education Academic Advisors are available to clarify faculty and university regulations and degree requirements, it is the student's responsibility to ensure that degree and program requirements are met.

3.1 Program Requirements for After-Degree Bachelor of Education

3.1.1 Application Deadline for School Placement

Actively registered After-Degree B.Ed. students will be contacted by February via email requesting that they complete an online “Request for School Placement” and must reply by the date specified in the email

Part time students or students not currently in attendance must contact the B.Ed. Student Services office no later than February 1 to make their intentions known. Failure to reply or make contact by the specified dates may result in students being denied a school placement.

After-Degree B.Ed. students who anticipate needing special accommodations are required to register with Student Accessibility Services and to speak with an Academic Advisor about the kinds of supports they may need. Once students have registered with Student Accessibility Services, reasonable accommodations for practicum can be made in consultation with the Director of the School Experience Office (SEO).

3.1.2 Student Criminal Background Check

Applicants should also be aware that the Professional Certification Unit will require students graduating from the Bachelor of Education program to undergo a criminal record check, including vulnerable sector screening as part of the certification process. Information on the “Self-Declaration for Newly Admitted Students: Child Abuse Registry and Statement of Criminal Records” form is included in the applicant information bulletin available from Student Affairs: Enrolment Services: Admissions, 424 University Centre or at: <http://umanitoba.ca/student/admissions/application/programs/education-application.html>.

All continuing students will be required to complete and submit a “Self-Declaration for Continuing Students: Child Abuse Registry and Statement of Criminal Records” form prior to registration for every year they are enrolled in the After-Degree B.Ed. program.

3.2 Early Years Stream Chart

Year 1		Year 2	
Fall	Winter	Fall	Winter
EDUB 3012	EDUB 3016	EDUB 4010	EDUB 4014
EDUB 3010	EDUB 3014		EDUA/EDUB Elective
Aboriginal Education ¹	EDUB 3018	EDUB 4012	EDUA/EDUB Elective
EDUA 3000 or EDUA 3002	EDUA 3000 or EDUA 3002		EDUA 4000
EDUB 3310 (Practicum 1)	EDUB 3312 (Practicum 2)	EDUB 4310 (Practicum 3)	EDUB 4312 (Practicum 4)
15 Credit Hours	15 Credit Hours	15 Credit Hours	15 Credit Hours

¹ All graduates of the After-Degree B.Ed. program must have 3 credit hours of Aboriginal Education coursework chosen from: EDUA 3400 or EDUB 3402.

3.3 Middle Years Stream Chart

Year 1		Year 2	
Fall	Winter	Fall	Winter
EDUB 3050	EDUB 3152	EDUB 3060	EDUB 4050
EDUB 3056	EDUB 3054	EDUB 3062	EDUB 3058
Aboriginal Education ¹ or Special Education /Diversity ²	Aboriginal Education ¹ or Special Education /Diversity ²	EDUB 3064	EDUB 4052
EDUA 3000 or EDUA 3002	EDUA 3000 or EDUA 3002	EDUA/EDUB Elective	EDUA 4000
EDUB 3320 (Practicum 1)	EDUB 3322 (Practicum 2)	EDUB 4320 (Practicum 3)	EDUB 4322 (Practicum 4)
15 Credit Hours	15 Credit Hours	15 Credit Hours	15 Credit Hours

¹ All graduates of the After-Degree B.Ed. program must have 3 credit hours of Aboriginal Education coursework chosen from: EDUA 3400 or EDUB 3402.
² All graduates of the After-Degree B.Ed. program must have 3 credit hours of Special Education/Diversity coursework chosen from: EDUA 3420, EDUB 1620, EDUB 1820, or EDUB 3426.

3.4 Senior Years Stream Chart

Year 1		Year 2	
Fall	Winter	Fall	Winter
EDUB 3100	EDUB 3102	EDUB 4XXX ^{4,5} Curriculum & Instruction	EDUB 4102
EDUB 3XXX ³ Curriculum & Instruction	EDUB 4XXX ^{4,5} Curriculum & Instruction	EDUA/EDUB Electives	EDUB 4100
Aboriginal Education ¹ or Special Education / Diversity ²	Aboriginal Education ¹ or Special Education / Diversity ²	EDUA/EDUB Electives	EDUA/EDUB Elective
EDUA 3000 or EDUA 3002	EDUA 3000 or EDUA 3002	EDUA 4000	EDUA/EDUB Elective
EDUB 3330 (Practicum 1)	EDUB 3332 (Practicum 2)	EDUB 4330 (Practicum 3)	EDUB 4332 (Practicum 4)
15 Credit Hours	15 Credit Hours	15 Credit Hours	15 Credit Hours

¹ All graduates of the After-Degree B.Ed. program must have 3 credit hours of Aboriginal Education coursework chosen from: EDUA 3400 or EDUB 3402.
² All graduates of the After-Degree B.Ed. program must have 3 credit hours of Special Education/Diversity coursework chosen from: EDUA 3420, EDUB 1620, EDUB 1820, or EDUB 3426.
³ 3 credit hours chosen from EDUB 3110, EDUB 3120, EDUB 3130 or EDUB 3140 dependent on Major subject area.
⁴ 3 credit hours chosen from EDUB 4110, EDUB 4112, EDUB 4114, EDUB 4120, EDUB 4122, EDUB 4124, EDUB 4130, EDUB 4132, EDUB 4134, EDUB 4140, EDUB 4142, EDUB 4144, EDUB 4146, EDUB 4148, EDUB 4150, EDUB 4152, EDUB 4154 as required for major and as required for minor.
⁵ Registration in EDUB 4XXX is dependent on scheduling. May require 6 credits of EDUB 4XXX for both subject areas to be taken in second term of program.

SECTION 4: PROGRAM REQUIREMENTS INTEGRATED BACHELOR OF MUSIC/BACHELOR OF EDUCATION

REMINDER: While Education Academic Advisors are available to clarify faculty and university regulations and degree requirements, it is the student’s responsibility to ensure that degree and program requirements are met.

4.1 Program Requirements for Integrated Bachelor of Music/Bachelor of Education

4.1.1 Application Deadline for School Placement

Actively registered Year 3 & 4 Integrated Bachelor of Music/Bachelor of Education (B.Mus./B.Ed.) students will be contacted in October regarding their intentions for the upcoming summer session practicum via email, and must reply by the date specified in the email. Part time students or students not currently in attendance should contact the B.Ed. Student Services office no later than November 1 to make their intentions known. Failure to reply by the specified dates may result in students being denied a school placement.

Actively registered Integrated B.Mus./B.Ed. students intending to proceed to Year 5 (final year) will be contacted by February via email requesting that they complete an online “Request for School Placement” and must reply by the date specified in the email. Part time students or students not currently in attendance who intend to proceed to Year 5 (final year) should contact the B.Ed. Student Services office no later than February 1 to make their intentions known. Failure to reply by the specified dates may result in students being denied a school placement.

Integrated B.Mus./B.Ed. students who anticipate needing special accommodations are required to register with Student Accessibility Services and to speak with an Academic Advisor about the kinds of supports they may need. Once students have registered with Student Accessibility Services, reasonable accommodations for practicum can be made in consultation with the Director of the School Experience Office (SEO).

4.1.2 Student Criminal Background Check

Year 3 Integrated B.Mus./B.Ed. students should also be aware that the Professional Certification Unit will require students graduating from the Bachelor of Education program to undergo a criminal record check, including vulnerable sector screening as part of the certification process. Information on the “Self-Declaration for Newly Admitted Students: Child Abuse Registry and Statement of Criminal Records” form is included in the applicant information bulletin available from Enrolment Services: Admissions, 424 University Centre and the website: <http://umanitoba.ca/student/admissions/application/programs/education-application.html>.

All continuing students will be required to complete and submit a “Self-Declaration for Continuing Students: Child Abuse Registry and Statement of Criminal Records” form prior to registration for every year they are enrolled in the Integrated B.Mus./B.Ed. program.

4.2 Integrated Music/Education Program Chart

Students choose a specialization in Music (see chart 4.2.1 below) for their teachable major and a subject other than Music for their teachable minor.

Students who complete the program of studies satisfactorily receive a Bachelor of Music (B.Mus.) degree and a Bachelor of Education (B.Ed.) degree. Students are expected to maintain academic standards consistent with the granting of the degrees in non-integrated programs.

Integrated Music/Education Program				
Year 1	Year 2¹	Year 3	Year 4	Year 5
MUSC 1004	Core Music History Elective MUSC XXXX	MUSC 3180 or MUSC 3182	MUSC 3974	EDUB 2980
MUSC 1014	Core Music History Elective MUSC XXXX	MUSC 3190 or MUSC 3192	MUSC 4180 or MUSC 4182	EDUA 1800
MUSC 1110	MUSC 2110	MUSC 3470	MUSC 4190 or MUSC 4192	EDUA 3002
MUSC 1120	MUSC 2120	MUSC 3964	MUSC 4470	EDUB 1990
MUSC 1180 or MUSC 1182	MUSC 2180 or MUSC 2182	MUSC XXXX ⁴	EDUB 4112 ⁵ or	EDUA 2800
MUSC 1190 or MUSC 1192	MUSC 2190 or MUSC 2192	MUSC XXXX ⁴	EDUB 2160 ⁵	EDUA 3000
MUSC 1384	MUSC 2384	EDUB 3110	MUSC XXXX ⁴	EDUB 2500 ⁶
MUSC 1394	MUSC 2394	EDUB 1600	MUSC XXXX ⁴	EDUB 3102 ⁶
MUSC 1400	MUSC 2400	Teachable Minor ³	MUSC XXXX ⁴	EDUB 1XXX ⁷ or EDUB 1614 ⁷
MUSC 3230 or MATH 1XX or STAT 1XXX	MUSC 2460			
ENGL 1XXX	Teachable Minor ^{2,3}	Teachable Minor ³	MUSC XXXX ⁴	
	Teachable Minor ^{2,3}	See “NOTE” Below	Teachable Minor ³	
		See “NOTE” Below	Teachable Minor ³	
		Summer Session EDUB 1940	Summer Session EDUB 1950	

¹ Apply to Faculty of Education, Integrated Music/Education Program during Year 2. Deadline to apply is February 1.

² Students must choose one of the following for their minor: Art, Biology, Chemistry, Computer Science, English, French, General Science, Geography, History, Human Ecology (Home Economics), Mathematics, Native Studies, Physical Education, Physics, Second Language (other than English or French), or Drama/Theatre.

³ Some minors have specific level/course requirements. See the Applicant Information Bulletin for After-Degree B.Ed. (Senior Years) for specifics or contact a student advisor in the Faculty of Education B.Ed. Student Services office. Some minors have pre-requisite courses or faculty restrictions and may be problematic to complete in a timely manner.

⁴ See Chart 4.2.1 to determine course requirements.

⁵ Students with Instrumental & Choral Specialization will take EDUB 4112 and students with Early/Middle Specialization will take EDUB 2160.

⁶ Students with an Early or Middle specialization; replace EDUB 2500 and EDUB 3102 with EDUA/EDUB elective courses.

⁷ Students with an Early/Middle specialization take EDUB 1614. Students with Instrumental & Choral Specializations take Year 1 Curriculum & Instruction course for minor.

NOTE: Prior to beginning Year 5 all B.Ed. students must have completed the Aboriginal Education Requirement and the Special Education/Diversity Requirement which is defined as 3 credit hours Aboriginal Education (EDUA 3400 Aboriginal Education or EDUB 3402 Aboriginal Perspectives and the Curriculum) and 3 credit hours Special Education/Diversity (EDUA 3420 Cross Cultural Education, EDUB 1620 Principles and Procedures of Second Language Teaching, EDUB 1820 Language and Content Instruction of ESL/Bilingual Students or EDUB 3426 La pédagogie du français de base aux niveaux intermédiaire et de la jeune enfance).

4.2.1 Integrated Music Specializations and Music Education Electives Chart

Integrated Music Specializations			Music Education Electives	
Instrumental Music Required Courses	Choral Music Required Courses	Early/Middle Years Music Required Courses	Music Education Electives	
MUSC 3690	MUSC 3770	MUSC 3130	MUSC 3090	MUSC 3780
MUSC 3780	MUSC 3884	MUSC 3730	MUSC 3130	MUSC 3790
MUSC 3790	MUSC 4154	MUSC 3770	MUSC 3140	MUSC 3800
MUSC 3884	MUSC 4750	6 credit hours Music Education Elective	MUSC 3150	MUSC 3884
MUSC 4770	MUSC 4760	The Marcel A. Desautels Faculty of Music recommends as the 6 credit hours Music Education Electives: MUSC 3140 or MUSC 4750 & MUSC 4760	MUSC 3360	MUSC 3894
MUSC 4780	3 credit hours Music Education Elective		MUSC 3690	MUSC 4154
			MUSC 3620	MUSC 4350
			MUSC 3730	MUSC 4750
			MUSC 3770	MUSC 4760
				MUSC 4770
				MUSC 4780

Students who complete the above program of studies satisfactorily receive a Bachelor of Music (B.Mus.) degree and a Bachelor of Education (B.Ed.) degree. Students are expected to maintain academic standards consistent with the granting of the degrees in non-integrated programs.

SECTION 5: ACADEMIC REGULATIONS FOR BACHELOR OF EDUCATION

The following academic regulations are for students accepted into the After-Degree B.Ed. program commencing September 2015 and Integrated B.Mus./B.Ed. program.

For students admitted prior to September 2015, please refer to 2014-2015 Academic Calendar - Undergraduate PDF or Archived Academic Calendars at: <http://umanitoba.ca> (Studying at the U of M, Academic Calendar)

The provisions of the Academic Calendar chapters, General Academic Regulations and University Policies, apply to all students. In addition, the Faculty of Education has regulations and requirements, published below, that apply specifically to its students.

5.1 Academic Regulations of All Bachelor of Education Programs

5.1.1 Academic Requirement for Graduation

A DGPA of 2.50 is required for graduation in the B.Ed.

5.1.2 Academic Standing

A minimum DGPA of 2.50 must be maintained in the B.Ed. program for clear standing. A grade of "C" is considered a passing grade for Education courses.

5.1.3 Additional Academic Considerations

Each student in the Faculty of Education is presumed to be generally suited to a teaching program. Should this prove not to be the case, the Faculty reserves the right, at any time, to require a student to withdraw from the B.Ed. program. Unsatisfactory performance in School Experience courses may be considered reason to require a B.Ed. student to withdraw from the faculty. See Professional Unsuitability By-Law in this section.

5.1.4 Appeal Procedures

The general university policy for appeal of assigned grades applies to the Faculty of Education. See the Academic Calendar chapter, General Academic Regulations, Appeals of Assigned Grades. Information about admission decision appeals may be found in the Academic Calendar chapter, Admissions.

5.1.5 Assessment of Student Academic Performance

Academic performance is assessed at the end of each regular term in which the B.Ed. student is registered in all courses that are used for credit towards the B.Ed. degree. Decisions concerning academic standing are normally made upon initial completion of 15 credit hours.

Based on the DGPA attained in these courses, the following decisions with respect to the student's eligibility to continue as a Faculty of Education B.Ed. student will be made.

5.1.5.1 Eligible to Proceed

The student with a minimum of 2.50 is eligible to proceed.

5.1.5.2 Academic Probation

The student who passes all courses, but whose DGPA is below 2.50 but above 1.99 is placed on academic probation

The student with failing grades whose DGPA is below 2.50 but above 1.99 may be granted permission to repeat and/or replace the failed courses and permission to proceed on probation until completion of an additional 15 credit hours of Education coursework

Students placed on academic probation may continue on probation until they have completed an additional 15 credit hours of required degree coursework. To clear probation, a student must raise their DGPA to 2.50 by the end of the probationary period. Normally, students on probation who fail to raise the DGPA to at least 2.50 will be required to withdraw on academic grounds (suspension) for a period of two years.

5.1.5.3 Academic Suspension

The student whose DGPA is below 2.00 shall be required to withdraw on academic grounds (suspension) from the Faculty of Education for a period of two academic years.

Students who have been required to withdraw on academic grounds will be informed via registered mail. These students may not register at the university for two academic years. Following this period, students wishing to pursue a B.Ed. degree, must make a written request for reinstatement. The following will apply in such cases:

- No application for reinstatement will be considered before a minimum period of two academic years has lapsed from the effective date of the required withdrawal to the effective date of the requested reinstatement.
- The applicant will be expected to demonstrate that he or she will now be able to meet the academic requirements of the program.
- If the student is reinstated after the time limit for program completion has expired (see Statute of Limitation section below), the Associate Dean (Undergraduate) shall determine which, if any, courses previously successfully completed shall be repeated or replaced.

5.1.6 Attendance at Class/Debarment

Regular attendance is expected for all students in all courses, including practicum. An instructor or the Director of School Experience can initiate procedures to debar a student from attending classes, practicum, and final examinations where unexcused absences exceed three hours of scheduled classes in any one term.

See the Academic Calendar chapter General Academic Regulations, Attendance and Withdrawal

5.1.7 Authorized Withdrawals

Authorized Withdrawals (AWs) may be permitted on medical or compassionate grounds, subject to satisfactory documentation. Students must contact an Education Academic Advisor to initiate an authorized withdrawal.

5.1.8 Dean's Honour List

Students registered in a minimum of 12 credit hours within a single term and who achieve a Term Grade Point Average of 3.90 or better will be included in the Dean's Honour List. Grades for coursework taken on a Letter of Permission and used towards the B.Ed. degree will be used in meeting the eligibility requirements of the Dean's Honour List.

Students receiving failing grades where such coursework is required to earn the B.Ed. degree and/or practicum will not be eligible for the Dean's Honour List.

Eligible students must be enrolled in either the After-Degree B.Ed. program or the Integrated B.Mus./B.Ed. programs.

5.1.9 Degree with Distinction

A student graduating from the After-Degree B.Ed. program will have the degree granted "With Distinction" if a minimum DGPA of 4.20 has been attained on all courses that are used for credit towards the B.Ed. degree. This distinction will be noted on the parchment and on the student's transcript.

5.1.10 Gold Medal

The Gold Medal is awarded each year to the B.Ed. graduate who has the highest GPA (minimum 3.75) in the last 60 credit hours of the B.Ed. degree and who has completed at least 80 percent of what is considered to be the normal full course load in each of the last two years of the program.

5.1.11 Grading Scale

Letter Grade	Grade Point	Level of Achievement	Percentage Range
A+	4.50	Exceptional	95 and above
A	4.00	Excellent	90-94
B+	3.50	Very Good	85-89
B	3.00	Good	80-84
C+	2.50	Satisfactory	75-79
C	2.00	Adequate	70-74
D	1.00	Unacceptable	60-69
F	0.00	Failure	Below 60

5.1.12 Incompletes

See the Academic Calendar chapter, General Academic Regulations, Academic Evaluation.

5.1.13 Leave of Absence

Although most students will complete the After-Degree B.Ed. program in two years, the Faculty recognizes that individual circumstances may arise that require a student to take one or more full years away from study. In such cases a student should meet with an Education Academic Advisor as early as possible to discuss their particular situation and to map out plans for completing their program. It is important to note that in such cases the following applies:

- Newly admitted students must complete a minimum of 3 credit hours of required B.Ed. coursework in the fall or winter term of the year of admission. That is, a leave of absence is not permitted in the first year.
- The normal maximum time allowed for completion of the B.Ed. program is six years from the date of admission.
- Application to return for a School Placement following a leave must be made by the deadline stated under "Application Deadline for School Placement" in the "Program Requirements" sections.
- Any student returning to resume studies after a leave of absence is expected to conform to any new requirements that have been approved during their absence.
- A student who is on a leave of absence is still considered to be within the B.Ed. program and therefore, cannot take courses at another post-secondary institution unless approved on a Letter of Permission (see the Academic Calendar, General Academic Regulations, Academic Evaluation 2.1).

5.1.14 Part-Time Studies

Applicable to students admitted prior to September 2015

In any of the program streams, the Curriculum and Instruction courses and the practicum experience for each year must be taken concurrently. All Year 1 course requirements must be completed before proceeding to Year 2. When exceptions are permitted, they would normally only be allowed as a result of scheduling conflicts, unavailability of courses scheduled on a rotating basis, compassionate grounds or other exceptional circumstances.

5.1.15 Professional Unsuitability By-Law

The Senate of the University has approved a by-law granting authority to the Faculty of Education to require a student to withdraw from the Faculty for reasons of professional unsuitability. A student may be required to withdraw from the Faculty when, at any time, the Professional Unsuitability Committee has determined that the student is unsuited, on consideration of competence or professional fitness, for the practice of teaching.

Copies of this by-law may be obtained from the Faculty of Education website.

5.1.16 Repeating a Course

Required courses which receive a grade of "F" or "D" must be repeated. Education elective courses which receive a grade of "F" or "D" must be repeated or replaced with other Education elective courses. Courses which receive a "C" grade or higher may be repeated; but only with the consent of the Associate Dean, Undergraduate Program.

Education courses may only be repeated once. When a course is repeated, the last grade achieved will be used in calculating the DGPA.

Applicable to B.Ed. students admitted prior to September 2015 and Integrated B.Mus./B.Ed. students only:

Senior Years and Integrated B.Mus./B.Ed. students who fail a school experience course will normally be required to repeat the Curriculum and Instruction courses associated with that practicum. Students who fail a Curriculum and Instruction course will normally be required to repeat the practicum course associated with that curriculum area.

Early and Middle Years B.Ed. students who fail a school experience course will normally be required to repeat all of the Curriculum and Instruction courses related to that year's practicum.

5.1.17 Statute of Limitation

The normal maximum time allowed for the completion of the B.Ed. program is six years from the date of admission.

5.1.18 Supplemental Examinations

Supplemental examinations are not permitted in Education courses.

5.1.19 Voluntary Withdrawals

See the Academic Calendar chapter, General Academic Regulations.

5.1.20 Voluntary Withdrawal from Practicum Limit

All students admitted are permitted one voluntary withdrawal from each of the practicum courses.

5.1.21 5000-Level Courses

Students enrolled in the After-Degree B.Ed. program and the Integrated B.Mus./B.Ed. programs are not permitted to take 5000-level courses.

5.2 Academic Regulations for the After-Degree Bachelor of Education

In addition to 5.1 the following regulations apply to the After-Degree B.Ed. program.

5.2.1 Maximum Course Load

The maximum credit hour load for After-Degree B.Ed. students is 30 credit hours in the regular session (September-April). The following requests for exception will apply:

- Requests to register for 33 credit hours, from students who are in good standing, do not need approval but the student must contact an Academic Advisor for assistance.
- Requests to register for 36 credit hours are approved by an Academic Advisor provided the student's minimum DGPA is 3.50.
- Requests to register for 3 credit hours above the maximum load but where the student's DGPA is below 2.50 must be submitted, in writing, to the Associate Dean, Undergraduate Programs.
- Requests to register for more than 36 credit hours must be submitted, in writing, to the Associate Dean, Undergraduate Programs.

Students in the Senior Years Stream may request written permission to complete additional Curriculum and Instruction courses, provided they have previously completed the course requirements for this additional major/minor and where there is space in that Curriculum and Instruction course. Where permission is granted, students may substitute this credit for 3 credit hours of elective course work as outlined in their program plan. Students who choose to take more than the required two Curriculum and Instruction courses in their program have no guarantee that a practicum teaching experience will be provided in that additional teachable area.

5.2.2 Transfer of Credit

Students may transfer a maximum of five full courses (30 credit hours) from another recognized university or college Professional Education program toward the After-Degree B.Ed. provided the courses are acceptable to the program, and they have not been applied to another degree program.

Students will not receive advance standing for any Education course which is more than six years old at the point of their admission to the Faculty of Education.

Courses taken as part of the Certificate in Teaching English as a Second Language (CTESL) or Certificate in Adult and Continuing Education (CACE) through Extended Education, U of M, may receive credit for some coursework. See PBDE 6.5 Transfer of Credit section for a listing of equivalents.

Those students who are currently in the program and wish to register for a course at another university or college must complete an application for “Letter of Permission” prior to registering. Further information can be found at <http://umanitoba.ca/student/records/forms.html>

5.3 Academic Regulations for the Integrated Bachelor of Music/Bachelor of Education

In addition to 5.1 the following regulations apply to the Integrated B.Mus./B.Ed. program.

5.3.1 Major/Minor Academic Requirements

In addition to Education courses, students must achieve a grade of C or greater in courses which apply to the major and minor.

5.3.2 Maximum Course Load

The maximum credit hour load for Integrated B.Mus./B.Ed. students in the regular session (September-April) are:

34 credit hours (Year 3)

37 credit hours (Year 4)

30 credit hours (Year 5)

The following requests for exception will apply:

- Requests to register for an additional 3 credit hours above the maximum load for students who are in good standing do not need approval but the student must contact an Academic Advisor for assistance.
- Requests to register for 6 credit hours above the maximum load are approved by an Academic Advisor provided the student’s minimum DGPA is 3.50.
- Requests to register for 3 credit hours above the maximum load where the student’s DGPA is below 2.50 must be submitted, in writing, to the Associate Dean, Undergraduate Programs (Education).
- Requests to register for more than 6 credit hours above the maximum load must be submitted, in writing, to the Associate Dean, Undergraduate Programs (Education).

5.3.3 Part-Time

Integrated B.Mus./B.Ed. students must complete Years 1 to 4 inclusive before proceeding to Year 5. When exceptions are permitted, they would normally only be allowed as a result of scheduling conflicts, unavailability of courses scheduled on a rotating basis, compassionate grounds or other exceptional circumstances.

5.3.4 Transfer of Credit

Students may transfer a maximum of ten full courses (60 credit hours) from another recognized university or college toward the Integrated B.Mus./B.Ed. degree provided the courses are acceptable to the program. Those students who are currently in the B.Ed. program and wish to register for a course at another university or college must complete an “Application for Letter of Permission” prior to registering.

5.3.5 University Written English and Mathematics

All Integrated B.Mus./B.Ed. students are required to complete the university written English and Mathematics requirement. This requirement is described in the Academic Calendar chapter, General Academic Regulations.

SECTION 6: POST BACCALAUREATE DIPLOMA IN EDUCATION

The Faculty of Education offers a Post Baccalaureate Diploma in Education (PBDE) designed for teachers and other professionals.

The unique features of the PBDE program are that students can: design their own program of study and tailor it to their own areas of interest; take courses at the Faculty of Education as well as at other faculties and schools at the U of M or other approved institutions. A wide selection of courses is available through Summer Session, distance education, via the internet and summer institutes.

This program is also used for Internationally Educated Teachers who require additional coursework to meet Manitoba Teacher Certification requirements.

The PBDE is recognized by Manitoba Education and Advanced Learning for salary classification purposes. Further, the PBDE program provides the opportunity for teachers to follow courses of study leading to the school counsellor, special education and special education coordinator certificates, certificate in school leadership, and to partial fulfilment of the requirements of the school administrators’ (Level 1) and principals’ (Level 2) certificates, all of which are issued by Manitoba Education and Advanced Learning. For information regarding specialist certificates, contact: Professional Certification Unit, Manitoba Education and Advanced Learning, Box 700, Russell, Manitoba, ROJ 1W0; telephone toll free at: 1-800-667-2378, or 1-204-773-2998, or e-mail certification@gov.mb.ca, or web: www.edu.gov.mb.ca/k12/profcert/.

6.1 Admission Requirements

Applicants for Admission must possess:

- A bachelor's degree and one of the following types of certificates granted by Manitoba Education and Advanced Learning: Permanent Professional Certificate, Provisional Professional Certificate, or Clinicians' Certificate; or equivalent from other provinces [See note 1 on teacher certification] or a bachelor's degree and two years of appropriate teaching/work experience (see note 2);
- A Grade Point Average of 2.00 in the bachelor's degree (including any after degree certification program).

Note 1:

Teacher Certification

The majority of applicants will possess a valid teaching certificate before being admitted to the Post Baccalaureate Diploma in Education Program.

The granting of a certificate to teach in the public schools of Manitoba is the prerogative of Manitoba Education and is based on a recognized program of teacher education. Individuals wishing to apply for such certification should contact the Professional Certification Unit, Manitoba Education.

Note 2:

Individuals must also complete a Supplementary Application and include a brief statement as to educational plans and a resume showing evidence of two years of appropriate full-time teaching or work experience.

6.2 Admission Procedure

Applications may only be completed online and the form is available at <http://umanitoba.ca/faculties/education/future/index.html>. The deadlines are:

Canadian/US Applicants

April 1 for classes beginning in May

June 1 for classes beginning in July

August 1 for classes beginning in September (Fall)

December 1 for classes beginning in January (Winter)

International Applicants

April 1 for classes beginning in September (Fall)

June 1 for classes beginning in January (Winter)

6.3 Readmission, Continuing, and Returning Students

All students who were admitted and who did not follow through with course registration or who voluntarily withdrew from their first year of studies must reapply for admission (www.umanitoba.ca/applynow).

All students who were admitted to the PBDE and who have not been in attendance for three consecutive terms, must request permission to re-register in the program. The 'Request for Permission to Re-Register in the Post Baccalaureate Diploma in Education' is available at <http://umanitoba.ca/education/>

6.4 Program Requirements

REMINDER: While Education academic advisors are available to clarify faculty and university regulations and degree requirements, it is the student's responsibility to ensure that diploma and program requirements are met.

The Post Baccalaureate Diploma in Education consists of 30 credit hours of coursework, subject to the following regulations:

- a) A minimum of 12 credit hours must be taken in the Faculty of Education at the 5000-level;
- b) A maximum of 18 credit hours may be taken in the Faculty of Education below the 5000-level;
- c) A maximum of 18 credit hours may be taken outside the Faculty of Education at the introductory or higher level of which six credit hours may be taken at the 1000-level. In the case of language study other than English or French, a maximum of 12 credit hours may be taken at the 1000-level provided both are in the same language.
- d) A maximum of six credit hours may be earned through approved external field-led courses. These courses are Faculty-approved courses offered by approved partner organizations. Prior approval through the 'Application for Letter of Permission' will be required before taking courses and only students enrolled in the PBDE may take these courses.
- e) PBDE students are not permitted to take graduate courses.

6.5 Academic Regulations

Appeal Procedures

The general university policy for appeal of assigned grades applies to the Faculty of Education. See the chapter, General Academic Regulations and Policy, of this Calendar, Appeals of Grades. Information about admission decision appeals may be found in the chapter, Admissions.

Assessment of Student Academic Performance

Academic performance is normally assessed at the completion of nine credit hours of course work and at the end of every session thereafter. A minimum grade of "C" is required for each course that is to be included in the student's diploma program. Effective September 2011, a student must maintain a minimum Degree Grade Point Average of 2.50 to continue in the program. A student whose Degree Grade Point Average falls below 2.50 will be placed on academic suspension for two years. Reapplication is required for readmission to the program.

Attendance at Class and Debarment

Regular attendance is expected of all students in all courses. An instructor can initiate procedures to debar a student from attending classes and from final examinations where unexcused absences exceed three hours of scheduled classes in any one term. See the chapter, General Academic Regulations and Requirements, Attendance at Class and Withdrawal.

Continuing Students

See the chapter, University of Manitoba Admissions.

Grading Scale

Letter Grade	Grade Point	Level of Achievement	Percentage Range
A+	4.50	Exceptional	95 and above
A	4.00	Excellent	90-94
B+	3.50	Very Good	85-89
B	3.00	Good	80-84
C+	2.50	Satisfactory	75-79
C	2.00	Adequate	70-74
D	1.00	Marginal	60-69
F	0.00	Failure	Below 60

Incompletes

See the chapter, General Academic Regulations and Requirements, Academic Evaluation. Students who are unable to complete the term work prescribed in a course may apply to the instructor prior to the end of term for consideration of a grade classification of 'incomplete.' It is understood that the student is to write the final examination if one is scheduled for the course.

Taking into account the results of the final examination, the value of the term work completed, and the extent of the incomplete term work, the instructor shall calculate the temporary grade using a zero value for incomplete work.

Normally, the following maximum extensions are allowed:

August 1 for courses terminated in April

December 1 for courses terminated in August

April 1 for courses terminated in December

If a final grade is not reported within one month of the extension deadline, the Incomplete (I) classification will be dropped and the grade will remain as awarded. The student will no longer have an opportunity to improve the grade. In no case will the satisfaction of the incomplete requirements result in a lower grade being awarded.

Maximum Time Limits

The maximum time allowed for completing the PBDE is six* years from the time of admission. In addition, a student will not be permitted to count toward the diploma any course completed more than six* years prior to the time of admission. Students will be permitted to retake and use as PBDE credit Education courses beyond the six* years provided they have not been previously used elsewhere for credit toward a degree or diploma program. Courses from other faculties will need to be dealt with on an individual basis.

* For students admitted prior to September 2015, the maximum time allowed to complete the PBDE is nine years and courses cannot be older than nine years at the completion of the PBDE.

Repeating a Course

Courses for which a grade of "F" or "D" is obtained, must be repeated or replaced; however, courses in which a grade of "C" or higher is obtained may only be repeated with the consent of the Associate Dean, PBDE Program. Courses may be repeated once. When a course is repeated, the last grade achieved will be used in calculating the Degree Grade Point Average.

Supplemental Examinations

Supplemental examinations are not permitted in education courses.

Voluntary Withdrawals

See the chapter, General Academic Regulations and Requirements.

Authorized Withdrawals (AWs) may be permitted on medical or compassionate grounds, subject to satisfactory documentation. Students must contact an Education Student Advisor to initiate an authorized withdrawal.

6.6 Transfer of Credit

Subject to approval by the Faculty, transfer of credit may be granted on the basis of:

- completed university level courses that have not been previously used towards a degree,
- completed M.Ed. courses not used to satisfy requirements for the M.Ed. degree, and
- the following courses completed through the Certificate in Adult and Continuing Education (CACE), University of Manitoba:

ADED 0170 Foundations of Adult Education transferred as EDUA 1570 Foundations of Adult Education (3); ADED 0180 Program Planning in Adult Education transferred as EDUA 1580 Program Planning in Adult Education (3); ADED 0160 Adult Learning and Development transferred as EDUA 1560 Adult Learning and Development (3); ADED 0190 Facilitating Adult Education transferred as EDUA 1590 Facilitating Adult Education (3).

Completion of the CACE certificate is not required to receive individual credit.

- a maximum of 15 credit hours completed through the Certificate in Teaching English as a Second Language (CTESL), University of Manitoba from the following:

CTSL 0100 Principles and Procedures of Second Language transferred as EDUB 1620 Principles and Procedures of Second Language Teaching (3); CTSL 0102 Teaching ESL Vocabulary and Pronunciation as EDUB 1640 Teaching ESL Vocabulary and Pronunciation (3); CTSL 0104 Teaching ESL Grammar as EDUB 1650 Teaching ESL Grammar (3); CTSL 0120 Practicum in Teaching English as a Second Language (TESL) as EDUB 1860 Practicum in Teaching English as a Second Language (TESL) (3); CTSL 0108 Content-based Second Language Instruction as EDUB 1820 Language and Content Instruction of ESL/Bilingual Students (3); 39306 Computers in Second Language Teaching as EDUB 1660 Computers in Second Language Teaching (3); CTSL 0106 Teaching ESL Literacy as EDUB 1606 Teaching ESL Foundational Literacy, Academics & Language (3); CTSL 0110 Adult ESL & the Canadian Language Benchmarks as EDUB 1612 Adult ESL and the Canadian Language Benchmarks (3); CTSL 0114 Assessment and Teaching of ESL Learners as EDUB 1608 Assessment and Testing of EAL/ESL Learners.

Completion of the CTESL certificate is not required to receive individual credit.

A maximum of 12 credit hours may be transferred from an institution other than the University of Manitoba. There is no maximum limit for courses completed at the University of Manitoba. Transferred courses must have a grade of C or better. Students will not be permitted to count toward the diploma any course completed more than six years* prior to the time of admission.

*For students admitted prior to September 2015, courses transferred to the PBDE must fall within the nine year statute of limitation at the completion date, must be within the program requirements, and must have a grade of C or better.

6.7 Extension of Time to Complete Program of Study

All requests for extensions will normally be dealt with administratively and reported, in summary form, to the Executive Committee of Education Faculty Council for information. The student must complete the "Request for Extension" form available at <http://umanitoba.ca/education/> and submit it to the Office of Graduate & Professional Programs and Research, Faculty of Education at least three, but no more than four, months prior to expiration of the respective maximum time limit. Requests for an extension are reviewed by Associate Dean (Graduate & Professional Programs and Research) on a case by case basis.

Requests for extension must be accompanied by a realistic timeline. The extension time requested must closely reflect the time required to complete the program.

The normal time requested for extensions is four to eight months. More than one extension period may be considered; however, the total approved for all extensions will not normally exceed one year.

6.8 Leave of Absence

6.8.1 Regular Leave

At the request of a PBDE student, the Associate Dean (Graduate & Professional Programs, and Research), may recommend to the dean of the Faculty of Education to grant a leave of absence for a period of time not to exceed one year. While on leave of absence, a student would not be expected to maintain study. Students on a Regular Leave of Absence will be required to register for courses at the end of the leave period. A Regular Leave of Absence status does not extend the time limits as outlined in the Faculty regulations.

Fees: No Re-Admission fee will be levied upon return to study at the end of a 12 month leave.

6.8.2 Exceptional Leave

In exceptional circumstances, at the request of the PBDE student, the Associate Dean (Graduate & Professional Programs, and Research) may recommend to the Dean of the Faculty of Education to grant an exceptional leave of absence for a period of time not to exceed one year. While on leave of absence for exceptional reasons, a student would not be expected to maintain study nor pay the Re-Admission fee. In addition, the leave period would not be included in the time period allowed for the completion of the diploma.

Fees: No Re-Admission fee will be levied upon return to study at the end of a 12 month leave.

6.8.3 Parental Leave

A PBDE student who is bearing a child or who has primary responsibility of the care of an infant or young child immediately following a birth or adoption of a child is eligible for parental leave. The request should be made to the Faculty of Education normally for a leave of four to twelve months. Leaves of

other durations will be considered on an individual basis. Where possible, students doing course work should coordinate their requests with the beginning of an academic term. While on leave of absence for parental reasons, a student would not be expected to maintain study. The leave period is not included in the time period allowed for completion of the diploma.

Fees: No Re-Admission fee will be levied upon return to study at the end of a 12 month leave.

Note: At the time of approval of an application for leave, the procedures for the return of the student to the Faculty at the completion of the leave must be stipulated.

The Leave of Absence Application Form is available at <http://umanitoba.ca/education/>.

6.8.4 Awards & Leave of Absence

Students granted exceptional or parental leave will retain the full value of an award whose terms and conditions are established by the Faculty of Education. Such an award will be suspended at the onset of the leave and reinstated at the termination of the leave period (4 to 12 months) provided that the student returns to full time study at that time. Other awards will be paid according to the conditions established by the donor or granting agency.

6.9 Courses Grouped by Subject

Ungrouped courses

EDUA 5012 Legal and Administrative Aspects of Schools for Clinicians Cr.Hrs.3

EDUB 5870 Mentoring for Teachers Cr.Hrs.3

EDUB 5940 Instructional Product Development Cr.Hrs.3

Counselling Psychology

EDUA 5480 Counselling Skills Cr.Hrs.3

EDUA 5490 Field Placement in Counselling Cr.Hrs.3

EDUA 5500 Theories and Issues in School Counselling Cr.Hrs.3

EDUA 5510 Elementary School Counselling Cr.Hrs.3

EDUA 5520 Ethics in Counselling Cr.Hrs.3

EDUA 5530 Secondary School Counselling Cr.Hrs.3

EDUA 5540 Groups in Guidance Cr.Hrs.3

EDUA 5550 Psychology of Human Relationships Cr.Hrs.3

EDUA 5570 Family Life Education Cr.Hrs.3

EDUA 5580 Career Development Cr.Hrs.3

EDUA 5590 Career Information Cr.Hrs.3

Cross-cultural, Sociological, and Philosophical Foundations in Education

EDUA 5200 Readings in Educational Foundations Cr.Hrs.3

EDUA 5210 Recent Developments in Educational Foundations 1 Cr.Hrs.3

EDUA 5230 Studies in International Education Cr.Hrs.3

Early Years Education

EDUA 5930 Observing Child Behaviour Cr.Hrs.3

EDUA 5940 Language and Symbolic Process Cr.Hrs.3

Educational Administration

EDUA 5010 Introduction to Educational Administration Cr.Hrs.3

EDUA 5020 Principles of Curriculum Development Cr.Hrs.3

EDUA 5030 Management of Educational Institutions Cr.Hrs.3

EDUA 5040 Personnel Administration in Education Cr.Hrs.3

EDUA 5060 Principles of Instructional Supervision Cr.Hrs.3

EDUA 5070 Organizational Behaviour in Educational Institutions Cr.Hrs.3

EDUA 5080 Recent Developments in Educational Administration 1 Cr.Hrs.3

EDUA 5090 Recent Developments in Educational Administration 2 Cr.Hrs.3

EDUA 5100 Issues in the Administration of Education Cr.Hrs.3

Educational Psychology

EDUA 5710 Readings in Educational Psychology 1 Cr.Hrs.3

EDUA 5730 Recent Developments in Educational Psychology 1 Cr.Hrs.3

EDUA 5740 Recent Developments in Educational Psychology 2 Cr.Hrs.3

EDUA 5760 Psychology of Instruction in Educational Contexts Cr.Hrs.3

Educational Technology

EDUB 5840 Internet Pedagogy Cr.Hrs.3

EDUB 5850 Theory and Practice of Designing and Developing Web-based Courses Cr.Hrs.3

EDUB 5860 Project Management in Education and Training Cr.Hrs.3

Expressive Arts

EDUB 5012 Video Art, Culture and Education Cr.Hrs.3

EDUB 5040 Theory and Practice of Teaching Art (Elementary) Cr.Hrs.6

EDUB 5060 Theory and Practice of Teaching Art in the Senior Years 1 Cr.Hrs.3

EDUB 5120 Music in the Early Years/Middle Years School 1 Cr.Hrs.3

EDUB 5130 Music in the Early Years/Middle Years School 2 Cr.Hrs.3

EDUB 5140 Special Methods in Music 1 Cr.Hrs.3

EDUB 5150 Special Methods in Music 2 Cr.Hrs.3

EDUB 5160 School Band Cr.Hrs.3

EDUB 5190 School Music Productions Cr.Hrs.3

EDUB 5250 Music: Advanced Choral Methods Cr.Hrs.3

Inclusive Education

EDUA 5600 Introduction to Inclusive Special Education Cr.Hrs.6

EDUA 5610 Field Experience in Inclusive Special Education Cr.Hrs.6

EDUA 5620 Teaching Children Through Alternative and Augmented Communication Cr.Hrs.3

EDUA 5630 Assessment and Instruction in Inclusive Special Education Cr.Hrs.6

EDUA 5640 Inclusive Special Education: Early and Middle Years Cr.Hrs.3

EDUA 5650 Inclusive Special Education: High School and Transition to Adult Life Cr.Hrs.3

EDUA 5660 Organization and Delivery of Resource Program and Support Services Cr.Hrs.3

EDUA 5670 Strategies for Organizing Inclusive Classrooms and Schools Cr.Hrs.3

EDUA 5680 Promoting Responsible Behaviour in Educational Settings Cr.Hrs.3

EDUA 5690 Focus on Exceptionality: Gifted and Talented Cr.Hrs.3

EDUA 5770 Focus on Exceptionality: An Ecological Approach to FAS/E Cr.Hrs.3

Instructional Design and Evaluation

EDUA 5800 Introduction to Educational Research Cr.Hrs.3

EDUA 5810 Theory of Test Construction Cr.Hrs.3

Language Arts

EDUB 5330 Teaching Language and Literacy in the Content Areas Cr.Hrs.3

EDUB 5350 Current Issues in Language and Literacy Cr.Hrs.3

EDUB 5360 Children's Literature Cr.Hrs.3

EDUB 5370 Adolescent Literature Cr.Hrs.3

EDUB 5380 Theory and Practice in Written Composition Cr.Hrs.3
EDUB 5390 The Teaching of Written Composition Cr.Hrs.3
EDUB 5400 Diagnostic and Remedial Techniques in Language Arts Cr.Hrs.6.

Library Science

EDUB 5550 Library Reference and Informational Materials Cr.Hrs.6.

Mathematics

EDUB 5760 Recent Developments in Mathematics Education Cr.Hrs.3
EDUB 5770 Diagnosis and Remediation in Elementary School Mathematics Cr.Hrs.3

Readings in Curriculum

EDUB 5200 Readings in Curriculum, Teaching and Learning 1 Cr.Hrs.3
EDUB 5210 Readings in Curriculum, Teaching and Learning 2 Cr.Hrs.3
EDUB 5220 Recent Developments in Curriculum, Teaching and Learning 1 Cr.Hrs.3
EDUB 5230 Recent Developments in Curriculum, Teaching and Learning 2 Cr.Hrs.3
EDUB 5470 Recent Developments in Curriculum: Mathematics and Natural Sciences 1 Cr.Hrs.3
EDUB 5480 Recent Developments in Curriculum: Mathematics and Natural Sciences 2 Cr.Hrs.3

SECTION 7: ADDITIONAL INFORMATION

7.1 Information Updates

Scheduling changes to courses and practicum will be updated to Aurora Student. Students are expected to check their Week-At-A-Glance on Aurora Student to confirm location, time, and instructor changes. Cohort meetings and faculty events will be posted on the faculty website. Students are encouraged to regularly refer to the website.

7.2 Other Students

7.2.1 Continuing Students

See the Academic Calendar chapter, Admissions, Section 5: Other Admission Categories

7.2.2 Part-Time Students

Opportunities for part-time study are available in all After-Degree B.Ed. streams as well as the Integrated B.Mus./B.Ed. program. In addition to 4.1.16 and 4.3.3, the following should be noted:

- Students can begin part-time studies in the first year provided they successfully complete 3 credit hours of Education coursework from the Year 1 program requirements. Failure to do so will result in ineligibility to continue in program and require re-application and re-admission.
- Part-time students should note that not all Curriculum and Instruction courses are offered every year.

7.2.3 Special Students

The Faculty of Education does not admit students to this category.

7.2.4 Students enrolled in Other Faculties/Schools

Students currently enrolled in other faculties/schools at the University of Manitoba may take 1000-level Education courses. Students who hold a recognized degree from an accredited institution may also take 5000-level courses, however, students must obtain permission by completing the Registration Permission form available @ <http://umanitoba.ca/education/current/> or from the B.Ed. Student Services office, Education Building. 5000-level courses cannot be applied towards a B.Ed. degree or Integrated B.Mus./B.Ed. degrees.

7.2.5 Visiting Students

For admissions procedure, refer to Registration and Fees chapter of the Academic Calendar and contact the B.Ed. Student Services office, Faculty of Education at (204) 474-9004.

7.3 Program Days

The Faculty sponsors a number of lectures, workshops and forums. Attendance at program days is mandatory. Details will be posted on the "News and Events" of the faculty's website: <http://umanitoba.ca/education>.

7.4 Registration, Voluntary Withdrawal and Fee Refund Deadlines

Education courses may have unique start and end dates. Students are referred to Aurora Class Schedule to view voluntary withdrawal and fee refund dates.

Second Language Education

EDUB 5510 ESL Materials Development and Practicum Cr.Hrs.3
EDUB 5512 Teacher Development and Leadership in Second Language Education Cr.Hrs.3
EDUB 5520 Grammar in ESL Learning and Instruction Cr.Hrs.3
EDUB 5530 ESL and Content Instruction Cr.Hrs.3
EDUB 5540 Vocabulary and Pronunciation Instruction Cr.Hrs.3
EDUB 5580 Fundamentals of ESL (English Second Language) Instruction Cr.Hrs.3

Social Studies

EDUB 5600 The Teaching of Social Studies in the Early and Middle Years Cr.Hrs.3
EDUB 5660 Theoretical Foundations of Social Studies Cr.Hrs.3

Technical/Vocational

EDUB 5100 Developing Competency Skills in Enterprise Education 1 Cr.Hrs.3
EDUB 5110 Developing Competency Skills in Enterprise Education 2 Cr.Hrs.3
EDUB 5690 Seminar in Business Education Cr.Hrs.6

SECTION 8: COURSE DESCRIPTIONS

Department of Curriculum, Teaching and Learning Course Descriptions-1000 Level

EDUB 1020 Early Years Curriculum and Instruction in Music and Movement 1 Cr.Hrs. 1

(Formerly 132.102) An introductory, interdisciplinary study of Curriculum and Instruction in Early Years education (Kindergarten to Grade 4). Not to be held with the former 063.107. Corequisite: EDUB 1000 (or 132.100), EDUB 1010 (or 132.101), EDUB 1030 (or 132.103), EDUB 1040 (or 132.104), EDUB 1050 (or 132.105), EDUB 1060 (or 132.106), EDUB 1960 (or 132.196); pre- or corequisite: EDUA 1800 (or 129.180), EDUA 1810 (or 129.181), EDUB 1990 (or 132.199).

EDUB 1110 Introduction to Teaching Social Studies in the Middle Years Cr.Hrs. 1

(Formerly 132.111) A study of the fundamentals of social studies education in the Middle Years, with particular emphasis on the goals, curriculum approaches, content, and initial planning issues. Not to be held with the former 063.121. Corequisite: EDUB 1100 (or 132.110), EDUB 1120 (or 132.112), EDUB 1130 (or 132.113), EDUB 1140 (or 132.114), EDUB 1970 (or 132.197); pre- or corequisite: EDUA 1800 (or 129.180), EDUA 1810 (or 129.181), EDUA 2800 (or 129.280), EDUA 2810 (or 129.281), EDUB 1990 (or 132.199).

EDUB 1120 Teaching Drama in the Middle Years Cr.Hrs. 1

(Formerly 132.112) An overview of the teaching strategies appropriate to teaching drama in the Middle Years. Not to be held with the former 063.122. Corequisite: EDUB 1100 (or 132.110), EDUB 1110 (or 132.111), EDUB 1130 (or 132.113), EDUB 1140 (or 132.114), EDUB 1970 (or 132.197); pre- or corequisite: EDUA 1800 (or 129.180), EDUA 1810 (or 129.181), EDUA 2800 (or 129.280), EDUA 2810 (or 129.281), EDUB 1990 (or 132.199).

EDUB 1130 Introduction to Teaching Science in the Middle Years Cr.Hrs. 1

(Formerly 132.113) This course will explore Middle Years science curricular content and issues. It will also provide teaching and learning models and tools for structuring science knowledge and drawing relationships among theory, evidence, and values in Science. Not to be held with the former 081.120. Corequisite: EDUB 1100 (or 132.110), EDUB 1110 (or 132.111), EDUB 1120 (or 132.112), EDUB 1140 (or 132.114), EDUB 1970 (or 132.197); pre- or corequisite: EDUA 1800 (or 129.180), EDUA 1810 (or 129.181), EDUA 2800 (or 129.280), EDUA 2810 (or 129.281), EDUB 1990 (or 132.199).

EDUB 1500 Education in the Senior Years Cr.Hrs. 3

(Formerly 132.150) An examination of the assumptions about and goals of Senior Years education, the role of the Senior Years teacher, and the Senior Years curriculum in the schools. Corequisite: EDUB 1980 (or 132.198), curriculum and instruction for major and minor; pre- or corequisite: EDUA 1800 (or 129.180), EDUA 1810 (or 129.181), EDUB 1510 (or 132.151), EDUB 1990 (or 132.199)

EDUB 1520 Education in the Senior Years Integrated Programs 1 Cr.Hrs. 2

(Formerly 132.152) An examination of the assumptions about and goals of Senior Years education, the role of the Senior Years teacher, and the Senior Years curriculum in the schools. For students in the integrated B.Ed. programs. Not to be held with EDUB 1500 (or 132.150). Corequisite: EDUB 1940 (or 132.194).

EDUB 1530 Education in the Senior Years Integrated Programs 2 Cr.Hrs. 1

(Formerly 132.153) An examination of the assumptions about and goals of Senior Years education, the role of the Senior Years teacher, and the Senior Years curriculum in the schools. For students in the integrated B.Ed. programs. Not to be held with EDUB 1500 (or 132.150). Prerequisite: EDUB 1520 (or 132.152). Corequisite: EDUB 1950 (or 132.195).

EDUB 1600 Teaching General Music Cr.Hrs. 3

(Formerly 132.160) A study of teaching music in Early and Middle Years schools. For both classroom teachers and Music specialists, the course covers all traditional areas of music instruction as well as music's role across the curriculum.

EDUB 1602 Aboriginal Perspectives and the Curriculum Cr.Hrs. 3

The course will focus on fostering teacher candidate pedagogical knowledge, orientations and capabilities for developing and implementing curricula for kindergarten through to Grade 12 that reflect Aboriginal perspectives. May not be held with EDUB 1840 Recent Developments in CTL where the course section taken was "Integrating Aboriginal Perspectives into the Manitoba Curriculum."

EDUB 1606 Teaching ESL Foundational Literacy, Academics and Language (LAL) Students Cr.Hrs. 3

This course focuses on the theoretical and practical aspects of teaching foundational English Literacy, numeracy, academics, oral language and schooling routines to English language learners. Definitions, assessment, and instructional strategies will be examined with a view to meeting the diverse needs of EAL/bilingual literacy learners.

EDUB 1608 Assessment and Testing of EAL/ESL Learners Cr.Hrs. 3

Assessment and Testing of ESL/EAL Learners. This course will examine various methods in assessment and testing of English language learners, including formative, summative and alternative assessment strategies. Attention will be paid to the following areas: initial and ongoing needs assessment, evaluating without tests, evaluating with tests, and questioning the educative value of assessment and testing. Not to be held with EDUB 1840 where the course taken was "Assessment & Testing of ESL Learners".

EDUB 1610 CyberPedagogy: Technology Production in Education Cr.Hrs. 3

An examination of technologies in education focusing on the production, and creation of educational computer-based new media.

EDUB 1612 Adult ESL Curriculum and the Canadian Language Benchmarks Cr.Hrs. 3

This course will examine the Canadian Language Benchmarks and its use in Adult EAL programs. Attention will be paid to the following areas: format, features, and key principles of the CLB, communicative competence, language tasks and task-based instruction, thematic module planning, language assessment and evaluation.

EDUB 1614 K-8 Curriculum Studies Cr.Hrs. 3

A focused study of the philosophy, purposes and content of K-8 provincial curriculum documents; current learning theories, teaching approaches and instructional planning in both discipline-based and interdisciplinary contexts; and assessment and evaluation of student learning. Not to be held with EDUB 1840 where the course section taken was "General Curriculum."

EDUB 1620 Principles and Procedures of Second Language Teaching Cr.Hrs. 3

(Formerly 132.162) Examination of principles and demonstration of procedures for developing basic second language knowledge and skills in various contexts, e.g., ESL, EFL, AL, HL, IL.

EDUB 1640 Teaching ESL Vocabulary and Pronunciation Cr.Hrs. 3

(Formerly 132.164) Systematic and principled procedures for teaching English vocabulary, and for teaching comprehensible and acceptable English pronunciation (vowels, diphthongs, semi-vowels, consonants, stress, rhythm, and intonation).

EDUB 1650 Teaching ESL Grammar Cr.Hrs. 3

(Formerly 132.165) Examination of English sentence and discourse grammar, and demonstration of procedures of teaching grammar in communicative and academic contexts.

EDUB 1660 Computers in Second Language Teaching Cr.Hrs. 3

(Formerly 132.166) Concepts and methodology in computer assisted language learning (CALL), with emphasis on using the Internet.

EDUB 1820 Language and Content Instruction of ESL/Bilingual Students Cr.Hrs. 3

(Formerly 132.182) Principles and procedures of teaching ESL/bilingual students in subject-area classrooms, using content-based language instruction and language sensitive content instruction. Not to be held with the former 132.161 or 063.152 or 063.322.

EDUB 1840 Recent Developments in CTL 1 Cr.Hrs. 3

(Formerly 132.184) The study of selected topics in curriculum, teaching, and learning.

EDUB 1860 Practicum in Teaching English as a Second Language (TESL) Cr.Hrs. 3

(Formerly 132.186) Practical second language teaching experiences, including: observing recorded and live teaching, planning lessons and units, micro and live teaching, and reflective practice. This course is graded pass/fail. Not to be held with the former 132.163 or EDUB 5510. Pre- or corequisites: EDUB 1620 (or 132.162), EDUB 1640 (or 132.164), and EDUB 1650 (or 132.165).

EDUB 1940 Integrated Programs School Experience 1 Cr.Hrs. 3

(Formerly 132.194) For students in the Integrated Bachelor of Human Ecology/Bachelor of Education and Bachelor of Music/Bachelor of Education programs. Practical teaching experience in schools under the guidance and supervision of faculty members and collaborating teachers. This course is graded pass/fail. Prerequisite: EDUB 1200 (or 132.120) for Integrated B.Mus./B.Ed. and EDUB 1240 (or 132.124) for Integrated B.H.Ecol./B.Ed. Corequisite: EDUB 1520 (or 132.152).

EDUB 1950 Integrated Programs School Experience 2 Cr.Hrs. 3

(Formerly 132.195) For students in the Integrated Bachelor of Human Ecology/Bachelor of Education and Bachelor of Music/Bachelor of Education programs. A continuation of practical teaching experience in schools under the guidance and supervision of faculty members and collaborating teachers. This course is graded pass/fail. Prerequisite: EDUB 1940 (or 132.194); EDUB 2240 (or 132.224) for Integrated B.Mus./B.Ed. and EDUB 2290 (or 132.229) for Integrated B.H.Ecol./B.Ed. corequisite: EDUB 1530 (or 132.153).

EDUB 1960 Early Years School Experience 1 Cr.Hrs. 6

(Formerly 132.196) Practical teaching experience in Early Years schools under the guidance and supervision of faculty members and collaborating teachers. The practicum will be closely integrated with the study of curriculum and instruction at the Early Years level. This course is graded pass/fail. Not to be held with the former 063.190. Corequisite: EDUB 1000 (or 132.100), EDUB 1010 (or 132.101), EDUB 1020 (or 132.102), EDUB 1030 (or 132.103), EDUB 1040 (or 132.104), EDUB 1050 (or 132.105), EDUB 1060 (or 132.106); pre- or corequisite: EDUA 1800 (or 129.180), EDUA 1810 (or 129.181), EDUB 1990 (or 132.199).

EDUB 1970 Middle Years School Experience 1 Cr.Hrs. 3

(Formerly 132.197) Practical teaching experience in Middle Years schools under the guidance and supervision of faculty members and collaborating teachers. The practicum will be closely integrated with the study of curriculum and instruction at the Middle Years level. This course is graded pass/fail. Not to be held with the former 063.191. Corequisite: EDUB 1100 (or 132.110), EDUB 1110 (or 132.111), EDUB 1120 (or 132.112), EDUB 1130 (or 132.113), EDUB 1140 (or 132.114); pre- or corequisite: EDUA 1800 (or 129.180), EDUA 1810 (or 129.181), EDUA 2800 (or 129.280), EDUA 2810 (or 129.281), EDUB 1990 (or 132.199).

EDUB 1980 Senior Years School Experience 1 Cr.Hrs. 6

(Formerly 132.198) Practical teaching experience in the schools under the guidance and supervision of faculty members and collaborating teachers. The practicum will be closely integrated with the study of curriculum and instruction at the Senior Years level. This course is graded pass/fail. Corequisite: EDUB 1500 (or 132.150); Curriculum and Instruction courses for the major and minor; pre- or corequisite: EDUA 1800 (or 129.180), EDUA 1810 (or 129.181), EDUB 1510 (or 132.151), EDUB 1990 (or 132.199).

EDUB 1990 Teacher and Technology Cr.Hrs. 3

(Formerly 132.199) An introduction to educational and information technology in the classroom. Focus will be on the utilization of technology, the development of information skills for teachers and critical analyses of the potential of educational technology. Not to be held with the former 081.182 or 081.218.

Department of Curriculum, Teaching and Learning Course Descriptions-2000 Level

EDUB 2000 Early Years Philosophy and Practice 2 Cr.Hrs. 1

(Formerly 132.200) An advanced interdisciplinary study and application of curriculum, instructional approaches and techniques relevant to Early Years education (Kindergarten to Grade 4). Prerequisite: successful completion of year one; corequisite: EDUB 2010 (or 132.201), EDUB 2020 (or 132.202), EDUB 2030 (or 132.203), EDUB 2040 (or 132.204), EDUB 2050 (or 132.205), EDUB 2060 (or 132.206), EDUB 2070 (or 132.207), EDUB 2080 (or 132.208), EDUB 2960 (or 132.296); pre- or corequisite: EDUA 2800 (or 129.280), EDUA 2810 (or 129.281).

EDUB 2010 Early Years Curriculum and Instruction in Language and Literacy 2 Cr.Hrs. 3

(Formerly 132.201) An advanced interdisciplinary study and application of curriculum, instructional approaches and techniques relevant to Early Years education (Kindergarten to Grade 4). Prerequisite: successful completion of year one; corequisite: EDUB 2000 (or 132.200), EDUB 2020 (or 132.202), EDUB 2030 (or 132.203), EDUB 2040 (or 132.204), EDUB 2050 (or 132.205), EDUB 2060 (or 132.206), EDUB 2070 (or 132.207), EDUB 2080 (or 132.208), EDUB 2960 (or 132.296); pre- or corequisite: EDUA 2800 (or 129.280), EDUA 2810 (or 129.281)

EDUB 2020 Early Years Curriculum and Instruction in Music and Movement 2 Cr.Hrs. 2

(Formerly 132.202) An advanced interdisciplinary study and application of curriculum, instructional approaches and techniques relevant to Early Years education (Kindergarten to Grade 4). Prerequisite: successful completion of year one; corequisite: EDUB 2000 (or 132.200), EDUB 2010 (or 132.201), EDUB 2030 (or 132.203), EDUB 2040 (or 132.204), EDUB 2050 (or 132.205), EDUB 2060 (or 132.206), EDUB 2070 (or 132.207), EDUB 2080 (or 132.208), EDUB 2960 (or 132.296); pre- or corequisite: EDUA 2800 (or 129.280), EDUA 2810 (or 129.281).

EDUB 2030 Early Years Curriculum and Instruction in Art and Drama 2 Cr.Hrs. 1

(Formerly 132.203) An advanced interdisciplinary study and application of curriculum, instructional approaches and techniques relevant to Early Years education (Kindergarten to Grade 4). Prerequisite: successful completion of year one; corequisite: EDUB 2000 (or 132.200), EDUB 2010 (or 132.201), EDUB 2020 (or 132.202), EDUB 2040 (or 132.204), EDUB 2050 (or 132.205), EDUB 2060 (or 132.206), EDUB 2070 (or 132.207), EDUB 2080 (or 132.208), EDUB 2960 (or 132.296); pre- or corequisite: EDUA 2800 (or 129.280), EDUA 2810 (or 129.281).

EDUB 2040 Early Years Curriculum and Instruction in Social Studies 2 Cr.Hrs. 2

(Formerly 132.204) An advanced interdisciplinary study and application of curriculum, instructional approaches and techniques relevant to Early Years education (Kindergarten to Grade 4). Prerequisite: successful completion of year one; corequisite: EDUB 2000 (or 132.200), EDUB 2010 (or 132.201), EDUB 2020 (or 132.202), EDUB 2030 (or 132.203), EDUB 2050 (or 132.205), EDUB 2060 (or 132.206), EDUB 2070 (or 132.207), EDUB 2080 (or 132.208), EDUB 2960 (or 132.296); pre- or corequisite: EDUA 2800 (or 129.280), EDUA 2810 (or 129.281).

EDUB 2050 Early Years Curriculum and Instruction in Mathematics 2 Cr.Hrs. 2

(Formerly 132.205) An advanced interdisciplinary study and application of curriculum, instructional approaches and techniques relevant to Early Years education (Kindergarten to Grade 4). Prerequisite: successful completion of year one; corequisite: EDUB 2000 (or 132.200), EDUB 2010 (or 132.201), EDUB 2020 (or 132.202), EDUB 2030 (or 132.203), EDUB 2040 (or 132.204), EDUB 2060 (or 132.206), EDUB 2070 (or 132.207), EDUB 2080 (or 132.208), EDUB 2960 (or 132.296); pre- or corequisite: EDUA 2800 (or 129.280), EDUA 2810 (or 129.281).

EDUB 2060 Early Years Curriculum and Instruction in Science and Health 2 Cr.Hrs. 2

(Formerly 132.206) An advanced interdisciplinary study and application of curriculum, instructional approaches and techniques relevant to Early Years education (Kindergarten to Grade 4). Prerequisite: successful completion of year one; corequisite: EDUB 2000 (or 132.200), EDUB 2010 (or 132.201), EDUB 2020 (or 132.202), EDUB 2030 (or 132.203), EDUB 2040 (or 132.204), EDUB 2050 (or 132.205), EDUB 2070 (or 132.207), EDUB 2080 (or 132.208), EDUB 2960 (or 132.296); pre- or corequisite: EDUA 2800 (or 129.280), EDUA 2810 (or 129.281).

EDUB 2070 Early Years Curriculum and Instruction Children's Literature Cr.Hrs. 1

(Formerly 132.207) An advanced interdisciplinary study and application of curriculum, instructional approaches and techniques relevant to Early Years education (Kindergarten to Grade 4). Prerequisite: successful completion of year one; corequisite: EDUB 2000 (or 132.200), EDUB 2010 (or 132.201), EDUB 2020 (or 132.202), EDUB 2030 (or 132.203), EDUB 2040 (or 132.204), EDUB 2050 (or 132.205), EDUB 2060 (or 132.206), EDUB 2080 (or 132.208), EDUB 2960 (or 132.296), pre- or corequisite: EDUA 2800 (or 129.280), EDUA 2810 (or 129.281).

EDUB 2080 Early Years Multi-Language Development Cr.Hrs. 1

(Formerly 132.208) An advanced interdisciplinary study and application of curriculum, instructional approaches and techniques relevant to Early Years education (Kindergarten to Grade 4). Prerequisite: successful completion of year one; corequisite: EDUB 2000 (or 132.200), EDUB 2010 (or 132.201), EDUB 2020 (or 132.202), EDUB 2030 (or 132.203), EDUB 2040 (or 132.204), EDUB 2050 (or 132.205), EDUB 2060 (or 132.206), EDUB 2070 (or 132.207), EDUB 2960 (or 132.296); pre- or corequisite: EDUA 2800 (or 129.280), EDUA 2810 (or 129.281).

EDUB 2100 Teaching Language Arts in the Middle Years Cr.Hrs. 3

(Formerly 132.210) A study of curriculum, instructional approaches, and techniques relevant to language and literacy at the Middle Years level, with emphasis on writing instruction, the teaching of literature, and writing across the curriculum. Prerequisite: successful completion of year one; corequisite: EDUB 2110 (or 132.211), EDUB 2120 (or 132.212), EDUB 2130 (or 132.213), EDUB 2140 (or 132.214), EDUB 2150 (or 132.215), EDUB 2400 (or 132.240), EDUB 2970 (or 132.297).

EDUB 2110 Teaching Social Studies in the Middle Years Cr.Hrs. 3

(Formerly 132.211) A study of curriculum and instruction in Middle Years social studies education, with particular emphasis on its theories, developments, instructional approaches, evaluation, and contemporary issues. Prerequisite: successful completion of year one; corequisite: EDUB 2100 (or 132.210), EDUB 2120 (or 132.212), EDUB 2130 (or 132.213), EDUB 2140 (or 132.214), EDUB 2150 (or 132.215), EDUB 2400 (or 132.240), EDUB 2970 (or 132.297).

EDUB 2120 Teaching Art in the Middle Years Cr.Hrs. 2

(Formerly 132.212) An overview of art processes and teaching strategies appropriate for Middle Years students, with an emphasis on general visual awareness, art appreciation and art production. Prerequisite: successful completion of year one; corequisite: EDUB 2100 (or 132.210), EDUB 2110 (or 132.211), EDUB 2130 (or 132.213), EDUB 2140 (or 132.214), EDUB 2150 (or 132.215), EDUB 2400 (or 132.240), EDUB 2970 (or 132.297).

EDUB 2130 Teaching Science in the Middle Years Cr.Hrs. 3

(Formerly 132.213) This course will examine learning in Middle Years science from multi-perspectives. Contemporary teaching and learning models will be assessed. Unit and lesson plans will be developed using multi-voices in science. Prerequisite: successful completion of year one; corequisite: EDUB 2100 (or 132.210), EDUB 2110 (or 132.211), EDUB 2120 (or 132.212), EDUB 2140 (or 132.214), EDUB 2150 (or 132.215), EDUB 2400 (or 132.240), EDUB 2970 (or 132.297).

EDUB 2140 Teaching Mathematics in the Middle Years Cr.Hrs. 3

(Formerly 132.214) A study of instructional approaches needed to teach mathematics at the Middle Years level. Prerequisite: successful completion of year one; corequisite: EDUB 2100 (or 132.210), EDUB 2110 (or 132.211), EDUB 2120 (or 132.212), EDUB 2130 (or 132.213), EDUB 2150 (or 132.215), EDUB 2400 (or 132.240), EDUB 2970 (or 132.297).

EDUB 2150 Teaching Physical Education in the Middle Years Cr.Hrs. 2

(Formerly 132.215) This course introduces students to the rationale for, and methods of, teaching of health and physical education in the Middle Years grades. Prerequisite: successful completion of year one; corequisite: EDUB 2100 (or 132.210), EDUB 2110 (or 132.211), EDUB 2120 (or 132.212), EDUB 2130 (or 132.213), EDUB 2140 (or 132.214), EDUB 2400 (or 132.240), EDUB 2970 (or 132.297).

EDUB 2160 Teaching Music in Early/Middle Years Cr.Hrs. 3

(Formerly 132.216) The specialized study and application of curriculum, instructional approaches and techniques relevant to music education at the early and middle years levels (K-8). This course is intended for music specialists (music majors/minors, or with permission or instructor). Prerequisite: EDUB 1200 (or 132.120) and EDUB 1940 (or 132.194) or permission of instructor.

EDUB 2400 Teaching in the Middle Years Cr.Hrs. 2

(Formerly 132.240) Examines the assumptions underlying the goals of Middle Years education. Topics include unit and lesson planning, special topics in adolescent development, classroom management, student evaluation, and integrating curriculum. Prerequisite: successful completion of year one; corequisite: EDUB 2970 (or 132.297), EDUB 2100 (or 132.210), EDUB 2110 (or 132.211), EDUB 2120 (or 132.212), EDUB 2130 (or 132.213), EDUB 2140 (or 132.214), EDUB 2150 (or 132.215).

EDUB 2500 Themes in Senior Years Education Cr.Hrs. 3

(Formerly 132.250) Examination of selected themes or issues relevant to Senior Years education, and the development of the beginning teacher's personal professional identity. Course activities will be coordinated with in-school experiences and will vary from year to year. Senior Years: Prerequisite: successful completion of year one; corequisite: EDUB 2980 (or 132.298), six credit hours year 2 Curriculum and Instruction courses specific to major and minor. Integrated B.Mus./B.Ed. and B.H.Ecol./B.Ed.: Prerequisite: successful completion of years 1-4.

EDUB 2960 Early Years School Experience 2 Cr.Hrs. 6

(Formerly 132.296) A continuation of practical teaching experience in Early Years schools under the guidance and supervision of faculty members and collaborating teachers. The practicum will be closely integrated with the study of curriculum and instruction at the Early Years level. This course is graded pass/fail. Prerequisite: successful completion of year one; corequisite: EDUB 2000 (or 132.200), EDUB 2010 (or 132.201), EDUB 2020 (or 132.202), EDUB 2030 (or 132.203), EDUB 2040 (or 132.204), EDUB 2050 (or 132.205), EDUB 2060 (or 132.206), EDUB 2070 (or 132.207), EDUB 2080 (or 132.208); pre- or corequisite: EDUA 2800 (or 129.280), EDUA 2810 (or 129.281).

EDUB 2970 Middle Years School Experience 2 Cr.Hrs. 9

(Formerly 132.297) A continuation of practical teaching experience in Middle Years schools under the guidance and supervision of faculty members and collaborating teachers. The practicum will be closely integrated with the study of curriculum and instruction at the Middle Years level. This course is graded pass/fail. Prerequisite: successful completion of year one; corequisite: EDUB 2100 (or 132.210), EDUB 2110 (or 132.211), EDUB 2120 (or 132.212), EDUB 2130 (or 132.213), EDUB 2140 (or 132.214), EDUB 2150 (or 132.215), and EDUB 2400 (or 132.240).

EDUB 2980 Senior Years School Experience 2 Cr.Hrs. 6

(Formerly 132.298) A continuation of practical teaching experience under the guidance and supervision of faculty members and collaborating teachers. The practicum will be closely integrated with the study of curriculum and instruction at the Senior Years level. This course is graded pass/fail. Senior Years: prerequisite: successful completion of year one; corequisite: EDUB 2500 (or 132.250) and six credit hours year two curriculum and instruction courses specific to major and minor; pre- or corequisite: EDUA 2800 (or 129.280), EDUA 2810 (or 129.281), EDUB 2510 (or 132.251); Integrated B.Mus./B.Ed. and B.H.Ecol./B.Ed.: prerequisite: successful completion of years one to four inclusive; corequisite: EDUA 1800 (or 129.180), EDUA 1810 (or 129.181), EDUA 2800 (or 129.280), EDUA 2810 (or 129.281), EDUB 2500 (or 132.250) (Early/Middle Years Music specialization take an Education complementary course), EDUB 2510 (or 132.251), (Early/Middle Years Music specialization take an Education complementary course); pre- or corequisite: EDUB 1990 (or 132.199).

Department of Curriculum, Teaching and Learning Course Descriptions-3000 Level

EDUB 3310 Early Years: Practicum 1 Cr.Hrs. 3

Practical teaching experience for Early Years in a Manitoba school with the guidance and under the supervision of a faculty advisor and cooperating teacher(s). This is a pass/fail course. May not be held with EDUB 1960. Pre- or corequisites: [3 credit hours from EDUA 3400, EDUB 3402, EDUB 3018] and [3 credit hours from EDUB 3010, EDUB 3012].

EDUB 3312 Early Years: Practicum 2 Cr.Hrs. 3

Practical teaching experience for Early Years in a Manitoba school with the guidance and under the supervision of a faculty advisor and cooperating teacher(s). This is a pass/fail course. May not be held with EDUB 1960. Prerequisite: EDUB 3310. Pre- or Corequisites: [EDUA 3400 or EDUB 3402] and EDUB 3010, EDUB 3012, EDUB 3018.

EDUB 3320 Middle Years: Practicum 1 Cr.Hrs. 3

Practical teaching experience for Middle Years in a Manitoba school with the guidance and under the supervision of a faculty advisor and cooperating teacher(s). This is a pass/fail course. May not be held with EDUB 1970. Pre- or corequisites: [3 credit hours from: EDUA 3400, EDUB 3402] or [3 credit hours from: EDUB 1620, EDUB 1820, EDUA 3420, EDUB 3426] and EDUB 3050.

EDUB 3402 Aboriginal Perspectives and the Curriculum Cr.Hrs. 3

The course will focus on fostering teacher candidate pedagogical knowledge, orientations and capabilities for developing and implementing curricula for kindergarten through to Grade 12 that reflect Aboriginal perspectives. May not be held with EDUB 1602 or EDUB 1840 when titled "Integrating Aboriginal Perspectives into the Manitoba Curriculum."

EDUB 3322 Middle Years: Practicum 2 Cr.Hrs. 3

Practical teaching experience for Middle Years in a Manitoba school with the guidance and under the supervision of a faculty advisor and cooperating teacher(s). This is a pass/fail course. May not be held with EDUB 1970. Prerequisite: EDUB 3320. Pre- or corequisites: [EDUA 3400 or EDUB 3402] and [3 credit hours from: EDUA 3420, EDUB 1620, EDUB 1820, EDUB 3426] and EDUB 3052.

EDUB 3010 Classroom Community & Early Years Literacy Cr.Hrs. 3

This course is designed to provide an introductory study of English language and literacy in Early Years education and how it relates to development of classroom communities. May not be held with EDUB 1010.

EDUB 3012 Early Years Mathematics and Quantitative Reasoning for All Learners Cr.Hrs. 3

This course addresses mathematical sense making, quantitative reasoning, and practical instructional approaches in the context of the Manitoba Early Years mathematics curriculum towards a developing mathematics teacher identity. May not be held with EDUB 1000 or EDUB 1050.

EDUB 3014 Early Years Science and Social Studies: Pedagogy and Curriculum Cr.Hrs. 3

Instructional approaches to helping young children construct knowledge about the natural world and the human society they inhabit. Attention is given to planning for learning in science and in social studies represented by current research, and provincial outcomes documents. May not be held with EDUB 1040 or EDUB 1060.

EDUB 3016 Creative Collaboration in the Arts Cr.Hrs. 3

An exploration of art, drama, and music. An emphasis will be placed on the value of play in early childhood development, the creative process, aesthetics, constructivism and the emergent curriculum. May not be held with EDUB 1030 or EDUB 2030.

EDUB 3018 Multi-Language Development in Early Years Cr.Hrs. 3

This course examines English as an Additional Language (EAL) development related to early years education. Issues to be addressed include: trends in EAL education, orienting newcomer students and parents to the school context, EAL-inclusive lesson/ unit planning, the new EAL curriculum, cooperative learning, and other related issues.

EDUB 3050 Middle Years Learners & Learning Cr.Hrs. 3

This course will explore the theoretical concepts of learning and development, both for Middle Years students and teachers as adult professional learners. This is a professional inquiry into practice and learning to observe students to assess their social and emotional, cognitive, and physical development, and how this information impacts learning and classroom dynamics. May not be held with EDUA 1800.

EDUB 3052 Middle Years: Teaching for Learning - Developing a Responsive Pedagogy Cr.Hrs. 3

This course focuses on effective teaching across curriculum areas with emphasis on classroombased assessment to develop a learner-responsive pedagogy. Strategies for integrating educational technologies into teaching and assessing for learning will be addressed. May not be held with EDUB 2100. Prerequisite EDUB 3050.

EDUB 3054 Introduction to Teaching Mathematics in Middle Years 1 Cr.Hrs. 3

This course introduces Middle Years teacher candidates to pedagogically appropriate teaching in Mathematics. May not be held with EDUB 1140.

EDUB 3056 Teaching English Language Arts in Middle Years Cr.Hrs. 3

A study of curriculum, theories, and instructional approaches and techniques relevant to teaching English Language Arts in the Middle Years. This course will include a focus on teacher candidates' literacy practices and the processes of Middle Year students' literacy learning. May not be held with EDUB 1100.

EDUB 3100 Senior Years: Principles and Processes for Teaching Cr.Hrs. 3

A general curriculum and instruction course designed to illuminate the connections between theory and practice and offers a practical approach to planning, teaching, and learning regardless of subject area specialty. Teacher candidates will critically consider the qualities of an effective Senior Years learning environment and recognize the elements at work. May not be held with EDUB 1510.

EDUB 3102 Senior Years: Languages & Literacy Across the Curriculum Cr.Hrs. 3

A deeper examination of the relationship between language, literacy and learning through an interdisciplinary approach, including how to understand language and literacy as a part of multiple sociocultural practices that are interconnected within various identities and contexts. May not be held with EDUB 2510.

EDUB 3110 Senior Years Curriculum & Instruction: The Arts Cr.Hrs. 3

A curriculum and instruction course for the clustered subject areas of Arts: Visual Arts, Dance, Drama and Music with opportunities to examine the pedagogical possibilities of their particular art form. The course will explore foundational principles for the study of curriculum, instructional strategies, and assessment in the Arts. May not be held with EDUB 1200. Pre- or Corequisite: EDUB 3100.

EDUB 3120 Senior Years Curriculum & Instruction: Languages Cr.Hrs. 3

A curriculum and instruction course for the cluster subject areas for languages. This course provides an introduction to the study of curriculum, instructional strategies and assessment in teaching languages and how to make connections between research, theory, and practice in the teaching/learning of languages in the Manitoba context. May not be held with EDUB 1210, EDUB 1280, EDUB 1350. Pre- or Corequisite: EDUB 3100.

EDUB 3130 Senior Years Curriculum & Instruction: Social Sciences Cr.Hrs. 3

A curriculum and instruction course for the cluster of subject areas for the Social Sciences: History, Geography, Native Studies. This course provides the foundational principles for the study of curriculum, instructional strategies and assessment in the Social Sciences. May not be held with EDUB 1230. Pre- or Corequisite: EDUB 3100.

EDUB 3140 Senior Years Curriculum & Instruction: Sciences Cr.Hrs. 3

A curriculum and instruction course for the cluster of subject areas for the Natural Sciences includes: General Science, Biology, Chemistry, Physics, Mathematics, Human Ecology, Physical Education/Health Education, and Computer Science. This course provides teacher candidates with the foundational principles for the study of curriculum, instructional strategies and assessment in the Natural Sciences. May not be held with EDUB 1240, EDUB 1250, EDUB 1260, EDUB 1270. Pre- or Corequisite: EDUB 3100.

EDUB 3330 Senior Years: Practicum 1 Cr.Hrs. 3

Practical teaching experience for Senior Years in a Manitoba school with the guidance and under supervision of a faculty advisor and cooperating teacher(s). This is a pass/fail course. May not be held with EDUB 1980. Pre- or corequisites: EDUB 3100 and [3 credit hours from: EDUA 3400, EDUB 3402] or [3 credit hours from: EDUB 1620, EDUB 1820, EDUA 3420, EDUB 3426] and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

EDUB 3332 Senior Years: Practicum 2 Cr.Hrs. 3

Practical teaching experience for Senior Years in a Manitoba school with the guidance and under the supervision of a faculty advisor and cooperating teacher(s). This is a pass/fail course. May not be held with EDUB 1980. Prerequisite: EDUB 3330. Pre- or corequisites: [3 credit hours from: EDUA 3400, EDUB 3402] and [3 credit hours from: EDUB 1620, EDUB 1820, EDUA 3420, EDUB 3426].

EDUB 3426 La pédagogie du français de base aux niveaux intermédiaire et de la jeune enfance Cr.Hrs. 3

Ce cours sert d'introduction aux principes et aux pratiques de base dans le domaine de l'enseignement et de l'apprentissage du Français comme langue seconde (FL2) ou additionnelle. Les participants au cours examineront les principes fondamentaux et la mise en pratique de l'enseignement et de l'apprentissage du français en tant que langue seconde ou additionnelle. L'accent est mis sur les pratiques pédagogiques de l'approche communicative expérientielle, telle qu'approuvée par le Ministre d'éducation du Manitoba. Puisque ce cours forme partie de la liste de cours répondant au 'Diversity Requirement' de Ministère de l'éducation, une philosophie d'ouverture et d'inclusion de la diversité sous-tendent l'essentiel de ce cours. May not be held with EDUB 1830. Prerequisite: 18 credit hours of French or permission of instructor.

EDUB 3502 Recent Developments in Curriculum, Teaching and Learning 1 Cr.Hrs. 3

The study of emerging topics in curriculum, teaching, and learning not studied in regular program courses.

EDUB 3504 Academic and Professional English for Multilingual Teachers Cr.Hrs. 3

This course provides English language development for multilingual teachers of English as a second/additional language and other subject areas. The focus is on teacher, classroom, and professional English that can be applied in various contexts. May not be held with EDUB 1604.

EDUB 3512 Literature for Adolescents Cr.Hrs. 3

A survey of the literature available for adolescents. The course includes reading and discussion of the literature, and consideration of techniques for encouraging extensive reading. May not be held with EDUB 1710.

EDUB 3514 Literature for Children Cr.Hrs. 3

A survey of the literature available for children. The course includes reading and a discussion of the literature, and consideration of techniques for encouraging extensive reading. May not be held with EDUB 1720.

EDUB 3516 Art Across the Curriculum Cr.Hrs. 3

This course will emphasize the importance of visual learning and its potential for teaching in the various curriculum areas at all levels. Opportunities for studio work, discussion and planning will be provided. May not be held with EDUB 1730.

EDUB 3518 Drama Across the Curriculum Cr.Hrs. 3

For all students, specialist and non-specialist, who wish to develop a greater understanding and practice of drama in the classroom across the curriculum. May not be held with EDUB 1740.

EDUB 3520 Historical Development of Physical Science up to the 20th Century Cr.Hrs. 3

The major ideas and discoveries in science of the Ionians and the Greeks, the scientific revolution of the 16th and 17th centuries, and the 'modern' period of science, up to the 20th century will be explored with an emphasis on science education and scientific literacy. May not be held with EDUB 1760, PHYS 2700.

EDUB 3522 Recent Developments in Learning and Teaching Senior Years Mathematics Cr.Hrs. 3

The study of selected topics in mathematics in Senior Years. May not be held with EDUB 1800.

EDUB 3524 Practical Work in School Science Cr.Hrs. 3

This course, which is appropriate for early, middle and senior teacher candidates, will critically examine the role of practical work in the teaching and learning of school science. Topics will include: demonstrations, experiments, investigations, field experiences, simulations, data collection and interpretation, new educational technologies, assessment and laboratory safety. May not be held with EDUB 1870.

EDUB 3526 Integration of Technological Literacy Across the K-12 Curriculum Cr.Hrs. 3

Training teachers to analyze and teach about technological principles within the content area, and to develop specific teaching and learning interventions to infuse technological literacy across content areas. May not be held with EDUB 1780.

EDUB 3528 Media Literacy Cr.Hrs. 3

The role of media in society, designed to assist educators in all disciplines and levels to develop an informed and critical understanding of the mass media and its impact on teaching and learning. May not be held with EDUB 1680.

EDUB 3530 Beyond Schools: Experiencing Teaching and Learning in Community Settings Cr.Hrs. 3

This course provides a community-based field experience. Students will attend a weekly seminar and spend 20 hours a week for six weeks at a host site. The focus of the course is to consider, challenge, and broaden understandings of education, curriculum, and pedagogy within the context of social justice. Site examples: arts programs, nature reserves, youth programs. This is a pass/fail course. May not be held with EDUB 1840 when titled "Beyond Classrooms: Teaching and Learning in Community-Based Settings". Prerequisites: 3 credit hours from: EDUB 3312, EDUB 3322, EDUB 3332.

EDUB 3532 Basic Experiences in Movement and Dance Education Cr.Hrs. 3

A study of teaching movements/ dance education in Early (K-4) and Middle Years (5-8) schools. For both classroom teachers and physical education specialists, the course covers all traditional areas of movement instruction as well as movements' role across the curriculum. May not be held with EDUB 1750.

Department of Curriculum, Teaching and Learning Course Descriptions-4000 Level

EDUB 4110 Senior Years: Teaching Art Cr.Hrs. 3

The development of skills for planning, teaching, and assessing visual art in a Senior Years setting. May not be held with EDUB 2200. Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

EDUB 4112 Senior Years: Teaching Music Cr.Hrs. 3

An advanced study of curriculum, and instructional approaches and techniques relevant to the teaching of music in Senior Years. May not be held with EDUB 2240. Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

EDUB 4114 Senior Years: Teaching Drama & Theatre Cr.Hrs. 3

An examination of the issues of arts, pedagogy, creative process and program development. May not be held with EDUB 2250. Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

EDUB 4120 Senior Years: Teaching English Language Arts Cr.Hrs. 3

An in-depth study of the curriculum and pedagogy relevant to inquiries into curriculum and pedagogy relevant to teaching English Language Arts in diverse, 21st century classrooms. May not be held with EDUB 2210. Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

EDUB 4122 Senior Years: Teaching French Cr.Hrs. 3

A course that will focus on theory and practices as well as strategies in teaching French as a Secondary Language. Students will address issues and challenges faced in FSL literacy and spend time focusing on inclusion in the FSL classroom and benefits of allophone students in the FSL classroom. May not be held with EDUB 2340. Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

EDUB 4130 Senior Years: Teaching Geography Cr.Hrs. 3

Designed to prepare students to become teachers of Geography using the Manitoba Senior Years Social Sciences curriculum. May not be held with EDUB 2220. Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

EDUB 4132 Senior Years: Teaching History Cr.Hrs. 3

Designed to prepare students to become teachers of history with expertise to help students acquire historical knowledge, historical thinking, and attain the enduring understanding (topics) listed in the Manitoba Curriculum documents for history/ social studies. May not be held with EDUB 2230. Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

EDUB 4134 Senior Years: Teaching Native Studies Cr.Hrs. 3

An examination of the curricular and pedagogical issues relating to the teaching of Native Studies in Senior Years. Includes the study of trends and current issues relevant to the Canadian indigenous experience. Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

EDUB 4140 Senior Years: Teaching Biology Cr.Hrs. 3

An exploration of the Manitoba Science Curriculum Framework for Biology in grades 11 and 12, focusing particularly on the foundational principles underlying the learning and teaching of science in these documents, as well as the key scientific concepts in each unit of the curriculum. Following contemporary approaches to teaching and learning, particularly conceptual change and socio-scientific issues (SSI), readings and discussions will focus on content-specific issues related to teaching and learning biology at the senior level. May not be held with EDUB 2260. Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

EDUB 4146 Senior Years: Teaching General Science Cr.Hrs. 3

An overview of the theory and practice of teaching General Science in the context of the Manitoba Curriculum Framework at the Grade 9- 10 level. General principles of science and education, conceptual development, cognitive and learning theories, and scientific literacy, are presented and discussed. Emphasis is placed on using conceptual development models to help science teachers present concepts and topics. May not be held with EDUB 2280. Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

EDUB 4148 Senior Years: Teaching Human Ecology Cr.Hrs. 3

A study of the planning and teaching of home economics. Emphasis will be placed on the new research on teaching, learning, assessment, principles of educational change, ICT, inclusivity, current brain research and how it affects learning, differentiated instruction, and multiple intelligences. May not be held with EDUB 2290. Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

EDUB 4150 Senior Years: Teaching Mathematics Cr.Hrs. 3

A study of the curriculum and instructional approaches to teaching mathematics, including how mathematics is learned, how to structure learning opportunities for students, and developing and expressing, pedagogically sound approaches to teaching mathematics courses in secondary schools. May not be held with EDUB 2300. Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

EDUB 4152 Senior Years: Teaching Physical Education/Health Education Cr.Hrs. 3

A course designed to prepare teacher candidates to work with students in ways that enable and encourage them to develop the commitment and capacity to lead an active healthy lifestyle. The course will also develop and enhance students' life skills to promote physical and health literacy, and health related behaviours. May not be held with EDUB 2310. Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

EDUB 4154 Senior Years: Teaching Physics Cr.Hrs. 3

An exploration of the Manitoba Science Curriculum Framework for Physics in grades 11 and 12, focusing particularly on the foundational principles underlying the learning and teaching of physics. May not be held with EDUB 2320. Prerequisites: EDUB 3100 and [3 credit hours from: EDUB 3110, EDUB 3120, EDUB 3130, EDUB 3140].

EDUB 4502 Recent Developments in Curriculum, Teaching and Learning 2 Cr.Hrs. 3

The study of emerging topics in curriculum, teaching and learning not studied in regular program courses.

Department of Curriculum, Teaching and Learning Course Descriptions-5000 Level**EDUB 5012 Video Art, Culture, and Education Cr.Hrs. 3**

This course will focus on fostering students pedagogical, historical, theoretical, and sociological knowledge, as well as creative video skills. Students will learn about developing and implementing video across the curricula from grade 1 to grade 12 in order to incorporate video making and current viewing practices into classrooms. May not be held for credit with EDUB 1840 or EDUB 5220 where the title is 'Video Art, Culture, and Education.'

EDUB 5040 Theory and Practice of Teaching Art (Elementary) Cr.Hrs. 6

(Formerly 132.504) The theory and practice of teaching Art in the Elementary School will be examined through an inquiry into both the development of the child through his/her art expression and related curricular experiences. Not to be held with the former 063.518.

EDUB 5060 Theory and Practice of Teaching Art in the Senior Years 1 Cr.Hrs. 3

(Formerly 132.506) An overview of major aspects of Art Education in the context of Senior Years 1 curriculum through a study of current theory, a variety of studio areas and related aesthetic concepts. Not to be held with the former 063.546.

EDUB 5100 Developing Competency Skills in Enterprise Education 1 Cr.Hrs. 3

(Formerly 132.510) Promotes the development and integration of skills of creativity, innovation, self-reliance and responsibility in students, within the framework of an enterprise education/entrepreneurship paradigm. Participants develop teaching strategies and materials and learn to integrate these skills into current educational practices. Corequisite: EDUB 5110 (132.511).

EDUB 5110 Developing Competency Skills in Enterprise Education 2 Cr.Hrs. 3

(Formerly 132.511) This course continues the promotion and application of student competency skills, within the framework of an enterprise education/entrepreneurship paradigm. Participants plan and organize a school, community or business venture, develop plans for the promotion and marketing of the product or service, arrange financial support, and make a presentation of their venture plan to a panel of evaluators. Corequisite: EDUB 5100 (132.510).

EDUB 5120 Music in the Early Years/Middle Years School 1 Cr.Hrs. 3

(Formerly 132.512) A course to assist classroom teachers plan for music making activities based on knowledge and proficiency in the use of Orff instruments and recorder. Not to be held with the former 063.552.

EDUB 5130 Music in the Early Years/Middle Years School 2 Cr.Hrs. 3

(Formerly 132.513) A course to assist classroom teachers plan for music making activities based on knowledge and proficiency in the use of a wide range of string instruments (guitar, baritone ukulele, dulcimer, etc). Not to be held with the former 063.553.

EDUB 5140 Special Methods in Music 1 Cr.Hrs. 3

(Formerly 132.514) An advanced study of the Orff method as it applies to Early and Middle Years schools with emphasis on ensemble performance. The course is designed for the music specialist. Not to be held with the former 063.554.

EDUB 5150 Special Methods in Music 2 Cr.Hrs. 3

(Formerly 132.515) An advanced study of the Kodaly method as it applies to Early and Middle Years schools with emphasis on the contributions of the method to fine choral performance. The course is designed for the music specialist. Not to be held with the former 063.555.

EDUB 5160 School Band Cr.Hrs. 3

(Formerly 132.516) An advanced study of the methods for initiating and continuing a band in Middle and Senior Years schools with emphasis on the contributions of a band program to Middle Years education. Not to be held with the former 063.556.

EDUB 5190 School Music Productions Cr.Hrs. 3

(Formerly 132.519) A study of the principles and procedures for presenting school music productions. Not to be held with the former 063.559.

EDUB 5200 Readings in Curriculum, Teaching and Learning 1 Cr.Hrs. 3

(Formerly 132.520) Readings and research in special areas of curricular study related to curriculum, teaching and learning.

EDUB 5210 Readings in Curriculum, Teaching and Learning 2 Cr.Hrs. 3

(Formerly 132.521) Readings and research in special areas of curricular study related to curriculum, teaching and learning.

EDUB 5220 Recent Developments in Curriculum, Teaching and Learning 1 Cr.Hrs. 3

(Formerly 132.522) An opportunity to examine the theoretical bases for, and practical application of, recent or emerging developments in the area.

EDUB 5230 Recent Developments in Curriculum, Teaching and Learning 2 Cr.Hrs. 3

(Formerly 132.523) A continuation of certain topics of EDUB 5220 (132.522) to extend and develop the study previously undertaken in these areas.

EDUB 5250 Music: Advanced Choral Methods Cr.Hrs. 3

(Formerly 132.525) Advanced methods in choral instruction and conducting through a study of choral literature related to school music programs. Not to be held with the former 063.565.

EDUB 5330 Teaching Language and Literacy in the Content Areas Cr. Hrs. 3

(Formerly 132.533) An examination of approaches to literacy in the content areas (science, mathematics, social studies, etc); emphasis on strategies for reading, writing, and studying, materials, and material assessment, procedures, and supporting research. Not to be held with the former 132.531 or 063.571.

EDUB 5350 Current Issues in Language and Literacy Cr.Hrs. 3

(Formerly 132.535) A special topics course designed to update students on the most recent developments in Language and Literacy Education.

EDUB 5360 Children's Literature Cr.Hrs. 3

(Formerly 132.536) The nature and psychology of literature for children in the elementary grades. Areas for consideration include an examination of materials, use of evaluative criteria to assess the materials, and research findings concerning development, interest and use of the material. Not to be held with EDUB 5361 or the former 063.544.

EDUB 5370 Adolescent Literature Cr.Hrs. 3

(Formerly 132.537) The nature and psychology of literature for students in Grades 7-12. Areas for consideration include an examination of materials, use of evaluative criteria to assess the materials, and research findings concerning development, interest and use of the material. Not to be held with EDUB 5371 or the former 063.545.

EDUB 5380 Theory and Practice in Written Composition Cr.Hrs. 3

(Formerly 132.538) A course designed to explore the nature of written composition and to provide practice in various types of writing. Not to be held with the former 063.584.

EDUB 5390 The Teaching of Written Composition Cr.Hrs. 3

(Formerly 132.539) A course designed to assist teachers in organizing and implementing writing programs. Consideration will be given to motivational strategies, useful writing activities and exercises, and practice in editing and evaluation. Not to be held with the former 063.585.

EDUB 5400 Diagnostic and Remedial Techniques in Language Arts Cr. Hrs. 6

(Formerly 132.540) Diagnosis and correction at the classroom level. Opportunities for detailed analysis of diagnostic instruments. Practical aspects include diagnosis of language arts problems, prescriptions, and correction on the basis of evaluation. Not to be held with the former 063.599.

EDUB 5470 Recent Developments in Curriculum: Mathematics and Natural Sciences 1 Cr.Hrs. 3

(Formerly 132.547) This course will provide an opportunity to examine the theoretical bases for, and practical application of, recent or emerging developments in the area.

EDUB 5480 Recent Developments in Curriculum: Mathematics and Natural Sciences 2 Cr.Hrs. 3

(Formerly 132.548) A continuation of certain topics of EDUB 5470 to extend and develop the previous study undertaken in these areas.

EDUB 5510 ESL Materials Development and Practicum Cr.Hrs. 3

A general survey of published ESL instructional materials will form the basis for students to develop lesson materials to be demonstrated in a supervised practicum. Not to be held with the former 063.587 or EDUB 1860. Prerequisites or concurrent: EDUB 5580 (C) and instructor's permission.

EDUB 5512 Teacher Development and Leadership in Second Language Education Cr.Hrs. 3

This course explores current approaches in the development of second language teachers and initiatives to facilitate leadership in programs inclusive of language learners.

EDUB 5520 Grammar in ESL Learning and Instruction Cr.Hrs. 3

(Formerly 132.552) A survey of English grammar and its applications to teaching all levels of ESL, from beginning to very advanced. Lectures, readings, group discussions, and demonstrations are designed to develop knowledge and skills necessary to teach oral and written grammar in traditional and innovative ways. Not to be held with the former 063.596.

EDUB 5530 ESL and Content Instruction Cr.Hrs. 3

(Formerly 132.553) Principles and procedures of teaching ESL/bilingual students in subject-area classrooms, using content-based language instruction and language sensitive content instruction.

EDUB 5540 Vocabulary and Pronunciation Instruction Cr.Hrs. 3

(Formerly 132.554) Principles and procedures in teaching English vocabulary and pronunciation for effective communication (sounds, spellings, word and sentence stress, rhythm, intonation, connected speech, integration). Not to be held with EDUB 1640 (132.164).

EDUB 5550 Library Reference and Informational Materials Cr.Hrs. 6

(Formerly 132.555) Principles of reference and research with special emphasis on interdisciplinary investigation; the problems of access to information; types of reference sources, their evaluation and selection for library reference collections; services to library users. Not to be held with the former 063.541.

EDUB 5580 Fundamentals of ESL (English Second Language) Instruction Cr.Hrs. 3

(Formerly 132.558) Examination of principles and demonstration of procedures for teaching ESL in Canada and EFL overseas. Not to be held with the former courses 132.550 or 063.586.

EDUB 5600 The Teaching of Social Studies in the Early and Middle Years Cr.Hrs. 3

(Formerly 132.560) This course concentrates on the teaching of social studies in schools from Kindergarten to approximately Grade Nine, with particular reference to the implications of social studies teachers of the characteristics of students at those levels. Not to be held with the former 132.567 or 063.595

EDUB 5660 Theoretical Foundations of Social Studies Cr.Hrs. 3

(Formerly 132.566) This course examines recent developments in social studies education. It aims to familiarize students with the debates, the research and the innovations (successful and otherwise) that have characterized social studies curriculum. Not to be held with the former 063.594.

EDUB 5690 Seminar in Business Education Cr.Hrs. 6

(Formerly 132.569) Curriculum development; methodologies; evaluation and measurement; research. Not to be held with the former 081.514.

EDUB 5760 Recent Developments in Mathematics Education Cr.Hrs. 3

(Formerly 132.576) Reading and research in mathematics education (selected topics).

EDUB 5770 Diagnosis and Remediation in Elementary School Mathematics Cr.Hrs. 3

(Formerly 132.577) Diagnostic and remedial methods in elementary school mathematics. Not to be held with EDUB 5771 or the former 081.558.

EDUB 5840 Internet Pedagogy Cr.Hrs. 3

(Formerly 132.584) Theory and practice of teaching and learning with the Internet. Focus on instructional applications of the Internet, for all levels from K-12 as well as adult, post-secondary and training settings. Current research will be examined and monitored for its relevance to this fast-changing field.

EDUB 5850 Theory and Practice of Designing and Developing Web-based Courses Cr.Hrs. 3

(Formerly 132.585) Theory and practice of the design, development and evaluation of on-line web-based distance education courses for K-12 through adult/post-secondary programs.

EDUB 5860 Project Management in Education and Training Cr.Hrs. 3

(Formerly 132.586) Theory and practice of project management principles in education and training. Emphasis on application of concepts and procedures of educational project management including planning and proposal creation for developmental and/or research activities in educational agencies.

EDUB 5870 Mentoring for Teachers Cr.Hrs. 3

(Formerly 132.587) An examination of mentoring practices with particular focus on educative ways of mentoring teacher candidates and new teachers

EDUB 5940 Instructional Product Development Cr.Hrs. 3

(Formerly 132.594) Systematic development of an instructional product. Includes needs assessment, goal setting, writing objectives, task analyses, product development, evaluation techniques. Not to be held with the former 081.532.

Department of Educational Administration, Foundation and Psychology Course Descriptions-1000 Level**EDUA 1500 Aboriginal Education Cr.Hrs. 3**

(Formerly 129.150) A study of fundamental issues, philosophies, and models of Aboriginal education. Cultural, spiritual, social, and political perspectives regarding Aboriginal education will be critically explored.

EDUA 1502 Measurement and Evaluation Cr.Hrs. 3

Theory and practical application are stressed in the preparation, use and interpretation of various approaches to assessing student learning. May not hold with the former 043.301, and also may not be held with 129.153 or EDUA 1530, "Recent Developments in Educational Psychology" where the course section taken was "Measurement and Evaluation."

EDUA 1510 Foundations of Moral and Religious Education Cr.Hrs. 3

(Formerly 129.151) Examination of the theory and practice of moral and religious education, including curricular and pedagogical issues in both humanistic and religious perspectives.

EDUA 1520 Recent Developments in Educational Administration and Foundations Cr.Hrs. 3

(Formerly 129.152) Topics will vary depending on the needs and interests of students, and will include specialized topics in educational administration and foundations.

EDUA 1530 Recent Developments in Educational Psychology Cr.Hrs. 3

(Formerly 129.153) Topics will vary depending on the needs and interests of students, and will include specialized topics in educational psychology not studied in regular program courses.

EDUA 1540 Cross-Cultural Education Cr.Hrs. 3

(Formerly 129.154) An examination of teacher attitudes, teaching techniques and curricular modifications which will facilitate learning in cross-cultural situations. Studies will focus on accommodation among cultural groups in rural and urban centres. Not to be held with the former 116.303.

EDUA 1550 Communication and Interpersonal Relationships in Education Cr.Hrs. 3

(Formerly 129.155) The purpose of this course is to help teacher candidates increase their awareness, understanding, and proficiency in communication and interpersonal relationships. Emphasis in this course is on the integration of theory, research, and practice in the areas of communication and interpersonal relationships.

EDUA 1560 Adult Learning and Development Cr.Hrs. 3

(Formerly 129.156) A study of the extensive knowledge of lifespan development and its importance for adult education practitioners. With a focus on development, learning and change, emphasis is placed on the importance of context and individual differences in adult learning.

EDUA 1570 Foundations of Adult Education Cr.Hrs. 3

(Formerly 129.157) An introduction to the field of Education from a local and global perspective. Attention will be given to historical movements in adult education, philosophical perspectives, participation and motivation, transformative perspectives on adult learning, and current and future perspectives on adult education. Not to be held with EDUA 5300 (or 129.530) or former 116.532.

EDUA 1580 Program Planning in Adult Education Cr.Hrs. 3

(Formerly 129.158) An introduction to the theory and practice of program planning in adult education. Attention is given to the context in which learning is to take place, the structuring of adult learning opportunities, and the logistics of successful programming

EDUA 1590 Facilitating Adult Education Cr.Hrs. 3

(Formerly 129.159) A study of theoretical and practical aspects of facilitation in adult education.

EDUA 1800 Psychology of Learning and Instruction 1: Theory and Practice Cr.Hrs. 3

(Formerly 129.180) An examination of theoretical concepts and practical issues related to the learning and development of learners as individuals in classrooms and other settings. Not to be held with the former 043.202.

EDUA 1810 School and Society 1: The Social Foundations of Education Cr.Hrs. 3

(Formerly 129.181) An examination of educational ideas and practices, especially schooling, in the context of a diverse society. The course focuses upon understanding schooling through historical, philosophical, sociological and cross-cultural perspectives. Not to be held with the former 116.101 or 037.101.

Department of Educational Administration, Foundations and Psychology Course Descriptions-2000 Level**EDUA 2800 Psychology of Learning and Instruction 2: Inclusive Special Education Cr.Hrs. 3**

(Formerly 129.280) An examination of concepts and issues related to meeting the diverse needs of all students including methods and resources for accommodating student diversity in classrooms and schools. Not to be held with the former 043.305. Pre- or corequisite: EDUA 1800 (or 129.180).

EDUA 2810 School and Society 2: Administrative Foundations of Education Cr.Hrs. 3

(Formerly 129.281) An examination of the form, functioning, and organizational aspects of contemporary schooling in Canada in the context of legislation, policy and public expectations. Not to be held with the former 116.301 or 059.301. Pre- or corequisite: EDUA 1810 (or 129.181).

Department of Educational Administration, Foundation and Psychology Course Descriptions-3000 Level

EDUA 3000 Canadian School Systems and Their Public Purposes Cr.Hrs. 3

The purpose of the course is to explore with teacher candidates the ways in which schooling and teachers work is shaped by, and shapes, particular administrative, social, political, economic, historical, legal, organizational, and professional contexts. May not be held with EDUA 2810.

EDUA 3002 Contested Spaces in Education Cr.Hrs. 3

An examination of educational ideas and practices that are often contested in the context of a diverse society. The course also focuses on understanding schooling through historical, philosophical, sociological, and cross-cultural perspectives. May not be held with EDUA 1810.

EDUA 3400 Aboriginal Education Cr.Hrs. 3

A study of fundamental issues, philosophies, and models of Aboriginal education. Within a multi-modal and interactive setting, cultural, spiritual, social, and political perspectives regarding Aboriginal education will be critically explored. May not be held with EDUA 1500.

EDUA 3420 Cross-Cultural Education Cr.Hrs. 3

Theory and practical applications related to understanding the complexities of culture, race, ethnicity, social inequality in classrooms, focusing on Aboriginal groups, immigration, and the needs of students in culturally diverse classrooms. May not be held with EDUA 1540.

EDUA 3500 Recent Developments in Educational Administration and Foundations Cr.Hrs. 3

Topics will vary depending on the needs and interests of students, and will include specialized topics in educational administration and foundations.

EDUA 3502 Recent Developments in Educational Psychology Cr.Hrs. 3

Topics will vary depending on the needs and interests of teacher candidates, and will include specialized topics in educational psychology not studied in regular program courses.

EDUA 3506 Foundations of Moral and Religious Education Cr.Hrs. 3

Examination of the theory and practice of moral and religious education, including curricular and pedagogical issues in both humanistic and religious perspectives. May not be held with EDUA 1510.

EDUA 3510 Communication and Interpersonal Relationships in Education Cr.Hrs. 3

The purpose of this course is to help teacher candidates increase their awareness, understanding and proficiency in communication and interpersonal relationships. Emphasis in this course is on the integration of theory, research and practice in the areas of communication and interpersonal relationships in schools. May not be held with EDUA 1550.

EDUA 3508 Measurement and Evaluation Cr.Hrs. 3

Theory and practical applications are stressed in the preparation, use, and interpretation of various approaches to assessing student learning. May not be held with EDUA 1502.

Department of Educational Administration, Foundations and Psychology Course Descriptions-5000 Level

EDUA 5010 Introduction to Educational Administration Cr.Hrs. 3

(Formerly 129.501) A study of the basic concepts, tasks and processes of administration as they apply to education. Not to be held with EDUA 5011 or the former 116.501.

EDUA 5012 Legal and Administrative Aspects of Schools for Clinicians Cr.Hrs. 3

This course will involve an examination of the form, functioning and organizational aspects of schooling through the lenses of legislation, policy, and public expectations. Students will gain an understanding of The Public Schools Act and The Education Administration Act (and associated Regulations), as well as other pertinent statutes, and their individual and collective application to, and impact upon, the work of school personnel in Manitoba. May not be held for credit with EDUA 5080 where title is "Legal and Administrative Aspects of Schools for Clinicians."

EDUA 5020 Principles of Curriculum Development Cr.Hrs. 3

(Formerly 129.502) An examination of approaches to curriculum design. Influences on the design process, and aspects of implementation. Emphasis is given to teacher participation in creating curriculum. Not to be held with EDUA 5021 or the former 116.502.

EDUA 5030 Management of Educational Institutions Cr.Hrs. 3

(Formerly 129.503) A study of basic patterns of organization and the administrator's role in educational institutions. The focus is on decision making, communicating, planning and evaluating in educational institutions. Not to be held with EDUA 5031 or the former 116.503.

EDUA 5040 Personnel Administration in Education Cr.Hrs. 3

(Formerly 129.504) An examination of the administrator's relationships with other personnel in education, with emphasis on personnel policy, staff development and motivation. Not to be held with EDUA 5041 or the former 116.504.

EDUA 5060 Principles of Instructional Supervision Cr.Hrs. 3

(Formerly 129.506) An analysis of theoretical models of instruction and supervision and their application in education. Not to be held with EDUA 5061 or the former 116.506.

EDUA 5080 Recent Developments in Educational Administration 1 Cr.Hrs. 3

(Formerly 129.508) An opportunity to examine the theoretical bases for, and application of, recent or emerging developments in educational administration.

EDUA 5090 Recent Developments in Educational Administration 2 Cr.Hrs. 3

(Formerly 129.509) A continuation of certain topics of EDUA 5080 to extend and develop studies previously undertaken in these areas.

EDUA 5100 Issues in the Administration of Education Cr.Hrs. 3

(Formerly 129.510) An analysis of issues in the administration of educational organizations. Not to be held with EDUA 5101 or the former 116.510.

EDUA 5200 Readings in Educational Foundations Cr.Hrs. 3

(Formerly 129.520) Readings and research in selected areas of the study of education.

EDUA 5210 Recent Developments in Educational Foundations 1 Cr.Hrs. 3

(Formerly 129.521) An opportunity to examine the theoretical bases for, and application of, recent or emerging developments in educational foundations.

EDUA 5230 Studies in International Education Cr.Hrs. 3

(Formerly 129.523) An examination of educational issues and practices in other countries, especially those of the third world. Emphasis will be given to teaching and administration in developing countries. Not to be held with the former 116.525.

EDUA 5480 Counselling Skills Cr.Hrs. 3

(Formerly 129.548) Emphasis will be on the development of counselling skills such as attending and listening, reflection of content and feelings, feedback and self-disclosure, focusing and summarization. Not to be held with EDUA 5481 or the former 129.556 or 043.516. Prerequisite or concurrent: EDUA 5500 or EDUA 5501(129.550)(C). Course evaluated on a pass/fail basis. Enrolment limited.

EDUA 5490 Field Placement in Counselling Cr.Hrs. 3

(Formerly 129.549) A field-based counselling situation for students to apply counselling skills under qualified professionals in the field, and supported by university instructors. Not to be held with EDUA 5491 or the former 129.556 or 043.516. Prerequisite or concurrent: [EDUA 5500 or EDUA 5501 (129.550)(C)] and [EDUA 5480 or EDUA 5481 (129.548)(P)]. Course evaluated on a pass/fail basis. Enrolment limited.

EDUA 5500 Theories and Issues in School Counselling Cr.Hrs. 3

(Formerly 129.550) A study of the philosophy and theories of counselling, issues in school guidance and counselling. Not to be held with EDUA 5501 or the former 043.509.

EDUA 5510 Elementary School Counselling Cr.Hrs. 3

(Formerly 129.551) An examination of the role and functions of the counsellor in the elementary school. Not to be held with EDUA 5511 or the former 043.510. Prerequisite or concurrent: EDUA 5500 or EDUA 5501 (129.550)(C).

EDUA 5520 Ethics in Counselling Cr.Hrs. 3

(Formerly 129.552) In this course, participants will be introduced to the Codes of Ethics for counsellors. Major ethical issues related to the following topics will be discussed: informed consent, confidentiality, record-keeping, boundary issues, training and competence, clinical supervision and multicultural and diversity issues. Participants will get an opportunity to practice various ethical decision-making models.

EDUA 5530 Secondary School Counselling Cr.Hrs. 3

(Formerly 129.553) A study of counselling as related to secondary-school practice. Emphasis on the secondary-school counsellor's role and functions. Examination of the various counsellor services: educational, orientation, staff, etc. Not to be held with EDUA 5531 or the former 043.511. Prerequisite or concurrent: EDUA 5500 or EDUA 5501 (129.550)(C).

EDUA 5540 Groups in Guidance Cr.Hrs. 3

(Formerly 129.554) A study of groups, group leadership and related skill development, especially as related to a counsellor's functioning in the schools. Not to be held with EDUA 5541 the former 043.512. Prerequisite or concurrent: EDUA 5500 or EDUA 5501 (129.550)(C).

EDUA 5550 Psychology of Human Relationships Cr.Hrs. 3

(Formerly 129.555) A study of interpersonal relationships. A laboratory approach is used to increase the personal sensitivity of the participants to people. Particularly suitable for teachers, school administrators, and other professionals. Not to be held with EDUA 5551 or the former 043.515.

EDUA 5570 Family Life Education Cr.Hrs. 3

(Formerly 129.557) A study of human sexuality and family relationships. Consideration is given to research findings, teaching resources and the methods, development, and cooperation with home and community. Not to be held with EDUA 5571 or the former 043.517.

EDUA 5580 Career Development Cr.Hrs. 3

(Formerly 129.558) Study and application of theories of career development, occupational choice, and decision making; evaluation and design or self-knowledge programs in counselling for decision. Not to be held with EDUA 5581 or the former 043.513 or 043.545.

EDUA 5590 Career Information Cr.Hrs. 3

(Formerly 129.559) A study of work, local employment, and training; analysis of career information; evaluation and design of career resource centres; a development study of career education. Not to be held with the former 043.514 or 043.546.

EDUA 5600 Introduction to Inclusive Special Education Cr.Hrs. 6

(Formerly 129.560) A survey course for educators interested in inclusive special education - legislative, pedagogical, attitudinal and systemic barriers to inclusion and exemplary inclusive provisions are covered. Not to be held with EDUA 5601 or the former 043.518.

EDUA 5610 Field Experience in Inclusive Special Education Cr.Hrs. 6

(Formerly 129.561) A field-based situation for full and part-time students to apply inclusive special education skills under the supervision of qualified school staff and supported by professional peer mentors and university instructors. Approximately 160 hours of field-based service required. Not to be held with the former 043.523. Prerequisite or concurrent: [EDUA 5600 or EDUA 5601(129.560)(C) or equivalent] and [EDUA 5630 or EDUA 5631 (129.563)(C) or equivalent] and [EDUA 5660 or EDUA 5661 (129.566)(C) or equivalent]. Course evaluated on a pass/fail basis.

EDUA 5620 Teaching Children Through Alternative and Augmented Communication Cr.Hrs. 3

(Formerly 129.562) An examination of alternative and augmented communication issues, services, supports, and inclusive teaching and learning strategies. Not to be held with the former 043.533.

EDUA 5630 Assessment and Instruction in Inclusive Special Education Cr.Hrs. 6

(Formerly 129.563) An examination of curriculum-based and classroom-based assessment to guide the instruction of students experiencing learning or behavioural difficulties in inclusive classrooms. Not to be held with EDUA 5631 or the former 043.536. Prerequisite or concurrent: EDUA 5600 or 5601 (129.560)(C) or equivalent.

EDUA 5640 Inclusive Special Education: Early and Middle Years Cr.Hrs. 3

(Formerly 129.564) This course is designed for educators responsible for the integration of students with special learning needs into the early and/or middle years classroom. Not to be held with the former 043.537.

EDUA 5650 Inclusive Special Education: High School and Transition to Adult Life Cr.Hrs. 3

(Formerly 129.565) This course is designed for those responsible for the education of students with special learning needs into high school. Not to be held with the former 043.538.

EDUA 5660 Organization and Delivery of Resource Program and Support Services Cr.Hrs. 3

(Formerly 129.566) A critical study of the nature of resource teacher programs and an analysis of factors influencing program development and effectiveness. Not to be held with EDUA 5661 or the former 043.539. Prerequisite or concurrent: EDUA 5600 (129.560)(C).

EDUA 5670 Strategies for Organizing Inclusive Classrooms and Schools Cr.Hrs. 3

(Formerly 129.567) An examination of the organization and implementation of school-wide supports for access, learning, socialization, behaviour, family liaison, clinical engagement, and community services. Organizational strategies to enhance consultation, cooperation, collaboration and professional development are included. Not to be held with EDUA 5671 or the former 043.540. Prerequisite or concurrent: [EDUA 5600 or EDUA 5601 (129.560)(C) or equivalent].

EDUA 5680 Promoting Responsible Behaviour in Educational Settings Cr.Hrs. 3

(Formerly 129.568) The course is designed to provide teachers with an understanding of the needs of children who display maladaptive behaviours in a school setting. Conceptualization of behaviour disorders, identification/assessment procedures, and intervention strategies will be studied. The purpose of the course is to enable teachers to generate intervention strategies which are appropriate in an educational setting. Not to be held with EDUA 5681 or the former 043.542.

EDUA 5690 Focus on Exceptionality: Gifted and Talented Cr.Hrs. 3

(Formerly 129.569) Students will be introduced to various topics and issues in the realm of gifted education, including theoretical models; relevant research, and appropriate teaching and assessment practices.

EDUA 5710 Readings in Educational Psychology 1 Cr.Hrs. 3

(Formerly 129.571) Directed readings and study of topics in various aspects of education from the psychological viewpoint.

EDUA 5730 Recent Developments in Educational Psychology 1 Cr.Hrs. 3

(Formerly 129.573) An opportunity to examine the theoretical bases for, and practical application of, recent or emerging developments in this area.

EDUA 5740 Recent Developments in Educational Psychology 2 Cr.Hrs. 3

(Formerly 129.574) An opportunity to examine the theoretical bases for, and practical application of, recent or emerging developments in this area.

EDUA 5760 Psychology of Instruction in Educational Contexts Cr.Hrs. 3

(Formerly 129.576) Designed primarily, although not exclusively, for classroom teachers and school personnel. A critical examination of major theoretical foundations and models of instruction. The course aims at the integration and application of traditional and emerging approaches and strategies of classroom instruction. Not to be held with the former 043.544. Prerequisite: [EDUA 1800 (129.180)(C)] or [PSYC 1200 (017.120)(C)], or equivalent.

EDUA 5770 Focus on Exceptionality: An Ecological Approach to FAS/E Cr.Hrs. 3

(Formerly 129.577) Students will be introduced to an ecological or multidisciplinary approach regarding children with FAS/E. Theoretical frameworks and evidence based assessment and instructional practices will be covered.

EDUA 5800 Introduction to Educational Research Cr.Hrs. 3

(Formerly 129.580) A study of scientific inquiry in the field of education. Research and statistical methods are surveyed within the context of educational research. Particularly recommended for students interested in the evaluation and application of research findings. Not to be held with EDUA 5801 or the former 043.503.

EDUA 5810 Theory of Test Construction Cr.Hrs. 3

(Formerly 129.581) Particular attention is given to problems of item analysis, validity, reliability, and test evaluation in the educational setting. Norm and criterion referenced tests are considered. Not to be held with EDUA 5811 or the former 043.504.

EDUA 5930 Observing Child Behaviour Cr.Hrs. 3

(Formerly 129.593) The use of qualitative observation techniques, especially in educational settings, to understand children's behaviour, thinking, and motivations. Not to be held with EDUA 5930 or the former 043.530.

EDUA 5940 Language and Symbolic Process Cr.Hrs. 3

(Formerly 129.594) The focus in this course is on the role of symbolic learning in the development of the young child. A study of theories on symbol formation is intended to serve as a framework for examining the emergence of representational capacities in movement, gesture, play, drawing and three dimensional media. Not to be held with the former 043.541. Prerequisite: former 043.307.

FACULTY OF ENGINEERING

Dean: Dr. Jonathan Beddoes, Ph.D., P.Eng.

Associate Dean: Nariman Sepehri, Ph.D., P.Eng. (Undergraduate Programs); Dr. Cyrus Shafai, Professor & Acting Associate Dean (Research/Graduate Programs), Dr. Douglas Thomson, Ph.D., P.Eng. (Research and Graduate Programs) On sabbatical

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Email Address: eng_info@umanitoba.ca

Website: umanitoba.ca/faculties/engineering

Academic Staff:

Biosystems Engineering:

For a complete listing of academic staff, please refer to the following [website: http://umanitoba.ca/faculties/engineering/departments/biosystems/facstaff/acadstatic.html](http://umanitoba.ca/faculties/engineering/departments/biosystems/facstaff/acadstatic.html)

Civil Engineering

For a complete listing of academic staff, please refer to the following [website: http://umanitoba.ca/faculties/engineering/departments/civil/staff/acadstatic.html](http://umanitoba.ca/faculties/engineering/departments/civil/staff/acadstatic.html)

Electrical and Computer Engineering

For a complete listing of academic staff, please refer to the following [website: http://umanitoba.ca/faculties/engineering/departments/ece/staff/index.html](http://umanitoba.ca/faculties/engineering/departments/ece/staff/index.html)

Mechanical and Manufacturing Engineering:

For a complete listing of academic staff, please refer to the following [website: http://umanitoba.ca/faculties/engineering/departments/mechanical/staff/index.html](http://umanitoba.ca/faculties/engineering/departments/mechanical/staff/index.html)

Chapter Contents

SECTION 1: DEGREES OFFERED

1.1 Available Majors

1.2 Available Minors

1.3 The Profession of Engineering

SECTION 2: ADMISSION TO THE FACULTY OF ENGINEERING

SECTION 3: ACADEMIC REGULATIONS

3.1 Appeals

3.2 Attendance

3.3 Categories of Students

3.4 Complementary Studies Electives

3.5 Procedure Regarding the Inclusion of Elective Courses Taken Towards a Student's Degree Requirements

3.6 Course Selection

3.7 Examinations

3.8 Grading and Assessment

3.9 Minors in Engineering

3.10 Professional Registration

3.11 Requirements for the Bachelor's Degree

3.12 Student Progress and Academic Status

3.13 Limit on Time in the Preliminary Program

3.14 Students Applying to an Engineering Program

3.15 Use of Calculating Devices

3.16 Withdrawal from Courses

SECTION 4: PROGRAM REQUIREMENTS

4.1 Engineering Access Program

4.2 Preliminary Engineering Program

4.3 Common Courses Taught by the Faculty of Engineering

4.4 Biosystems Engineering

4.5 Biosystems Engineering Course Descriptions

4.6 Civil Engineering

4.7 Civil Engineering Course Descriptions

4.8 Electrical and Computer Engineering

4.9 Electrical and Computer Engineering Course Descriptions

4.10 Mechanical Engineering

4.10 Mechanical Course Descriptions

4.11 Internationally Educated Engineers Qualification Program (IEEQ Program)-

Post-Baccalaureate Diploma in Engineering

SECTION 5: CO-OPERATIVE EDUCATION AND INDUSTRIAL INTERNSHIP PROGRAMS

SECTION 1: DEGREES OFFERED

Degree Offered	Years to Complete	Total Credit Hours
Bachelor of Science in Engineering (Biosystems)	*4	153
Bachelor of Science in Engineering (Civil)	*4	164
Bachelor of Science in Engineering (Computer)	*4	155-158
Bachelor of Science in Engineering (Electrical)	*4	159-163
Bachelor of Science in Engineering (Mechanical)	*4	159
Post-Baccalaureate Diploma in Engineering	1-2	Minimum of 24

*One year in Preliminary Program (36 credit hours) for direct admission students or in Preliminary Program courses (or equivalent) taken while in University I, plus three years in a departmental program.

The following is a summary of the admission requirements. Equivalent academic courses completed at recognized universities elsewhere will be considered. All admission requirements, as well as application deadline dates and forms, are included in an applicant information bulletin that is available from the Admissions Office, Enrolment Services, 424 University Centre; this information is also posted on the university's website.

1.1 The Profession of Engineering

Engineers use fundamental principles and energy sources from the natural world and direct them to the benefit of people. They interpret science in terms of material human needs and manage personnel, money, and materials. The profession is involved in all aspects of construction and manufacturing, including conceptualization, design, preparation of plans and specifications, and fabrication of products to meet predetermined standards of reliability and performance. Engineers acquire competence through instruction in basic sciences, mathematics, and engineering sciences; by introduction to the processes of synthesis and design; by complementary studies in the humanities, social sciences, and management; and by learning from the skills and experience of more senior engineers during the early years of employment.

The educational objective in the Faculty of Engineering is to prepare students for positions of leadership in a world where engineering, science, and management are of major importance.

1.2 Available Majors

Biosystems Engineering
 Civil Engineering
 Computer Engineering
 Electrical Engineering
 Mechanical Engineering

1.3 Available Minors

Arts
 Computer Science
 Geological Sciences
 Management
 Mathematics
 Music

SECTION 2: ADMISSION TO THE FACULTY OF ENGINEERING

Direct admission into the Faculty of Engineering from high school:

Applicants who have completed Chemistry 40S, Precalculus Mathematics 40S, and Physics 40S with a minimum overall average of 85 per cent, and no grade lower than 60 per cent in any one of these courses, may be admitted to Engineering directly from high school.

All other admissions:

A minimum of 8 of the 12 courses in the Preliminary Engineering Program, section 4.2, each with a minimum grade of "C", and a minimum Adjusted Grade Point Average (AGPA) of 2.0. In addition, if the total number of credit hours attempted by the student in all courses that apply in the Faculty of Engineering meets or exceeds 72, then the ratio of those credit hours passed (from all courses with a grade of "C" or better that are applicable to the student's potential Engineering program) to total credit hours attempted must be greater than or equal to 75%. Furthermore, if the student has attempted less than 72 credit hours, the total number of failed credit hours (from all courses with a grade of "D" or "F" that are applicable to the student's potential Engineering program) must not exceed 18 credit hours in order to be eligible to be considered for admission.

Acceptance to Engineering programs is competitive. Courses must be completed within ten years of the application date in order to be considered for transfer credit.

English and mathematics requirements:

The university written English and mathematics requirements are satisfied by the English (ENGL 1400 or the former ENGL 1310; or one of the following ENGL 1200, ENGL 1300 or ENGL 1340) and mathematics (MATH 1510, MATH 1710 and MATH 1210) courses in the Preliminary Engineering Program.

Chemical Engineering at the University of North Dakota

The University of Manitoba has an agreement with the University of North Dakota, Grand Forks, N.D., which allows students to obtain a degree in chemical engineering from the University of North Dakota by taking the Preliminary Engineering program at the University of Manitoba and three years at the University of North Dakota. The chemical engineering program at the University of North Dakota is accredited by the Accreditation Board for Engineering and Technology in the United States and is recognized by the Association of Professional Engineers and Geoscientists of Manitoba. Information on this program may be obtained from the Student Affairs Office (Engineering), E1-284 EITC.

SECTION 3: ACADEMIC REGULATIONS

The provisions of the chapter, General Academic Regulations and Requirements, and the chapter, University Policies, apply to all students. In addition, the Faculty of Engineering has regulations and requirements, published below, which apply specifically to its students. Notwithstanding the regulations given in this section, the Faculty Council of Engineering reserves the right to rule on individual cases in exceptional circumstances.

3.1 Appeals

Students who feel that they have received unfair treatment in a course should appeal to the instructor. If the matter is not thereby resolved, it should be raised with the Department Head and subsequently the Associate Dean (Undergraduate Programs).

A student's academic status is based on academic performance. Students who feel that there are circumstances that have affected their academic performance should write to the Associate Dean (Undergraduate Programs), Chair of the Committee on Standing and Appeals, E1-284 EITC. Information regarding this process is available from the Undergraduate Student Services Office, E1-284 EITC and may be viewed through the following web site:

http://umanitoba.ca/faculties/engineering/student_resources/sr_policies_appeals.html

3.2 Attendance

When the number of unexcused absences recorded against a student in the Faculty of Engineering in any course exceeds 10 per cent of the number of lectures and laboratories for that course the instructor may report the case to the Dean of Engineering. When a student's attendance or work continues to be unsatisfactory, the instructor has the authority to exclude the student from classes, or examinations, or both. Such cases shall be reported to the Faculty Council of Engineering at the first opportunity. Students who are excluded from an examination for inadequate attendance in a compulsory course will receive a failing grade and be required to repeat the course.

3.3 Categories of Students

A student shall normally register for three to six courses in a term. Registration for more than six or fewer than three courses in a term must be approved by the Department Head or, in the preliminary program, by the Associate Dean (Undergraduate Programs). Students must also receive approval for registration in courses that are not part of the regular degree program.

All undergraduate programs offered by the Faculty of Engineering are full-time programs. Engineering considers registration in 15 credit hours per term to be a full course load. Full-time status is defined as being registered in at least 60 percent of this load, or 9 credit hours per term. Scholarships and other awards may require registration in more than this minimum.

3.4 Complementary Studies Electives

Complementary studies electives are an integral part of the curriculum. Their purpose is to broaden the student's experience beyond the purely scientific and technical content of engineering. They include studies in engineering economics and the impact of technology on society, as well as the central issues, methodologies and thought processes characteristic of the humanities and social sciences. Opportunities for development of the student's oral and written communication skills are also provided. The complementary studies elective requirements may vary from one program to another. Course numbers beginning with a 0 (i.e. ENGL 0930) are not allowed as complementary studies electives and ARTS 1110 Introduction to University cannot not be used for credit in the Faculty of Engineering.

3.5 Procedure Regarding the Inclusion of Elective Courses Taken Towards a Student's Degree RequirementsUpon Admission Into Engineering

At the time of admission, students may choose to apply (transfer) some or all eligible non-Engineering elective courses (i.e., complementary studies electives, science electives, free electives) taken prior to their admission to the Faculty towards their current Engineering degree program.

After Admission Into Engineering

Grades for all eligible courses (i.e., technical electives, complementary studies electives, science electives, free electives) attempted following admission to Engineering shall be included in and applied to a student's current degree program.

Special cases for either circumstance may be considered at the discretion of the Faculty of Engineering Associate Dean, Undergraduate Programs.

3.6 Course Selection

When arranging a program of study, a student must satisfy the following requirements:

1. All prerequisite and corequisite course requirements must be met.
2. All previously failed compulsory courses must be repeated. Students will require assistance with registration due to a block on the AURORA registration system which does not allow repeats automatically.
3. Students are not normally allowed to repeat courses graded "C" or higher, except under special circumstances with the approval of the Department Head, or for students in the Preliminary Engineering Program, of the Associate Dean (Undergraduate Programs).
4. Failed elective courses may be repeated or replaced with alternative elective courses, however, all attempts will be included in the degree grade point average calculation.

Prerequisite Course: A prerequisite course must have been completed with a "C" grade or better before a subsequent course can be attempted. Under exceptional circumstances, a course instructor may waive, subject to approval by the Department Head (or designate), a prerequisite requirement.

Corequisite Course: A corequisite course must be taken concurrently or before its companion course. Under exceptional circumstances, a course instructor may waive, subject to approval by the Department Head (or designate), a corequisite requirement.

3.7 Examinations

Deferred Examinations

If you miss a final examination for medical or compassionate reasons, you may be granted a deferred examination. Applications for a deferred examination after the examination has been missed must be filed within 48 hours of the date of the missed examination. A medical certificate of otherwise appropriate documentation may be required.

(See Chapter, General Academic Regulations and Requirements of this Calendar for more details)

Deferred Examinations are normally scheduled to take place within 30 working days from the end of the examination series from which the examination was deferred. The date of the deferred examination for a particular course will be set by the Dean's Office no later than January 15, May 15 or Sept 15 and in consultation with the instructor.

Supplemental Examinations

A student who has attempted to meet all requirements for the degree and has a single failure in their final academic year, in an Engineering course, may apply for a supplemental examination in that course. Supplemental examinations may not be requested for any other reason. A student shall only be permitted to exercise the privilege of writing a supplemental examination once in their degree program.

The grade for a course in which a supplemental examination is written shall be calculated in the following manner, with the grade reported being the greater of these two calculations:

1. The supplemental examination shall have the same percentage weighting as the original examination, and shall be combined with all term marks;
2. The supplemental examination shall have the percentage weighting equal to the combined weight of the original examination and all term tests, and shall be combined with all other term marks.

Both the original course grade and the supplemental examination course grade are retained on the student's record, and both are used in the calculation of TGPA and DGPA.

In the event that the supplemental examination is not successfully passed, the course must be repeated again in a subsequent term. When this occurs, the grade achieved on the last course attempt will replace the grades of both the previous course attempt and the supplemental examination.

The results of supplemental examinations must be reported to the Faculty Council of Engineering. The supplemental examination privileges apply only to courses offered by the Faculty of Engineering.

Challenge for Credit

Courses offered in Engineering may not be challenged for credit.

3.8 Grading and Assessment

All grades awarded by instructors for undergraduate courses offered in the Faculty of Engineering are reviewed by examiners' boards, which comprise all of the instructors in the student's program year. After approval by department councils, grades are presented to the Faculty Council of Engineering for acceptance. Grades are published succeeding their approval by the Faculty Council of Engineering. Following are the descriptions of grade point averages used for evaluation at end of each of the terms (Fall, Winter, and Summer):

Term Grade Point Average (TGPA)

The TGPA is computed from all of the final grades in all courses completed during a given academic term.

Degree Grade Point Average (DGPA)

The DGPA is computed from the final grades obtained in all courses attempted, including applicable courses transferred from other faculties and other institutions, as part of a student's current degree program. Where a course has been repeated or replaced by an approved equivalent course, only the last grade shall be included in the computation.

Cumulative Grade Point Average (CGPA)

The CGPA is computed from the final grades in all undergraduate courses attempted at the University of Manitoba and courses transferred from other faculties and other institutions.

Dean's Honour List

A continuing student who achieves a Term Grade Point Average (TGPA) of 3.50 or higher in their most recent academic term will be placed on the Dean's Honour List. The assessment is based on a minimum of 12 credit hours completed in that term. In addition, a graduating student who achieves a Degree Grade Point Average (DGPA) of 3.5 or higher in their final academic evaluation will graduate on the Dean's Honour List and receive a notation indicating this on their final term transcript.

Awards

A number of scholarships, bursaries and other academic awards are available to Engineering students. For information concerning awards (prizes, scholarships, and bursaries), please visit the Faculty website, umanitoba.ca/faculties/engineering

3.9 Minors in Engineering

In meeting the specific requirements for any minors available to Engineering students, no more than 50% of the credit hours required for a minor may be common with those forming part of a student's regular Engineering program.

Arts Minor

A Minor in Arts is available to Engineering students. The minor consists of 18 credit hours of Arts courses, including a minimum of 6 credit hours in the Humanities and 6 credit hours in the Social Sciences; students must meet all pre-requisite requirements. Depending on the approval of the Engineering department, courses used for the minor may also be used to fulfill program requirements in Engineering.

Computer Science Minor

A Minor in Computer Science is available to Engineering students. The minimum requirement is 18 credit hours of computer science courses subject to the following constraints: (1) Courses COMP 1012, COMP 1020, and COMP 2140 are compulsory; (2) 9 additional credit hours of COMP courses at the 2000 or 3000 level; and (3) registration in computer science courses will be controlled by normal pre-requisites and class size restrictions.

Geological Sciences Minor

The Minor in Geological Sciences includes the following set of courses: (1) GEOL 1340 or GEOL 2250; (2) One of the following three courses: GEOL 1400, GEOL 1410 or GEOL 1420; (3) GEOL 2540; (4) Nine (9) credit hours of 2000-level or above courses in Geological Sciences

Management Minor

The Minor in Management offered by the Faculty of Management is available to Engineering students. The minor consists of any 18 credit hours of Management courses; students must meet all prerequisite requirements. Depending on the approval of the Engineering department, courses used for the minor may also be used to fulfill program requirements in Engineering. Admission requirements for the minor are based on all courses transferred to Engineering or completed while in Engineering; the requirements are a minimum of 30 credit hours with a minimum Degree Grade Point Average (DGPA) of 3.00. Up to 10 spaces are available each year for engineering students on a competitive basis. Applications can be made in the Engineering Dean's office up to May 30th.

Mathematics Minor

A Minor in Mathematics is available to Engineering students. The minimum requirements are 24 credit hours of mathematics courses subject to the following constraints: (1) the students must notify their home department that they are pursuing the minor; (2) up to 12 credit hours of mathematics courses in a student's engineering program may be counted toward the minor; (3) the student must complete at least 6 credit hours of courses from the mathematics department at the 3000 level or higher that are not included as part of the curriculum in the student's engineering program; and (4) approval of the Department of Mathematics is required for courses outside of the regular engineering program.

Music Minor

The Minor in Music requires 18 credit hours of MUSC courses and students are subject to the regulations set by the Marcel A. Desautels Faculty of Music. Please see SECTION 4.7 Music Minors for students in the Faculty of Engineering, Faculty of Arts and Faculty of Science under the Marcel A. Desautels Faculty of Music section.

3.10 Professional Registration

In order to practice engineering in any province or territory in Canada, it is necessary to be a member of the professional engineering association of that province or territory. The requirements for membership are acceptable academic preparation and a subsequent period of acceptable engineering experience gained under the supervision of a registered professional engineer. The undergraduate programs in Biosystems, Civil, Computer, Electrical, and Mechanical Engineering are accredited by the Canadian Engineering Accreditation Board (CEAB), reflecting acceptable academic preparation for membership in the association of professional engineers in any province or territory in Canada. Through a mutual recognition agreement, these programs are also recognized as satisfying accreditation requirements in many other countries such as the United States, the United Kingdom, Ireland, New Zealand, Australia, and Hong Kong.

Graduates of an accredited program are eligible to apply for membership as an engineer-in-training (E.I.T.), in the association of professional engineers in their province of residence in Canada. After a period of acceptable experience, they are eligible to apply to the association for registration as a professional engineer in that province.

3.11 Requirements for the Bachelor's Degree

The requirement for a Bachelor of Science degree in Engineering is a grade of "C" or better in all courses in the student's program. All students are governed by the rules in effect at the time of their first registration in Engineering.

A student must complete at least 50 per cent of an engineering degree program as a full-time student in the Faculty of Engineering. Unless otherwise approved by the Dean of Engineering, students must complete all degree requirements within seven calendar years after being accepted into an Engineering departmental program.

Degree with Distinction

A student who on graduation achieves a Degree Grade Point Average (DGPA) of 3.80 or higher is awarded the degree "With Distinction."

Criteria for Medal Awards

The Faculty of Engineering Program Medal shall be awarded to the graduating student in each engineering program who has achieved the highest Degree Grade Point Average (DGPA) (minimum of 3.80) with no distinction as to full- or part-time status. The Program Medal will be awarded at spring convocation to the student who has completed that program in the past academic year (including October and February graduands).

The University Gold Medal for the Faculty of Engineering shall be awarded to the graduating student in the Faculty of Engineering who has achieved the highest Degree Grade Point Average (DGPA) (minimum of 3.80) for the entire program with no distinction as to full- or part-time status.

3.12 Student Progress and Academic Status

Students shall be evaluated at the conclusion of each academic term in which they receive a final grade in a minimum of 6 credit hours of course material (excluding Special Student credit hours), with the assessment being based on the resulting Term Grade Point Average (TGPA) in those courses. This assessment shall be based on only those courses which form part of the student's Engineering Program. The academic assessments are as follows:

Good Academic Standing

A student with a TGPA of 2.00 or higher is in Good Academic Standing. This will be notated as "Faculty Minimum Met" or "Satisfactory" on the student academic transcript.

Academic Warning

The first time the student's TGPA drops below 2.00, he/shewill receive an Academic Warning. Students who receive such a warning are required to meet with an academic advisor from their department or, in the Preliminary Engineering Program, from the Dean's Office.

Academic Probation

The second time that a student's TGPA drops below 2.00, the student will be placed on Academic Probation.

Required to Withdraw

The third time that a student's TGPA drops below 2.00, the student will be Required to Withdraw. Students who receive such a suspension shall be ineligible to take Engineering courses from the end of the term for which the suspension was issued through to the start of that same term in the subsequent academic year (normally, a period of 8 months.)

In order to be reinstated following the suspension period, the student must submit a written application for reinstatement to the Associate Dean (Undergraduate Programs). Applications must be received between 30-60 days in advance of the effective date of reinstatement; requests made earlier than 60 days in advance will not be accepted.

Ineligible to Proceed in Engineering

A student shall be Ineligible to Proceed in Engineering under either of the following conditions:

- a) The student's TGPA drops below 2.00 for a fourth time, or;
- b) The ratio of credit hours passed (from all courses with a grade of "C" or better that are applicable to the student's Engineering program) to total credit hours attempted for that student drops below 75%, and the student has attempted a minimum of 72 credit hours.

Starting Afresh

Students who have become Ineligible to Proceed in Engineering may apply to the Dean for permission to start their degree afresh, should they wish to return to the Faculty of Engineering.

At the discretion of the Dean, a student may start afresh in an engineering program after a minimum period of two years from their last academic assessment by the Faculty of Engineering, and may request to transfer up to 40 credit hours in which a minimum grade of "C+" was achieved. All previous courses will remain on the student's academic transcript, but will not be applied to their new program.

3.13 Limit on Time in the Preliminary Engineering Program

Students admitted to the Faculty of Engineering shall have two years to complete the minimum course requirements and submit an application for possible acceptance into an Engineering program. In the case of students admitted to the faculty through the Engineering Access Program the limit shall be three years.

Students who fail to meet this criterion shall be required to withdraw from Engineering. Such students may subsequently apply to an engineering program after successfully completing all courses forming the Preliminary Engineering Program.

3.14 Students Applying to an Engineering Program

Students will be accepted into department programs based on the following criteria. Students who have completed 8-12 Preliminary Engineering Program courses by May 1st of each academic year will be ranked and admitted on a competitive basis based on the average of the best eight marks in courses in the Preliminary Engineering Program.

Students applying from programs, faculties, colleges, or other institutions will have all courses or equivalent courses that are required in a particular engineering program transferred in, including failed grades ("D's" and "F's") in those courses. In addition, if the total number of credit hours attempted by the student in all courses that apply in the Faculty of Engineering meets or exceeds 72, then the ratio of those credit hours passed (from all courses with a grade of "C" or better that are applicable to the student's potential Engineering program) to total credit hours attempted must be greater than or equal to 75%. Furthermore, if the student has attempted less than 72 credit hours, the total number of failed credit hours (from all courses with a grade of "D" or "F" that are applicable to the student's potential Engineering program) must not exceed 18 credit hours in order to be eligible to be considered for admission. Students are advised to consult with the Engineering Undergraduate Student Affairs Office if there is concern as to their standing under this rule.

Direct entry engineering students must submit an application through AURORA self-service by May 1st indicating their program(s) of choice. The application fee for direct entry engineering students applying to an engineering program will be waived. Students from University 1 and other faculties must apply by April 1st through AURORA self-service and will be subject to an application fee.

3.15 Use of Calculating Devices

For courses offered by the Faculty of Engineering in which the use of devices capable of calculations is permitted in tests or examinations, such devices must be incapable of receiving and/or transmitting signals. Instructors wishing to restrict devices to certain capabilities must inform students, in writing, within the first week of term. Questions concerning the suitability of any given device should be directed to the course instructor(s).

3.16 Withdrawal from Courses

The responsibility for initiating withdrawals rests solely with the student, and no voluntary withdrawals are permitted after the deadlines for voluntary withdrawal without academic penalty (see the chapter, General Academic Regulations and Requirements, of this Calendar). For documented medical or compassionate reasons, Authorized Withdrawals may be permitted by the Dean.

A student who, after registering for courses, in any term, becomes ineligible to proceed in Engineering will be withdrawn from his or her courses for the effective term as well as any subsequent terms, including Summer Session.

SECTION 4: PROGRAM REQUIREMENTS

4.1 Engineering Access Program

General Office: E2-442 EITC
Telephone: 204 474 9872
Toll Free: 1800 432 1960 ext. 9872
Fax: 204 474 7518
E-mail: engap@cc.umanitoba.ca
Web: www.engap.com

The Engineering Access Program (ENGAP) recognizes that students of First Nation, Metis, and Inuit ancestry may be challenged with geographic and economic barriers, and/or lack of access to academic preparation, which may make them unable to meet the faculty's admission requirements. ENGAP serves as a specifically designed post-secondary program that provides an opportunity for students to complete their Bachelor of Science degree in Engineering. The program accomplishes this objective by offering upgrading courses in mathematics, chemistry, physics, and computer science, as well as providing academic advice, personal and family counselling along with financial supports. First Nation, Metis, and Inuit students who do meet the regular entrance requirements may still wish to join the program to benefit from these supports.

4.2 Preliminary Engineering Program

Student Advising Office: E1-284 EITC
Telephone: 204 474 9807
E-mail: eng_info@umanitoba.ca
Website: umanitoba.ca/faculties/engineering

The Preliminary Engineering Program is common to all programs in engineering. Students in the direct entry engineering program or University 1 must complete a minimum of 8 courses to be admitted to a degree granting engineering program. A student must complete the following list of 12 courses in order to graduate with a BSc degree from any of the engineering programs.

ACADEMIC CALENDAR 2015-2016

Course No.		Credit Hours
CHEM 1300	Structure and Modelling in Chemistry	3
COMP 1012	Computer Programming for Scientist and Engineers	3
ENG 1430	Design in Engineering	3
ENG 1440	Introduction to Statics	3
ENG 1450	Introduction to Electrical and Computer Engineering	3
ENG 1460	Introduction to Thermal Sciences	3
ENGL 1400	Thematic Approaches to the Study of Literature(Note 5)	3
MATH 1210	Techniques of Classical and Linear Algebra (Note 4)	3
MATH 1510	Applied Calculus 1 or equivalent (Note 1 and 3)	3
MATH 1710	Applied Calculus 2 or equivalent (Note 2 and 3)	3
PHIL 1290	Critical Thinking (Note 6)	3
PHYS 1050	Physics 1: Mechanics	3

Notes:

- (1) MATH 1500 and MATH 1510 are regarded as equivalent to each other.
- (2) MATH 1700 and MATH 1710 are regarded as equivalent to each other.
- (3) MATH 1690 may be regarded as being equivalent to one course from (1) and one course from (2).
- (4) MATH 1300 is not an acceptable equivalent to MATH 1210.
- (5) ENGL 1200, ENGL 1300, ENGL 1340 may be accepted for credit in lieu of ENGL 1400.
- (6) PHIL 1290 Critical Thinking is the recommended complementary studies elective. Students may, however, select any course from the Faculty of Arts or the Faculty of Management at the 1000 level or above, to be used for credit in lieu of PHIL 1290. The exception is ARTS 1110 Introduction to University which may not be held for credit within the Faculty of Engineering.

University Written English and Mathematics Requirements

All students are required to complete the university written English and mathematics requirement within the first 60 credit hours of their program. This requirement is described in the chapter General Academic Regulations and Requirements of this Calendar. In the Engineering programs the mathematics requirement is satisfied by one of MATH 1510 or MATH 1710 (or an equivalent); the written English requirement is satisfied by ENGL 1400 (or an equivalent).

4.3 Common Courses Taught by the Faculty of Engineering

Common Courses Taught by the Faculty of Engineering-ENG 1000 Level

ENG 1420 Engineering Processes for Non-Engineering Students Cr.Hrs. 3
(Formerly 130.142) Develops a basic understanding of the engineering profession with emphasis on basic technical principles, Systems Engineering, and Project Management. Special emphasis will be placed upon the interface between management and engineering and the role management plays in the conduct of technical projects and manufacturing. NOTE: This course is not available for credit to students registered in the Faculty of Engineering.

ENG 1430 Design in Engineering Cr.Hrs. 3

The creative process; the design process; working in a team. The engineering profession from the perspective of students and professionals. Academic, legal and ethical considerations. Prerequisites: A minimum grade of 60% in Pre-Calculus Mathematics 40S (or a minimum grade of "C" in MATH SKILLS) and Physics 40S (or passing grade in PHYS 0900 or minimum grade of "C" in PHYS 1050) and Chemistry 40S (or passing grade in CHEM 0900 or minimum grade of "C" in CHEM 1300) or their equivalents.

ENG 1440 Introduction to Statics Cr.Hrs. 3

Statics of particles; rigid bodies, equilibrium of rigid bodies; analysis of structures; distributed forces. Not to be held with ENG 1441. Prerequisites: A minimum grade of 60% in Pre-Calculus Mathematics 40S (or a minimum grade of "C" in MATH SKILLS) and Physics 40S (or passing grade in PHYS 0900 or minimum grade of "C" in PHYS 1050) and Chemistry 40S (or passing grade in CHEM 0900 or minimum grade of "C" in CHEM 1300) or their equivalents.

ENG 1441 Introduction à la statique Cr.Hrs. 3

(Laboratoire requis) Statique des particules, corps rigides, équilibre des corps rigides, analyse de structures, forces réparties. On ne peut se faire créditer ENG 1441 et aucun des ENG 1440 ou l'ancien 130.135. Préalable : une note minimale de 60% dans Mathématiques 40S (pré calcul) ou l'ancien Mathématiques 40S (300), Physique 40S et Chimie 40S.

ENG 1450 Introduction to Electrical and Computer Engineering Cr.Hrs. 3

Part I; Current, voltage, energy, potential, power Ohm's law; independent sources; capacitor, inductor, ideal diode, op-amp; Kirchoff's law; simple circuits (Resistive, RC, RL, OP-Amp; Diode); introduction to ac theory (Sinusoidal waveform, phase relations of voltage and current waveforms for R,L,C. RL and RC circuits). Part II; Applications (Digital Logic, motors). Prerequisites: A minimum grade of 60% in Pre-Calculus Mathematics 40S (or a minimum grade of "C" in MATH SKILLS) and Physics 40S (or passing grade in PHYS 0900 or minimum grade of "C" in PHYS 1050) and Chemistry 40S (or passing grade in CHEM 0900 or minimum grade of "C" in CHEM 1300) or their equivalents.

ENG 1460 Introduction to Thermal Sciences Cr.Hrs. 3

Properties of pure substances; first law for closed systems; first law for open systems; second law; examples of power cycles and refrigeration cycles. Prerequisites: A minimum grade of 60% in Pre-Calculus Mathematics 40S (or a minimum grade of "C" in MATH SKILLS) and Physics 40S (or passing grade in PHYS 0900 or minimum grade of "C" in PHYS 1050) and Chemistry 40S (or passing grade in CHEM 0900 or minimum grade of "C" in CHEM 1300) or their equivalents.

ENG 1900 Occupational Health and Safety Awareness Cr.Hrs. 3

Occupational health and safety will be discussed from the perspectives of various professions to understand 1) the issues relevant to individual professions and 2) how these individual perspectives may conflict. The overall goal for the course is to ensure that the student gains an appreciation for the importance of occupational health and safety to society.

Common Courses Taught by the Faculty of Engineering-ENG 2000 Level

ENG 2010 Technical Communications Cr.Hrs. 3

(Formerly 130.201) Students work collaboratively in teams and develop strong project management skills. Focus is on the connection between engineering and communication design; the importance of audience analysis; a clear definition of the technical issues and the criteria by which to measure a design or solution; well-designed graphic aids which support the text; and clear writing and speaking. Prerequisite: ENGL 1310 (or equivalent), and ENG 1430

ENG 2022 Engineering CAD Technology for Biosystems Cr.Hrs. 3

Instruction in the use of current CAD technology for conveying design through the use of graphics. Students will gain knowledge in technical drawing, 3D modelling techniques, production technology, and visual communication. Registration restricted to students in Engineering. Prerequisite: BIOE 2580.

ENG 2030 Engineering Communication: Strategies for the Profession Cr.Hrs. 3

Students work in a team-based environment to produce deliverables comparable to the engineering workplace. In-class tutorials focus on the sharpening of individual students' writing skills through an analytical, problem-solving and critical thinking approach. Students are exposed to a variety of communicative scenarios and emphasis is placed on development of a repertoire of skills necessary for effective communication in the engineering profession. Prerequisites: (ENGL 1200 or ENGL 1300 or ENGL 1310 or ENGL 1340 or ENGL 1400) and ENG 1430. Not to be held with the former ENG 2010.

ENG 2040 Engineering Communications: Strategies, Practice and Design Cr.Hrs. 3

This team-based course focuses on a rhetorical approach, communication strategies and guided practice in the design of engineering communications. Prerequisites: (ENGL 1200 or ENGL 1300 or ENGL 1310 or ENGL 1340 or ENGL 1400) and ENG 1430. May not be held with the former ENG 2010.

4.4 Biosystems Engineering

General Office: E2-376 EITC

Telephone: 204 474 6033

Fax: 204 474 7512

Website: umanitoba.ca/faculties/engineering/departments/biosystems/

Head: Dr. D. Mann, P.Eng.

Associate Head: Dr. N. Cicek, P.Eng.

Admin. Assistant: Ms. D. (Debby) Watson

Office Assistant: Ms. E. (Evelyn) Fehr

For a complete listing of academic staff, please refer to the following website:

umanitoba.ca/faculties/engineering/departments/biosystems/facstaff/acadstatic.html

The Department of Biosystems Engineering offers an accredited degree program in Biosystems Engineering. Biosystems Engineering emphasizes the application of engineering principles to biologically-based systems (plants, animals, humans, and microorganisms). The program is designed to give students knowledge of the fundamental principles of engineering and to introduce biological concepts to enable these engineers to successfully interact with relevant professionals when solving engineering problems involving biological systems. The program is offered in both a traditional and a co-operative education format. The department offers five Specializations (Agricultural, Biomedical, Bioprocessing, Environmental, and Sustainable Building Systems) and one Minor (Agribusiness). With the appropriate selection of elective courses, the bachelor's degree in Biosystems Engineering meets the requirements for admission to the Faculty of Medicine.

The undergraduate curriculum in Biosystems Engineering is an academic program in the Faculty of Engineering. Students wishing to study in Biosystems Engineering must be admitted to the Faculty of Engineering. They are required to complete the Preliminary Engineering Program as a prerequisite to the courses in Biosystems Engineering.

4.4.1 Biosystems Engineering Degree Program

Biosystems Engineering Degree Program

Preliminary Engineering Program

Common to all engineering programs (see Section 4.2 for details).

Program Core Courses

Note: Students are encouraged to consult the department for eight- and ten-term program models. Students are strongly encouraged to follow the model programs when possible, as timetabling and course offerings are based on these program models.

Course No.		Credit Hours
BIOE 2110	Transport Phenomenon	3
BIOE 2580	Biosystems Engineering Design Trilogy 1	4
BIOE 2480	Impact of Engineering on the Environment	3
BIOE 2590	Biology for Engineers	3
BIOE 3270	Instrumentation and Measurement for Biosystems	4
BIOE 3320	Engineering Properties of Biological Materials	4
BIOE 3400	Design of Structural Components in Machines	4
BIOE 3580	Biosystems Engineering Design Trilogy 2	4
BIOE 3590	Mechanics of Materials in Biosystems	4
BIOE 4240	Graduation Project	3
BIOE 4580	Biosystems Engineering Design Trilogy 3	4
CHEM 1310	University Chemistry 1	3
CIVL 2790 or MECH 2262	Fluid Mechanics Fundamentals of Fluid Mechanics	4
CIVL 2800 or MECH 2222	Solid Mechanics 1 Mechanics of Materials	4
CIVL 4050	Engineering Economics	3
ENG 2022	Engineering CAD Technologies for Biosystems	3
MATH 2120	Introduction to Numerical Methods for Engineers	4
MATH 2130	Engineering Mathematical Analysis 1	3
MATH 2132	Engineering Mathematical Analysis 2	3

MBIO 1220 or MBIO 1010	Essentials of Microbiology Microbiology 1	3 3
MECH 3482	Kinematics and Dynamics	4
STAT 2220	Contemporary Statistics for Engineers	3
BIOL 1410 or SOIL 4060	Anatomy of the Human Body Physical Properties of Soil	3 3
BIOL 1412 or BIOE 2600	Physiology of the Human Body Plant and Animal Physiology for Engineers	3 4
One course in Technology and Society (CIVL 4600, ANTH 2430 or ANTH 2500)		3
Two Complementary Studies Electives		6
Four Biosystems Engineering Design Electives (see list below)		16
Two Free Electives		6-8
Total credit hours for graduation		150 to 153

4.4.2 Biosystems Engineering Design Electives

Biosystems Engineering Design Electives

Course No.		Credit Hours
BIOE 4390	Unit Operations 1	4
BIOE 4412	Design of Light-Frame Building Systems	4
BIOE 4414	Imaging and Spectroscopy for Biosystems	4
BIOE 4420	Crop Preservation	4
BIOE 4440	Bioprocessing for Biorefining	4
BIOE 4460	Air Pollution Assessment and Management	4
BIOE 4560	Structural Design in Wood	4
BIOE 4590	Management of By-Products from Animal Production	4
BIOE 4600	Design of Water Management Systems	4
BIOE 4610	Design of Assistive Technology Devices	4
BIOE 4620	Remediation Engineering	4
BIOE 4640	Bioengineering Applications in Medicine	4
BIOE 4700	Alternative Building Design	4

4.4.3 Complementary Studies Electives

Complementary Studies Electives

Complementary studies electives are required to give the engineering student exposure to topics outside the fields of science and engineering. There are many university courses that fulfill this requirement. Any course at the 1000-level or above from the faculties of Arts or Management, or the Department of Agribusiness and Agricultural Economics can be used as a complementary studies elective. However, ARTS 1100 Introduction to University may not be used for credit in the Faculty of Engineering. Other university courses which do not cover topics of science or engineering may also be acceptable. Please consult with the department head (or his/her designate) for approval of such courses.

Free Electives

Any university course at the 1000-level or above can be used as a free elective. However, ARTS 1100 Introduction to University may not be used for credit in the Faculty of Engineering. Students are permitted to take additional design electives or engineering courses from other departments to fulfill free elective requirements.

4.4.4 Specializations

Agricultural Specialization

Students who obtain a grade of "C" or better in the courses listed below will receive a notation of "agricultural specialization" on their transcript at the time of graduation.

Group A: Science Electives

ACADEMIC CALENDAR 2015-2016

Within the two science slots in the core program, choose:

- SOIL 4060** Physical Properties of Soil
- BIOE 2600** Plant and Animal Physiology for Engineers

Group B: Biosystems Engineering Design Electives

Choose at least three of the following courses from the list of available design electives:

- BIOE 4412** Design of Light-Frame Building Systems
- BIOE 4420** Crop Preservation
- BIOE 4590** Management of By-Products from Animal Production
- BIOE 4600** Design of Water Management Systems

Group C: Complementary Studies & Free Electives

Choose 9 credit hours (minimum of 3 credit hours of complementary studies marked by*) from the following list of courses:

- ABIZ 1000** Introduction to Agribusiness Management*
- ABIZ 3530** Farm Management*
- AGRI 1500** Natural Resources and Primary Agricultural Production
- AGRI 1510** Production, Distribution and Utilization of Agricultural Products
- BIOE 2090** Machinery for Agricultural Production
- BIOE 2222** Precision Agriculture Concepts and Applications
- ENTM 3170** Crop Protection Entomology
- PLNT 2500** Crop Production
- PLNT 2510** Fundamentals of Horticulture
- SOIL 3520** Pesticides: Environment, Economics and Ethics

Note: Special permission may be granted by the Head of Department for courses not appearing on the list.

Biomedical Specialization

Students who obtain a grade of "C" or better in the courses listed below will receive a notation of "biomedical specialization" on their transcript at the time of graduation.

Group A: Science Electives

Within the two science elective slots in the core program, choose:

- BIOL 1410** Human Anatomy (rather than SOIL 4060)
- BIOL 1412** Physiology of the Human Body (rather than BIOE 2600)

Group B: Biosystems Engineering Design Electives

Choose the following three courses from the list of available design electives:

- BIOE 4414** Imaging and Spectroscopy for Biosystems
- BIOE 4610** Design of Assistive Technology Devices
- BIOE 4640** Bioengineering Applications in Medicine

Group C: Complementary Studies & Free Electives Choose 9 credit hours (minimum of 3 credit hours of complementary studies marked by *) from the following list of courses:

- BIOL 2410** Human Physiology 1
- BIOL 2420** Human Physiology 2
- BIOL 4470** Sensory-Motor Physiology
- ECE 4610** Biomedical Instrumentation and Signal Processing
- ENG 1900** Occupational Health and Safety Awareness*
- HIST 4660** History of Health and Disease (6)*
- HIST 4680** History of Health and Disease in Modern Canada (6)*
- KIN 2330** Biomechanics
- KIN 4330** Advanced Biomechanics
- NATV 3240** Native Medicine and Health*

PHIL 2740 Ethics and Biomedicine*

- PHYS 3220** Medical Physics and Physiological Measurement
- PHYS 4400** Medical Imaging

Note: Special permission may be granted by the Head of Department for courses not appearing on the list.

Bioprocessing Specialization

Students who obtain a grade of "C" or better in the courses listed below will receive a notation of "bioprocessing specialization" on their transcript at the time of graduation.

Group A: Science Electives

Within the two science slots in the core program, choose:

- SOIL 4060** Physical Properties of Soil
- BIOE 2600** Plant and Animal Physiology for Engineers

Group B: Biosystems Engineering Design Electives

Choose at least three courses from the list of available design electives:

- BIOE 4420** Crop Preservation
- BIOE 4390** Unit Operations 1
- BIOE 4440** Bioprocessing for Biorefining
- BIOE 4590** Management of By-Products from Animal Production

Group C: Complementary Studies & Free Electives Choose 9 credit hours (minimum of 3 credit hours of complementary studies marked by*) from the following list of courses:

- ABIZ 1010** Economics of World Food Issues and Policies*
- ENG 1900** Occupational Health and Safety Awareness*
- FOOD 1000** Food Safety Today and Tomorrow
- FOOD 3010** Food Process 1
- FOOD 4260** Water Management in Food Processing
- HNSC 1200** Food: Facts and Fallacies
- HNSC 2160** Principles of Food Preparation and Preservation

Note: Special permission may be granted by the Head of Department for courses not appearing on the list.

Environmental Specialization

Students who obtain a grade of "C" or better in the courses listed below will receive a notation of "environmental specialization" on their transcript at the time of graduation.

Group A: Science Electives

Within the two science slots in the core program, choose:

- SOIL 4060** Physical Properties of Soil
- BIOE 2600** Plant and Animal Physiology for Engineers

Group B: Biosystems Engineering Design Electives

Choose at least three of the following courses from the list of available design electives:

- BIOE 4460** Air Pollution Assessment and Management
- BIOE 4590** Management of By-Products from Animal Production
- BIOE 4600** Design of Water Management Systems
- BIOE 4620** Remediation Engineering

Group C: Complementary Studies & Free Electives

Choose 9 credit hours (minimum of 3 credit hours of complementary studies marked by *) from the following list of courses:

- ABIZ 2390** Introduction to Environmental Economics* (or equivalent)

AGEC 2370 Principles of Ecology (or equivalent)
CIVL 3690 Environmental Engineering Analysis
CIVL 3700 Environmental Engineering Design
CIVL 4350 Hazardous Waste Treatment
GEOG 2250 Introduction to Geographic Information Systems
GEOG 2520 Geography of Natural Resources*
PHIL 2750 Environmental Ethics*

Note: Special permission may be granted by the head of Department for courses not appearing on the list.

Sustainable Building Systems Specialization

Students who obtain a grade of "C" or better in the courses listed below will receive a notation of "sustainable building systems specialization" on their transcript at the time of graduation.

Group A: Science Electives

Within the two science slots in the core program, choose:

SOIL 4060 Physical Properties of Soil
BIOE 2600 Plant and Animal Physiology for Engineers
 or
BIOL 1412 Physiology of the Human Body

Group B: Biosystems Engineering Design Electives

Choose the following three courses from the list of available design electives:

BIOE 4412 Design of Light-Frame Building Systems
BIOE 4560 Structural Design in Wood
BIOE 4700 Alternative Building Design

Group C: Complementary Studies & Free Electives

Choose 9 credit hours (minimum of 3 credit hours of complementary studies marked by *) from the following list of courses:

CIVL 2770 Civil Engineering Materials
CIVL 3760 Structural Analysis
ENVR 3750 Green Building and Planning
ENVR 3850 Sustainable Manitoba*
EVDS 1600 Introduction to Environmental Design*
EVDS 1660 History of Culture, Ideas and Environment*
EVLU 4002 Construction Materials

Note: Special permission may be granted by the Head of Department for courses not appearing on the list.

Agribusiness Minor

A minor in agribusiness is available to Biosystems Engineering students. The minimum requirement is 18 credit hours consisting of ECON 1010 Introduction to Microeconomic Principles (3 credit hours), ECON 1020 Introduction to Macroeconomic Principles (3 credit hours), ABIZ 1000 Introduction to Agribusiness (3 credit hours), ABIZ 2510 Introduction to Agricultural and Food Marketing (3 credit hours), ABIZ 2520 Introduction to Management Sciences (3 credit hours) and at least three additional credit hours from the Department of Agribusiness and Agricultural Economics (students must meet all prerequisite requirements). A maximum of 2 courses (6 credit hours) of courses used for the minor may also be used to fulfill course requirements in Biosystems Engineering.

Admission to Medicine

The bachelor's degree in Biosystems Engineering provides the background to meet eligibility requirements for admission into the Faculty of Medicine. Students planning to apply for entrance to Medicine after completing the B.Sc. in Biosystems Engineering are advised to take PHIL 2740 Ethics and Bio-medicine as one complementary studies elective, CHEM 2210 Organic Chemistry 1 and CHEM 2360 Biochemistry 1 as their two free electives.

Co-operative Education Program in Biosystems Engineering

Please refer to SECTION 5: Co-operative Education and Industrial Internship Programs

4.5 Biosystems Engineering Course Descriptions-2000 Level

BIOE 2090 Machinery for Agricultural Production Cr.Hrs. 4

(Formerly 034.209) Farm machinery selection. Machine performance. Ownership and operating costs. Analysis of machine functions for safety and efficiency.

BIOE 2110 Transport Phenomena Cr.Hrs. 3

(Formerly 034.211) Principles of heat transfer, solar radiation, psychometrics, molecular diffusion, mass transfer and refrigeration and their application to biosystems. Prerequisite: ENG 1460 (or 130.112)

BIOE 2222 Precision Agriculture Concepts and Applications Cr.Hrs. 4

Precision agriculture is a philosophy of agricultural management that has been enabled by modern technology. This course examines the technology and the techniques of precision agriculture including GPS, GIS, variable rate technologies, and yield monitoring that can be used to improve the efficiency of agricultural operations by decreasing costs, increasing profits, and decreasing hazards to the environment.

BIOE 2480 Impact of Engineering on the Environment Cr.Hrs. 3

Students will gain an understanding of overall sustainability of industrial activities, life-cycle and risk assessment techniques for sustainability, and design improvements to enhance environmental performance of engineered systems. This course will introduce basic methodologies for conducting environmental impact assessments, including physical, chemical, ecological, social and economic impacts. May not be held with the former BIOE 4480. Registration restricted to Biosystems Engineering students.

BIOE 2580 Biosystems Engineering Design Trilogy 1 Cr.Hrs. 4

(Formerly 034.258) Biosystems Engineering and its place in the professions of engineering and agronomy. Design concepts, with an emphasis on team building and technical communication skills. Philosophy of project planning. Preparation of a conceptual design by teams in response to design assignment submitted by industry. Written report presented orally. Prerequisite: ENG 1430 OR THE FORMER ENG 1400 (OR 130.140).

BIOE 2590 Biology for Engineers Cr.Hrs. 3

(Formerly 034.259) Provide theories and principles of Biology to engineering students and present applications of biological principles to engineering problems. Fundamental theories involved in cell structure and function, metabolism, genetics and heredity, bacteria and virus structure and function, plant and animal structure and function are covered. An introduction to animal and plant physiology is also provided. Laboratory sessions and term assignments focus on the engineering applications of these basic theories and principles to provide a good understanding of the role of Biology in Engineering. Prerequisite: CHEM 1300 (or 002.130).

BIOE 2600 Plant and Animal Physiology for Engineers Cr.Hrs. 4

Plant and animal physiology as affected by environment for use in the design of agricultural machines, structures, and food processes for biological products; models of simulation of plant and animal growth. Prerequisite: BIOE 2590. May not be held with the former AGRI 2200.

Biosystems Engineering Course Descriptions-3000 Level

BIOE 3270 Instrumentation and Measurement for Biosystems Cr.Hrs. 4

(Formerly 034.327) Basic instrumentation for measuring electrical and non-electrical quantities associated with biosystems engineering and industry; transducers for automatic control. Prerequisites: [MATH 2132 (or the former MATH 2110 (or 136.211))] and [ENG 1450 or the former ENG 1180 (130.118)].

BIOE 3320 Engineering Properties of Biological Materials Cr.Hrs. 4

Engineering properties of biological and interacting materials within the system. Relationship between composition, structure, and properties of plant, animal, and human tissues. Definition and measurement of mechanical, thermal, electromagnetic, chemical and biological properties

and their variability. Use of these properties in engineering calculations. Prerequisites: Math 2130 (or Math 2100 or 136.210), CIVL 2800 (or 23.280) or MECH 2222 (or Mech 2220 or 025.222) BIOE 2580 (or 034.258). Not to be held with the former 034.323.

BIOE 3400 Design of Structural Components in Machines Cr.Hrs. 4

Design of structural components in machines; designing for axial tension and compression, connections for axial loadings, pinned trusses, bending, torsion, and combined loads; designing for welded connections; use of fluid power to enable movement of structural components. Students will use the computer as a design tool. Prerequisite: CIVL 2800 or MECH 2222. Not to be held with BIOE 4530.

BIOE 3530 Engineering Fundamentals Cr.Hrs. 3

(Formerly 034.353) Principles of heat transfer, steam, psychometrics, fluid mechanics, material balances, electricity and refrigeration. Cannot be held for credit in the Faculty of Engineering. Not to be held with the former 034.329. Prerequisite: [MATH 1300 or equivalent] and [MATH 1500 or equivalent] or the former MATH 1680 (136.168).

BIOE 3580 Biosystems Engineering Design Trilogy 2 Cr.Hrs. 4

(Formerly 034.358) Advanced design concepts associated with Biosystems Engineering, with emphasis on the principles of safety and human factors engineering. Theory of project planning. Preparation of a preliminary design by design teams in response to a design assignment submitted by industry. Written report with engineering drawings presented orally. Prerequisites: BIOE 2580 (or 034.258 or 034.214). Not to be held with the former 034.326.

BIOE 3590 Mechanics of Materials in Biosystems Cr.Hrs. 4

(Formerly 034.359) In this course students will be exposed to both the theory and physical behaviour of materials when subjected to loads. The course will be delivered using a combination of lectures and hands-on labs. The materials presented include a wide range of design biosystems engineers may be involved with, including plastics, bone, wood, concrete, steel, other biological materials and composites. Prerequisite: CIVL 2800 (or 023.280), or consent of instructor. Not to be with the former 034.324

Biosystems Engineering Course Descriptions-4000 Level

BIOE 4240 Graduation Project Cr.Hrs. 3

Either an independent or a directed study including at least one of: a comprehensive literature review, an experimental research project, or an engineering design problem. The project is to be concluded by a formal report or thesis. Prerequisites: BIOE 3270 (034.327) or approval of department.

BIOE 4390 Unit Operations 1 Cr.Hrs. 4

Equipment and systems used in handling, mixing, size reduction, separation and size enlargement of value-added food products. Prerequisites: CIVL 2790 (or 023.279) or MECH 2262 (or 025.226). Corequisites: BIOE 3320 (or 034.332 or 034.323), BIOE 3270 (or 034.327).

BIOE 4412 Design of Light-Frame Building Systems Cr.Hrs. 4

Light-frame buildings as a structural and environmental system; structural loads in building systems; energy (heat), moisture and air contaminants in building systems; built-environment for building occupants. Hands-on labs of constructing small-scale structures for students to gain an understanding of building construction techniques. Prerequisites: BIOE 2110 (034.211) and BIOE 3590 (034.359).

BIOE 4414 Imaging and Spectroscopy for Biosystems Cr.Hrs. 4

The purpose of this course is to familiarize senior Biosystems Engineering students with the fundamentals of imaging and spectroscopy for biosystems. Techniques of image acquisition, storage, processing, and pattern recognition will be taught. Various spectroscopy techniques and their applicability to biological materials will be discussed. Analysis of data using statistical, artificial neural networks and chemometric methods will be covered. Offered in alternate years. Prerequisite: BIOE 3270 (034.327)

BIOE 4416 Topics in Biosystems Engineering Cr.Hrs. 3

This course will cover contemporary topics in Biosystems Engineering. The specific topics and a detailed outline will be available at the time of registration. Prerequisite: Permission of the department.

BIOE 4420 Crop Preservation Cr.Hrs. 4

(Formerly 034.442) Biological and physical deterioration during storage. Methods of preserving and storing cereals, oilseeds, and other agricultural crops. Prerequisite: BIOE 2110 (or 034.211).

BIOE 4440 Bioprocessing for Biorefining Cr.Hrs. 4

This course will provide students with an understanding of the principles involved in the design of proper conditions for processing of biomaterials for production of high-quality biofuels and bioproducts. The content of this course is built on the principles of physics, transport phenomena, thermodynamics, reaction, kinetics, fermentation, and industrial unit operations. Prerequisite: BIOE 2110 (or 034.211). Pre- or corequisite: BIOE 3320 (or 034.332 or 034.323)

BIOE 4460 Air Pollution Assessment and Management Cr.Hrs. 4

Air pollutant sources and characteristics, their impact on the environment, their behaviour in the atmosphere. Methods of sampling and measurement and the basic technological alternatives available for separation/removal and control. Particular problems of regional interest are discussed. Corequisites: CIVL 2790 (or 023.279) or MECH 2262 (or MECH 2260 or 025.226).

BIOE 4480 Environmental Impact Assessment Cr.Hrs. 4

(Formerly 034.448) Basic methodologies for conducting impact assessments, including physical, chemical and ecological impacts. Prerequisite: BIOE 2590 or CIVL 3690.

BIOE 4500 Water Management Cr.Hrs. 3

(Formerly 034.450) Introduction to the design of irrigation and drainage systems. Topics in irrigation include sprinklers, laterals, mainline and pumps. Drainage topics cover both the surface and subsurface systems. Analysis of precipitation and runoff. Environmental impacts of water management. Offered alternate years.

BIOE 4520 Crop Preservation and Handling Cr.Hrs. 3

(Formerly 034.452) Interaction of biological and physical factors related to methods of preserving, storing, and handling cereals, oilseeds, and other agricultural crops. Offered alternate years.

BIOE 4530 Analysis and Design of Biomachinery Cr.Hrs. 4

Design of machines for bioprocessing; traction mechanics and tractor chassis mechanics; power transmission components; functional requirements for field and process machines; fluid power hydraulics. Prerequisite: BIOE 2580 (or 034.258).

BIOE 4560 Structural Design in Wood Cr.Hrs. 4

(Formerly 034.456) Design using wood as a structural material in light-frame buildings. Consideration of design constraints associated with sawn lumber as well as based composite materials. Emphasis on use of computer based design aids. Prerequisites: CIVL 3770 (or 023.377) or BIOE 3590 (034.359) or 034.324.

BIOE 4580 Biosystems Engineering Design Trilogy 3 Cr.Hrs. 4

(Formerly 034.458) Advanced design concepts, with emphasis on the principle of quality control. Application of project planning techniques. Principles of owning and operating an engineering consulting company. Preparation of a final design by design teams in response to a design assignment submitted by industry. Written report with cost of services rendered, presented orally. Prerequisite: BIOE 3580 (or 034.358) or 034.326. Not to be held with the former 034.413.

BIOE 4590 Management of By-Products from Animal Production Cr. Hrs. 4

Topics covered include solid and liquid manure, manure characteristics, manure collection, storage, land application and utilization, biological treatment, design of equipment and facilities for manure handling. Environment issues, such as odour and water pollution associated with manure management will also be discussed. Prerequisites: CIVL 2790 (or 023.279) or MECH 2262 (or MECH 2260 or 025.226).

BIOE 4600 Design of Water Management Systems Cr.Hrs. 4

(Formerly 034.460) To introduce the basic theoretical principles in the design of irrigation and drainage systems. Topics covered include the determination of irrigation depth and interval, evapotranspiration, measurement and analysis of precipitation, design of sprinkler and drip irrigation systems, selection of pumps, surface and subsurface drainage design, water quality issues, salinity management, and the environmental impact of water management practices. Corequisite: SOIL 4060 (or 040.406) or CIVL 3730 (or 023.373) or consent of instructor.

BIOE 4610 Design of Assistive Technology Devices Cr.Hrs. 4

(Formerly 034.461) Application and design of technology for individuals with disabilities; emphasizing the development of the requisite knowledge, skills, and attitudes to evaluate, design, and implement client-centred assistive technology. A multi-disciplinary approach to learning and applying knowledge will be emphasized with engineering and medical rehabilitation students collaborating on a design project. Prerequisite: BIOL 1412 (or ZOOL 1330 or 022.133).

BIOE 4620 Remediation Engineering Cr.Hrs. 4

The theoretical basis for the engineering design of different remediation technologies to treat contaminated soil and groundwater will be introduced. Methods for site characterization, monitoring of progress in remediation, and modeling of the remediation process will be presented. Different methods such as soil washing, air sparging, bioremediation, phytoremediation, constructed wetlands, electrokinetic remediation, reactive barriers will be discussed. Prerequisite: CIVL 2790 (or 023.279) or MECH 2262 (or MECH 2260 or 025.226).

BIOE 4630 Pollution Prevention Practices Cr.Hrs. 4

To give students an understanding of pollution prevention as it relates to solids and hazardous waste management, air and water pollution, energy usage, and resource depletion. To evaluate practices on improved manufacturing operations, present fundamentals of pollution prevention economics, examine waste minimization incentives, design improvements to existing systems, and investigate overall sustainability of industrial practices. Prerequisite: CIVL 2790 (or 023.279) or MECH 2262 (or MECH 2260 or 025.226).

BIOE 4640 Bioengineering Applications in Medicine Cr.Hrs. 4

This course surveys bioengineering applications and medicine from a clinical engineering perspective. Topics include: clinical engineering practice; device development legislation; biomedical sensors; biosensors; biomaterials and biocompatibility; as well as the principles of and design for medical imaging equipment. Prerequisites: BIOL 1410 (or ZOOL 1320 or 022.132) and BIOL 1412 (or ZOOL 1330 or 022.133) and BIOE 3320 (0343.332).

BIOE 4700 Alternative Building Design Cr.Hrs. 4

This course will provide students with experience in the design of structures that utilize natural and green building materials and techniques. Students will get hands-on lab experience with various natural building materials such as straw, straw light clay, cob and stackwall. Prerequisites: BIOE 3590 (or 034.359) or CIVL 3770 (or 023.377).

4.6 Civil Engineering

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Associate Head: Dr. Marolo Alfaro, P.Eng.

Associate Head: Dr. Dimos Polyzois, P.Eng.

Academic Staff:

Please refer to our website at:

<http://umanitoba.ca/faculties/engineering/departments/civil/facultystaff-academic.html>

The Department of Civil Engineering offers a fully accredited degree program in Civil Engineering. Graduates of the Civil Engineering program are academically qualified to register as Engineers-in-Training in engineering licensing bodies in Canada. The Civil Engineering program is designed to give students a broad knowledge of engineering principles and professional practice. The program has a strong core component that provides exposure to a range of areas in Civil Engineering, including – but not limited to – the design of building and bridges, the design of facilities and methods for treatment of water, waste water and solid waste, the design of foundations and earthworks such as dams and river bank protection, transportation planning, the design of roads and pavement, the design of hydraulic structures such as sewers, canals, and spillways, and the management of surface and ground water. In the last years of the program, there are some opportunities for specialization through selection of technical elective courses. A cooperative education option allows students to include practical work experience in their program.

Civil Engineering Degree Program

Students are to consult with the department for four and five-year program plans. Students are expected to follow the program plans when possible, as timetabling and course offerings are based on these plans.

Environmental Engineering Option

An option in Environmental Engineering provides an opportunity for students to focus on environmental engineering related courses.

Student Support

Summer employment of a limited number of undergraduate students may be offered by the Department of Civil Engineering. Typical duties include assisting academic staff members with research projects.

Laboratory Safety

Students entering Civil Engineering are required to attend a seminar on laboratory safety. The seminar will normally be held in September.

Preliminary Engineering Program

Common to all Engineering Programs (see Section 4.2 for details.)

Civil Engineering Program and Environmental Engineering Option

Common Core Program

Course No.		Credit Hours
CHEM 1310	Introduction to Physical Chemistry	3
CIVL 2770	Civil Engineering Materials	5
CIVL 2780	Civil Engineering Systems	4
CIVL 2790	Fluid Mechanics	4
CIVL 2800	Solid Mechanics 1	4
CIVL 2830	Graphics for Civil Engineers	2
CIVL 2840	Civil Engineering Geomatics	3
CIVL 3590	Numerical Methods for Engineers	4
CIVL 3690	Environmental Engineering Analysis	4
CIVL 3700	Environmental Engineering Design	4
CIVL 3740	Hydraulics	4
CIVL 3750	Hydrology	4
CIVL 3760	Structural Analysis	4
CIVL 3770	Structural Design 1	4
CIVL 3790	Transportation Engineering	4
CIVL 4050	Engineering Economics	3
CIVL 4220	Geotechnical Design	4
CIVL 4380	Infrastructure Engineering and Construction Management	4
CIVL 4390	Structural Design 2	4
CIVL 4400	Transportation Engineering 2	4
CIVL 4460	Technology, Society and the Future	3
CIVL 4590	Design Project	6

ENG 2030	Engineering Communication: Strategies for the Profession	3
or		
ENG 2040	Engineering Communication: Strategies, Practice and Design	3
GEOL 2250	Geology for Engineers	4
MATH 2130	Engineering Mathematical Analysis	3
MATH 2132	Engineering Mathematical Analysis 2	3
STAT 2220	Introduction to Probability and Statistics	3

Civil Engineering:

Complementary Studies Elective (see Note 1) 3

Environmental Option:

PHIL 2750 Environmental Ethics 3 (see Note 1) 3

Civil Engineering Technical Electives: (5 courses) (see Notes 2, 3, 4)

A minimum of 3 courses must be taken from Group A and up to 2 from Group B, with no more than one course from outside the Department of Civil Engineering.

Group A (Select 3 to 5 courses)

Course No.	Course Name	Credit Hours
CIVL 3710	Finite Element Analysis	4
CIVL 4020	Masonry Design and Construction	4
CIVL 4022	Properties and Design of Concrete Mixtures	4
CIVL 4030	Structural Design 3	4
CIVL 4040	Structural Dynamics	4
CIVL 4100	Engineering Management and the Environment (see Note 5)	4
CIVL 4120	Water Treatment Plant Design	4
CIVL 4130	Solid Waste Management	4
CIVL 4180	Environmental Systems	4
CIVL 4200	Groundwater Contamination	4
CIVL 4230	Geotechnical Engineering	4
CIVL 4250	Groundwater Hydrology	4
CIVL 4300	Design of Urban Water Systems	4
CIVL 4350	Hazardous Waste Treatment	4
CIVL 4410	Transportation Systems	4
CIVL 4420	Highway Pavement Design	4
CIVL 4470	Watershed Processes	4

Group B (Up to 2 courses, only 1 from outside of Civil Engineering)

Course No.	Course Name	Credit Hours
BIOE 4560	Structural Design in Wood	4
CIVL 4330	Graduation Project	4

Environmental Option Technical Electives:

(5 courses) (see Notes 2, 3, 4)

A minimum of 3 courses must be taken from Group A and up to 2 from Group B, with no more than one course from outside the Department of Civil Engineering.

Group A (Select 3 to 5 courses)

Course No.	Course Name	Credit Hours
CIVL 3710	Finite Element Analysis	4
CIVL 4100	Engineering Management and the Environment (see Note 5)	4
CIVL 4120	Water Treatment Plant Design	4
CIVL 4130	Solid Waste Management	4
CIVL 4180	Environmental Systems	4
CIVL 4200	Groundwater Contamination	4
CIVL 4250	Groundwater Hydrology	4
CIVL 4300	Design of Urban Water Systems	4
CIVL 4350	Hazardous Waste Treatment	4
CIVL 4470	Watershed Processes	4

ACADEMIC CALENDAR 2015-2016

Group B (Up to 2 courses, only 1 from outside of Civil Engineering)

Course No.	Course Name	Credit Hours
BIOE 4460	Air Pollution Assessment and Management	4
BIOE 4480	Environmental Impact Assessment (see Note 5)	4
CIVL 4330	Graduation Project	4
SOIL 4500	Remediation of Contaminated Land	3

Notes:

1) Students are required to take any course from the Faculty of Arts or Faculty of Management, at the 1000 level or above, as a complementary studies elective. However, ARTS 1110 Introduction to University may not be used for credit in the Faculty of Engineering. Students pursuing the Environmental Option must take PHIL 2750 as their complementary studies elective.

2) Students admitted prior to September 2015 may request to be assessed under the new program or continue under their original program, specifically with CIVL 3710 and CIVL 4250 as core courses and a minimum of three technical elective courses required.

3) Technical elective courses offered vary from year to year and may have limited enrollment. Courses offered in the current year are listed on the online timetables on the Department website.

4) Students are encouraged to discuss their program of courses with members of the instructional staff to obtain advice concerning the best choice of electives for their needs.

5) CIVL 4100 can not be held with BIOE 4480.

6) Students may take one technical elective course with a significant engineering science and/or design component from another department subject to the approval by the department head (or designate) of Civil Engineering.

Co-operative Education Option in Civil Engineering

Please refer to SECTION 5: Co-operative Education and Industrial Internship Programs

4.7 Civil Engineering Course Descriptions

Civil Engineering Course Descriptions-2000 Level

CIVL 2770 Civil Engineering Materials Cr.Hrs. 5

(Formerly 023.277) Principles of testing; testing standards; instrumentation; data acquisition systems; mechanical properties of steel, iron, cement, concrete, asphalt, wood and composites; classification and particle size analysis of soils and aggregates. Prerequisite: ENG 1440 (or 130.144). Corequisite: CIVL 2800 (or 023.280).

CIVL 2780 Civil Engineering Systems Cr.Hrs. 4

(Formerly 023.278) Introduction to applied systems analysis approach. Use of applied systems analysis in Civil Engineering. Optimization techniques: linear programming; dynamic programming; other techniques. Evaluation: decision analysis. Prerequisites: (MATH 1710 (or 136.171) or MATH 1700 (or 136.170)) (C).

CIVL 2790 Fluid Mechanics Cr.Hrs. 4

(Formerly 023.279) Definition of fluid; fluid properties; variation of pressure in a fluid; hydrostatic forces; buoyancy; kinematics of flow; control volumes; continuity; Bernoulli's equation; momentum equation; energy equation; flow in closed conduits; open channel flow. Prerequisites: ENG 1440 (or 130.144), MATH 1710 (or 136.171) or MATH 1700 (or 136.170).

CIVL 2800 Solid Mechanics 1 Cr.Hrs. 4

(Formerly 023.280) Analysis of deformable bodies; stress and strain in three dimensions; equilibrium equations and strain-displacement relations; constitutive relations and mechanical behaviour of materials; radially symmetric and plane problems in elasticity; relevant experimental demonstrations. Prerequisites: ENG 1440 (or 130.135), MATH 1710 (or 136.171) or MATH 1700 (or 136.170).

CIVL 2830 Graphics for Civil Engineers Cr.Hrs. 2

Orthographic Drawing: Object Orientation and Views, Space Dimensions, Surfaces, Lines, and Hidden Features. Computer-based Drawings. Applications: Steel and Reinforced Concrete Structures, Digital Terrain Models. Ethical, Legal and Professional Issues. Not to be held with the former 130.140. Co-requisite: CIVL 2840.

CIVL 2840 Civil Engineering Geomatics Cr.Hrs. 3

Geomatics in civil engineering, map-making, map-reading, computerized maps; leveling; distance measurement angles, directions, traverses; coordinate geometry; electronic survey instruments; global positioning system; geographic information systems; digital photogrammetric methods and data; aspects of route surveying. Not to be held with the former 023.281 or 023.282 or CIVL 2820. Pre or Co-requisite: MATH 1210 (C), Co-requisite: CIVL 2830.

Civil Engineering Course Descriptions-3000 Level

CIVL 3590 Numerical Methods in Engineering Analysis Cr.Hrs. 4

(Formerly 023.359) Variety of numerical techniques applicable to solutions of problems in civil engineering. Students may not hold credit for CIVL 3590 (023.359) and MATH 2120 (or 136.212). Prerequisite: COMP 1010 (or 074.101) or COMP 1012 (C). Pre or Co-requisite: MATH 2132 or prerequisite MATH 2100 (or 136.210).

CIVL 3690 Environmental Engineering Analysis Cr.Hrs. 4

(Formerly 023.369) Introduction to environmental engineering analysis concept; risk assessment; colloidal dispersions; mass balances, reaction kinetics and reactor design principles. Water pollution and water quality in rivers and lakes. Physical, chemical and biological unit operations and processes applied in water and/or wastewater treatment. Meteorology and air pollution; atmospheric dispersion. Solid waste management issues. Prerequisites: (CHEM 1310 or CHEM 2560), STAT 2220 (or 005.222).

CIVL 3700 Environmental Engineering Design Cr.Hrs. 4

(Formerly 023.370) Design principles are developed for water, solid/soil and air pollution control. Application of the principles in design projects which may include surface and groundwater remediation, solid waste management, landfilling, soil remediation and site assessment; municipal and industrial wastewater treatment; odour and air pollution abatement facilities. Prerequisite: CIVL 3690 (or 023.369).

CIVL 3710 Finite Element Analysis Cr.Hrs. 4

(Formerly 023.371) One-dimensional analysis of fluid flow, seepage and heat transfer; truss, beam and frame elements; two-dimensional problems; isoparametric elements and Gauss quadrature; time-dependent problems, diffusion, consolidation, and time integration methods; introduction to commercial packages; solution of problems in civil engineering (seepage, dams, pavements). Prerequisites: [CIVL 2790 (or 023.279), CIVL 2800 (or 023.280)], [CIVL 3590 (or 23.359) or MATH 2120.].

CIVL 3730 Geotechnical Materials and Analysis Cr.Hrs. 4

(Formerly 023.373) Geotechnical Materials and Analysis (3-1.5T:0-0) 4 Soil and rock properties: laboratory and field techniques; in situ states of stress and consolidations; constitutive models; stress beneath loaded areas and around tunnels; analysis of simple retaining structures and slopes; stability and settlement of shallow and deep foundations in soil and rock. Prerequisites: GEOL 2250 (or 007.225), CIVL 2770 (or 023.277), CIVL 2800 (or 023.280).

CIVL 3740 Hydraulics Cr.Hrs. 4

(Formerly 023.374) Hydraulics of uniform and gradually varied flow; back-water computation and classification of surface water profiles; hydraulics jumps, spillways, and stilling basins; flow over weirs; hydraulic models; theory of turbo-machinery. Prerequisite: CIVL 2790 (or 023.279).

CIVL 3750 Hydrology Cr.Hrs. 4

(Formerly 023.375) Basic hydrological processes; precipitation; evapotranspiration; infiltration and runoff; analytical methods; hydrograph theory and application; application to reservoir design; project floods and flow forecasting; statistical analysis. Prerequisite or corequisite: STAT 2220 (or 005.222) or (STAT 1000 and STAT 2000).

CIVL 3760 Structural Analysis Cr.Hrs. 4

(Formerly 023.376) Different structural forms and load distribution, analysis of cables; statically determinate curved, beams and frames; influence lines; energy methods and deflections of structures; flexibility and stiffness methods; computer-aided structural analysis; introduction to structural dynamics. Prerequisite: CIVL 2800 (or 023.280).

CIVL 3770 Structural Design 1 Cr.Hrs. 4

(Formerly 023.377) Introduction to design of steel structures; loading, structural configurations; design of simple members and connections; building code requirements. Prerequisites: CIVL 2770 (or 023.277) (C), CIVL 3760 (or 023.376) (C).

CIVL 3790 Transportation Engineering 1 Cr.Hrs. 4

(Formerly 023.379) Introduction to transportation. Overview of Canada and U.S. transport systems. Fundamentals of transport systems analysis. Introduction to sequential demand modeling. Analysis and evaluation of uninterrupted flow on highways. Basics of geometric design of highways. Basics of design of at-grade intersections. Introduction to computer applications in transportation engineering. Basics of pavement engineering and design. Prerequisites: CIVL 2840, CIVL 2770 (or 023.277), CIVL 2780 (or 023.278) or (STAT 2220 (or 005.222) or (STAT 1000 and STAT 2000)).

Civil Engineering Course Descriptions-4000 Level

CIVL 4020 Masonry Design and Construction Cr.Hrs. 4

Introduction to the building codes that govern masonry design. Advanced design procedures for masonry members and structures. Single-story and multi-story building design. Prerequisite: CIVL 3760.

CIVL 4022 Properties and Design of Concrete Mixtures Cr.Hrs. 4

Constituent materials (cement, admixtures, etc.) of concrete; performance-based design and control of concrete mixtures; fresh, hardened and durability properties of concrete. Prerequisite: CIVL 2770; Pre- or Corequisite: CIVL 3770.

CIVL 4030 Structural Design 3 Cr.Hrs. 4

(Formerly 023.403) Prestressed concrete structures; fibre-reinforced concrete structures; bridge loading, analysis and design in steel and concrete; special topics in structural engineering. Prerequisites: CIVL 2770 (or 23.277), CIVL 2800 (or 23.280), CIVL 3760 (or 23.376), CIVL 3770 (23.377), CIVL 4390 (or 023.439).

CIVL 4040 Structural Dynamics Cr.Hrs. 4

(Formerly 023.404) Dynamic loads in civil engineering; overview of structural dynamics; single-degree-of-freedom systems; free-vibration, harmonic, periodic and impulsive loads; multi-degree-of-freedom systems; distributed systems; beam vibrations; steady-state vibrations of foundations; introduction to earthquake engineering; elastic waves in soils, response and design spectrums; wind vibrations. Prerequisite: CIVL 3760 (or 023.376).

CIVL 4050 Engineering Economics Cr.Hrs. 3

(Formerly 023.405) Introduction to engineering economics. Time value of money and discounted cash flow calculations. Comparing alternatives. Replacement analysis and life-cycle costing. Public sector engineering economy studies. Private sector engineering economy studies. Before and after-tax analysis. Applications in cost-estimating. Applications in asset management systems. Basic accounting. Accommodating capital limitations. Dealing with inflation. Dealing with risk and uncertainty. Prerequisite: STAT 2220 (or 005.222) or (STAT 1000 and STAT 2000).

CIVL 4100 Engineering Management and the Environment Cr.Hrs. 4

(Formerly 023.410) Teams of students apply environmental management techniques, such as: impact assessment, site assessment, and auditing to selected engineering construction projects and operations; several oral and written reports are required. Co- or prerequisite: CIVL 3700 (or 023.370).

CIVL 4120 Water Treatment Plant Design Cr.Hrs. 4

Design of unit processes used in potable water treatment plants: solid/liquid separation, oxidation, coagulation, filtration, adsorption and disinfection. Determination of design parameters through laboratory studies. Water treatment plants design standards and guidelines. Prerequisite: CIVL 3690.

CIVL 4130 Solid Waste Management Cr.Hrs. 4

Engineering principles and the practice of integrated management of solid wastes, including characteristics, sorting, utilization and final disposal in landfill. Principles of leachate and hazardous waste management and disposal. Pre or Co-requisite: CIVL 3700.

CIVL 4180 Environmental Systems Cr.Hrs. 4

(Formerly 023.418) Development of a river water quality model; waste allocation modelling; modelling of the sites selection process; analysis of environmental impact using technical and non-technical (i.e. sociological, ethical, aesthetic) parameters. Prerequisites: CIVL 2780 (or 023.278), CIVL 3690 (or 023.369), CIVL 3750 (or 023.375).

CIVL 4200 Groundwater Contamination Cr.Hrs. 4

(Formerly 023.420) Introduction to the principles of groundwater chemistry; chemical evolution of natural groundwater flow systems; sources of contamination; mass transport processes; hydrochemical behaviour of contaminants; nuclear waste disposal; non-aqueous phase organics; aquifer remediation. Prerequisites: CIVL 4250 (or 023.425), GEOL 2250 (or 007.225).

CIVL 4220 Geotechnical Design Cr.Hrs. 4

(Formerly 023.422) Site characterization; design and construction of surface footings, deep foundations, tunnels, earth and rock support systems; design and remediation of slopes; frozen soils and foundation design; geosynthetics and geofabrics in geotechnical construction; reinforced earth; geoenvironmental issues; tailing dams, clean-up, and remediation. Prerequisite: CIVL 3730 (or 023.373).

CIVL 4230 Geotechnical Engineering Cr.Hrs. 4

(Formerly 023.423) Case-history approach to geotechnical engineering practice from civil and mining engineering; relationship between predicted and observed behaviour; surface and shallow footings; propped walls and bulkheads; rock and soft ground tunneling; deep foundations; rock and soil slopes; culverts; geoenvironmental problems. Prerequisite: CIVL 3730 (or 023.373).

CIVL 4250 Groundwater Hydrology Cr.Hrs. 4

(Formerly 023.425) Introduction to theory of groundwater flow; flow nets; regional groundwater flow; well hydraulics; role of groundwater in geologic and engineering processes; multiphase flow. Prerequisites: GEOL 2250 (or 007.225), CIVL 2790 (or 023.279), MATH 2130 (or MATH 2110), MATH 2132 (or MATH 2100).

CIVL 4300 Design of Urban Water Systems Cr.Hrs. 4

Water supply and the design of water distribution systems. Urban hydrology and design of wastewater and stormwater collection systems. Manitoba specific applications will be discussed. Prerequisites: CIVL 3750. Pre-or Corequisites: CIVL 3740.

CIVL 4330 Graduation Project Cr.Hrs. 4

(Formerly 023.433) The student will undertake an original study involving engineering design, procedure, or experimental investigation that emphasizes the student's initiative and judgement. The student must demonstrate an ability to plan, conduct and formally report on the study by written thesis and oral presentation. Prerequisites: Completion of 120 credit hours, ENG 2010 (or 130.201).

CIVL 4350 Hazardous Waste Treatment Cr.Hrs. 4

(Formerly 023.435) Sources and classification of hazardous and industrial wastes. Overview of the waste management problem. Theory and applications of various physical, chemical, and thermal, waste treatment processes. Waste elimination options and strategies. Prerequisite: CIVL 3690 (or 023.369).

CIVL 4380 Infrastructure Engineering and Construction Management Cr.Hrs. 4

(Formerly 023.438) Infrastructure engineering; drainage systems, maintenance engineering and management. Construction and project management; workplace health and safety, construction site field trips, construction equipment, temporary facilities, project management. Elements of law for civil engineers. Prerequisite: CIVL 4050 (or 023.405).

CIVL 4390 Structural Design 2 Cr.Hrs. 4

(Formerly 023.439) Design in reinforced concrete; properties of materials; ultimate strength design; analysis and design of sections in bending; shear and development considerations; short- and long-term deflection; sections subjected to bending and axial stresses; design of simple floor systems; column footings. Prerequisites: CIVL 2770 (or 023.277), CIVL 2800 (or 023.280), CIVL 3760 (or 023.376), CIVL 3770 (or 023.377).

CIVL 4400 Transportation Engineering 2 Cr.Hrs. 4

(Formerly 023.440) Fundamentals of traffic control for highways. Capacity and level of service analysis on urban streets. Urban supplement to geometric design guide for Canadian roads. Modelling vehicle performance. Elements of railway engineering. Design for trucks. Transportation systems management. Application of intelligent transportation systems. Basic pavement design methods. Introduction to pavement management systems. Highway accidents and design for safety. Legislative and policy framework for transportation engineering. Prerequisite: CIVL 3790 (or 023.379).

CIVL 4410 Transportation Systems Cr.Hrs. 4

(Formerly 023.441) Contemporary approaches to transportation planning. Data for transportation planning. Advanced demand analysis and modelling. Illustrative transport planning studies. Planning and design for public passenger transportation. Planning and design for barrier-free transportation and transport of disabled persons. Goods movement and trucking studies. Planning and design for motor carrier operations. Planning and design for grain handling and transportation. Transport planning in developing countries. Evaluating transport plans and projects. Transport and the environment. Transport and energy. Vehicle operating costs and engineering unit cost models. Prerequisite: CIVL 3790 (or 023.379).

CIVL 4420 Highway Pavement Design Cr.Hrs. 4

(Formerly 023.442) Soil classification and properties; soil-moisture-density-strength relationships; earthwork operations and specifications; soil stabilization; granular bases; surface drainage; structural design of flexible and rigid pavements. Prerequisites: CIVL 2770 (or 023.277), CIVL 3790 (or 023.379).

CIVL 4460 Technology, Society, and the Future Cr.Hrs. 3

(Formerly 023.446) Impact of technology and technological change on society - past, present, future; specific technologies, e.g. construction, machine power, computers, communications, medical, military: the process of technological change; invisible effects of technology; technology and resource use; sustainable development, limits to growth and the role of technology. Prerequisite: A grade of "C" or better in ENGL 1400 or ENGL 1200 or ENGL 1300 or the former ENGL 1310 or the former ENGL 1320 or ENGL 1340 (or equivalent).

CIVL 4470 Watershed Processes Cr.Hrs. 4

(Formerly 023.447) Rainfall-runoff processes, flood routing; characteristics and mechanics of flow in (natural) channels; computer modelling of watershed hydrology and hydraulics; influence of man-made structures; river morphology, sediment transport prediction, design of a stable channel; river ice processes. Prerequisite: CIVL 3750 (or 023.375). Pre or co-requisite: CIVL 3740 (or 023.374).

CIVL 4590 Design Project Cr.Hrs. 6

(Formerly 023.459) An interdisciplinary project-based course involving engineering design, teamwork and delivered in studio format. Students are expected to work in pre-assigned teams under the guidance of professional engineers on a pre-determined project. Lecture material will cover project management, construction, environmental and economic issues. Each team will be required to give an oral presentation of their design project. Prerequisite: ENG 2010 (or 130.201), CIVL 2840 (or CIVL 2820 or 23.282), CIVL 3700 (or 23.370), CIVL 3740 (or 23.374), CIVL 3750 (or 23.375). CIVL 3770 (or 23.377), CIVL 3790 (or 23.379).

4.8 Electrical and Computer Engineering

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Head: Dr. J. LoVetri, P.Eng.
Associate Head (Computer Engineering): Dr. Dean McNeill, P.Eng.
Associate Head (Electrical Engineering): Dr. Derek Oliver, P.Eng.

The Department of Electrical and Computer Engineering offers two fully accredited degree programs, one in Electrical Engineering and one in Computer Engineering. Both programs may include an industry internship. The programs are designed to give students knowledge of the basic principles of engineering and, in particular, an adequate training and education in the fundamentals and professional applications of Electrical and Computer Engineering. It is recommended that students entering Electrical or Computer Engineering acquire their own computer.

Industry Internship Program (IIP)

The Faculty of Engineering offers cooperative education or industry internship opportunities as part of all degree programs. For information on these programs, please refer to SECTION 5: Co-operative Education and Industrial Internship Programs.

4.8.1 Computer Engineering Degree Program

The program in Computer Engineering has a core-plus-elective structure.

The core includes fundamental professional courses focused on digital hardware, digital systems design, software engineering, algorithms, electronics, and communications, as well as developing a necessary foundation in mathematics, computer programming, electric circuits, the physical sciences, and thermodynamics. At the conclusion of the program, a graduate will have acquired both the knowledge and experience necessary to design and engineer practical custom digital hardware and software systems to solve real-world problems. To support that outcome, the final year includes a significant, industrially relevant, capstone group design project as a core requirement, with the remaining program based on electives. A certain level of specialization is possible through the selection of elective courses offered in the final year. In addition, the Department offers recognized Focus Areas in Communications Networks, Embedded Computing, and Machine Vision, as described in Section 4.8.3.

The student’s program must include six credit hours of complementary studies electives. Courses in engineering economics, technical writing, and ecology, technology and society are compulsory.

Students are encouraged to consult with the department for model four-year and five-year programs. Students are strongly encouraged to follow the model programs when possible, as timetabling and course offerings are based on these.

Preliminary Engineering Program

All degree programs within the Faculty of Engineering consist of a common first-year known as the Preliminary Engineering Program. For information on the preliminary program, please refer to Section 4.2.

Computer Engineering Departmental Program

Course No.		Credit Hours
ANTH 2430	Ecology, Technology and Society	3
CIVL 4050	Engineering Economics	3
COMP 1020	Computer Science 2	3
COMP 2140	Data Structures and Algorithms	3
COMP 3430	Operating Systems	3
ECE 2160	Electronics 2E	5
ECE 2220	Digital Logic Systems	5
ECE 2262	Electric Circuits	4
ECE 3610	Microprocessing Systems	4
ECE 3670	Electronics 3E	4
ECE 3700	Telecommunication Network Engineering	4
ECE 3740	System Engineering Principles 1	4
ECE 3760	Digital Systems Design 1	4
ECE 3780	Signal Processing 1	4
ECE 3790	Engineering Algorithms	4
ECE 4150	Control Systems	4
or		
ECE 4260	Communication Systems	4
ECE 4240	Microprocessor Interfacing	4
ECE 4830	Signal Processing 2	4
ECE 4600	Group Design Project (See Note 1)	6

ENG 2030	Engineering Communication: Strategies for the Profession	3
or		
ENG 2040	Engineering Communication: Strategies, Practice, and Design	3
MATH 2130	Engineering Mathematical Analysis 1	3
MATH 2132	Engineering Mathematical Analysis 2	3
MATH 3120	Applied Discrete Mathematics	3
MATH 3132	Engineering Mathematical Analysis 3	3
PHYS 2152	Modern Physics for Engineers	3
STAT 2220	Contemporary Statistics for Engineers	3
	Complementary Studies Elective (2 required) (see Note 2)	
	Natural Science Electives (2 required) (see Note 5)	
	Technical Electives (3 required) (see Note 3)	

Total credits for Graduation 155-158

Technical Electives (3 required) (see Note 3)**Computer Engineering Electives**

ECE 3750	Systems Engineering Principles 2	4
ECE 3770	Digital Systems Design 2	4
ECE 4180	Introduction to Robotics	4
ECE 4250	Digital Communications	4
ECE 4420	Digital Control	4
ECE 4440	Computer Vision	4
ECE 4520	Simulation and Modeling	4
ECE 4530	Parallel Processing	4
ECE 4540	Wireless Networks	4
ECE 4740	Digital System Implementation	4
ECE 4850	Contemporary Topics in Electrical and Computer Engineering 1 (see Note 6)	4
ECE 4860	Contemporary Topics in Electrical and Computer Engineering 2 (see Note 6)	4
ECE 4870	Contemporary Topics in Electrical and Computer Engineering 3 (see Note 6)	3
ECE 4880	Contemporary Topics in Electrical and Computer Engineering 4 (see Note 6)	3

Computer Science Electives

COMP 2150	Object Orientation	3
COMP 2160	Programming Practices	3
COMP 3010	Distributed Computing	3
COMP 3020	Human-Computer Interaction 1	3
COMP 3190	Introduction to Artificial Intelligence	3
COMP 3380	Databases Concepts and Usage	3
COMP 3490	Computer Graphics 1	3
COMP 4020	Human-Computer Interaction 2	3
COMP 4140	Introduction to Cryptography and Cryptosystems	3
COMP 4360	Machine Learning	3
COMP 4490	Computer Graphics 2	3
COMP 4580	Computer Security	3

Electrical Engineering Electives (maximum of 1, see Note 3)

ECE 3540	Advanced Circuit Analysis and Design	4
ECE 3580	Foundations of Electromagnetics	4
ECE 3600	Physical Electronics	4
ECE 3720	Electric Power and Machines	4
ECE 4150	Control Systems	4
ECE 4160	Control Engineering	4
ECE 4260	Communication Systems	4
ECE 4390	Engineering Computations 4E	4
ECE 4610	Biomedical Instrumentation and Signal Processing	4

Natural Science Electives for Computer Engineering

The Computer Engineering program requires students to complete two elective courses in natural science selected from a Department approved list. This list is updated periodically to reflect changes in course offerings and is available on the Department website.

http://umanitoba.ca/ece/curr_students/undergraduate.html

NOTES:

1. Course continues through both terms with credit given upon completion.
2. The complementary studies elective can be any course at the 1000 level or above from either the faculties of Arts or Management. However, ARTS 1110 (formerly 099.111) Introduction to University may not be used for credit in the Faculty of Engineering.
3. The Department of Electrical and Computer Engineering does not guarantee that all elective courses will be offered every session or that it will be possible to fit courses into all of the many possible timetable combinations of students taking the programs. The term in which an elective course is offered is specified each year in the online timetables on the Department website. There may be a maximum limit on the number of students allowed to take an elective in a particular session. Similarly, there may be a minimum limit and if registration is below the minimum, the elective will be cancelled for the session, and those registered will be required to transfer to another elective before the deadline date for course changes.
4. Students are urged to discuss their program of courses with members of the instructional staff before the end of their third year to obtain advice concerning the best choice of electives for their needs.

ACADEMIC CALENDAR 2015-2016

5. The natural science elective course is to be chosen from a list of courses approved by the Department and available on the Department website.
6. Requires permission of the Department.

4.8.2 Electrical Engineering Degree Program

The program in Electrical Engineering has a core-plus-elective structure. The core develops the necessary base in mathematics, the physical sciences, dynamics, thermodynamics, electric fields and circuits, and fundamental professional courses focused on energy conversion and transmission, electronics, materials and devices, communications, and control systems. At the conclusion of the program, a graduate will have acquired both the knowledge and experience necessary to design and engineer practical electrical and electronic systems to solve real-world problems. To support that outcome, the final year includes a significant, industrially relevant, capstone group design project, in addition to control systems, and communication systems as core requirements, with the remaining program based on electives. A certain level of specialization is possible through the selection of elective courses offered in the final year. In addition, the Department offers recognized Focus Areas in Power and Energy Systems, Wireless Communication Devices, Engineering Physics, and Biomedical, as described in Section 4.8.4.

The student's program must include six credit hours of complementary studies electives. Courses in engineering economics, technical writing, and ecology, technology and society are compulsory.

Students are encouraged to consult with the department for model four-year and five-year programs. Students are strongly encouraged to follow the model programs when possible, as timetabling and course offerings are based on these.

Preliminary Engineering Program

All degree programs within the Faculty of Engineering consist of a common first-year known as the Preliminary Engineering Program. For information on the preliminary program, please refer to Section 4.2.

Electrical Engineering Departmental Program

Course No.		Credit Hours
ANTH 2430	Ecology, Technology and Society	3
CIVL 4050	Engineering Economics	3
COMP 1020	Computer Science 2	3
COMP 2140	Data Structures and Algorithms	3
COMP 3430	Operating Systems	3
ECE 2160	Electronics 2E	5
ECE 2220	Digital Logic Systems	5
ECE 2262	Electric Circuits	4
ECE 3610	Microprocessing Systems	4
ECE 3670	Electronics 3E	4
ECE 3700	Telecommunication Network Engineering	4
ECE 3740	System Engineering Principles 1	4
ECE 3760	Digital Systems Design 1	4
ECE 3780	Signal Processing 1	4
ECE 3790	Engineering Algorithms	4
ECE 4150	Control Systems	4
or		
ECE 4260	Communication Systems	4
ECE 4240	Microprocessor Interfacing	4
ECE 4830	Signal Processing 2	4
ECE 4600	Group Design Project (See Note 1)	6
ENG 2030	Engineering Communication: Strategies for the Profession	3
or		
ENG 2040	Engineering Communication: Strategies, Practice, and Design	3
MATH 2130	Engineering Mathematical Analysis 1	3
MATH 2132	Engineering Mathematical Analysis 2	3
MATH 3120	Applied Discrete Mathematics	3
MATH 3132	Engineering Mathematical Analysis 3	3
PHYS 2152	Modern Physics for Engineers	3
STAT 2220	Contemporary Statistics for Engineers	3
	Complementary Studies Elective (2 required) (see Note 2)	
	Natural Science Electives (2 required) (see Note 5)	
	Technical Electives (3 required) (see Note 3)	

Total credits for Graduation

159-163

Technical Electives (7 required) (see Notes 3, 4)**Group A**

Course No.		Credit Hours
ECE 3650	Electric Machines	5
ECE 4100	Microelectronic Fabrication	4
ECE 4140	Power Transmission Lines	4
ECE 4160	Control Engineering	4
ECE 4200	Electric Filter Design	4
ECE 4250	Digital Communications	4
ECE 4270	Antennas	4
ECE 4280	Engineering Electromagnetics	4
ECE 4290	Microwave Engineering	4
ECE 4300	Electrical Energy Systems 1	4
ECE 4310	Electrical Energy Systems 2	4
ECE 4360	High Voltage Engineering	4
ECE 4370	Power Electronics	4
ECE 4390	Engineering Computations 4E	4
ECE 4420	Digital Control	4
ECE 4580	Optoelectronics	4
ECE 4610	Biomedical Instrumentation and Signal Processing	4
ECE 4830	Signal Processing 2	4
ECE 4850	Contemporary Topics in Electrical and Computer Engineering 1 (see Note 7)	4
ECE 4860	Contemporary Topics in Electrical and Computer Engineering 2 (see Note 7)	4
ECE 4870	Contemporary Topics in Electrical and Computer Engineering 3 (see Note 7)	3
ECE 4880	Contemporary Topics in Electrical and Computer Engineering 4 (see note 7)	3

Group B

COMP 2140	Data Structures and Algorithms	3
COMP 3190	Introduction to Artificial Intelligence	3
COMP 4180	Intelligent Mobile Robotics	3
COMP 4360	Machine Learning	3
ECE 3700	Telecommunication Network Engineering	4
ECE 3760	Digital Systems Design 1	4
ECE 3770	Digital Systems Design 2	4
ECE 4240	Microprocessor Interfacing	4
ECE 4440	Computer Vision	4
ECE 4520	Simulation and Modeling	4
ECE 4530	Parallel Processing	4
ECE 4540	Wireless Networks	4
ECE 4740	Digital Systems Implementation	4
MATH 3120	Applied Discrete Mathematics	3
MATH 3340	Complex Analysis 1	3
MATH 3460	Partial Differential Equations	3
PHYS 2260	Optics	3
PHYS 3220	Medical Physics and Physiological Measurements	3
PHYS 3640	Electro- and Magnetodynamics and Special Relativity	3
PHYS 4590	Advanced Optics	3

Natural Science Electives for Electrical Engineering

The Electrical Engineering program requires students to complete an elective course in natural science selected from a Department approved list. This list is updated periodically to reflect changes in course offerings and is available on the Department website.

http://umanitoba.ca/ece/curr_students/undergraduate.html

NOTES:

1. Course continues through both terms with credit given upon completion.
2. The complementary studies electives can be any course at the 1000 level or above from either the faculties of Arts or Management. However, ARTS 1110 (formerly 099.111) Introduction to University may not be used for credit in the Faculty of Engineering.
3. A minimum of 4 electives are required from Group A; the other 3 electives may be taken from either Group A or B unless the student completes a Focus Area.
4. The Department of Electrical and Computer Engineering does not guarantee that all elective courses will be offered every session or that it will be possible to fit courses into all of the many possible timetable combinations of students taking the programs. The term in which an elective course is offered is specified each year in the online timetables on the Department website. There may be a maximum limit set on the number of students allowed to take a particular elective in a session. Similarly, there may be a minimum limit and if registration is below the minimum, the elective will be cancelled and those registered will be required to transfer to another elective before the deadline date for course changes.
5. Students are urged to discuss their program of courses with members of the instructional staff before the end of their third year to obtain advice concerning the best choice of electives for their needs.
6. The natural science elective course is to be chosen from a list of courses approved by the Department.
7. Requires permission of the Department.
8. Students who do not complete ECE 3730 are required to have taken both ECE 3710 and ECE 4240.
9. Students must complete one Qualified Engineering Design technical elective. Please see:

http://umanitoba.ca/ece/curr_students/undergraduate.html

4.8.3 Computer Engineering Focus Areas

Students wishing to pursue more focused studies in a Computer Engineering subject/research area have the choice of doing so through a recognized Focus Area. Courses taken towards a Focus Area take the place of some or all of the Technical Electives required in the Computer Engineering program. See http://umanitoba.ca/ece/curr_students/undergrad/te-focus-areas.html for a detailed description of each area and the courses required.

Communications Networks (6 courses)

ECE 3700 Telecommunications Network Engineering*

ECE 3790 Engineering Algorithms*

ECE 4240 Microprocessor Interfacing*

ECE 4260 Communications Systems*

2 Electives (as specified in this Focus Area)

Embedded Systems (6 courses)

COMP 3430 Operating Systems*

ECE 3740 Systems Engineering Principles 1*

ECE 3760 Digital System Design 1*

ECE 4240 Microprocessor Interfacing*

ECE 4740 Digital System Implementation

1 Elective (as specified in this Focus Area)

Machine Vision (6 courses)

COMP 3490 Computer Graphics 1

ECE 3790 Engineering Algorithms*

ECE 4440 Computer Vision

ECE 4830 Signal Processing 2*

2 Electives (as specified in this Focus Area)

*This course is already required as part of the regular program requirements for Computer Engineering.

4.8.4 Electrical Engineering Focus Areas

Students wishing to pursue more focused studies in an Electrical Engineering subject/research area have the choice of doing so through a recognized Focus Area. Courses taken towards a Focus Area take the place of some or all of the Technical Electives required in the Electrical Engineering program. See http://umanitoba.ca/ece/curr_students/undergrad/ee-focus-areas.html for a detailed description of each area and the courses required.

Power and Energy Systems (PES) (5 courses)

ECE 3650 Electric Machines

4 PES Technical Electives (3 from Group 1; 1 from Group 1 or 2)

Wireless Communication Devices (WCD) (5 courses)

5 WCD Technical Electives (3 from Group 1; 2 from Group 1 or 2)

Engineering Physics** (7 courses; 1 counts as a Science Elective)

ECE 4580 Optoelectronics

PHYS 2380 Quantum Physics 1

PHYS 2650 Classical Mechanics 1

PHYS 3670 Classical Thermodynamics

PHYS 3680 Statistical Mechanics

2 Eng Physics Technical Electives (1 from Group 1; 1 from Group 1 or 2)

Biomedical** (6 courses; 1 counts as Science Elective)

ECE 4610 Biomedical Instrumentation and Signal Processing

BIOL 1410 Anatomy of the Human Body

BIOL 1412 Physiology of the Human Body OR MBIO 1220 Essentials of Microbiology

BIOE 2590 Biology for Engineers OR BIOL 1030 Biology 2: Biological Diversity, Function and Interactions
Electives (1 from Group 1; 1 from Group 1 or 2)

**The Physics and Biomedical Focus Areas require students to complete 1 extra course in addition to the 45 courses needed to fulfill regular program requirements. Talk to the Department for more details.

Admissions to Medicine

The Biomedical Focus Area provides the background to meet eligibility requirements for admission into the Faculty of Medicine when specific Biomedical Technical Electives are completed. Please see the website for details:

http://umanitoba.ca/ece/curr_students/undergrad/biomed-focus-area.html

4.8.5 Second Degree in Electrical and Computer Engineering

Students who have completed a first degree in Electrical Engineering or Computer Engineering may seek a second degree in the complementary program. The requirements for completion of the second degree include:

1. The completion of all deficient required (core) courses for the second degree. If a student has completed any of these courses as fourth year electives towards the first degree, then they will not have to repeat or replace the courses already taken.

2. The equivalent of a full fourth year program is required for the second degree, i.e., twelve half courses. This must include:

i) A second capstone group design project on a different topic relating to the field of the second degree;

ii) All the fourth year course requirements of the second degree. If a student has already taken one or more of the required fourth year courses during their first degree, then they must replace those courses by other appropriate fourth year courses as approved by the Department Head. For example, core courses common to both programs must be replaced by fourth year electives from the Department.

4.9 Electrical and Computer Engineering Course Descriptions

Electrical and Computer Engineering Course Descriptions-2000 Level

ECE 2160 Electronics 2E Cr.Hrs. 5

(Formerly 024.216) Characteristics of integrated circuits and transistors; design of DC and AC amplifiers in the steady state. Prerequisite: ECE 2262.

ECE 2220 Digital Logic Systems Cr.Hrs. 5

(Formerly 024.222) Boolean algebra and logic primitives, net-work simplification techniques, physical realizations, number systems and codes; analysis and design of asynchronous and synchronous sequential circuits; applications to computation, measurements, and control. Prerequisite ENG 1450

ECE 2240 Numerical Methods for Electrical Engineers Cr.Hrs. 4

Numerical methods applied to Electrical Engineering problems; mathematical models of physical systems, solutions of linear and non-linear equations, numerical differentiation and integration methods and associated errors, introduction to solution analysis. May not be held with MATH 2120. Prerequisites ECE 2262, COMP 1012, MATH 2132

ECE 2262 Electric Circuits Cr.Hrs. 4

The application of circuit concepts; network theorems and formal methods, steady state analysis, frequency and transient response, application of the Laplace transform in the analysis of linear time-invariant networks. Prerequisite: [ENG 1450 (or 130.118). Pre- or corequisite: MATH 2132 or [MATH 2100 or 136.210 and MATH 2110 or 136.211].

Electrical and Computer Engineering Course Descriptions-3000 Level

ECE 3010 Elements of Electric Machines and Digital Systems Cr.Hrs. 4

Introduction to elementary concepts in ac circuits, electric machines, and digital sub-systems. Topics include electrical impedance, capacitors, inductors, electric motors, logic gates, decoders, multiplexing, flip flops, registers, microprocessor structures, I/O and data acquisition. Not available to students in Electrical or Computer Engineering. Prerequisite ENG 1450, MATH 2132, and a year class designation of Year 3 or Year 4.

ECE 3540 Advanced Circuit Analysis and Design Cr.Hrs. 4

Application of the Laplace Transform in the analysis of linear time-invariant networks, poles, zeros and frequency response; natural frequencies; general network theorems; two ports; energy and passivity; transmission lines; time and frequency domain. Prerequisite: ECE 2262 (or ECE 2260) and MATH 3132 (or MATH 3100 or 136.310).

ECE 3580 Foundations of Electromagnetics Cr.Hrs. 4

(Formerly ECE 2130) Fundamental laws of field theory; Maxwell's equations in integral and point form. Prerequisite: ECE 2240, PHYS 2152, and MATH 3132 (MATH 3100).

ECE 3590 Electromagnetic Theory Cr.Hrs. 4

Maxwell's equations; plane electromagnetic waves; transmission line theory; electromagnetic radiation and introduction to antennas. Prerequisite: ECE 3580 (or the former ECE 2130).

ECE 3600 Physical Electronics Cr.Hrs. 4

(Formerly 024.360) Basic solid state theory; properties of semi-conductors; principles of metal-semiconductor junctions, p-n junctions and transistors; optoelectronic processes. Prerequisites: PHYS 2152 or (PHYS 1070 or 016.107) and MATH 3132 or (MATH 3100 or 136.310), and ECE 3670 (or 024.367).

ECE 3610 Microprocessing Systems Cr.Hrs. 4

(Formerly 024.361) Fundamentals of microprocessors and microcomputers; data flow; machine programming; architectures and instructions sets; stacks, subroutines, I/O, and interrupts; interfacing fundamentals; designing with microprocessors. Prerequisite: ECE 2220 (or 024.222).

ECE 3650 Electric Machines Cr.Hrs. 5

Continuation of ECE 3720, including steady state and transient performance and introductory power systems theory. Prerequisite: ECE 3720

ECE 3670 Electronics 3E Cr.Hrs. 4

(Formerly 024.367) Continuation of ECE 2160 (or 024.216), including device models, feedback, regulators, frequency effects, oscillators, and bistability and gates. Prerequisite: ECE 2160 (or 024.216).

ECE 3700 Telecommunication Network Engineering Cr.Hrs. 4

(Formerly 024.370) This course will introduce modem concepts in telecommunications, including LANs, WANs, telephone networks, wireless and mobile networks, and Internet networks. Focus will be on design engineering, and management of networks, and on network programming for client server architectures. Prerequisite: COMP 2140 (or 074.214).

ECE 3710 Design of Engineering Software Cr.Hrs. 4

(Formerly 024.371) This course will introduce various practical tools and techniques for developing engineering software. Topics to be covered include: Object oriented analysis and design, data structures, network programming, graphical user interfaces, and software engineering. Prerequisite: COMP 1010 (or 074.101).

ECE 3720 Electric Power and Machines Cr.Hrs. 4

(Formerly 024.372) Principles and applications of electric power, energy conversion and machines. Prerequisite: ECE 2262 or ENG 1180 (or 130.118).

ECE 3730 Principles of Embedded System Design Cr.Hrs. 4

This course will introduce students to the design and implementation of embedded systems. Topics include introduction to UML and data structures, A-to-D, D-to-A, serial bus architectures, embedded computing, bus-based computer systems, program design and analysis, networks, and hardware-software co-design. Prerequisites: ECE 2160, ECE 3610 and (COMP 1010 or COMP 1012).

ECE 3740 Systems Engineering Principles 1 Cr.Hrs. 4

(Formerly 024.374) Complexity and other system measures and analysis, system architectures and architectural elements for embedded systems, hardware and software, incremental design elaboration. Coding, testing, debugging, verification and validation. Project planning, cost analysis and maintenance. Real-time systems, graphical user interfaces and computational models. Prerequisite: COMP 2140 (or 074.214).

ECE 3750 Systems Engineering Principles 2 Cr.Hrs. 4

(Formerly 024.375) Reliability measures and analysis, software system architectures, system metrics, system verification for embedded systems. Coding practices for large scale embedded system development. Real-time systems, graphical user interfaces, and computational models. Prerequisite: ECE 3740 (or 024.374)

ECE 3760 Digital Systems Design 1 Cr.Hrs. 4

(Formerly 024.376) Design methodologies for the development of digital hardware, including system specification, component allocation, functional partitioning, specification refinement, implementation, verification, and testing. Hardware-software co-design. Prerequisite: ECE 4240 (or 024.424).

ECE 3770 Digital Systems Design 2 Cr.Hrs. 4

(Formerly 024.377) Executable system specification and a methodology for system partitioning and refinement into system-level components. Models and architectures, specification languages, translation to an HDL, system partitioning, design quality estimation, specification refinement into synthesizable models. Prerequisite: ECE 4240 (or 024.424) and MATH 3120 (or 136.312).

ECE 3780 Signal Processing 1 Cr.Hrs. 4

(Formerly 024.378) Introduction to signals and systems; spectral analysis (Fourier Series) of continuous-time periodic signals; spectral analysis of aperiodic signals (Fourier Transform); the impulse response and convolution operator; frequency analysis of linear time-invariant systems; applications to filtering, communications systems, and biological systems; A/D conversion; sampling. Laboratory periods will be used to give students hands-on experience in programming many of the techniques covered in the theoretical parts of the course. Prerequisites: ECE 2262 or ECE 2260 (or 024.226) and MATH 3132 or MATH 3100 (or 136.310).

ECE 3790 Engineering Algorithms Cr.Hrs. 4

(Formerly 024.379) Numerical algorithms, optimization, statistical description of data random number generation, string processing, geometric algorithms, algorithm machines, dynamic programming and NP complete problems. Prerequisite: COMP 2140 (or 074.214). Pre- or Corequisite: MATH 3132 or MATH 3100 (or 136.310). May not be held with the former 24.451.

Electrical and Computer Engineering Course Descriptions-4000 Level

ECE 4100 Introduction to Microelectronic Fabrication Cr.Hrs. 4

Introduction to the fabrication of integrated circuits (ICs). Emphasis is on silicon based devices. Topics include water preparation, oxidation, thin film deposition, diffusion and ion implantation, lithography, wet and dry etching and metallization. An introduction to MEMS and micromachining technology is given. Prerequisite: ECE 3670 (or 24.367).

ECE 4140 Power Transmission Lines; Field Effects and Insulation Coordination Cr.Hrs. 4

(Formerly 024.414) AC and DC transmission line corona and its environmental effects. Electric field calculations; design methods to reduce electric field. Electrostatic and electromagnetic effects. Insulation design for power frequency, switching and lightning induced surges. Insulation coordination - conventional and probabilistic methods. Power apparatus testing - criteria and significance. Prerequisite: ECE 3720 (or 024.372).

ECE 4150 Control Systems Cr.Hrs. 4

Principal methods of analysis and design for feedback control systems. Prerequisite: ECE 2160 and ECE 3780.

ECE 4160 Control Engineering Cr.Hrs. 4

(Formerly 024.416) Design of control systems by frequency domain and root locus method; state equations; introduction to nonlinear analysis. Prerequisite: ECE 4150 (or 024.415).

ECE 4180 Introduction to Robotics Cr.Hrs. 4

This course provides fundamental concepts of robotics, including robot classification and applications, robot kinematics, sensor and actuators, sensor interfacing, motor control, trajectory planning, and robot programming. Prerequisites: ECE 4150 and (ECE 4240 or ECE 3730).

ECE 4200 Electric Filter Design Cr.Hrs. 4

Realizability theory, approximation of filtering characteristics, ladder networks and transmission zeros, active RC filter design with regard to sensitivity minimization, phase-shifting and time-delay filters, impulse response of filters, rudiments of digital filters. Prerequisite: ECE 3540 (or ECE 3530).

ECE 4240 Microprocessor Interfacing Cr.Hrs. 4

(Formerly 024.424) Interfacing of microcomputers to the external world: interfacing of I/O devices with minimum hardware and software; data acquisition with and without microprocessors; data communication, transmission and logging with small computers. Prerequisite: ECE 2160 (or 024.216) and ECE 3610 (or 024.361).

ECE 4250 Digital Communications Cr.Hrs. 4

(Formerly 024.425) Transmission of digital data; error rates, interference. Information measures, information rate and channel capacity. Coding. Prerequisite: ECE 4260 (or 024.426) and ECE 4830 (or 024.483) or 024.373.

ECE 4260 Communications Systems Cr.Hrs. 4

(Formerly 024.426) Development and applications of random processes. Analysis and comparison of modulation schemes: AM, FM, PM, PCM. Prerequisites: ECE 3780 (or 024.378) and STAT 2220 (or 005.222).

ECE 4270 Antennas Cr.Hrs. 4

(Formerly 024.427) Radiation fundamentals, linear antennas, point source arrays, aperture antennas, antenna impedance, antenna systems. Prerequisite: ECE 3590 (or 024.359).

ECE 4280 Engineering Electromagnetics Cr.Hrs. 4

(Formerly 024.428) Plane, cylindrical and spherical waves, introduction to scattering and diffraction, waveguides, transmission line applications. Prerequisite: ECE 3590 (or 024.359).

ECE 4290 Microwave Engineering Cr.Hrs. 4

(Formerly 024.429) Microwave circuit analysis; passive and active devices; communication system power budget and signal-to-noise ratio calculations. Prerequisite: ECE 3590 (or 024.359).

ECE 4300 Electrical Energy Systems 1 Cr.Hrs. 4

(Formerly 024.430) Power system component modelling and computational methods for system problems such as load flow, faults, and stability. Prerequisite: ECE 3650 (or 024.365).

ECE 4310 Electrical Energy Systems 2 Cr.Hrs. 4

(Formerly 024.431) Generating stations. Power system stability and optimal operation. EHV-ac and HVDC power transmission. Power system protective relaying and reliability evaluation. Prerequisite: ECE 4300 (or 024.430).

ECE 4360 High Voltage Engineering Cr.Hrs. 4

The course serves as an introduction to high voltage engineering, including basics of electrical breakdown, high voltage generation, high voltage test systems, measurement and analysis techniques as applied to power system apparatus, such as cables, insulators, transformers, and generators. Prerequisite: ECE 3580, ECE 3720.

ECE 4370 Power Electronics Cr.Hrs. 4

Thyristor device theory and operation, controlled rectifiers and line-commutated inverters, and forced commutation as applied to d/c choppers and a/c variable frequency and voltage inverters. Prerequisites: ECE 3720 and ECE 2160.

ECE 4390 Engineering Computations 4E Cr.Hrs. 4

Development and application of numerical methods for the solution of electrical and computer engineering problems. Optimization techniques. Finite difference, finite element and boundary element methods. Solution of large systems of linear and non-linear equations. Prerequisite: MATH 3132, ECE 2240.

ECE 4420 Digital Control Cr.Hrs. 4

(Formerly 024.442) Mathematical modelling of sampling switches. Z-transforms. Response and stability of systems involving sampling. Design of digital compensators. Prerequisites: ECE 4830 (or 024.483) or 024.373 and ECE 4150 (or 024.415).

ECE 4440 Computer Vision Cr.Hrs. 4

(Formerly 024.444) Image formation and sensing, image compression, degradation and restoration, geometrical and topological properties, pattern classification, segmentation procedures, line-drawing images, texture analysis, 3-D image processing. Prerequisite: ECE 3780 (or 024.378).

ECE 4520 Simulation and Modelling Cr.Hrs. 4

(Formerly 024.452) Monte Carlo Methods, random processes, simulation of complex systems in the design of computer systems. Use of statistical inference and measures of performance in hardware and software systems. Prerequisites: STAT 2220 (or 005.222) or 005.250 and COMP 2140 (or 074.214).

ECE 4530 Parallel Processing Cr.Hrs. 4

(Formerly 024.453) Classification of parallel processors, SIMD vs. MIMD, multiprocessing Vs parallel processing, interconnection topology, communications, and node complexity, pipelining and vector processors, array processors, connection machines, multiprocessors, data flow and VLSI algorithmic machines. Prerequisites: COMP 2140 (or 074.214) and ECE 3760 (or 024.376).

ECE 4540 Wireless Networks Cr.Hrs. 4

Introduction to wireless communications systems, network architectures, protocols and applications. Topics include mobile computation systems, signals propagation, channel modelling, modulation, and networking standards. Prerequisite: ECE 3700 (or 24.370) (or 24.370), ECE 3780 (or 24.378)

ECE 4580 Optoelectronics Cr.Hrs. 4

(Formerly 024.458) Basic theory of quantum mechanics; solution of Schrodinger equations; interaction of radiation with matter; masers and lasers; propagation, modulation, excitation and detection in optical waveguides; introduction to fiber and integrated optics. Prerequisite: ECE 3600 (or 024.360).

ECE 4600 Group Design Project Cr.Hrs. 6

(Formerly 024.460) The engineering curriculum must culminate in a significant design experience which is based on the knowledge and skills acquired in earlier course work and which gives students an exposure to the concepts of team work and project management. Prerequisites: ENG 2010 and ECE 3780; and either the four courses ECE 3580, ECE 3720, ECE 3670 and ECE 3610; or the four courses ECE 3670, ECE 3700, ECE 3760 and ECE 3740.

ECE 4610 Biomedical Instrumentation and Signal Processing Cr.Hrs. 4

Introduction to biological systems and the application of engineering principles to medical problems. Students design systems to acquire and analyze biological signals in the laboratory. Content includes introduction to relevant physiology and anatomy of cells, skeletal muscles, heart and cardiovascular systems, human balance and biomechanics, recording and analyzing biological signals (ECG, EMG, respiratory sounds), design of instrumentation amplifiers for signal conditioning, medical instrumentation safety and health hazards. Prerequisites: ECE 2160 and ECE 3780.

ECE 4740 Digital Systems Implementation Cr.Hrs. 4

(Formerly 024.474) Implementation methodologies and technologies for digital systems, including VLSI implementations, PCB implementations, and rapid prototyping (FPGA). Prerequisite: ECE 4240 (or 024.424). Not to be held with ECE 4500 (or 024.450).

ECE 4770 Topics in Electrical Engineering 3 Cr.Hrs. 4

(Formerly 024.477) This course will cover contemporary topics in Electrical Engineering via lectures and laboratory sessions. The specific topics and a detailed course outline will be available at the time of registration. Prerequisite: Permission of the Department.

ECE 4830 Signal Processing 2 Cr.Hrs. 4

(Formerly 024.483) Representation of discrete-time signals and systems in the time and frequency domains; the z-transform; application to various discrete-time linear time-invariant systems; design of digital filters. Laboratory periods will be used to give students hands-on experience in programming many of the techniques covered in the theoretical parts of the course. Prerequisite: ECE 3780 (or 024.378).

ECE 4850 Topics in Electrical and Computer Engineering 1 Cr.Hrs. 4

This course will cover contemporary topics in Electrical and Computer Engineering via lectures and laboratory sessions. The specific topics and a detailed course outline will be available at the time of registration. Prerequisite: Permission of the Department.

ECE 4860 Topics in Electrical and Computer Engineering 2 Cr.Hrs. 4

This course will cover contemporary topics in Electrical and Computer Engineering via lectures and laboratory sessions. The specific topics and a detailed course outline will be available at the time of registration. Prerequisite: Permission of the Department.

ECE 4870 Topics in Electrical and Computer Engineering 3 Cr.Hrs. 3

This lecture based course will cover contemporary topics in Electrical and Computer Engineering. The specific topics and a detailed course outline will be available at the time of registration. Prerequisite: Permission of the Department.

ECE 4880 Topics in Electrical and Computer Engineering 4 Cr.Hrs. 3

This lecture based course will cover contemporary topics in Electrical and Computer Engineering. The specific topics and a detailed course outline will be available at the time of registration. Prerequisite: Permission of the Department.

4.10 Mechanical Engineering

Head: Dr. D. Kuhn, P.Eng.

Associate Heads: Dr. M. Birouk, P.Eng. and Dr. M. Tachie, P.Eng.

General Office: E2 -327 EITC

Telephone: 204 474 7358 / 6630

Fax: 204 275 7507

Website: umanitoba.ca/faculties/engineering/departments/mechanical/

The Department of Mechanical Engineering offers a fully accredited degree program. Students entering the Mechanical Engineering program may specialize with an option in Aerospace or Manufacturing, or a stream in Materials, Solid Mechanics, or Thermofluids. Students are urged to consult appropriate program requirements shown for each option/stream.

The Mechanical Engineering program provides the education required by those who wish to practice in Mechanical Engineering that embraces, among other subdivisions, the design of mechanical devices and systems, manufacturing engineering and management, computer-aided design and computer-aided manufacturing, power generation and utilization, air conditioning, the material sciences, and the aeronautical sciences.

The Mechanical Engineering Program offers basic training in the sciences, mathematics and fundamental engineering subjects followed by more specialized discipline-related subjects. Students are allowed to choose technical electives to suit their career objectives and are also required to take complementary studies electives related to social issues.

Co-operative Education Programs

Please refer to SECTION 5: Co-operative Education and Industrial Internship Programs.

4.10.1 Mechanical Engineering Program

Preliminary Engineering Program - Common to all Engineering Programs. (See Section 4.2 for details.)

Program Core Courses:		
Course No.		Credit Hours
CHEM 1310	An Introduction to Physical Chemistry	3
CIVL 4050	Engineering Economics	3
CIVL 4460	Technology, Society, and the Future	3
	OR	
ANTH 2430	Ecology, Technology and Society (B)	3
ECE 3010	Elements of Electric Machines and Digital Systems	4
ENG 2030	Engineering Communication: Strategies for the Profession	3
	or	
ENG 2040	Engineering Communication: Strategies, Practice and Design	3
MATH 2120	Introductory Numerical Methods for Engineers	4
MATH 2130	Engineering Mathematical Analysis 1	3
MATH 2132	Engineering Mathematical Analysis 2	3
MATH 3132	Engineering Mathematical Analysis 3	3
MECH 2012	Computer Aided Design and Manufacturing Processes	4
MECH 2202	Thermodynamics	4
MECH 2222	Mechanics of Materials	4
MECH 2262	Fundamentals of Fluid Mechanics	4
MECH 2272	Engineering Materials 1	4
MECH 3170	Project Management	4
MECH 3420	Vibrations and Acoustics	4
MECH 3430	Measurements and Control	4
MECH 3460	Heat Transfer	4
MECH 3482	Kinematics and Dynamics	4
MECH 3492	Fluid Mechanics and Applications	4
MECH 3502	Stress Analysis and Design	4
MECH 3542	Engineering Materials 2	4
MECH 3980	Mechanical Engineering Laboratory (full year)	4
MECH 4650	Machine Design 4M	4
MECH 4860	Engineering Design	5
PHYS 1070	Physics 2: Waves and Modern Physics	3
STAT 2220	Contemporary Statistics for Engineers	3
	5 Technical Electives (TE)	4
	1 Complimentary Studies Elective (CE)	3

NOTES:

1. A student's selection and timetabling of electives are subject to the following conditions:
 - a. Only one complementary elective (CE) is required upon completion of Critical Thinking (PHIL 1290), which is recommended but not required; students may choose an alternate course from the Faculties of Arts or Management at the 1000 level or above, and English (ENGL 1400) in the preliminary program.
 - b. The complementary elective (CE) can be any course at the 1000-level or above from the faculties of Arts or Management. However, ARTS 1110 Introduction to University may not be used for credit in the Faculty of Engineering.
2. For courses continuing through both terms, credit is given on completion of course.
3. A minimum of 20 credit hours of technical electives is required with 18 hours required if completing MECH 4162 the Mechanical Engineering Thesis Course (5 courses at 4 credit hours each or 3 courses at 4 credit hours each plus MECH 4162 at 6 credit hours).

4.10.2 Aerospace Option

Choose all 5 courses.		
Course No.		Credit Hours
MECH 3520	Aerodynamics	4
MECH 4182	Aerospace Structures: Analysis and Design	4
MECH 4192	Aerospace Materials and Manufacturing Processes	4
MECH 4200	Gas Turbine Propulsion Systems	4
MECH 4452	Aircraft Performance, Dynamics, and Design	4

4.10.3 Manufacturing Option

Choose 5 from the following 10 courses. Some courses will be offered in alternating years.		
Course No.		Credit Hours
MECH 3550	Robotics and Computer Numerical Control	4
MECH 3562	Introduction to Optimization	4
MECH 3570	Manufacturing Automation	4
MECH 3582	Manufacturing Planning and Quality Control	4
MECH 3592	Simulation Modelling and Facilities Planning	4
MECH 3602	Manufacturing Process Fundamentals	4
MECH 4330	Contemporary Topics in Manufacturing Engineering 1	4
MECH 4342	Contemporary Topics in Manufacturing Engineering 2	4
MECH 4960	Mechatronics Systems Design	4
MECH 4960	Manufacturing Processes 1	4
MECH 4970	Manufacturing Processes 2	4

4.10.4 Materials Stream

Choose 3 from the following 5 courses. Choose the remaining two TEs from the same stream, other TEs, or thesis. Some courses will be offered in alternating years.		
Course No.		Credit Hours
MECH 4192	Aerospace Materials and Manufacturing Processes	4
MECH 4350	Topics in Materials 1	4
MECH 4360	Topics in Materials 2	4
MECH 4620	Corrosion of Metals and Alloys	4
MECH 4870	Fracture and Failure of Engineering Materials	4

4.10.5 Solid Mechanics Stream

Choose 3 from the following 6 courses. Choose the remaining two TEs from the same stream, other TEs, or thesis. Some courses will be offered in alternating years.		
Course No.		Credit Hours
MECH 4182	Aerospace Structures: Analysis and Design	4
MECH 4472	Mechanical Vibration	4
MECH 4510	Fundamentals of Finite Element Analysis	4
MECH 4532	Advanced Strength of Materials	4
MECH 4550	Noise Control	4
MECH 4672	Advanced Mechanical Design	4

4.10.6 Thermofluids Stream

2. Students must be in their graduating year to register for MECH 4162 Thesis.

Choose 3 from the following 8 courses. Choose the remaining two TEs from the same stream, other TEs, or thesis. Some courses will be offered in alternating years.

Course No.		Credit Hours
MECH 4292	IC Engines	4
MECH 4412	Heating, Venting, and Air Conditioning	4
MECH 4560	Selected Topics in Fluid Mechanics 4M	4
MECH 4680	Energy Conversion Utilization	4
MECH 4692	Renewable Energy	4
MECH 4694	Advanced Topics in Heat Transfer	4
MECH 4702	Design of Thermal Systems	4
MECH 4822	Numerical Heat Transfer in Fluid Flow	4

4.10.7 Technical Electives in Mechanical Engineering

MECH 3520	Aerodynamics	4
MECH 3550	Robotics and Computer Numerical Control	4
MECH 3562	Introduction to Optimization	4
MECH 3570	Manufacturing Automation	4
MECH 3582	Manufacturing Planning and Quality Control	4
MECH 3592	Simulation Modelling and Facilities Planning	4
MECH 3602	Manufacturing Processes Fundamentals	4
MECH 4900	Mechatronics Systems Design	4
MECH 4162	Thesis (full year course) (See Note 2)	6
MECH 4182	Aerospace Structures: Analysis and Design	4
MECH 4192	Aerospace Materials and Manufacturing Processes	4
MECH 4200	Gas Turbine Propulsion Systems	4
MECH 4240	Design for Manufacturing	4
MECH 4292	IC Engines	4
MECH 4310	Contemporary Topics in Mechanical Engineering 1	4
MECH 4322	Contemporary Topics in Mechanical Engineering 2	4
MECH 4330	Contemporary Topics in Manufacturing Engineering 1	4
MECH 4342	Contemporary Topics in Manufacturing Engineering 2	4
MECH 4350	Topics in Materials 1	4
MECH 4360	Topics in Materials 2	4
MECH 4412	Heating, Venting, and Air Conditioning	4
MECH 4452	Aircraft Performance, Dynamics, and Design	4
MECH 4472	Mechanical Vibration	4
MECH 4510	Fundamentals of Finite Element Analysis	4
MECH 4532	Advanced Strength of Materials	4
MECH 4550	Noise Control	4
MECH 4560	Selected Topics in Fluid Mechanics 4M	4
MECH 4620	Corrosion of Metals and Alloys	4
MECH 4672	Advanced Mechanical Design	4
MECH 4680	Energy Conversion Utilization	4
MECH 4692	Renewable Energy	4
MECH 4694	Advanced Topics in Heat Transfer	4
MECH 4702	Design of Thermal Systems	4
MECH 4812	Automotive Engineering	4
MECH 4822	Numerical Heat Transfer in Fluid Flow	4
MECH 4870	Fracture and Failure of Engineering Materials	4
MECH 4900	Mechatronics System Design	4
MECH 4960	Manufacturing Processes 1	4
MECH 4970	Manufacturing Processes 2	4

NOTES:

1. The Department of Mechanical Engineering may not be able to offer all technical electives listed above. Students are urged to consult the Mechanical Engineering office for a current list of technical electives.

4.10.8 Mechanical Engineering Course Descriptions

Mechanical Engineering Course Descriptions-2000 Level

MECH 2012 Computer Aided Design and Manufacturing Processes Cr. Hrs. 4

Provide instruction on the application of computer aided design software packages. The students will work in groups in the design and development of a product using CAD packages. The course will be delivered through a combination of lectures and tutorials. ENG 1430 (formerly 130.113 or 130.140). Not to be held with MECH 2010 or CIVL 2830.

MECH 2202 Thermodynamics Cr.Hrs. 4

Cycles, transient flow processes, entropy, gas mixtures, psychrometry combustion. Prerequisites: ENG 1460 (or 130.112), (MATH 1500 (or 136.150) or MATH 1510 (or 136.151) and MATH 1700 (or 136.170) or MATH 1710 (or 136.171) Not to be held for credit with MECH 2200 or 025.220

MECH 2222 Mechanics of Materials Cr.Hrs. 4

Topics covered in this course include: axial and torsional loading, stress-strain and deformation in statically determinate/indeterminate systems, thermally induced stress, and stresses in beams (including reinforced beams) under pure bending and bending with shear. The mechanical properties of materials under various loading modes will be addressed. Prerequisites: [PHYS 1050 (or 016.105)] and [ENG 1440 or ENG 1441 (ENG 1350 or 130.135)] and COMP 1012 and [MATH 1710 (136.171) or MATH 1700 (136.170)].

MECH 2262 Fundamentals of Fluid Mechanics Cr.Hrs. 4

Fundamental concepts used in the analysis of fluid behaviour, pressure in stationary fluids, forces on submerged surfaces, buoyancy, integral methods, Bernoulli equation, pipeline analysis. Prerequisites: MATH 2130 or MATH 2110 (formerly 136.211). Pre or Co requisite: MATH 2132 or MATH 2100 (formerly 136.210). Not to be held for credit with MECH 2260 (or 025.226)

MECH 2272 Engineering Materials 1 Cr.Hrs. 4

Introduction to engineering materials; defects, strengthening mechanisms, and plasticity in engineering metals and alloys; fundamentals and application of heat treatment of metallic materials including topics such as diffusion, phase diagram, phase transformation, and thermal processing; mechanical properties of engineering metallic materials and their relationship to structure, defects, various strengthening mechanisms, and processing; structure of non-metallic polymers and ceramics. Prerequisites: [CHEM 2240 (002.224) or CHEM 1310 (002.131)] and [MECH 2222 (or MECH 2220 or 025.222)]. Not to be held for credit with MECH 2270 (or 025.227), MECH 2290 (or 025.229) or MECH 3540 (or 025.354)

Mechanical Engineering Course Descriptions-3000 Level

MECH 3170 Project Management Cr.Hrs. 4

Topics covered in this course will include project planning, scheduling, resource allocation, process analysis, layout and control. The course will make use of industrial projects for developing a strong design and analytical approach pertinent to project management. Prerequisites: MECH 2012 (or MECH 2010) or CIVL 2830. Not to be held for credit with MECH 4170 (or 025.417).

MECH 3420 Vibrations and Acoustics Cr.Hrs. 4

(formerly 025.342) Vibrations and computer simulations of single-degree-of-freedom systems, viscous and friction damping, MD of systems and modal analysis, measurement and sources of noise, noise control. Prerequisites: MECH 3482 (formerly MECH 2120 (or 025.212) and MECH 3480 (or 025.348)), and MATH 3132 (formerly MATH 3100) (or 136.310). Not to be held for credit with the former 025.342.

MECH 3430 Measurements and Control Cr.Hrs. 4

Mathematical modelling of mechanical systems. Feedback systems and stability. Digital control; analog to digital and digital to analog control systems. Prerequisites: MATH 3132 (or MATH 3100) (or 136.310) and ENG 1450 (or 130.118). Not to be held for credit with the former 025.343.

MECH 3460 Heat Transfer Cr.Hrs. 4

Steady-state and transient heat conduction, fins. Forced and free convection, laminar and turbulent conditions, internal and external flows. Heat exchangers. Radiation properties and exchange. Prerequisites: MATH 3132 (formerly MATH 3100) (or 136.310) and ENG 1460 (or 130.112). May not be held with MECH 3470 or the former 025.347.

MECH 3482 Kinematics and Dynamics Cr.Hrs. 4

Fundamentals of 2D and 3D rigid body motions (kinematics) and the forces/moments (kinetics) needed to produce such motions. Applications will emphasize elements of machine design. Prerequisites: PHYS 1050 (016.105) and [ENG 1440 or ENG 1441] and COMP 1012 and [MATH 1710 (136.171) or MATH 1700 (136.170)]. Not to be held for credit with MECH 2120 (or 025.212) or MECH 3480 (or 025.348).

MECH 3492 Fluid Mechanics and Applications Cr.Hrs. 4

The angular momentum principle, introduction to differential analysis of fluid motion, internal and external incompressible viscous flow, fluid machinery and multiple-path systems, fluid coupling and torque couplings and torque converters. Prerequisite: PHYS 1050 (016.105), ENG 1440 or ENG 1441, COMP 1012 and [(MATH 1710 or 136.171) or MATH 1700 (136.170)] and [MECH 2262 (MECH 2260 or 025.226)]. Not to be held for credit with MECH 3490 (or 025.349).

MECH 3502 Stress Analysis and Design Cr.Hrs. 4

Strength and stability of columns, torsion of thin-walled members, unsymmetric loading and shear centres, beam deflection and energy methods. Prerequisites: MECH 2222 (formerly MECH 2220 or 025.222), and MATH 2130 (formerly MATH 2110 or 136.211). Not to be held for credit with MECH 2220 (or 025.222) or MECH 3500 (or 025.350)

MECH 3520 Aerodynamics Cr.Hrs. 4

Aeronautical definitions, compressible flow, plane normal shock waves, Mach. no. and shock waves in two-dimensional flow, potential flow theory in two-dimensional and axisymmetric flows. Two-dimensional wing theory, finite wing theory panel methods, elements of boundary layer theory. Compressibility and wings, wing design, flow control. Not to be held for credit with the former 025.352. Prerequisite: MECH 3492 (MECH 3490 or 025.349).

MECH 3542 Engineering Materials 2 Cr.Hrs. 4

Mechanical properties of engineering non-metallic materials such as polymers, ceramics and composites, and their relationship to structure and processing; introduction to various shaping and joining processes used in manufacturing, their advantages and limitations; selection and application of engineering materials. Prerequisites: MECH 2272 (formerly MECH 2270 or 025.270). Not to be held for credit with MECH 2270 (or 025.227), MECH 2290 (or 025.229) or MECH 3540 (or 025.354)

MECH 3550 Robotics and Computer Numerical Control Cr.Hrs. 4

This course builds up a foundation in the area of Computer Aided Manufacturing (CAM) such as computer numerically controlled machine tools and robotics. Intense hands on experience are provided in the laboratory sessions on part programming using Computer aided design (CAD) packages and robots to demonstrate application in the area of CAM. Several case studies and manufacturing applications will be discussed. Not to be held with the former 025.484 or 025.355. Prerequisite: MECH 2012 (or MECH 2010 or CIVL 2830).

MECH 3562 Introduction to Optimization Cr.Hrs. 4

The objective of this course is to develop the ability to formulate and analyze problems that will be encountered in a manufacturing system. The skills acquired will allow the students to approach problems from an optimization perspective. The students will be provided experience in related software packages. Prerequisites: MECH 2012 (MECH 2010 or CIVL 2830), and STAT 2220 (005.222), and STAT 2220 (formerly 005.222). Not to be held with the former MECH 3560 (025.356 or 025.341).

MECH 3570 Manufacturing Automation Cr.Hrs. 4

(Formerly 025.357) This course builds upon the foundation developed in a previous course: namely Robotics and Computer Numerical Control. The course covers a wide variety of topics in the area of computer controlled automation. The students are provided with hands on experience in design for automation. It will synthesize several aspects associated with integrated operation of computer controlled automated devices. Prerequisite: MECH 3550 (or 025.355). (Not to be held with the former 025.485 or 025.357).

MECH 3582 Manufacturing Planning and Quality Control Cr.Hrs. 4

The course covers topics such as: Group technology, Just-in-Time, Computer aided process planning, Statistical Process Control and Manufacturing Planning and Control. Issues related to the integration of several areas that fall with CIM are emphasized. Systems approach is introduced. Prerequisites: MECH 2012 (or MECH 2010 or CIVL 2830). Not to be held for credit with MECH 3580 (025.358 or 025.485).

MECH 3592 Simulation Modeling and Facility Planning Cr.Hrs. 4

The objective of this course is to introduce simulation for manufacturing operations and the concepts of facilities location and layout. The students will learn how to program WITNESS, a simulation language, and through simulation, explore the effects of facility planning; resource availability e.g. machines and quality related problems on manufacturing productivity and timing. Not to be held for credit with MECH 3590 (or 025.359 or 025.471). Prerequisite: MECH 2012 (or MECH 2010 or CIVL 2830).

MECH 3602 Manufacturing Process Fundamentals Cr.Hrs. 4

This course will give students hands on experience with numerous manufacturing processes, machines and systems, by having them build a miniature Stirling engine, for example. Using CNC mills, lathes, conventional machine shop equipment and hand tools, the students will manufacture engine components, assemble them and trouble shoot any problems. The object of the course is to provide Mechanical and Manufacturing students with hands-on exposure to the application of basic manufacturing process tools. The course will be offered in collaboration with the Mechanical and Manufacturing and Communication department, Red River College. Not to be held for credit with MECH 3600 (or 025.360). Prerequisite: MECH 2012 (or MECH 2010 or CIVL 2830).

MECH 3910 Manufacturing Cooperative Education Assignment 1 Cr. Hrs. 1

Special work assignment in business, industry, or government for cooperative education students. Requires submission of a written report covering the work completed during the four-month professional assignment, and in-depth presentation of related engineering problems. Not to be held for credit with 025.391. (Pass/Fail grade only).

MECH 3920 Manufacturing Cooperative Education Assignment 2 Cr. Hrs. 1

Special work assignment in business, industry, or government for cooperative education students. Requires submission of a written report covering the work completed during the four-month professional assignment, and in-depth presentation of related engineering problems. Not to be held for credit with the former 025.392. (Pass/Fail grade only). Prerequisite: MECH 3910 (or 025.391).

MECH 3980 Mechanical Laboratory Cr.Hrs. 4

Laboratory course on topics that compliment and reinforce concepts developed in second and third year mechanical engineering courses. Comprehensive experiments followed by submission of laboratory reports will be required. Prerequisites: ENG 2010 (or 130.201), and MECH 2262 (or MECH 2260 or 025.260), MECH 2202 (or MECH 2200 or 025.220) and MECH 2222 (or MECH 2220 or 025.222). Pre- or Co requisites: MECH 3420 (or 025.342) and MECH 3502 (or MECH 3500 or 025.350), and MECH 3542 (or MECH 3540 or 025.345). Not to be held for credit with MECH 4980 (or 025.498) and MECH 4990 (or 025.499)

Mechanical Engineering Course Descriptions-4000 Level

MECH 4160 Graduation Thesis Cr.Hrs. 3

(Formerly 025.416) Each graduating student must submit a satisfactory thesis on a subject which will be designated or approved by the head of the department. Theses are to be handed in to the Department of Mechanical and Industrial Engineering office by the designated deadline. RESTRICTION: Only students with a year class distinction of 4 or higher in Mechanical or Manufacturing Engineering may register for this course. Not to be held for credit with the former 025.416. Prerequisite: ENG 2010 (or 130.201) and eligible to graduate.

MECH 4162 Thesis Cr.Hrs. 6

This course will give students the opportunity to gain research or design experience in their area of interest. Thesis topics must be approved by the head of the department or designate. Prerequisites: This course is restricted to students in year 4 of Mechanical Engineering. ENG 2010 (or 130.201) and eligible to graduate. Not to be held for credit with MECH 4160 (formerly 025.416).

MECH 4180 Analysis and Design of Aerospace Structures Cr.Hrs. 3

Methodology and techniques for design of aerospace structures and components to preclude failure with minimum weight, cost and resource consumption. Analysis of structural, air, gust and manoeuvre loads. Not to be held with the former 025.418. Prerequisite: MECH 3500 (or 025.350).

MECH 4182 Aerospace Structures: Analysis and Design Cr.Hrs. 4

Methodology and techniques for design of aerospace structures and components to preclude failure with minimum weight, cost and resource consumption. Analysis of structural, air, gust and manoeuvre loads. Prerequisites: MECH 3502 (or MECH 3500 or 025.350). Not to be held for credit with MECH 4180 (or 025.418).

MECH 4190 Aerospace Materials and Advanced Manufacturing Processes Cr.Hrs. 3

Properties of aerospace structural materials including glass and graphite fibre composites, light metal alloys and high strength steels. Properties of high temperature materials; superalloys, ceramics, intermetallic compounds, metal matrix composites. Specialized methods for manufacture of these materials. Not to be held for credit with the former 025.419. Prerequisite: MECH 3540 (or 025.354).

MECH 4192 Aerospace Materials and Manufacturing Processes Cr.Hrs. 4

Properties of aerospace structural materials including glass and graphite fibre composites, light metal alloys and high strength steels. Properties of high temperature materials; superalloys ceramics, intermetallic compounds, metal matrix composites. Specialized methods for manufacture of these materials. Prerequisites: MECH 3542 (formerly MECH 3540 or 025.354). Not to be held for credit with MECH 4190 or the former 025.419.

MECH 4200 Gas Turbine Propulsion Systems Cr.Hrs. 4

(Formerly 025.420) Gas turbine systems, shaft power cycles, gas turbine propulsion cycles, centrifugal compressors, axial flow compressors, combustion systems, design performance predictions, off-design operations and transient behaviour of gas turbines. Design performance predictions. Not to be held for credit with the former 025.420. Prerequisites: MECH 2202 (or MECH 2200 or 025.220) and MECH 3520 (or 025.352)

MECH 4290 Internal Combustion Engines Cr.Hrs. 3

Thermodynamics of internal combustion engine cycles; fuels and lubricants; supercharging; carburetion; valving; manifolding; combustion chamber ignition and fuel injection; engine performance and testing; free piston engines. Not to be held for credit with the former 025.429. Prerequisite: MECH 2200 (or 025.220).

MECH 4292 IC Engines Cr.Hrs. 4

(Formerly MECH 4290 or 025.429) Thermodynamics of internal combustion engine cycles; fuels and lubricants; supercharging; carburetion; valving; manifolding; combustion chamber ignition and fuel injection; engine performance and testing; free piston engines. Prerequisite: MECH 2202 (formerly MECH 2200 or 025.220). Not to be held for credit with MECH 4290 or 025.429

MECH 4310 Contemporary Topics in Mechanical Engineering 1 Cr.Hrs. 4

This course will cover contemporary topics in Mechanical Engineering. The specific topics and a detailed outline will be available at the time of registration prior to the start of the registration period for the session in which the course will be offered. Prerequisite: Permission of the department.

MECH 4322 Contemporary Topics in Mechanical Engineering II Cr.Hrs. 4

This course will cover contemporary topics in Mechanical Engineering. The specific topics and a detailed outline will be available at the time of registration prior to the start of the registration period for the session in which the course will be offered. Prerequisite: Departmental Permission. Not to be held for credit with MECH 4320

MECH 4330 Contemporary Topics in Manufacturing Engineering 1 Cr.Hrs. 4

This course will cover contemporary topics in Manufacturing Engineering. The specific topics and a detailed outline will be available at the time of registration prior to the start of the registration period for the session in which the course will be offered. Prerequisite: Permission of the department.

MECH 4342 Contemporary Topics in Manufacturing Engineering II Cr.Hrs. 4

This course will cover contemporary topics in Manufacturing Engineering. The specific topics and a detailed outline will be available at the time of registration prior to the start of the registration period for the session in which the course will be offered. Prerequisite: Departmental Permission. Not to be held for credit with MECH 4340

MECH 4350 Topics in Engineering Material 1 Cr.Hrs. 4

This course will cover contemporary topics in engineering materials. The specific topics and a detailed outline will be available prior to the start of registration period for the session in which the course will be offered. Prerequisite: Departmental Permission.

MECH 4360 Topics in Engineering Materials 2 Cr.Hrs. 4

This course will cover contemporary topics in engineering materials. The specific topics and a detailed outline will be available prior to the start of registration period for the session in which the course will be offered. Prerequisite: Departmental Permission.

MECH 4410 Air Conditioning Cr.Hrs. 3

Psychometric processes, equipment selection, and the design of heating and cooling systems for typical buildings. Prerequisite: MECH 2200.

MECH 4412 Heating, Ventilation and Air Conditioning Cr.Hrs. 4

Psychometric processes, equipment selection, and the design of heating and cooling systems for typical buildings. Prerequisite: MECH 2202 (formerly MECH 2200 or 025.220). Not to be held for credit with MECH 4410 or the former 025.441.

MECH 4452 Aircraft Performance, Dynamics and Design Cr.Hrs. 4

A study of the morphology of aerospace vehicles; basic components and their functions, Aircraft performance; drag, thrust, lift, basics of orbital mechanics. Prerequisites: MECH 3520 (or 025.352). Not to be held for credit with MECH 4450 or the former 025.445.

MECH 4472 Mechanical Vibration Cr.Hrs. 4

Nonlinear Vibrations: mathematical theory for lumped vibratory systems; response of systems to nonharmonic excitation; solutions by Laplace transforms and Fourier analysis; introduction to the matrix formulation of vibration problems and vibration of distributed systems. Prerequisite: MECH 3420. May not be held for credit with 025.447.

MECH 4510 Fundamentals of Finite Element Analysis Cr.Hrs. 4

Fundamentals of the Finite Element Method, basic components in a Finite Element procedure, application of FEM to solve engineering problems and use of commercial software. Prerequisites: MATH 2120 (formerly 136.212) and (MATH 3132 or MATH 3100 (formerly 136.310) and MECH 2222 (formerly MECH 2220 or 025.222).

MECH 4532 Advanced Strength of Materials Cr.Hrs. 4

Stress and strain in three dimensions; thick walled cylinders, beams of elastic foundations, unsymmetrical bending and sheet-stringer construction, curved beams. Additional topics such as the analysis of fibre-composite material, techniques in experimental stress analysis and studies in metallic fatigue may be presented prerequisite: MECH 3502 (formerly MECH 3500 or 025.350). Not to be held for credit with MECH 4530 or 025.453.

MECH 4550 Noise Control Cr.Hrs. 4

An elective course open to all branches of Engineering; a recommended course for students taking Air Conditioning. Wave propagation, transducers and measurement techniques, psycho-acoustic criteria, legislation, techniques of noise and vibration control. Not to be held for credit with the former 025.455.

MECH 4560 Selected Topics in Fluid Mechanics 4M Cr.Hrs. 4

Topics may include: wind tunnel design; experimental techniques; some exact solutions of the conservation equations; fundamentals of turbulence; secondary flows; fluidization; elementary meteorology; fluidics; other topics of current interest. Prerequisites: MATH 3132 (or MATH 3100 or 136.310), and MECH 3490 (025.349). Not to be held with the former 006.360.

MECH 4620 Corrosion of Metals and Alloys Cr.Hrs. 4

(Formerly 025.462) Electrochemical basis of corrosion, corrosion prevention by cathodic protection, inhibitors, alloying and heat treatment, passivation, stress corrosion cracking, corrosion fatigue; ionic and electronic conduction; oxidation of metals and alloys. Not to be held for credit with the former 025.462. Prerequisite: MECH 3542 (or MECH 3540 or 025.354)

MECH 4650 Machine Design 4M Cr.Hrs. 4

(Formerly 025.465) Stress analysis and the design of various machine elements; shafts and couplings, springs, threaded fasteners and power screws, clutches and power transmission components; spur, bevel, worm and helical gears; lubrication, journal and roller bearings. Not to be held for credit with the former 025.465. Prerequisites: MECH 3482 (or MECH 212 or 025.212) and MECH 3502 (or MECH 3500 or 025.350).

MECH 4672 Advanced Mechanism Design Cr.Hrs. 4

Graphical, analytical and computer techniques for the analysis and design of mechanisms to produce a desired set of motion characteristics; design of linkages, double lever, slider and dwell mechanism; cognate linkages. Kinetic synthesis tasks function generation, path generation and motion generation. Prerequisite: MECH 3482 (formerly MECH 2120 or 025.212). Not to be held for credit with MECH 4670 or the former 025.467.

MECH 4680 Energy Conservation and Utilization Cr.Hrs. 4

Energy supply and demand, advanced thermodynamic cycles, conventional energy sources, alternative energy, conservation of energy, environmental considerations. Not to be held for credit with the former 025.468. Prerequisite: MECH 2202 (formerly MECH 2200 pr 025.220)

MECH 4690 Topics in Heat Transfer and Energy Cr.Hrs. 3

Some combination of the following advanced topics: conduction heat transfer, radiation, heat-exchanger design, two-phase phenomena, fluidization, alternative energy, energy conservation. Other topics of current interest may also be included. Not to be held for credit with the former 025.469. Prerequisite: MECH 3460 (or MECH 3470) (or 025.347).

MECH 4692 Renewable Energy Cr.Hrs. 4

Introduction to renewable energy systems, current and future global energy issues and the need for renewable energy applications, and distributed renewable energy generation. Renewable energy systems that will be considered are; solar heat, solar PV, biomass heat and power, hydro power, and wind power. Students will develop simple numerical models of renewable energy systems. Prerequisites MECH 2202 (formerly MECH 2200 or 025.220) and MECH 2262 (formerly MECH 2260 or 025.226). Pre- or Co requisite; MECH 3460 (formerly MECH 3470 or 025.347)

MECH 4694 Advanced Topics in Heat Transfer Cr.Hrs. 4

Some combination of the following advanced topics; conduction heat transfer radiation, heat-exchanger design, two-phase phenomena, fluidization, alternative energy, energy conservation. Other topics of current interest may also be included. Prerequisite: MECH 3460 (or MECH 3470 or 025.347). Not to be held for credit with MECH 4690 or the former 025.469.

MECH 4702 Design of Thermal Systems Cr.Hrs. 4

Modeling of thermal systems; system simulation; design applications of optimization methods: Lagrange multipliers, search methods, and dynamic geometric and linear programming. Prerequisite: MECH 2202 (or MECH 2200 or 025.220). Not to be held for credit with MECH 4700 or the former 025.470.

MECH 4812 Automotive Engineering Cr.Hrs. 4

Introduction to the design of passive suspension systems; control of active suspension systems; tire dynamics; ergonomics, safety and crash dynamics; automotive lighting and digital display trains. Prerequisite: MECH 3502 (formerly MECH 3500 or 025.350). Pre or Corequisite: MECH 3420 (or 025.342). Not to be held for credit with MECH 4810 or the former 025.481.

MECH 4822 Numerical Heat Transfer in Fluid Flow Cr.Hrs. 4

General conservation equations; specific forms of the conservation equations and energy equations; finite difference methods; one dimensional steady problems' one dimensional unsteady problems' two dimensional steady problems; two dimensional; unsteady problems; convection, solution for the flow field. Prerequisite: MATH 3132 (or MATH 3100) (or 136.310), MATH 2120 (or 136.212), MECH 3460 (or MECH 3470 or 025.347) and MECH 3492 (or MECH 3490 or 025.349). Not to be held for credit with MECH 4820 or the former 025.482.

MECH 4860 Engineering Design Cr.Hrs. 5

Design projects; teams of students prepare written and oral design reports on solutions to specific problems from Manitoba industries; series of seminars by invited speakers. Prerequisite: eligibility for graduation in the current academic year or registered in third year Industrial Cooperative Education Program. Not to be held with the former 024.101 or 025.486. Prerequisite: ENG 2010 (or 130.201).

MECH 4870 Fracture and Failure of Engineering Materials Cr.Hrs. 4

Criteria for crack initiation and propagation leading to structural failure. Fracture mechanics and fracture toughness phenomena. Effects of structure geometry, loading rate, environment, temperature, composition and microstructure on material integrity. Not to be held with the former 025.487. Prerequisite: MECH 3542 (or MECH 3540 or 025.354).

MECH 4900 Mechatronics System Design Cr.Hrs. 4

The course covers topics in the analysis of control systems and components with the goal to provide students with tools and an understanding of issues related to integrating mechanical, electronic and software components towards building mechatronic devices. Hands-on-experience is provided in the laboratory sessions on simulation and actual computer control of various devices. Problems considered would include application to fluid power systems, systems integration and validation. The focus is placed on learning to work with real hardware. Not to be held for credit with the former 025.490. Prerequisite: MECH 3430 (or 025.343)

MECH 4910 Manufacturing Co-operative Education Assignment 3 Cr. Hrs. 1

Special work assignment in business, industry, or government for cooperative education students. Requires submission of a written report covering the work completed during the four-month professional assignment, and in-depth presentation of related engineering problems. Not to be held for credit with the former 025.491. (Pass/Fail grade only.) Prerequisite: MECH 3920 (or 025.392).

MECH 4920 Manufacturing Co-operative Education Assignment 4 Cr. Hrs. 1

Special work assignment in business, industry, or government for cooperative education students. Requires submission of a written report covering the work completed during the four-month professional assignment, and in-depth presentation of related engineering problems. Not to be held for credit with the former 025.492. (Pass/Fail grade only.) Prerequisite: MECH 4910 (or 025.491)

MECH 4930 Mechanical Engineering Industry Internship (IIP) Cr.Hrs. 0

Supervised work experience normally of 12-16 months duration, concluded by a work report. Not to be held for credit with the former 025.493. (Pass/Fail grade only.)

MECH 4960 Manufacturing Process 1 Cr.Hrs. 4

This course will introduce additional or expanded versions of topics introduced in MECH 2290 (or 025.229), "Manufacturing Engineering". Topics will be selected from relationship of manufacturing, material selection to design, process improvement techniques; casting of metals and polymers; machining and cutting; polymers and composites; processing of powders, ceramics and glasses. Not to be held for credit with the former 025.496. Prerequisite: MECH 3542 (or MECH 2290 or 025.229).

MECH 4970 Manufacturing Process 2 Cr.Hrs. 4

This course will introduce additional or expanded versions of topics introduced in MECH 4960 (or 025.496), "Manufacturing Process 1", and building on course material from MECH 2290 (or 025.229). Topics will be selected from forming or metals; joining processes; rapid manufacturing; micro-electronics processing; surface engineering and finishing systems. Laboratory experience will be obtained on casting and rolling of metals and comparison of mechanical properties of the two routes. Not to be held for credit with the former 025.497. Prerequisite: MECH 4960 (or 025.496).

MECH 4980 Mechanical Engineering Laboratory Cr.Hrs. 2

(Formerly 025.498) Advanced laboratory course on topics covering different disciplines within mechanical engineering. Comprehensive experiments followed by submission of laboratory reports will be required. One lecture/week will be provided on issues related to experimental techniques. Prerequisites: MECH 3502 (or MECH 3500 or 025.350) and MECH 3420 (or 025.342). Not to be held with the former 024.101 or 025.498.

MECH 4990 Mechanical Engineering Laboratory 2 Cr.Hrs. 2

(Formerly 025.499) Advanced laboratory course on topics covering different disciplines within mechanical engineering. Comprehensive experiments followed by submission of laboratory reports will be required. One lecture/week will be provided on issues related to experimental techniques. Prerequisite: MECH 2202 (or MECH 2200 or 025.220). Pre or Corequisite: MECH 3460 (or MECH 3470 or 025.347)

4.11 Internationally Educated Engineers Qualification Program (IEEQ) – Post-Baccalaureate Diploma in Engineering

General Office: E3-573 EITC

Telephone: (204) 474 8961

Fax: (204) 474 7312

E-mail: ieeq@umanitoba.ca

Web: umanitoba.ca/engineering/ieeq

4.12.1 Introduction

The Faculty of Engineering offers the IEEQ Program, designed for international engineering graduates (IEGs) pursuing foreign credentials recognition with the Association of Professional Engineers and Geoscientists of Manitoba (APEGM, www.apegm.mb.ca), the regulatory body for engineering in Manitoba. Through the IEEQ Program, IEGs

- Meet requirements for academic qualification with APEGM and, upon successful completion of IEEQ program requirements, become registered with APEGM as a Member-in-Training; and,
- May earn a Post-Baccalaureate Diploma in Engineering from the University of Manitoba.

The provisions of Section 3: Academic Regulations apply to all students. In addition, the IEEQ Program has regulations and requirements that apply specifically to its students that may differ from the academic regulations in Section 3. Details on regulations and requirements not included below are provided to students upon their admission into the IEEQ program, and can be found on-line at umanitoba.ca/engineering/ieeq

4.12.2 Admission Requirements and Application Procedures

The IEEQ Program can accept applicants whose Confirmatory Exam assignments by APEGM correspond to one of the five accredited undergraduate engineering programs offered in the Faculty of Engineering.

Program entrance is normally in September of any given year. In order to be admitted to the IEEQ Program, the student must:

- Be an IEG with an earned undergraduate engineering degree obtained from a university outside of Canada;
- Have obtained the results of an Assessment of Academic Credentials from APEGM, with a result of five or fewer Confirmatory Exams assigned by APEGM in order to be considered academically qualified;
- Be a Permanent Resident or Canadian Citizen; and,
- Demonstrate English language proficiency at benchmark level 8 on the Canadian Language Benchmarks.

4.12.3 Program Requirements

The Post-Baccalaureate Diploma in Engineering consists of a minimum of 24 hours of coursework, subject to the following regulations:

CIVL 4050 Engineering Economics; and
ENG 4020 Professional Engineering Practice in Manitoba; and
ENG 4800 IEEQ Co-op Assignment; and

Technical courses are taken from the 3000 and 4000 level of the student's engineering discipline, and corresponding to the topic areas of Confirmatory Exams assigned by APEGM.

The total number of courses required in the IEEQ Program is generally as shown in the table below:

Number of Technical Confirmatory Exams ¹ Assigned by APEGM	Number of courses in IEEQ ²
One (1) or two (2)	5
Three (3)	7
Four (4)	9
Five (5)	11

Notes:

1. Technical exams refer to exams assigned from Group A or Group B of the Discipline Examinations (see http://engineerscanada.ca/e/pu_syllabus_1.cfm). Technical Exams do not include exams assigned from the Basic Studies (BS) or Complementary Studies (CS) syllabi, such as 98-CS-1 Engineering Economics

2. Including CIVL 4050 Engineering Economics, ENG 4020 Professional Engineering Practice in Manitoba, and ENG 4800 IEEQ Co-op Assignment

If the courses required in IEEQ total less than 24 credit hours, the student may apply for a transfer of credit from the original earned undergraduate engineering degree (obtained outside of Canada).

All courses must be completed with a grade of C or better. Failed courses may only be repeated once, and are subject to the limits outlined in the IEEQ Student Handbook and on the IEEQ website.

4.12.4 Maximum Time Limits

Students can choose a full-time or part-time option in the IEEQ Program. Students will be asked to declare their status upon their acceptance to the IEEQ Program.

Number of courses in IEEQ	Full-time	Part-time
Seven (7) or fewer	1 yrs	2 yrs
More than seven (7)	2 yrs	3 yrs

SECTION 5: CO-OPERATIVE EDUCATION AND INDUSTRIAL INTERNSHIP PROGRAMS

Contact and Program Information

Director: Carolyn Geddert, P.Eng., Engineer-in-Residence

Tel. 204 474 8948

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Cooperative Education Administrator: Leslie Cole

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Tel. 204 480 1069

Fax. 204 474 7676

The Faculty of Engineering offers a Co-operative education and Industry Internship Program (Co-op/IIP) designed to complement and enrich the academic program with work experience. The work terms provide students with practical experience, assistance in financing their education, and guidance for future career specialization.

A student in good academic standing, who will have successfully completed 58 credit hours of their academic program of study by the end of the session, may apply to participate in the Co-operative and Industry Internship Program. Applicants will be interviewed and approved by the Co-op/IIP staff and faculty advisors. Final acceptance into the program will be confirmed in writing by the Co-op/IIP office.

In addition to students following regular departmental programs, Internationally Educated Engineers Qualification (IEEQ) Program participants may also be approved for participation in Co-op/IIP upon written approval of the IEEQ Director.

Progress of all students through Co-op/IIP the program is dependent upon the student obtaining a job placement confirmed as appropriate by the Co-op/IIP office.

Upon acceptance, Engineering students enrol in the course ENG 4800, Engineering Cooperative Education Work Term 1 (and subsequently, ENG 4810, ENG 4820, ENG 4830, ENG 4840) for the specific work term of employment.

Students who are unable to maintain the standards of the Co-op/IIP will be transferred back into the regular program.

The course and grade requirements for completion of the Co-op/IIP are the same as those required for the regular program. However, in order to satisfy course prerequisite requirements, timetables may differ from the regular program. Co-op/IIP students are evaluated in the same manner as regular students and all rules and regulations of the Faculty of Engineering apply.

Students who are placed on Academic Warning or Academic Probation will either be removed from Co-op/IIP or have their acceptance deferred until they have completed two consecutive terms with an Academic Standing of "Satisfactory".

Students who are Required to Withdraw will immediately become ineligible for Co-op/IIP and will remain ineligible after re-instatement to the Faculty of Engineering.

Written reports must be completed at the end of each work term. Each successfully completed work term and its corresponding work term report receives a Pass/Fail grade and is rated at one credit hour. Graduates who successfully complete at least three work terms and the required work term reports will have the Co-operative Education Option acknowledged on their B.Sc. graduation parchment.

For more information regarding the Co-op/IIP requirements, please see the Co-op/IIP office.

<http://umanitoba.ca/faculties/engineering/programs/coopiip/index.html>

CLAYTON H. RIDDELL FACULTY OF ENVIRONMENT, EARTH, AND RESOURCES

Dean: Norman Halden

Associate Dean: Mary Benbow (Academic), David Barber (Research)

Campus Address & General Office: 440 Wallace Building

Telephone: (204) 474-7252

Fax: (204) 275-3147

Email Address: Riddell.Faculty@umanitoba.ca

Website: umanitoba.ca/environment

Academic Staff: Please refer to the Clayton H. Riddell Faculty of Environment, Earth, and Resources Academic Staff [Academic Staff](#) website

Chapter Contents

SECTION 1: DEGREE PROGRAMS OFFERED

1.1 Program, Majors and Minors

1.2 Available Focus Areas and Streams

SECTION 2: ADMISSION TO THE CLAYTON H. RIDDELL FACULTY OF ENVIRONMENT, EARTH, AND RESOURCES

2.1 Admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources

2.2 Direct Entry from High School

2.3 Admission from University 1

2.4 Transfer Students

2.5 Visiting Students

2.6 Second Degree Students

2.7 Special Students

2.8 Auditing Students

SECTION 3: DEGREE REGULATIONS AND SERVICES APPLICABLE TO ALL PROGRAMS IN THE CLAYTON H. RIDDELL FACULTY OF ENVIRONMENT, EARTH, AND RESOURCES

3.1 Courses Offered in Other Faculties and Schools Acceptable for Credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources

3.2 Available Minors in Departments and Faculties

3.3 University Written English and Mathematics Requirements

3.4 Faculty of Arts and Faculty of Science Courses Requirements

3.5 Changes in Program Requirements

3.6 Prerequisite and Corequisite Courses

3.7 Course Availability

3.8 Repeated Courses and Attempted Credit Hours

3.9 Voluntary Withdrawals

3.10 Authorized Withdrawals

3.11 Residence Requirement

3.12 Letter of Permission to Take Courses at Another University

3.13 Dean's Honour List

3.14 Academic Warning, Probation, Academic Suspension and Special Students (Academic Standing)

3.15 Academic Misconduct

3.16 Termwork and Debarment

3.17 Deferred Examinations

3.18 Challenge for Credit

3.19 Appeals Involving Academic Regulations

3.20 Riddell Faculty Student Advisor Office Hours

3.21 Student Responsibility

3.22 Maximum Number of Courses During a Term

3.23 Registration

SECTION 4: DEPARTMENT OF ENVIRONMENT AND GEOGRAPHY

4.1 Academic Staff

4.2 Undergraduate Programming Available in the Department of Environment and Geography

4.3 Cooperative Education Option

SECTION 5: BACHELOR OF ARTS IN GEOGRAPHY DEGREE REGULATIONS, PROGRAM DESCRIPTION AND COURSES OFFERED BY

5.1 Program Information

5.2 Advanced Entry Entrance Requirements

5.3 Minimum Performance Requirements

5.4 Graduating with Distinction or First Class Honours

5.5 B.A. Geography Program Chart

5.6 Systematic Courses (HS, PS, TS) and Area Studies (A)

5.7 Environment, Earth, and Recourses Course Descriptions

5.8 Geography Course Descriptions - 1000 level

5.8 Geography Course Descriptions - 2000 level

5.8 Geography Course Descriptions - 3000 level

5.8 Geography Course Descriptions - 4000 level

SECTION 6: BACHELOR OF SCIENCE IN PHYSICAL GEOGRAPHY DEGREE REGULATIONS, PROGRAM DESCRIPTION AND COURSES OFFERED BY

6.1 Program Information

6.2 Advanced Entry Entrance Requirements

6.3 Minimum Performance Requirements for Continuation and Graduation

6.4 Graduating with Distinction or First Class Honours

6.5 B.Sc. Physical Geography Program Chart

6.6 Environment, Earth, and Recourses Course Descriptions

6.7 Geography Course Descriptions - 1000 level

6.7 Geography Course Descriptions - 2000 level

6.7 Geography Course Descriptions - 3000 level

6.7 Geography Course Descriptions - 4000 level

SECTION 7: BACHELOR OF ENVIRONMENTAL SCIENCE AND BACHELOR OF ENVIRONMENTAL STUDIES DEGREE REGULATIONS, PROGRAM DESCRIPTIONS AND COURSES OFFERED BY

- 7.1 Program Information
- 7.2 Advanced Entry Entrance Requirements
- 7.3 Minimum Performance Requirements for Continuation and Graduation
- 7.4 Graduating with Distinction or First Class Honours
- 7.5 Bachelor of Environmental Science Program Chart
- 7.6 Bachelor of Environmental Studies Program Chart
- 7.7 Environment, Earth, and Recourses Course Descriptions
- 7.8 Environmental Science and Environmental Studies Course Descriptions - 1000 level
- 7.8 Environmental Science and Environmental Studies Course Descriptions - 2000 level
- 7.8 Environmental Science and Environmental Studies Course Descriptions - 3000 level
- 7.8 Environmental Science and Environmental Studies Course Descriptions - 4000 level

SECTION 8: DEPARTMENT OF GEOLOGICAL SCIENCES: BACHELOR OF SCIENCE IN GEOLOGICAL SCIENCES - GEOLOGY, GEOPHYSICS, AND GENERAL DEGREE REGULATIONS, PROGRAM DESCRIPTIONS AND COURSES OFFERED BY

- 8.1 Academic Staff
- 8.2 Program Information
- 8.3 Degree Regulations
- 8.4 Bachelor of Science in Geological Sciences (Geology) Program Chart
- 8.5 Bachelor of Science in Geological Sciences (Geophysics) Program Chart
- 8.6 Bachelor of Science in Geological Sciences (General) Program Chart
- 8.7 Environment, Earth, and Recourses Course Descriptions
- 8.8 Geological Sciences Course Descriptions - 1000 level
- 8.8 Geological Sciences Course Descriptions - 2000 level
- 8.8 Geological Sciences Course Descriptions - 3000 level
- 8.8 Geological Sciences Course Descriptions - 4000 level

SECTION 1: DEGREE PROGRAMS OFFERED

The Clayton H. Riddell Faculty of Environment, Earth, and Resources offers degree programs in Environmental Science, Environmental Studies, Geography, Physical Geography, Geological Sciences, Geology and Geophysics. All students are advised to examine their interests and future goals carefully to make appropriate program choices. Consultation with [Riddell Faculty student advisors](#) and/or department representatives is strongly encouraged.

1.1. Programs

Degree	Years to complete	Total Credit Hours
Geography		
Bachelor of Arts in Geography (General) ¹	3	90
Bachelor of Arts in Geography (Advanced) ¹	4	120
Bachelor of Arts in Geography (Honours) ¹	4	120
Physical Geography		
Bachelor of Science in Physical Geography (Major, Major Co-op) ¹	4	120
Bachelor of Science in Physical Geography (Honours, Honours Co-op) ¹	4	120
Environmental Science		
Bachelor of Environmental Science (General) ¹	3	90
Bachelor of Environmental Science (Major, Major Co-op) ¹	4	120
Bachelor of Environmental Science (Honours, Honours Co-op) ¹	4	120
Environmental Studies		
Bachelor of Environmental Studies (General) ¹	3	90
Bachelor of Environmental Studies (Major, Major Co-op) ¹	4	120
Bachelor of Environmental Studies (Honours, Honours Co-op) ¹	4	120
Geological Sciences		
Bachelor of Science in Geological Sciences (General) ¹	3	90
Geology		
Bachelor of Science in Geological Sciences – Geology (Major) ¹	4	120
Bachelor of Science in Geological Sciences – Geology (Honours) ²	4	120
Geophysics		
Bachelor of Science in Geological Sciences – Geophysics (Major) ¹	4	121
Bachelor of Science in Geological Sciences – Geophysics (Honours) ²	4	121

Footnotes:

¹There is no time limit to complete the degree.

²There is an eight-year time limit to complete the degree.

1.2 Available Focus Areas and Streams

Focus Areas (Environmental Studies and Environmental Science): Conservation & Biodiversity, Environmental Assessment, Environmental Health, Toxicology, Land Systems, Natural Resource Management, Northern Studies, Policy & Law, Stewardship, Sustainable Building, Sustainable Development, Water Resources, Wildlife Management, and Individualized Study.

Streams (Physical Geography): Atmosphere and Hydrological Sciences, General Physical Geography, and Geomatics.

SECTION 2: ADMISSION TO THE CLAYTON H. RIDDELL FACULTY OF ENVIRONMENT, EARTH, AND RESOURCES

2.1 Admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources

The following is a summary of the admission requirements. All admission requirements, as well as application deadline dates and forms, are included in the Clayton H. Riddell Faculty of Environment, Earth, and Resources Applicant Information Bulletin that is available from the [Admissions Office](#), Enrolment Services, 424 University Centre; this information is also posted on the University of Manitoba's website (umanitoba.ca/admissions).

Other than Direct Entry students, completion of a minimum of 24 credit hours of university level courses is required (see sections 2.3 to 2.7)

Faculty admission is determined on the basis of a 2.00 Cumulative Grade Point Average on a minimum of 24 credit hours of course work from a recognized institution. Note: For students completing the Bachelor of Arts in Geography, entry is based on a Degree Standards Table.

Degree programs may define additional entrance requirements and students are referred to the appropriate section of this Chapter for further details as follows:

Section 5: Bachelor of Arts in Geography Degree Regulations and Program Description.

Section 6: Bachelor of Science in Physical Geography Degree Regulations and Program Description.

Section 7: Bachelor of Environmental Science and Bachelor of Environmental Studies Degree Regulations and Program Descriptions.

Section 8: Department of Geological Sciences: Bachelor of Science in Geological Sciences - Geology, Geophysics, and General Degree Regulations and Program Descriptions.

Students must apply to be considered eligible for admission to the Riddell Faculty. Application information is available from the Admissions Office, Enrolment Services, 424 University Centre. This information is also available in the Riddell Faculty Dean's Office, 440 Wallace Building, and is posted on the University's website (umanitoba.ca/admissions).

2.2 Direct Entry from Highschool

Effective for September 2015, students will apply to and be admitted directly into their degree program of choice. The Direct Entry admission requirements for ALL degree programs are:

- Manitoba high school graduation, with five full credits at the Grade 12 level, in courses designated S (Specialized), G (General), or U (Dual-Credit University), or the equivalent standard from other provinces or countries will be considered.

Additionally, the following Direct Entry requirements must be met for the specific degree programs:

Admission Requirements for the Bachelor of Environmental Science program and Bachelor of Science in Physical Geography program:

- Must have a minimum 85% average over the following, with no less than a 60% in each course:
 - o English 40S,
 - o Mathematics 40S (Pre-calculus or Applied),
 - o And one of Biology, Chemistry, Physics or Computer Science 40S

Admission Requirements for the Bachelor of Science in Geological Sciences program:

- Must have a minimum 85% average over the following, with no less than a 60% in each course:
 - o Chemistry 40S,
 - o Physics 40S,
 - o Pre-calculus Mathematics 40S

Admission Requirements for the Bachelor of Environmental Studies program and the Bachelor of Arts in Geography program:

- Must have a minimum 85% average over the following, with no less than a 60% in each course:
 - o English 40S,
 - o A second 40 S course,
 - o A third 40S course

2.3 Admission from University 1

University 1 students are encouraged to apply for admission to a degree program in the Clayton H. Riddell Faculty of Environment, Earth, and Resources once they have completed 24 credit hours of course work and have met the minimum entrance requirements of their intended degree program.

2.4 Transfer Students

Students applying for admission from other recognized universities or colleges are called 'transfer students'. For the University of Manitoba's general policy on transfer of credit and advanced standing, refer to the Admissions website: umanitoba.ca/admissions.

To be eligible for admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources, transfer students must have completed no fewer than 24 credit hours of university level course work and satisfied the minimum performance requirements of the intended degree program. Transfer students who have completed less than 24 credit hours must register in University 1 or Extended Education to complete the required credit hours of course work. Students with more than 24 credit hours who are not admissible to the Riddell Faculty should consider applying to Extended Education as their alternative choice.

Students on academic suspension as a result of work completed at another post-secondary institution or another Faculty will not normally be considered for admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources until the suspension has been served.

Transfer of Credit

The University of Manitoba assesses transfer credit as a part of the application process. Assessment of prior course work for admissions or transfer credit will only take place after your application has been submitted. The University of Manitoba [transfer credit equivalencies database](#) is now available as a reference tool to look up current course assessments. Please take note of the guidelines outlined on the database access page as these course assessments are subject to change.

See the Admissions section of this Calendar. Courses completed at an external institution ten years prior to registration in the Clayton H. Riddell Faculty of Environment, Earth, and Resources are not considered for transfer of credit. Students should contact a [Riddell Faculty student advisor](#) regarding transfer credit.

University College of the North and the University of Manitoba Articulation Agreement NRM Technology Diploma (UCN)/ Bachelor of Environmental Science (U of M)

Graduates of the 2 Year Natural Resource Management Technology Diploma from University College of the North may apply for admission into the Bachelor of Environmental Science program in the Clayton H. Riddell Faculty of Environment, Earth, and Resources at the University of Manitoba. Successful applicants will be granted 60 credit hours on admission towards the completion of the 120 credit hour Bachelor of Environmental Science degree.

Students should contact a [Riddell Faculty student advisor](#) regarding more information.

2.5 Visiting Students

Visiting students may apply for admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources on the basis of a [Letter of Permission](#) from the Registrar or appropriate Dean of her/his home institution. Certain restrictions may be placed on the kind and number of courses in which a student will be allowed to register. Visiting students may wish to contact a [Riddell Faculty student advisor](#) in the Faculty Dean's Office for further information.

2.6 Second Degree Students

Students possessing a first degree from a recognized university program with a minimum Cumulative Grade Point Average of 2.00 on their first degree may be eligible for admission as a Second Degree student provided they have completed the minimum coursework entrance requirements for their intended degree program.

Second Degree requirements may be shortened by up to 60 credit hours and, once admitted, students will be expected to satisfy all continuation and graduation requirements in the degree program. Second Degree students are not required to satisfy the University Written English and Mathematics requirement. See a [Riddell Faculty student advisor](#) for specific information on degree requirements following completion of the first degree.

2.7 Special Students

After Degree Special Student

Students who have successfully completed a first degree from a recognized university program with a cumulative Grade Point Average of 2.00 or better are eligible for admission as Special Students.

Prospective applicants who hold a previously completed degree may enroll in degree credit courses in the Faculty as a Special Student provided that they are not at the time interested in pursuing a degree. As noted in the university admission requirements (<http://umanitoba.ca/student/admissions/requirements/special-students.html>), such courses may subsequently be accepted as credit towards a degree, diploma or certificate at the discretion of program deans or directors.

2.8 Auditing Students

Students who wish to audit courses must have written permission from the instructor of the desired course before they can register. Auditing students must register in-person in the Riddell Faculty Dean's Office. The Clayton H. Riddell Faculty of Environment, Earth, and Resources prohibits auditors from registering in courses until after the initial access period.

SECTION 3: DEGREE REGULATIONS AND SERVICES APPLICABLE TO ALL PROGRAMS IN THE CLAYTON H. RIDDELL FACULTY OF ENVIRONMENT, EARTH, AND RESOURCES

Students who are registered in the Clayton H. Riddell Faculty of Environment, Earth, and Resources may take any course offered by another faculty or school for credit towards their degree, subject to permission from the department head (or designate) and/or a [Riddell Faculty student advisor](#).

3.2 Available Minors in Departments and Faculties

Students in the Bachelor of Environmental Science, Bachelor of Environmental Studies, Bachelor of Science in Geological Sciences (Geology and Geophysics) and Bachelor of Science in Physical Geography degree programs may, if they wish, declare and complete a Minor from departments and interdisciplinary programs in which a Minor is offered. Students registered in the B.A. Geography (General; Advanced) and B.Sc. Geological Sciences (General) are required to complete a Minor prior to graduation. Students may not, however, declare both their Major and Minor from the same subject area. For example: a student in B.A. Geography program may not declare a minor in physical geography; a student in Environmental Science program may not declare a minor in Environmental Studies, etc.. Students can declare only one minor. For specific requirements to complete a Minor, please refer to the relevant Faculty/School's chapter in the [Academic Calendar & Catalog](#).

It should be noted that for Honours students any consideration of completing a Minor should be made early due to restricted opportunities in later years in their programs. Students in the B.A. Geography (Honours) may not declare a Minor.

A Minor will normally consist of at least 18 credit hours, with a minimum of 12 credit hours being at the 2000-, 3000-, and 4000-levels (although there are some exceptions). It should be noted that no course can be used as part of a prescribed Honours or Major program and also be part of a prescribed Minor. An alternate course will have to be selected to satisfy the Minor requirement. For example: if a course in Economics is part of the student's Major or Honours program in B.Env.Sc., then that course may not be used as part of a Minor in Economics.

Students planning to enrol in the I.H. Asper School of Business [Management Minor] must consult a [Riddell Faculty student advisor](#) as enrolment in this minor program is limited. The Management minor consists of any 18 credit hours in courses offered by the Asper School of Business.

3.3 University Written English and Mathematics Requirement

Students are required to complete the University Written English and Mathematics requirement as outlined in the General Academic Regulations, Residence and Written English and Mathematics Requirements in this Calendar. It is recommended that students complete these requirements while in Year 1 of their program.

A list of all courses that satisfy the Written English and Mathematics requirements can be found in 3. Approved English and Mathematics Courses of this Calendar. Course numbers of designated written English courses are marked with a 'W' and designated Mathematics courses are marked with an 'M'.

Students may wish to consider GEOG 2900W Geography of Canadian Prairie Landscapes (3), ENVR 2270W Environmental Problem Solving and Scientific Thinking (3), GEOL 3130W Communication Methods in the Geological Sciences (3), and/or GEOG 3810M Quantitative Research Methods in Geography (3) to satisfy these requirements. In addition, the Department of Environment and Geography offers several courses annually through Distance Education that satisfy the 'W' requirement.

3.4 Faculty of Arts and Faculty of Science Courses Requirements

Students are required to take 6 credit hours from the Faculty of Arts and 6 credit hours from the Faculty of Science.

For course subjects taught by the Faculty of Science refer to the Chapter Faculty of Science for a complete listing.

For course subjects taught by the Faculty of Arts refer to the Chapter Faculty of Arts for a complete listing.

3.5 Changes in Program Requirements

Once students have successfully completed any portion of a degree program, they will not be required to meet new course requirements subsequently stipulated for that portion of the program, whether the requirements be for the Faculty or for an individual degree program. Students are required to complete their program in its entirety as outlined in the Calendar effective upon the point of admission to the Faculty and program.

3.6 Prerequisite and Corequisite Courses

Definitions for prerequisite and corequisite courses are outlined in the Chapter, General Academic Regulations, Course Identification of this Calendar.

3.7 Course Availability

All courses listed in this Calendar are not offered every year. Students are referred to the [Class Schedule](#) for current information.

The Department of Environment and Geography offers numerous courses under the following course numbers: **GEOG 3770** Special Topics in Geography (3), **GEOG 4670** Selected Issues (3), **GEOG 3740** Field Studies in Geography (6), **GEOG 3750** Field Studies in Geography (3), **GEOG 3760** Special Topics in Geography (6), **ENVR 2010** Field Topics in Environment (1.5), **ENVR 2020** Extended Field Topics in Environment (3), **ENVR 3000** Multidisciplinary Topics in Environmental Science (3), **ENVR 3010** Field Topics in Environmental Science 1 (1.5), **ENVR 3020** Extended Field Topics in Environmental Science 1 (3), **ENVR 4000** Multidisciplinary Topics in Environmental Science (3), **ENVR 4010** Field Topics in Environmental Science 2 (1.5), and **ENVR 4020** Extended Field Topics in Environmental Science 2 (3).

The Department of Geological Sciences offers a course under the following course number: **GEOL 4270** Advanced Studies in Earth Sciences (3). Students are referred to the [Class Schedule](#) for current information.

3.8 Repeated Courses and Attempted Credit Hours

Clayton H. Riddell Faculty of Environment, Earth, and Resources students are subject to the University of Manitoba regulations (see General Academic Regulations, Academic Evaluation, 1.2 Repeating a Course as described in this Calendar) and the Riddell Faculty degree regulations regarding eligibility to repeat a course. Repeating a course will not result in the removal of the first attempt and grade in that course from the student's record. The course will appear on the transcript as many times as it has been repeated. Only the grade from the last attempt will be included in the calculation of the cumulative and degree Grade Point Average, unless otherwise stipulated by the degree program.

Students who wish to repeat a course must contact a [Riddell Faculty student advisor](#) for approval prior to registration and complete the [Request to Repeat a Course](#) form available on the Riddell Faculty web page (umanitoba.ca/environment/undergraduate).

There is no limit to the number of credit hours permitted in the degree programs in the Faculty provided a student does not exceed the credit hour limit of failed courses stated for specific programs.

3.9 Voluntary Withdrawals

The responsibility for initiating withdrawals rests solely with the student. When eligible to do so, Voluntary Withdrawals must be done through Aurora Student. No withdrawals will be permitted after the deadlines posted in the Academic Schedule.

There is currently no limit on the number of Voluntary Withdrawal hours a student can accumulate.

3.10 Authorized Withdrawals

Students who have valid and documented reasons for withdrawal, such as medical illness or compassionate circumstances, may be authorized to withdraw without penalty. Requests for authorized withdrawals must be submitted in writing to a [Riddell Faculty student advisor](#). The Office of Student Advocacy located at 520 University Centre (474-7423, student_advocacy@umanitoba.ca) is available to provide information and assistance.

3.11 Residence Requirement

Students are required to complete a minimum number of credit hours at the University of Manitoba. Students should refer to their degree program in the appropriate section for further information:

5: Bachelor of Arts in Geography Degree Regulations and Program Description and Courses Offered by

6: Bachelor of Science in Physical Geography Degree Regulations and Program Description and Courses Offered by

7: Bachelor of Environmental Science and Bachelor of Environmental Studies Degree Regulations and Program Descriptions and Courses Offered by

8: Department of Geological Sciences: Bachelor of Science in Geological Sciences - Geology, Geophysics, and General Degree Regulations and Program Descriptions and Courses Offered by

The courses used to satisfy the residence requirement must be acceptable for credit by the degree program in the Clayton H. Riddell Faculty of Environment, Earth, and Resources. Residence requirements apply to both first and second degree students.

3.12 Letter of Permission to Take Courses at Another University

Students wishing to complete courses at another institution for credit at this university must obtain written permission ([Letter of Permission](#)) from the Registrar's Office prior to registering at the other institution or no credit will be permitted. Any earned grades are transferred and form part of the degree Grade Point Average, when applicable. Students who register for courses elsewhere without a Letter of Permission must reapply to the Faculty.

Students who are on academic suspension may not elect courses at another institution for credit toward an Environment, Earth, and Resources degree at this university.

Attendance at Other Institutions

Students who attend other post-secondary institutions without a Letter of Permission must reapply for admission to the Faculty before the application deadline and be academically competitive for admission. Similarly, students registered in the Clayton H. Riddell Faculty of Environment, Earth, and Resources may not be registered at another academic institution at the same time unless they are registered elsewhere on a Letter of Permission. The penalty for unauthorized or undisclosed attendance may be disciplinary withdrawal or academic suspension.

3.13 Dean's Honour List

A student's eligibility for the Dean's Honour List designation is evaluated after each term.

Students enrolled in a minimum of 12 credit hours of course work during a term and who achieve a term Grade Point Average of 3.50 or higher will be placed on the Dean's Honour List. The Dean's Honour List designation will appear on the student's transcript.

3.14 Academic Warning, Probation and Academic Suspension (Academic Standing)

Students shall be evaluated after each academic term in which they receive a final grade in a minimum of 4 credit hours, with the assessment being based on the resulting Degree Grade Point Average (DGPA). This assessment will determine a student's academic standing to be: faculty minimum met, academic warning, on probation, suspension warning, or academic suspension.

Faculty Minimum Met

To be in good standing, a student must achieve a 2.00 Degree Grade Point Average at each point of assessment and the notation 'Faculty Minimum Met' will be recorded on the student's transcript. Note: For students completing the Bachelor of Arts in Geography, Faculty Minimum Met is based on a Degree Standards Table found in section 5.2.2.

Degree programs may define additional performance requirements for continuation and graduation. Students are referred to the appropriate section of this Chapter for further details as follows:

Section 5.3: Bachelor of Arts in Geography.

Section 6.3: Bachelor of Science in Physical Geography.

Section 7.3: Bachelor of Environmental Science and Bachelor of Environmental Studies.

Section 8.3.1: Bachelor of Science in Geological Sciences - Major.

Section 8.3.2: Bachelor of Science in Geological Sciences - Honours.

Section 8.3.3: Bachelor of Science in Geological Sciences - General.

Academic Warning

Students will receive an academic warning if, at the point of assessment following a term, s/he fails to achieve the required minimum performance level. The notation 'Academic Warning' will be recorded on the student's transcript.

On Probation

Those who fail to meet the required minimum performance level following an Academic Warning assessment will be placed on probation. The notation 'On Probation' will be recorded on the student's transcript.

Suspension Warning

Those who fail to meet the required minimum performance level following an On Probation assessment will be placed on Suspension Warning. The notation, 'Suspension Warning' will be recorded on the student's transcript.

Academic Suspension

Those who fail to meet the required minimum performance level following a Suspension Warning assessment will be placed on Academic Suspension for One Year. The notation, 'Academic Suspension for One Year' will be recorded on the student's transcript. A student placed on academic suspension is not allowed to register in the Clayton H. Riddell Faculty of Environment, Earth, and Resources during the duration of the suspension.

A student will be placed on academic suspension for two years under the following circumstances:

- Upon return from one year suspension, the student fails to attain a 2.00 degree grade point average in the following two terms after the probationary assessment (see a

[Riddell Faculty student advisor](#) for information).

The Faculty calculates that it is mathematically impossible for the student to clear his/her probationary standing by the following assessment period.

The student exceeds the maximum number of credit hours of failed courses.

The notation, 'Academic Suspension for Two Years', will be recorded on the student's transcript of marks. Those serving two-year suspensions are required to start the degree afresh should they choose to return to the Clayton H. Riddell Faculty of Environment, Earth, and Resources. Students may appeal for transfer of credit up to 30 credit hours in courses in which a minimum grade of 'C' was achieved.

Students should consult with a [Riddell Faculty student advisor](#) for further assistance in clearing their academic warning, on probation, suspension warning, or academic suspension academic standing.

Special Students

Special students that have successfully completed at least 15 credit hours of course work in the Riddell Faculty will be notified by mail / email that given the extent of their studies to date, they are strongly encouraged to consider application to a degree, diploma or certificate program, perhaps through Extended Education or as a Second Degree Student.

- If 6 or more credit hours of coursework in the first 15 are failed course attempts (grades of F or D) students will receive notice by mail / email encouraging them to seek guidance from the Academic Learning Centre and /or from Riddell Faculty student advisors.

Special students that have earned (includes earning F grades) 30 credit hours of course work in the Riddell Faculty will be notified by mail / email that given the extent of their studies that they must either transfer into a degree, diploma or certificate program, or should they wish to continue their studies as non-degree students, to enroll with Extended Education. Special Student status will not be granted by the Riddell Faculty past the 30 credit hour level.

3.15 Academic Misconduct

Academic misconduct is intentional cheating, fabrication, impersonation, or plagiarism. It is also knowingly helping or attempting to help others to be dishonest. Academic dishonesty lowers scholastic quality and defrauds others who will eventually depend on their own knowledge and integrity.

Plagiarism or any other form of cheating on examinations, term tests, or assignments is subject to academic penalty as serious as suspension or expulsion from the Faculty or University.

Students who are unsure of what constitutes academic misconduct should refer to the regulations in the Chapter General Academic Regulations, Academic Integrity: Plagiarism and Cheating in this Calendar and consult with your professor or instructor.

3.16 Termwork and Debarment

A student is responsible for the completion of laboratory work, assignments, tests and other class work as prescribed by the course syllabus. A student who does not meet termwork requirements to the satisfaction of the Associate Dean (Academic) will receive a warning to this effect. If this warning is ignored, a student may be debarred from the course. Any student debarred from a course receives an automatic grade of 'F' in that course.

3.17 Deferred Examinations

A student who is unable to write a final examination because of illness or other incapacity or compassionate reasons should contact a student advisor in the Clayton H. Riddell Faculty of Environment, Earth, and Resources. The appropriate documentation (i.e. a medical certificate or otherwise appropriate documentation certifying the reason for the missed exam) will be required. Students are reminded to contact their home faculty (and not the faculty through which the course is offered). Please see the [missed exam information](#) on the faculty website. Refer to the Chapter General Academic Regulations, Academic Evaluation: Deferred and Supplemental Examinations in this Calendar for further information.

A complete copy of the Deferred and Supplemental Examinations Procedures is available at http://umanitoba.ca/admin/governance/governing_documents/academic/1299.html

3.18 Challenge for Credit

Some departments at the University of Manitoba offer courses by means of challenge of credit. Since the courses offered in this manner may vary from year to year, any student wishing to challenge a course for credit should contact a [Riddell Faculty student advisor](#) in the Clayton H. Riddell Faculty of Environment, Earth, and Resources general office. The Academic Schedule of this Calendar contains the relevant registration deadlines dates appropriate to challenge for credit.

3.19 Appeals Involving Academic Regulations

The Student Appeals and Discipline Committee in the Faculty considers appeals from students who request special consideration with respect to the rules and regulations governing their degree program and qualifications for graduation.

Appeals should be addressed to:

[Student Advisor](#), Secretary Student Appeals and Discipline Committee,
General Office, Clayton H. Riddell Faculty of Environment, Earth, and Resources,
440 Wallace Building.

3.20 Riddell Faculty Student Advisor Office Hours

Monday through Friday: 9:00 a.m. to 4:00 p.m.

Email: Riddell.Faculty@umanitoba.ca

3.21 Student Responsibility

It is your responsibility to be familiar with the regulations, courses, and graduation requirements of your degree program. You are advised to review the appropriate sections of this Calendar carefully when selecting your courses to ensure compliance with degree program requirements. If you are not sure of how regulations and requirements apply to your case, please consult a [Riddell Faculty student advisor](#). Since a complete graduation check is not done until you have declared your intention to graduate, you are encouraged to make an appointment with a [Riddell Faculty student advisor](#) prior to your initial registration access date to confirm you are meeting the degree requirements. Ultimately you are responsible to ensure compliance with degree program requirements.

Every candidate for a degree must make a formal application at the beginning of the term in which they expect to complete graduation requirements, before the last date of the registration revision period.

Undergraduate students need to declare their intent to graduate. This can be done on-line through Aurora. (Log into Aurora, select "Enrolment and Academic Records", select "Declarations", and follow the instructions. If the date you wish to graduate does not appear, you will need to contact a Student Advisor in the Dean's Office, 440 Wallace, for assistance.; you may have missed the online application deadline)

Note: While we welcome the opportunity to assist you, it is important for you to realize that it is your responsibility to be familiar with university and Riddell Faculty academic regulations and registration procedures as they are described in this calendar.

3.22 Maximum Number of Courses During a Term

You may attempt a maximum of 15 credit hours in any one term unless otherwise stipulated by your program. If you wish to exceed the normal load you may apply in-person at the Faculty Dean's Office, or complete the [Application to Exceed Credit Hours](#) form available on the Riddell Faculty web page (umanitoba.ca/environment/undergraduate).

3.23 Registration

Student Responsibilities

Know your registration time. Registration information is available on the Registrar's website under [Registration](#).

It is the students' responsibility to ensure that all pre-registration approvals are completed and that all pre-requisites and program approval holds have been removed prior to the start of the registration period.

Steps to confirming your registration access:

1. Review your program requirements and if required, complete your [Advanced/Major/Honours Program Approval](#) form. The Program Approval form is available at the Riddell Faculty webpage: umanitoba.ca/environment/undergraduate. The Program Approval Hold will only be removed when your course selection has been approved by the student advisor.

Students completing the Bachelor of Arts in Geography (General) or the Bachelor of Science in Geological Sciences (General) do NOT need program approval prior to registration.

2. Obtain all required departmental permission that pertain to waivers for pre-requisites, space, and timetable conflicts.

3. Complete your registration through [Aurora Student](#).

4. Students interested in transferring between degree programs (i.e. switching from a Major to Honours, or from Major to Major Coop) must acquire the approval and submit to the student advisor in 440 Wallace Building.

5. Declaring a graduation date: Students are encouraged to declare a grad date as early as possible, and to come to the Dean's Office, 440 Wallace, to have a [Riddell Faculty student advisor](#) review your graduation requirements.

What Aurora Student cannot do:

Aurora Student will not check degree requirements. You are responsible for knowing the requirements of your degree. Consult a Riddell Faculty student advisor for advice and assistance if degree requirements are unclear.

You cannot add or change a course classification through [Aurora Student](#). Therefore, if you are an undergraduate student and wish to take a course as an Auditor, or as Challenge for Credit, you must add this course in-person in the Riddell Faculty Dean's Office within the normal deadlines for such activity.

Aurora Student will not prevent a student from registering in two (or more) courses that are designated not to be held for credit with one another. It is the student's responsibility to ensure that they are not registered for courses that are ineligible to be held for credit with one another. Read the course descriptions carefully. If you are unsure about a course you have selected, check with a Riddell Faculty [student advisor](#) prior to the [revision deadline](#). No academic concessions will be granted in this regard.

Have you been away for a While?

Students who have been away from the Riddell Faculty for more than a year cannot use Aurora Student until they have consulted a Riddell Faculty student advisor. Students who have attended another post-secondary institution since their last registration at the University of Manitoba must normally re-apply for admission.

SECTION 4: DEPARTMENT OF ENVIRONMENT AND GEOGRAPHY

Head: Michael Campbell

Campus Address & General Office: 220 Sinnott Building

Telephone: (204) 474-9451

Fax: (204) 474-7699

Email Address: environment_geography@umanitoba.ca

Website: umanitoba.ca/environment/departments/geography

Academic Staff: Please refer to the Clayton H. Riddell Faculty of Environment, Earth, and Resources [Academic Staff](#) website.

4.2 Undergraduate Programming in the Department of Environment and Geography

The fields of study in this department can be divided into four overlapping areas: environmental sciences, environmental studies, human geography and physical geography. These areas are built on a diverse range of academic frameworks or foundations, including: natural, physical and social sciences, education, law, agriculture, management, medicine, humanities and architecture.

Environmental Science applies scientific knowledge from many disciplines to issues and questions relating to an increasing human population, the sustainability of resource use, degradation caused by pollution and disturbance, and the endangerment and extinction of species and natural systems. Environmental Studies applies the theory and practice of group and organizational communication, understanding public policies and programs that underscore environmental concerns, and the need to integrate diverse social, institutional, political and legal considerations inherent in attaining environmental objectives. (Students have the opportunity to focus advanced studies in one of several areas, defined through consultation with a [Riddell Faculty student advisor](#).)

"Human Geography examines how people have been influenced by the environment and how, in turn, they have left their mark on the environment," Dr. Daniel Todd, Human Geographer. Students may choose to focus their studies into one of several areas including Human-Environment Relations, Urban and Rural Development, Social Cultural Geography, Population, Resources and Development, and Area Studies.

Areas of physical geography include the study of the environment through aspects of atmospheric science, geomatics, biogeography, and hydrology. Streams are currently available in Atmospheric and Hydrological Sciences, Geomatics (an emerging subfield, referring to the techniques of spatial data acquisition, handling and analysis) and Physical Geography.

Potential careers for graduates of these programs include a diverse array of possibilities in the natural sciences, social sciences, or a combination of both. Graduates are poised to assume positions where they identify and analyze the local, regional, national, and global patterns that shape our lives. As well, technical skills such as geographic information systems and remote sensing are demanded in several of the environmental sectors. Graduates of these programs can expect to enter the workforce in private, government, research, or not-for-profit sectors.

4.3 Cooperative Education Option

A Cooperative Education Option is available to students registered in either the Major or Honours degree programs in Environmental Science, Environmental Studies, or Physical Geography. Coop is an arrangement whereby students spend alternating periods in university and employment. There are several advantages to a cooperative education program for students. One benefit is that students are able to acquire both theoretical knowledge and practical experience. This experience assists them in selecting areas of specialization for their senior courses in their chosen Focus Area or Stream. As well, Coop assists students in their professional development by enhancing networking opportunities, participation in conferences and workshops and provides the foundation of skills and strategies required in searching and acquiring employment after graduation. Students can also defray some of the costs of their university education through these work term placements. Further information about Cooperative Education and student eligibility is available from a Riddell Faculty student advisor available in the Faculty general office.

Students electing to participate in the Cooperative Education Option will be assessed a program fee with their formal admission into the program. Once a student has accepted a position with a Coop employer, no portion of the program fee will normally be refunded.

The Cooperative Education Option consists of two employment work terms, each over a minimum period of four months, and contributes 6 credit hours towards the four year degree program. Students complete ENVR 2900 Professional Development 1 (1.5), ENVR 3900 Professional Development 2 (1.5), work term placements ENVR 3980 Work Term 1 (0), ENVR 3990 Work Term 2 (0), and the work term report courses ENVR 3910 Work Term Report 1 (1.5) and ENVR 3920 Work Term Report 2 (1.5). Additional work terms are available to interested students. Each academic term and each employment term commence in January, May or September. While on an employment term, a Cooperative Education Option student is not permitted to take more than three additional credit hours of academic work outside of the requirements of the Coop placement without permission of a Riddell Faculty student advisor.

Students are required to register in the appropriate Coop courses and pay course fees prior to beginning their placement.

For more information, please visit the Riddell Faculty Co-operative Education Program webpage.

SECTION 5: BACHELOR OF ARTS IN GEOGRAPHY DEGREE REGULATIONS, PROGRAM DESCRIPTION AND COURSES OFFERED BY

Head: Michael Campbell

Campus Address & General Office: 220 Sinnott Building

Telephone: (204) 474-9451

Fax: (204) 474-7699

Email Address: environment_geography@umanitoba.ca

Website: umanitoba.ca/environment/departments/geography

5.1 Program Information

There are four broad categories of courses in the Geography discipline: physical geography is concerned with physical features on and over the globe; human geography examines the products of human activity; regional geography attempts to achieve a synthesis of physical and human geography of a particular place; and techniques in geography focus on analytical methods.

The attraction of Geography as a discipline lies in its diverse interests and approaches to knowledge building while being centred on the fundamental concepts of human-environment relations, location/place and space/ distance. Geographers see the world and want to know how physical processes and systems shape the land, air, water, flora and fauna around them and how these are influenced by human activity. We want to know how human societies, cultures, and economies work and how these human systems are interdependent with each other and with natural systems. We work at a variety of geographic scales, from the micro-scale of local communities and regions, through the macro-scale of global human and physical systems. Geography embraces the study of topics as wide-ranging as: weather and climate, population distribution, agricultural systems, globalization, landforms and geomorphology, environmental perceptions, health and healthcare, and biogeography. Therefore, by selecting courses from within the department, as well as complementary courses from other academic units of the University, students can develop fascinating, focused and challenging degree programs that will prepare them for careers in a variety of areas.

The General degree in Geography provides students with a basic level of understanding of the discipline and its inter-relationships. This degree is also a useful consideration for students planning to complete the After-Degree Bachelor of Education program (see the Faculty of Education chapter of this Calendar). The General degree program may be completed entirely by Distance Education (see the Distance Education Guide for further details). The Advanced degree program in Geography provides opportunities for students who desire a broad geographical education along with a reasonable degree

of specialization in a particular field of Geography. Students planning a professional career or a high degree of specialization in Geography are strongly advised to enter the Honours degree program. The Honours degree demands the highest scholastic performance of all programs available. Students are strongly advised to enter an Honours degree program with their admission to the Bachelor of Arts in Geography. Consultation with the department head is also advised.

Structure of the B.A. Geography Degree Program

The structure of the B.A. Geography degree is summarized as follows:

A Geography (Major) component that varies in credit hour requirement depending on the degree program; 30 credit hours in the General; 51 credit hours in the Advanced; and 69 credit hours in the Honours. Students are not permitted to declare a second major.

Advanced and General degree students must complete a Minor in a subject field that is different than that of the declared major, and may be chosen from one of the other programs in the Clayton H. Riddell Faculty of Environment, Earth, and Resources. Students in the B.A. Geography are not permitted to complete a Minor in Physical Geography. The Minor requirements are described in section 3.2 of this Chapter. Contact a [Riddell Faculty student advisor](#) in the Faculty Dean's Office for further information about eligible Minors.

Students must complete 5 subject fields with 6 credit hours in each (30 credit hours). For example: 6 credit hours in Geography, plus 6 credit hours in Mathematics, plus 6 credit hours in Geological Sciences, plus 6 credit hours in Anthropology, plus 6 credit hours in Native Studies.

Students must also complete 6 credit hours from Humanities, and 6 credit hours offered by the Faculty of Arts, and 6 credit hours offered by the Faculty of Science.

Note: Students can satisfy the requirement for a Humanity, and/or Arts, or Science and at the same time satisfy the Written English or Mathematics requirement and one of the 5 subject fields required with the same 6 credit hours of courses.

Humanities

For course subjects taught by the Faculty of Arts that can be used towards the Humanities requirement, refer to the Chapter for the Faculty of Arts, Additional Faculty Regulations and Policies section. Music (i.e. all courses listed for Advanced Major and Minor programs except ensemble courses) and History of Art (i.e. all courses listed with course prefix FAAH) may also be eligible courses. Students should see a [Riddell Faculty student advisor](#) for further information.

B.A. in Geography (General): Academic Regulations

To qualify for the degree Bachelor of Arts in Geography (General), students must complete 90 credit hours including: all course requirements; a chosen minor field; the requirements in the five subject fields; and areas of Humanities, Arts, and Sciences. As well, students must satisfy the Riddell Faculty regulations outlined in section 3 of this Chapter. Minimum performance requirements include passing grades ('D' or better) in each course and a minimum degree Grade Point Average of 2.00 on Geography courses as well as the 90 credit hours that constitute the degree. Students cannot exceed 48 credit hours of failed courses.

B.A. in Geography (Advanced): Academic Regulations

To qualify for the Bachelor of Arts in Geography (Advanced) degree, students must complete 120 credit hours including: all course and performance requirements; a chosen minor field; the requirements in the five subject fields; and areas of Humanities, Arts, and Sciences. As well, students must satisfy the Riddell Faculty regulations outlined in section 3 of this Chapter. Minimum performance requirements include passing grades ('D' or better) in each course and a minimum degree Grade Point Average of 2.00 on Geography courses and the 120 credit hours which constitute the degree. Students cannot exceed 18 credit hours of failed courses.

B.A. in Geography (Honours): Academic Regulations

To qualify for the Bachelor of Arts in Geography (Honours) designation, students must complete 120 credit hours including: all course and performance requirements; the requirements in the five subject fields, and the areas of Humanities, Arts and Sciences. As well, students must satisfy the Riddell Faculty regulations outlined in section 3 of this Chapter. Minimum performance requirements include passing grades ('D' or better) in each course and a minimum degree Grade Point Average of 3.00 on Geography courses and the 120 credit hours which constitute the degree. Students cannot exceed 18 credit hours of failed courses.

5.2 Advanced Entry Entrance Requirements

Students are required to attain a minimum degree Grade Point Average of 2.00 based on the Degree Standards Table in Section 5.2.2 to be eligible for admission to the B.A. in Geography. Students who are admitted will be placed in the General degree program. Students may be eligible for transfer to either the Advanced or Honours degree program provided they satisfy the entrance requirements defined below in 5.2.1. To enter the Advanced or Honours degree program, a student must consult with a [Riddell Faculty student advisor](#) in the Faculty Dean's Office.

5.2.1 Advanced Entry Entrance Requirements				
Degree Program in B.A. Geography	Minimum Number of Credit Hours	Minimum Degree Grade Point Average	Maximum Credit Hours of Failed courses	Additional Entrance Requirements
Honours	24	3.00	18	grade of 'B' from GEOG 1280, GEOG 1290 ² and/or GEOG 1700 or a GPA of 3.00 or better in all Geography courses
Advanced	24	2.00	18	grade of 'C' from GEOG 1280, GEOG 1290 ² and/or GEOG 1700
General	24	2.00 ¹	48	grade of 'C' from GEOG 1280, GEOG 1290 ² and/or GEOG 1700

¹Minimum Grade Point Average for entrance into the General degree program is determined using the Degree Standards Table in 5.2.2.
²GEOG 1281 and GEOG 1291 may be used in lieu of GEOG 1280 and GEOG 1290, respectively.

5.2.2 Grade Point Average Calculation for Entrance and Continuation

General degree students in the B.A. Geography must attain a minimum 2.00 Grade Point Average at each point of assessment. The Degree Standards Table listed below is used to determine a student's eligibility for admission to the Riddell Faculty as well as evaluate a student's performance after each term.

5.2.2 Degree Standards Table	
Credit hours	Minimum Degree GPA
24-30	1.80
33-45	1.85
48-60	1.90
63-75	1.95
78-90	2.00
93+ hours	2.00

5.3 Minimum Performance Requirements

A student's academic performance is assessed first with his/her application for admission to the Riddell Faculty and then following each term in which the student is registered in more than 4.0 credit hours. To be in good standing and permitted to continue in a degree program, a student must achieve the minimum standards outlined for his/her degree program at each point of assessment. For General degree students, this includes the Degree Standards Table outlined in 5.2.2, as well as the requirements outlined in 5.3.1. Students in the Advanced and Honours degrees are required to satisfy the requirements listed in 5.3.1. Minimum academic performance is based on the degree Grade Point Average and number of failed courses. Prior to each registration, Advanced and Honours degree students must have their course selections approved by a [Riddell Faculty student advisor](#). Students may not make any subsequent changes without receiving prior written permission.

To graduate with a B.A. Geography with the intended degree designation, a student must achieve the minimum performance standards and graduation requirements outlined in 5.3.1. following their last term of registration and satisfy all faculty and degree requirements in Geography as defined in sections 5.3.1. and 5.5 of this Chapter.

Students in the Honours and Advanced degree programs who do not meet these minimum performance requirements will be withdrawn from their existing program and placed in the Advanced and General degrees respectively. Students who do not meet the minimum performance requirements for the General degree program will receive an academic warning, be placed on probation or academic suspension as defined in section 3.14 Academic Warning, Probation, Academic Suspension and Special Students (Academic Standing) in this Chapter. Students withdrawn from the Honours degree program may be eligible to enter the Advanced program and are required to obtain permission from a [Riddell Faculty student advisor](#).

Students withdrawn from the Honours degree program will have the notation, 'Required to Withdraw from the Honours Program', recorded on their transcript. Similarly, students withdrawn from the Advanced program will have the notation, 'Required to Withdraw from the Advanced Program', recorded on their transcript.

ACADEMIC CALENDAR 2015-2016

5.3.1 Minimum Performance Requirements for Continuation and Graduation ¹					
	Minimum Performance Requirements			Additional Graduation Requirements	
Degree Program (Cr. Hrs.)	Minimum Degree Grade Point Average (GPA)	Maximum Cr. Hrs. Failed Courses	Minimum Degree GPA in Geography Courses ³	Geography Courses Cr. Hr. Requirement (see 5.5 also)	Residence Requirement (Cr. Hrs.) (see section 3.11 also)
Honours ^{2,1} (120)	3.00	18	3.00	69	60
Advanced ^{1,2,3} (120)	2.00	18	2.00	51	60
General ^{2,3} (90)	2.00 see 5.2.2 for continuation	48	2.00	30	48 cr. hrs. total or the final 30 cr. hrs.

¹The courses required in this program will satisfy the [university mathematics requirement](#).
²Within the first 60 credit hours of courses, students must have completed 6 credit hours in each of 5 subject fields (totalling 30 credit hours). See section 5.1 for details.
³General and Advanced degree students are required to maintain a Degree Grade Point Average of 2.00 on the courses defining their Geography Major. **Note:** Students must complete all prerequisite courses with minimum 'C' grades.

5.4 Graduating with Distinction or First Class Honours With Distinction

Students graduating with a B.A. Geography (General) degree will have their degree granted 'With Distinction' if they have a minimum degree Grade Point Average of 3.80 and provided a minimum of 60 credit hours of acceptable course work is completed at the University of Manitoba.

Students graduating with a B.A. Geography (Advanced) degree will have their degree granted 'With Distinction' if they have a minimum degree Grade Point Average of 3.80 and provided a minimum of 90 credit hours of acceptable course work is completed at the University of Manitoba.

First Class Honours

Students in the Honours program will have their degree granted with 'First Class Honours' if they have a minimum degree Grade Point Average of 3.80 and provided a minimum of 90 credit hours of acceptable course work is completed at the University of Manitoba.

5.5 B.A. Geography Program Chart

5.5 B.A. Geography ⁵			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
HONOURS¹ 120 CREDIT HOURS (69 credit hours in Geography)			
6 credit hours from GEOG 1280, GEOG 1290 and/or GEOG 1700 Plus 6 credit hours of Humanities ⁶ Plus 6 credit hours from the Faculty of Science	GEOG 2200, GEOG 2530 9 credit hours in Geography courses numbered at the 2000- or 3000-level ³	GEOG 3730, GEOG 3810 Plus 18 credit hours in Geography courses numbered at the 2000- or 3000-level ³	GEOG 4660 18 credit hours in Geography courses numbered at the 4000- level
It is recommended that students complete the W course within the first 60 credit hours of courses. Enough elective credit to total 120 credit hours for the program.			
ADVANCED¹ 120 CREDIT HOURS (51 credit hours in Geography)			
6 credit hours from GEOG 1280, GEOG 1290 and/or GEOG 1700 Plus 6 credit hours of Humanities ⁶ Plus 6 credit hours from the Faculty of Science	GEOG 2200, GEOG 2530 9 credit hours in Geography courses numbered at the 2000- or 3000-level ⁴	GEOG 3730, GEOG 3810 Plus 6 credit hours in Geography courses numbered at the 3000-level ⁴	12 credit hours in Geography courses numbered at the 4000- level Plus 6 additional credit hours in Geography at the 2000-level or above
It is recommended that students complete the W course within the first 60 credit hours of courses. Enough elective credit to total 120 credit hours for the program.			

GENERAL² 90 CREDIT HOURS (30 credit hours in Geography)			
6 credit hours from GEOG 1280, GEOG 1290 and/or GEOG 1700 Plus 6 credit hours of Humanities ⁶ Plus 6 credit hours from the Faculty of Science	12 credit hours in Geography courses numbered at the 2000-level ⁴	12 credit hours in Geography courses numbered at the 3000- and/ or 4000- level ⁴	
It is recommended that students complete the W and M courses within the first 60 credit hours of courses. Note: 30 credit hours, with 6 credit hours in each of 5 subject fields, must be completed in the first 60 credit hours. Enough elective credit to total 90 credit hours for the program.			
MINOR 18 CREDIT HOURS			
6 credit hours from GEOG 1280, GEOG 1290 and/or GEOG 1700	6 credit hours in Geography courses numbered at the 2000-level	6 credit hours in Geography courses numbered at the 3000-level	
NOTES:			
<p>¹Entrance into the Honours and Advanced degree programs is summarized in 5.2.1. The courses required in this program will satisfy the University Mathematics requirement.</p> <p>²Entry into the General degree program is summarized in 5.2.1 and 5.2.2.</p> <p>³Among the 2000- and 3000-level courses, at least 6 credit hours must be systematic and at least 6 must be area studies. Systematic courses and area studies courses are listed in Section 5.6.</p> <p>⁴Among the 2000- and 3000-level courses, at least 12 credit hours must be systematic and at least 6 must be area studies. Systematic courses and area studies courses are listed in Section 5.6. Students wishing to transfer from the General to the Advanced degree program are permitted to take either GEOG 2200 and GEOG 3730, or GEOG 2530 in either third or fourth year.</p> <p>⁵Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number "1" (e.g. GEOG 1281).</p> <p>⁶May also satisfy the Faculty of Arts requirement.</p> <p>Notes:</p> <ul style="list-style-type: none"> To fulfil prerequisite requirements, a grade of "C" must be achieved, unless otherwise stated, in any course stipulated as a prerequisite to a further course. Students should review the current course topics available through GEOG 3740 (6), GEOG 3750 (3), GEOG 3760 (6), GEOG 3770 (3) and GEOG 4670 (3). Also, all courses are not offered every year or every term. The course schedule for the current academic term is available from the Class Schedule. Students registering in certain courses may be required to participate in field trips or field components and pay a portion of the associated expenses. For details, contact the Department of Environment and Geography general office. 			

5.6 Systematic Courses (HS, PS, TS) and Area Studies (A)

Courses numbered at the 2000- and 3000-level are arranged into Systematics (PS, HS and TS) and Area Studies (A). B.A. Geography students may specialize in the Physical Geography (PS); Human Geography (HS); Techniques (TS); Area Studies (A) but it is not compulsory for them to do so. B.A. Geography students wishing to specialize in Physical Geography should take at least three options (18 credit hours) from courses designated 'PS'. B.A. Geography students wishing to specialize in Human Geography should take at least three options (18 credit hours) from courses designated 'HS'. Students should discuss these options with a [Riddell Faculty student advisor](#).

B.A. Geography students wishing to specialize in Applied Geography should include 2000-level courses from **GEOG 2200, GEOG 2310, GEOG 2510, GEOG 2520, and GEOG 2530**; and 3000-level courses from **GEOG 3200, GEOG 3320, GEOG 3460, GEOG 3730, GEOG 3810M, GEOG 3710, and GEOG 3720**.

Courses offered for the current academic term are published in the [Class Schedule](#) and can be searched by Attribute Type. To find Systematic (HS, PS, TS) courses search: 'Geography: Human', 'Geography: Physical' or 'Geography: Techniques'. To find Area Studies (A) courses search: 'Geography: Area Studies'.

5.7 Environment, Earth, and Resources Course Description

EER 1000 Earth: A User's Guide Cr.Hrs. 3

This course will present a multi-disciplinary introduction to the Planet Earth as both the source of essential resources and as the site of resulting negative impacts. Focus in the course will be provided by addressing important and current topics, case studies, and concepts that the well-educated citizen of the Earth should understand and will include natural and human-induced processes within a broad range of spatial and temporal scales.

5.8 Geography Course Descriptions

Geography Course Descriptions 1000 level

GEOG 1280 Introduction to Human Geography Cr.Hrs. 3

Formerly 053.128) This course studies aspects of the human world: population, settlement and resources. Not to be held with GEOG 1200 or GEOG 1201 (053.120), or GEOG 1281.

GEOG 1290 Introduction to Physical Geography Cr.Hrs. 3

(Formerly 053.129) This course studies aspects of our physical environment: climate, landforms, soils and vegetation. Not to be held with GEOG 1291 or GEOG 1200 or GEOG 1201.

Geography Course Descriptions-2000 Level

GEOG 2200 Introduction to Thematic Cartography (TS) Cr.Hrs. 3

(Lab Required) (Formerly 053.220) An introduction to the principles of map compilation and reproduction, including analysis and cartographic display of spatially referenced data. Emphasis will be placed on cartographic data manipulation, generalization, and symbolization, map design, visualization and communication. Not to be held with GEOG 2221 (053.222). Prerequisite: a grade of C or better in a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

GEOG 2250 Introduction to Geographic Information Systems (TS) Cr. Hrs. 3

(Lab Required) (Formerly 053.225) An introduction to the fundamental theoretical concepts of geographic information systems including acquisition, processing and analyzing environmental and socio-economic data. Topics to be covered include georeferencing, spatial data structures, processing, output and applications. Not to be held with GEOG 2221(053.222). Prerequisite: a grade of C or better in a minimum of three credit hours from Geography, Geology or Environment courses numbered at the 1000 level, or permission of department head.

GEOG 2272 Natural Hazards (PS) Cr.Hrs. 3

Environmental hazards to human settlement and economy are examined with particular attention to meteorological, soil erosion, mass wasting, earthquake and volcanic phenomena. Not to be held with GEOG 2440. Prerequisite: a grade of C or better in one of GEOG 1290, GEOL 1340, or GEOL 1410, GEOG 1291 (053.129), GEOG 1200, GEOG 1201 (053.120), (007.134) GEOL 1360 (007.136) or permission of department head.

GEOG 2300 Atmospheric Thermodynamics, Clouds and Precipitation (PS) Cr.Hrs. 3

(Formerly 053.230) Critical thermodynamic processes are discussed that are associated with the Earth's atmosphere including dry and moist processes, phases of water, stability, cloud development and precipitation processes. Prerequisites: (GEOG 1290 or GEOG 1291 (053.129) (C), or (GEOG 1200) or GEOG 1201 (053.120) (C)), and (MATH 1500 or MATH 1501 (136.150) (C), or MATH 1510 (136.151) (C), or MATH 1520 (136.152) (C), or MATH 1530 (136.153) (C)).

GEOG 2310 Introduction to Process Hydrology (PS) Cr.Hrs. 3

(Formerly 053.231) This course introduces students to the near-surface components of the hydrological cycle, including the processes of precipitation, evaporation, water-biosphere interactions, infiltration, overland and stream flow. Not to be held with (053.362). Prerequisites: (GEOG 1290 or GEOG 1291 (C), or (GEOG 1200) or GEOG 1201 (053.120) (C)), and (PHYS 1020 or PHYS 1021 (016.102) (C), or PHYS 1050 or PHYS 1051 (016.105) (C), or MATH 1500 or MATH 1501 (136.150) (C), or MATH 1510 (136.151) (C), or MATH 1520 (136.152) (C), or MATH 1530 (136.153) (C)), or permission of department head.

GEOG 2330 Place, Populations and Mobility: Geographic Perspectives (HS) Cr.Hrs. 3

An examination of the factors controlling the number and distribution of human population. Variations in fertility, mortality and mobility will be analyzed and the causes and consequences reviewed. Not to be held with GEOG 2480 (053.248). Prerequisite: a grade of C or better in a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

GEOG 2372 Geography of Tourism (HS) Cr.Hrs. 3

This course examines the social, economic and environmental dimensions of tourism and recreation. Historical and contemporary experiences from around the world will be studied. Not to be held with GEOG 2410 (053.241). Prerequisite: a grade of C or better in (GEOG 1200) or GEOG 1280, or permission of department head.

GEOG 2520 Geography of Natural Resources (HS) Cr.Hrs. 3

(Formerly 053.252) An introduction to the basic concepts of the subject and the distribution of resources. Stress will be placed on Canadian resources and resource requirements but examples from other resource systems will also be used. Prerequisite: a grade of C or better in a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

GEOG 2530 Introduction to Scientific Geographic Research (TS) Cr.Hrs. 3

(Formerly 053.253) An introduction to the use of scientific methodology in geography and the application of scientific explanatory frameworks to geographic research projects. Data collection procedures are discussed with particular emphasis on measurement, sampling designs, and interview surveying techniques. Not to be held with (053.247). Prerequisite: a grade of C or better in a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

GEOG 2540 Weather and Climate (PS) Cr.Hrs. 3

(Formerly 053.254) This half-course examines the nature, controls, and observations of weather and the variation of climate in time and space. Prerequisite: a grade of C or better in a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

GEOG 2550 Geomorphology (PS) Cr.Hrs. 3

(Formerly 053.255) This half-course surveys a broad array of landforms in the world and the geomorphic processes responsible for their creation. Attention is strongly focused on those landform processes originating at the earth's surface. Prerequisite: (GEOG 1200) or GEOG 1201 (053.120) (C), or GEOG 1290 or GEOG 1291 (053.129) (C), or permission of department head.

GEOG 2570 Geography of Canada (A) Cr.Hrs. 3

(Formerly 053.257) A regional study of Canada in which the major regions of Canada are studied with respect to geographical patterns of their physical environment, settlement, culture, economic activity, and land use. Not to be held with GEOG 2560 (053.256), GEOG 2561 or GEOG 3431 (053.343). Prerequisite: a grade of C or better in a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

GEOG 2580 Geography of the United States (A) Cr.Hrs. 3

(Formerly 053.258) A regional study of the United States in which the major regions of the United States are studied with respect to geographical patterns of their physical environment, settlement, culture, economic activity, and land use. Not to be held with GEOG 2560, GEOG 2561 (053.256). Prerequisite: a grade of C or better in a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

GEOG 2630 Geography of Culture and Environment (HS) Cr.Hrs. 3

(Formerly 053.263) An introduction to the cultural geographic study of environment, focusing on the evolution of landscape, the creation of regions, and human relationships with nature. Prerequisite: (GEOG 1200) or GEOG 1201 (053.120) (C), or GEOG 1280 or GEOG 1281 (053.128) (C), or permission of department head.

GEOG 2640 Geography of Culture and Inequality (HS) Cr.Hrs. 3

(Formerly 053.264) An introduction to the cultural geographic study of human and place inequalities, focusing on behaviour in landscape, group differences, and human identities. Prerequisite: (GEOG 1200) or GEOG 1201 (053.120) (C), or GEOG 1280 or GEOG 1281 (053.128) (C), or permission of department head.

GEOG 2700 Introduction to Arctic System Science Cr.Hrs. 3

This course introduces students to the various components of the Arctic system, including the terrestrial and marine environments, polar atmosphere, biological and chemical oceanography. Prerequisite: GEOG 1290 or (GEOG 1291)(C), or GEOG 1200 or (GEOG 1201)(C) or ENVR 1000 (C) or GEOL 1340 (C).

GEOG 2900 Geography of Canadian Prairie Landscapes (A) Cr.Hrs. 3

This course introduces students to the various geographical themes, concepts and processes within the context of the natural and anthropogenic development of the Canadian prairie region. It traces the evolution of the prairie landscape. It will focus on academic writing in the discipline. Not to be held with GEOG 2450. Prerequisite: a grade of C or better in a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

GEOG 2930 Introduction to Oceanography Cr.Hrs. 3

This course provides an introduction to the physical, chemical, biological and geological processes in the world oceans and their interactions with the overall Earth system. This course is interdisciplinary, applying geological, chemical and biological processes to the study of the world's oceans. Prerequisite: A minimum grade of "C" in GEOG 1290 (or Geog 1291) or GEOG 1200 (or GEOG 1201) or ENVR 1000 or GEOL 1340.

Geography Course Descriptions-3000 Level**GEOG 3200 Introduction to Remote Sensing (TS) Cr.Hrs. 3**

(Lab Required) (Formerly 053.320) The course is an introduction to the principles of optical, active and passive microwave remote sensing. A review of satellite and sensors and their geographic applications will be presented, along with digital image analysis techniques. Laboratory assignments will provide hands-on experience in dealing with remote sensing data. Not to be held with (053.454). Prerequisites: [(GEOG 1200) or GEOG 1201 (053.120) (C), or GEOG 1290 or GEOG 1291 (053.129) (C)], and [PHYS 1020 or PHYS 1021 (016.102) (C), or PHYS 1050 or PHYS 1051 (016.105) (C), or MATH 1300 or MATH 1301 (136.130) (C), or MATH 1500 or MATH 1501 (136.150) (C)], or permission of department head.

GEOG 3310 Atmospheric Dynamics, Storms and Radar (PS) Cr.Hrs. 3

(Formerly 053.331) The course covers the critical dynamic processes that are associated with the Earth's atmosphere including forces that control wind, the kinematics of the wind field, general circulation, hodographs, thermal wind, laws of motion, mid-latitude circulations, convective storms and the utility of weather radar. Prerequisite: GEOG 2300 (053.230) (C), or permission of department head.

GEOG 3320 Introduction to Microclimates and Micrometeorology (PS) Cr.Hrs. 3

(Formerly 053.332) This course introduces the concept of energy balance climatology and examines relationships among climate, microclimate, and environments of the Earth's surface and human-made environments. Studies include bioclimates and hydroclimates. Prerequisites: (GEOG 2310 (053.231) (C)), and (GEOG 2300 (053.230) (C)), or permission of department head.

GEOG 3340 Migration and Mobility in a Globalized World Cr.Hrs. 3

This course surveys the geographic dimensions of migration and mobility of populations, with emphasis of contemporary events. Prerequisites: a grade of C or better in GEOG 2330 or (GEOG 2480), or permission of department head.

GEOG 3390 Introduction to Climate Change and Its Causes (PS) Cr.Hrs. 3

The primary objective of this course is to provide students with a general understanding of the physical and astronomical factors that drive global climate change. Focus will be given to current and future climate change in the context of observations and modeling. Not to be held with GEOG 3610. Prerequisite: a minimum of three credit hours from Geography or Environment courses, or permission of department head.

GEOG 3460 Urban Geography (HS) Cr.Hrs. 6

(Formerly 053.346) The course studies the processes and trends of urbanization; the classification of cities; central-place theory; cities as systems; land-use patterns; social forces and factorial ecology; and urban transport problems. Prerequisite: (GEOG 1200) or GEOG 1201 (053.120) (C), or GEOG 1280 or GEOG 1281 (053.128) (C), or permission of department head.

GEOG 3640 Social Geography of the Environment (HS) Cr.Hrs. 3

This course provides an intermediate-level assessment of current geographical approaches to society and environment. Students are exposed to critical realist, social constructionist, Marxist, feminist and post-Colonial traditions as they are applied to environmental and social justice, globalization and public health. It includes discussion and a community-based learning project. Prerequisite: a grade of C or better in (GEOG 1200) or GEOG 1280, or permission of department head.

GEOG 3730 Geographic Information Systems (TS) Cr.Hrs. 3

(Lab Required) (Formerly 053.373) Weekly two-hour lab. The course introduces students to the evolving science, technology and applications of Geographic Information Systems (GIS). Related geospatial technologies such as Global Navigation Satellite Systems and Remote Sensing, as well as the field of Geomatics will be introduced. Prerequisite: a grade of C or better in a minimum of three credit hours from Geography, Geology or Environment courses numbered at the 1000 and/or 2000 level, or permission of instructor or department head. Not to be held with GEOG 2250.

GEOG 3740 Field Studies in Geography (A,TS) Cr.Hrs. 6

(Formerly 053.374) A field course designed to introduce students to either a detailed area study or to field techniques employed for specific geographic enquiry. Prerequisite: Permission of department head.

GEOG 3750 Field Studies in Geography (A,TS) Cr.Hrs. 3

(Formerly 053.375) A field course designed to introduce students to either a detailed area study or to field techniques employed for specific geographic enquiry. Prerequisite: a grade of C or better in a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

GEOG 3760 Special Topics in Geography Cr.Hrs. 6

(Formerly 053.376) This course will vary from year to year depending on the needs of students and the interests of instructors. Prerequisite: Permission of department head.

GEOG 3770 Special Topics in Geography Cr.Hrs. 3

(Formerly 053.377) This course will vary from year to year depending on the needs of students and the interests of instructors. Prerequisite: Permission of department head.

GEOG 3810 Quantitative Research Methods in Geography (TS) Cr.Hrs. 3

This course focuses on the quantitative analytical methods available for the interpretation on physical and human geography applications. Not to be held with GEOG 3680 (053.368). Prerequisite: GEOG 2530 (053.253) or STAT 1000 or STAT 1001 (005.100), or permission of department head.

GEOG 3850 Sustainable Manitoba (A) Cr.Hrs. 3

This course approaches local sustainability issues from an interdisciplinary perspective. By looking at the ecological, social and economic aspects from a variety of discipline perspectives, a fuller understanding of sustainability is achieved. The broad range of perspectives is achieved through participation of guest speakers from other faculties and outside of the university as well as excursion outside the classroom. Not to be held with ENVR 3850. Prerequisite: 60 credit hours of course work, or permission of department head.

GEOG 3860 Animal Geographies (HS) Cr.Hrs. 3

This course presents a variety of topics concerning the interactions between humans and animals, how humans influence and use animals, and the many roles animals play in human lives and environments. Animal Geographies lies at a meeting point between physical and human geography, where we must consider the blurring boundaries between what it means to be animal/human, and the implications of how animals are used and represented. A wide variety of perspectives, beliefs, and points of view will be explored. Prerequisite: Permission of department head.

GEOG 3870 Food Geographies Cr.Hrs. 3

This course provides a critical examination of the geographies of food at a variety of scales, from the body to the global. The course focuses on themes in three interconnected areas: 1) food production and the global food system from farm to plate including agribusiness and alternative food production and distribution models; 2) food consumption habits and beliefs and foodways as geographically contingent material culture; and 3) food (in) security and its relationship to health and wellbeing. This course is cross-listed as HNSC 3870. May not be held with HNSC 3870. Prerequisite: a grade of C or better in GEOG 1280 or GEOG 1281 or HNSC 1200 or GEOG 1200, or permission of department head.

GEOG 3920 Biological Oceanography 1: Lower Trophic Levels Cr.Hrs. 3

In this course, students will gain a background on the study of biological oceanography. Biological oceanography is a very active and important field of study worldwide due to the spatial coverage and biological activity of the world's oceans. This course examines the interaction of marine organisms with other biological life, as well as with the physical environment. Prerequisite: A minimum grade of "C" in both GEOG 2930 and BIOL 1030.

Geography Course Descriptions-4000 Level

GEOG 4050 Ecosystem Management Cr.Hrs. 3

This course will provide students with an understanding of the practical applications of ecological science, environmental policy, and resource management approaches in the large-scale planning of landscapes. The course will review ecological principles and trace the historical development of the ecosystem concept. Comparisons are made to other possible environmental management approaches. The synthesis of major elements and concepts will be reinforced through case studies on the Manitoba landscape, with an emphasis on practical learning by students through field seminars and group discussions. Not to be held with ENVR 4050. Prerequisite: Permission of department head.

GEOG 4060 Biogeography Cr.Hrs. 3

This course will provide students with a general understanding of the historical, ecological, analytical, and conservation aspects of biogeography. The course will also have a dual focus on the principles and concepts of reasons for the distribution of plants and animals worldwide, as well as incorporating discussion on as many local (Manitoba, Canada, North America) examples as possible. Not to be held with ENVR 4060. Prerequisite: Permission of department head.

GEOG 4200 Advanced Methods in Remote Sensing Cr.Hrs. 3

(Lab Required) (Formerly 053.420) Provides instruction in the current theory and application of remote sensing technology to Earth system Science. Emphasis will be placed on the processing and interpretation of remote sensing imagery and the integration of remote sensing data with other spatial data. Not to be held with (053.454). Prerequisite: GEOG 3200 (053.320) (C), or permission of department head.

GEOG 4260 Sacred Lands Cr.Hrs. 3

(Formerly 053.426) Students will increase their understanding of the importance and significance of Sacred Lands and Sacred Spaces to International Indigenous Peoples. Experiential learning, seminars, and a field component may be included. Not to be held with NATV 4260 (032.426). Prerequisite: Permission of department head.

GEOG 4280 Gender and the Human Environment Cr.Hrs. 3

This upper-level seminar course will develop in students a depth and breadth of understanding appropriate to the honours undergraduate/graduate level in the area of gender geography scholarship. From critical social science theoretical positions, this course asks students to examine what we can learn about how humans live on the earth if we see them as gendered. Just as we may also understand humans and their interactions in and with spaces, places and environments through the lenses of race, ethnicity, class, age and/or combinations of these categories with gender. Prerequisite: a grade of C or better in a minimum of six credit hours in Geography, or permission of department head.

GEOG 4290 Geographies of Health and Health Care Cr.Hrs. 3

(Formerly 053.429) This course provides an introduction to and critical examination of the geographies of health and healthcare. Topics include perceptions and determinations of health and health care; health care delivery, focusing on spatial patterns and inequities; and the relationship between environment and health, particularly impacts of environmental contamination. Prerequisite: Permission of department head.

GEOG 4300 Synoptic Meteorology and Weather Analysis Cr.Hrs. 3

(Formerly 053.430) Applied aspects of meteorology are described in terms of weather analysis and forecasting techniques for synoptic-scales and meso-scales using various meteorological tools. An introduction to severe weather forecasting techniques will also be described. Prerequisite: GEOG 3310 (053.331) (C), or permission of department head.

GEOG 4310 Boundary-Layer Climatology and Micrometeorology Cr.Hrs. 3

(Formerly 053.431) A seminar course on advanced topics in microclimatology and micrometeorology. Prerequisite: GEOG 3320 (053.332) (C), or permission of department head.

GEOG 4330 Concepts in Atmospheric Modeling Cr.Hrs. 3

This course will primarily focus on numerical modeling applications and techniques of the Earth's atmosphere with an emphasis on weather prediction. This includes understanding basic modeling terminology, numerical schemes, structure of models, types of models, what is required to run a model, and an introduction to data assimilation and ensemble techniques to weather prediction. Not to be held with GEOG 4320. Prerequisite: GEOG 3310 (C) or GEOG 3320 (C), or permission of department head.

GEOG 4350 Parks and Protected Areas Planning and Management: Field Studies Cr.Hrs. 6

The course is taught in two segments, an on-campus component and field study component taking place in Banff National Park. The on-campus component examines the historical development of the concept of parks and protected areas, the role of interpretation, management and research in the parks and emerging issues in the management of parks and protected areas. In addition, during the on-campus component planning for the field will take place. The field segment will focus on a wide variety of management issues with particular attention to Banff National Park. Emerging issues and trends will be examined and past management responses evaluated. There will be opportunities for students to investigate specific management issues of interest to them and to participate in current research being conducted in the park. This course is also offered in the Faculty of Kinesiology and Recreation Management as REC 4350. Prerequisite: Permission of department head.

GEOG 4390 Global Climate Change Cr.Hrs. 3

Students will be introduced to the complexities of climate changes through a series of introductory lectures and reading assignments that focus on recent scientific publications and review articles (mathematical skills are not required). Both sides of the climate change debate will be addressed in weekly assignments, and students will defend their conclusions in classroom discussion. Each student will take on a project in some aspect of climate change -- glaciers, sea ice, temperature trends, precipitation, agriculture, animal migration, aerosols, or a regional impact. Prerequisite: a grade of C or better in GEOG 3390 (or GEOG 3610 or 053.361), or permission of department head.

GEOG 4560 Techniques in Climatology Cr.Hrs. 3

(Formerly 053.456) Instrumentation, the sources of climatic data, and the use of satellite photography, as well as methods of analysis and presentation are discussed. Prerequisite: GEOG 3320 (053.332) (C), or permission of department head.

GEOG 4650 Models in Regional Analysis Cr.Hrs. 3

(Formerly 053.465) Emphasis is placed on the use of regression techniques in regional analysis including the classical ordinary least squares methods and two-stage least squares. Migration and industrial location models are developed and calibrated using these techniques. Prerequisite: Permission of department head.

GEOG 4660 Honours Thesis Cr.Hrs. 6

(Formerly 053.466) This course involves the production of a thesis under the supervision of a department faculty member. Prerequisite: Permission of department head.

GEOG 4670 Selected Issues Cr.Hrs. 3

(Formerly 053.467) Intensive study of selected geographic issues. Prerequisite: Prearranged written consent of an individual instructor and permission of department head.

GEOG 4720 Advanced Methods in Geographic Information Systems Cr.Hrs. 3

(Lab Required) (Formerly 053.472) Weekly two-hour lab. This course focuses on the practical application of techniques used in Geographic Information Systems (GIS) and the development of techniques used in Geographic Information Systems (GIS) and the development of GIS models. The development, testing and presentation of GIS data, models and results are studied. Prerequisite: Permission of department head.

GEOG 4780 Storms-Mesoscale Cr.Hrs. 3

This course focuses on a range of storms and mesoscale phenomena in the summer or winter. These include thunderstorms, tornadoes, squall lines, lightning, low level jets, gust fronts, blizzards, freezing rain, orographic storm, and polar lows. The emphasis is on the physical mechanisms leading to these events and it also examines how they may change in our changing climate. Not to be held for credit with GEOG 7780. Prerequisite: A grade of "C" or better in GEOG 3310 (053.331) or permission of department head.

SECTION 6: BACHELOR OF SCIENCE IN PHYSICAL GEOGRAPHY DEGREE REGULATIONS, PROGRAM DESCRIPTION AND COURSES OFFERED BY

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6.1 Program Information

Physical Geography includes the study of the environment through aspects of atmospheric science, geomorphology, biogeography, and hydrology, all of which draw upon the natural and applied sciences to understand the natural environment. Atmospheric sciences examine the physical and biophysical processes at and near the earth's surface shaping climate and determining the weather. These processes are examined over cascading scales, local to global. Hydrology studies the flow of water between the Earth's surface and the atmosphere, including the quantity and quality of water resources as well as the spatial variability in the hydrologic cycle. The examination of processes at the earth's surface and the associated landforms is called geomorphology. Various sub-disciplines in geomorphology include weathering and erosional processes, volcanoes, glacial and river systems. Biogeography studies the interrelationships between the biospheric environment and the physical environment. Formation of soils, ecosystem and biome cycles and components, as well as human interaction with the physical environment are all topical areas in biogeography.

Geomatics is an emerging field referring to the techniques of spatial data acquisition, handling, and analysis. Included within this field have been geographic applications of computer analysis and spatial modeling, spatial statistics, remote sensing technology, and geographic information systems. Many of these techniques have their origins in the applied sciences, but both physical and human geographers have contributed greatly to their development and application. The application of such methodologies in geographic fields, such as resource management, urban geography, climate change, and applied geography has also provided closer co-operation between human and physical geography, as well as promoting considerable interdisciplinary research with other University disciplines.

The Major and Honours B.Sc. degree programs in Physical Geography serve students who desire advanced study in the academic subject matter of various themes contained within Physical Geography. The Honours program in particular is intended for students interested in the opportunity for exposure to advanced geographic research. As such, the Honours program demands higher academic performance. Students who are ineligible to enter Honours in their second year may establish this in the following year on the basis of their improved scholastic performance. The degree programs may be pursued on a full or part-time basis.

Minor in Another Department

Students in the B.Sc. Physical Geography have the opportunity to complete a Minor in a subject field that is different than that of the declared Major, and which normally consist of 18 credit hours from a department offering this option at the University of Manitoba. Students in the B.Sc. Physical Geography are not permitted to complete a Minor in Geography. Students can declare only one Minor. The Minor requirements are described in section 3.2 of this Chapter. Contact a [Riddell Faculty student advisor](#) in the Faculty Dean's Office for further information about eligible Minors.

Streams

Students are required to complete a stream approved by a Riddell Faculty student advisor. Students in the Major or Major (Coop) programs are required to complete a minimum of 30 credit hours of 2000- (or higher) level courses, of which at least 18 credit hours must be at or above the 3000-level. The B.Sc. Honours and Honours (Coop) programs require students to complete 39 credit hours in a Stream, of which at least 24 credit hours are defined at or above the 3000-level and must include GEOG 4660 Honours Thesis (6). Streams are currently available in Atmospheric and Hydrological Sciences, Geomatics and Physical Geography. See the department and/ or a [Riddell Faculty student advisor](#) for current information about these Streams.

Major

To qualify for the degree, Bachelor of Science in Physical Geography (Major), a student must complete 120 credit hours with passing grades ('D' or better) and a minimum degree grade point average of 2.00. Major (Coop) students must attain a minimum degree Grade Point Average of 2.50. Students must complete all faculty requirements. There is no limit to the number of credit hours a student completes provided he/she does not exceed 18 credit hours of failed courses.

Honours

To qualify for the degree Bachelor of Science in Physical Geography (Honours and Honours Coop), a student must complete 120 credit hours with passing grades ('D' or better) and a minimum degree grade point average of 3.00 in the courses that constitute the degree. Students must complete all faculty requirements. There is no limit to the number of credit hours a student completes provided he/she does not exceed 18 credit hours of failed courses.

6.2 Advanced Entry Entrance Requirements

Students complete the first-year of their degree program in University 1 where they select courses from a wide variety of offerings including from the Clayton H. Riddell Faculty of Environment, Earth, and Resources. Students admitted from University 1 are placed in the Major degree program until they have completed a minimum of 48 credit hours after which they may transfer to the Honours program or remain in the Major. To make a program transfer, students must consult a [Riddell Faculty student advisor](#).

6.2.1 Advanced Entry Entrance Requirements			
Degree Program in Physical Geography	Minimum Number of Credit Hours	Minimum Degree Grade Point Average	Additional Entrance Requirements
Honours	48	3.00	A grade of 'B' or better in GEOG 1290 ³ ; a grade of 'C+' or better in 12 credit hours from PHYS 1020 ³ (or PHYS 1050), MATH 1500 ^{2,3} , PHYS 1030 (or PHYS 1070), MATH 1300 ³ (or MATH 1310)
Honours (Coop) ¹	60	3.00	ENVR 2900; students must satisfy the requirements for Entrance/continuation in the regular program and (normally) have completed GEOG 2200, GEOG 2250, GEOG 2300, GEOG 2310, GEOG 2550, PHYS 1020 ³ (or PHYS 1050), and MATH 1500 ^{2,3}
Major	24	2.00	A grade of 'C' or better in GEOG 1290 ³ ; a grade of 'C+' or better in 6 credit hours from PHYS 1020 ³ (or PHYS 1050) and MATH 1500 ^{2,3}
Major (Coop) ¹	60	2.50	ENVR 2900; students must satisfy the requirements for Entrance/continuation in the regular program and (normally) have completed GEOG 2200, GEOG 2250, GEOG 2300, GEOG 2310, GEOG 2550, PHYS 1020 ³ (or PHYS 1050), PHYS 1030 ³ (or PHYS 1070), MATH 1300 ³ (or MATH 1310) and MATH 1500 ^{2,3}

¹Students may be permitted to enter the program without satisfying all requirements listed. Students should consult with the Cooperative Education Coordinator for further information.

²MATH 1510 or MATH 1520 or MATH 1690 may be used in lieu of MATH 1500.

³Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number 1.

6.3 Minimum Performance Requirements for Continuation and Graduation

A student's academic performance will be assessed with his/her application for admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources and following each term thereafter. A Riddell Faculty student advisor must approve a student's registration each Fall/Winter and Summer term. Any revisions in this schedule should also be approved prior to the end of the registration revision period.

To be in good standing and permitted to continue in a degree program, a student must achieve the minimum standards at each point of assessment. This assessment is based on the student's minimum degree Grade Point Average; the grades received in each of GEOG 1290 (or GEOG 1291), GEOG 2200, GEOG 2300, GEOG 2310, GEOG 2550, GEOG 3730, GEOG 3810; and the number of failed courses after admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources.

6.3.1 Minimum Performance Requirements					
Minimum Performance Requirements				Graduation Requirements ¹	
Degree Program (Credit Hours)	Minimum Degree Grade Point Average (DGPA)	Maximum Credit Hours of Failed Courses	Physical Geography Core: Minimum Grade Requirements in GEOG 1290 ² , GEOG 2200 ² , GEOG 2300, GEOG 2310, GEOG 2272, GEOG 2550, GEOG 3730, GEOG 3810	Stream (2000-Level or Higher)	Coop Option Courses
Honours (120)	3.00	18	'B' in GEOG 1290; 'C+' grades in others	39 credit hours of which at least 24 credit hours must be at the 3000-level or higher; completion of GEOG 4660; minimum 'C+' grade in each course.	
Honours Coop (120)	3.00	18	'B' in GEOG 1290; 'C+' grades in others	39 credit hours of which at least 24 credit hours must be at the 3000-level or higher; completion of GEOG 4660; minimum 'C+' grade in each course.	ENVR 2900, ENVR 3900, ENVR 3910, ENVR 3980, ENVR 3920, ENVR 3990; (ENVR 4910 and ENVR 4980 are optional)
Major (120)	2.00	18	'C'	30 credit hours of which at least 18 credit hours must be at the 3000-level or higher; minimum Degree GPA of 2.00.	

ACADEMIC CALENDAR 2015-2016

Major Coop (120)	2.50	18	'C'	30 credit hours of which at least 18 credit hours must be at the 3000-level or higher; minimum Degree GPA of 2.00.	ENVR 2900, ENVR 3900, ENVR 3910, ENVR 3980, ENVR 3920, ENVR 3990; (ENVR 4910 and ENVR 4980 are optional)
¹ B.Sc. Physical Geography students must successfully complete a minimum of 60 credit hours at the University of Manitoba to satisfy the Residence Requirement. The courses used to satisfy the requirement must be acceptable for credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources.					
² Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number 1.					

To graduate from the Bachelor Science in Physical Geography with the intended degree designation, a student must achieve the minimum standards and graduation requirements outlined above in 6.3.1 following the final term of registration and satisfy all degree course requirements in the foundation, physical geography core and Stream.

Students in the Honours program who do not meet these minimum performance requirements for continuation or graduation will be withdrawn from the degree program and placed in the Major provided they are eligible based on their performance. Students who do not meet the minimum performance requirements of the Major will be placed on academic warning, probation or academic suspension as defined in section 3.14 Academic Warning, Probation, Academic Suspension and Special Students (Academic Standing) in this Chapter.

Students withdrawn from the Honours program as a result of their inability to meet minimum performance requirements will have the notation, 'Required to Withdraw from the Honours Program,' recorded on their transcript. Similarly, students withdrawn from the Major program will have the notation, 'Required to Withdraw from the Major Program,' recorded on their transcript.

6.4 Graduating with Distinction or First Class Honours

With Distinction

Students graduating with a B.Sc. Physical Geography (Major) degree will have their degree granted 'With Distinction' if they have a minimum Degree Grade Point Average of 3.50 on all course work.

The term 'Degree with Distinction' will appear both on the parchment and on the student's transcript.

First Class Honours

Students in the Honours program will have their degree granted with 'First Class Honours' if they have a minimum Degree Grade Point Average of 3.50 based on all acceptable course work. The term First Class Honours will appear both on the parchment and on the student's transcript.

6.5. B.Sc. Physical Geography Program Chart

Bachelor of Science in Physical Geography ^{2,7}			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
HONOURS¹ 120 CREDIT HOURS			
GEOG 1290, PHYS 1020 ³ , MATH 1500 ⁴ , PHYS 1030 ³ , MATH 1300 ⁴ ; or 6 credit hours from GEOG 1340 ⁵ , COMP 1010, CHEM 1300, CHEM 1310, STAT 1000, STAT 2000, BIOL 1020 ⁶ , BIOL 1030 ⁶ , MATH 1700 ⁴ Plus 6 credit hours from the Faculty of Arts	GEOG 2200, GEOG 2300, GEOG 2310, GEOG 2530, GEOG 2540, GEOG 2550 Whichever of, PHYS 1030 ³ , MATH 1300 ⁴ , or 6 credit hours from GEOG 1340 ⁵ , COMP 1010, CHEM 1300, CHEM 1310, STAT 1000, STAT 2000, BIOL 1020 ⁶ , BIOL 1030 ⁶ , MATH 1700 ⁴ not yet taken	GEOG 2272 ⁸ , GEOG 3730, GEOG 3810 ⁹ 9 credit hours from GEOG 1340 ⁵ , COMP 1010, CHEM 1300, CHEM 1310, STAT 1000, STAT 2000, BIOL 1020 ⁶ , BIOL 1030 ⁶ , MATH 1700 ⁴ not yet taken	GEOG 4660 Enough elective credit to total 120 credit hours for the program.
It is recommended that students complete the W course within the first 60 credit hours of courses.			
Plus a Stream approved by a Riddell Faculty student advisor. Honours Stream requirements are as follows: 33 credit hours of 2000- (or higher) level courses, of which 24 credit hours must be at the 3000- or 4000-level.			
HONOURS COOPERATIVE OPTION¹ 120 CREDIT HOURS			

GEOG 1290, PHYS 1020 ³ , MATH 1500 ⁴ , PHYS 1030 ³ , MATH 1300 ⁴ ; or 6 credit hours from	GEOG 2200, GEOG 2300, GEOG 2310, GEOG 2530, GEOG 2540, GEOG 2550, ENVR 2900	GEOG 2272 ⁸ , GEOG 3730, GEOG 3810 ⁹ , ENVR 3900, ENVR 3980, ENVR 3910	GEOG 4660 ENVR 3990, ENVR 3920 (ENVR 4980 and ENVR 4910 are optional)
GEOL 1340 ⁵ , COMP 1010, CHEM 1300, CHEM 1310, STAT 1000, STAT 2000, BIOL 1020 ⁶ , BIOL 1030 ⁶ , MATH 1700 ⁴	Whichever of, PHYS 1030 ³ , MATH 1300 ⁴ , or 6 credit hours from GEOL 1340 ⁵ , COMP 1010, CHEM 1300, CHEM 1310,	9 credit hours from GEOL 1340 ⁵ , COMP 1010, CHEM 1300, CHEM 1310, STAT 1000, STAT 2000, BIOL 1020 ⁶ , BIOL 1030 ⁶ , MATH 1700 ⁴ not yet taken	Enough elective credit to total 120 credit hours for the program.
Plus 6 credit hours from the Faculty of Arts	STAT 1000, STAT 2000, BIOL 1020 ⁶ , BIOL 1030 ⁶ , MATH 1700 ⁴ not yet taken		

It is recommended that students complete the [W course](#) within the first 60 credit hours of courses.
 Plus a **Stream** approved by a Riddell Faculty student advisor. Honours Stream requirements are as follows: 33 credit hours of 2000- (or higher) level courses, of which 24 credit hours must be at the 3000- or 4000-level.

MAJOR 120 CREDIT HOURS			
GEOG 1290, PHYS 1020 ³ , MATH 1500 ⁴ , PHYS 1030 ³ , MATH 1300 ⁴ ; or 6 credit hours from	GEOG 2200, GEOG 2300, GEOG 2310, GEOG 2530, GEOG 2540, GEOG 2550	GEOG 2272 ⁸ , GEOG 3730, GEOG 3810 ⁹ , 9 credit hours from GEOL 1340 ⁵ , COMP 1010, CHEM 1300, CHEM 1310, STAT 1000, STAT 2000, BIOL 1020 ⁶ , BIOL 1030 ⁶ , MATH 1700 ⁴ not yet taken	Enough elective credit to total 120 credit hours for the program.
GEOL 1340 ⁵ , COMP 1010, CHEM 1300, CHEM 1310, STAT 1000, STAT 2000, BIOL 1020 ⁶ , BIOL 1030 ⁶ , MATH 1700 ⁴	Whichever of, PHYS 1030 ³ , MATH 1300 ⁴ , or 6 credit hours from GEOL 1340 ⁵ , COMP 1010, CHEM 1300, CHEM 1310, STAT 1000, STAT 2000, BIOL 1020 ⁶ , BIOL 1030 ⁶ , MATH 1700 ⁴ not yet taken		
Plus 6 credit hours from the Faculty of Arts			

It is recommended that students complete the [W course](#) within the first 60 credit hours of courses.
 Plus a **Stream** approved by a Riddell Faculty student advisor. Honours Stream requirements are as follows: 30 credit hours of 2000- (or higher) level courses, of which 18 credit hours must be at the 3000- or 4000-level.

MAJOR COOPERATIVE OPTION 120 CREDIT HOURS			
GEOG 1290, PHYS 1020 ³ , MATH 1500 ⁴ , PHYS 1030 ³ , MATH 1300 ⁴ ; or 6 credit hours from	GEOG 2200, GEOG 2300, GEOG 2310, GEOG 2530, GEOG 2540, GEOG 2550, ENVR 2900	GEOG 2272 ⁸ , GEOG 3730, GEOG 3810 ⁹ , ENVR 3900, ENVR 3980, ENVR 3910	ENVR 3990, ENVR 3920 (ENVR 4980 and ENVR 4910 are optional)
GEOL 1340 ⁵ , COMP 1010, CHEM 1300, CHEM 1310, STAT 1000, STAT 2000, BIOL 1020 ⁶ , BIOL 1030 ⁶ , MATH 1700 ⁴	Whichever of, PHYS 1030 ³ , MATH 1300 ⁴ , or 6 credit hours from GEOL 1340 ⁵ , COMP 1010, CHEM 1300, CHEM 1310,	9 credit hours from GEOL 1340 ⁵ , COMP 1010, CHEM 1300, CHEM 1310, STAT 1000, STAT 2000, BIOL 1020 ⁶ , BIOL 1030 ⁶ , MATH 1700 ⁴ not yet taken	Enough elective credit to total 120 credit hours for the program.
Plus 6 credit hours from the Faculty of Arts	STAT 1000, STAT 2000, BIOL 1020 ⁶ , BIOL 1030 ⁶ , MATH 1700 ⁴ not yet taken		

It is recommended that students complete the [W course](#) within the first 60 credit hours of courses.
 Plus a **Stream** approved by a Riddell Faculty student advisor. Honours Stream requirements are as follows: 30 credit hours of 2000- (or higher) level courses, of which 18 credit hours must be at the 3000- or 4000-level.

MINOR 18 CREDIT HOURS			
GEOG 1290			
15 credit hours selected from 2000-, 3000-, or 4000-level courses designated as Physical Geography (PS) or Techniques (TS) courses in the Geography course descriptions defined in sections 5.6 in this <i>Chapter</i> .			

NOTES:

- 1 Entrance into the degree programs is summarized in [6.2.1](#) in this *Chapter*.
- 2 The courses required in this program will satisfy the [University Mathematics requirement](#).
- 3 PHYS 1050 and PHYS 1070 may be used in lieu of PHYS 1020 and PHYS 1030, respectively.
- 4 MATH 1510 or MATH 1520 may be used in lieu of MATH 1500; or MATH 1690 may be used in place of MATH 1500 (or equivalent) and MATH 1700; or MATH 1310 may be used in lieu of MATH 1300.
- 5 GEOL 1440 may be used in lieu of GEOL 1340.
- 6 BIOL 1000 and BIOL 1010 may be used in lieu of BIOL 1020 and BIOL 1030.
- 7 Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number 1 (e.g. GEOG 1291).
- 8 The former GEOG 2440 may be used in lieu of GEOG 2272.
- 9 The former GEOG 3680 may be used in lieu of GEOG 3810.

Note:

To fulfil prerequisite requirements a grade of 'C' must be achieved, unless otherwise stated, in any course stipulated as a prerequisite to a further course.

Students should review the course topics available for GEOG 3740 (6), GEOG 3750 (3), GEOG 3760 (6), GEOG 3770 (3) and GEOG 4670 (3). Also, all courses are not offered every year. The course schedule for the current academic term is available from the [Class Schedule](#).

Students registering in certain courses may be required to participate in field trips or field components and pay a portion of the associated expenses. For details, contact the [Department of Environment and Geography](#) general office.

IMPORTANT: The Honours and Major programs need not be completed in the course order described in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

6.6 Environment, Earth, and Resources Course Description

EER 1000 Earth: A User's Guide Cr.Hrs. 3

This course will present a multi-disciplinary introduction to the Planet Earth as both the source of essential resources and as the site of resulting negative impacts. Focus in the course will be provided by addressing important and current topics, case studies, and concepts that the well-educated citizen of the Earth should understand and will include natural and human-induced processes within a broad range of spatial and temporal scales.

6.7 Geography Course Descriptions

Geography Course Descriptions-1000 Level

GEOG 1280 Introduction to Human Geography Cr.Hrs. 3

(Formerly 053.128) This course studies aspects of the human world: population, settlement and resources. Not to be held with GEOG 1200 or GEOG 1201 (053.120), or GEOG 1281.

GEOG 1290 Introduction to Physical Geography Cr.Hrs. 3

(Formerly 053.129) This course studies aspects of our physical environment: climate, landforms, soils and vegetation. Not to be held with GEOG 1291 or GEOG 1200 or GEOG 1201.

Geography Course Descriptions-2000 Level

GEOG 2200 Introduction to Thematic Cartography (TS) Cr.Hrs. 3

(Lab Required) (Formerly 053.220) An introduction to the principles of map compilation and reproduction, including analysis and cartographic display of spatially referenced data. Emphasis will be placed on cartographic data manipulation, generalization, and symbolization, map design, visualization and communication. Not to be held with GEOG 2221 (053.222). Prerequisite: a grade of C or better in a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

GEOG 2250 Introduction to Geographic Information Systems (TS) Cr.Hrs. 3

(Lab Required) (Formerly 053.225) An introduction to the fundamental theoretical concepts of geographic information systems including acquisition, processing and analyzing environmental and socio-economic data. Topics to be covered include georeferencing, spatial data structures, process-

ing, output and applications. Not to be held with GEOG 2221(053.222). Prerequisite: a grade of C or better in a minimum of three credit hours from Geography, Geology or Environment courses numbered at the 1000 level, or permission of department head.

GEOG 2272 Natural Hazards (PS) Cr.Hrs. 3

Environmental hazards to human settlement and economy are examined with particular attention to meteorological, soil erosion, mass wasting, earthquake and volcanic phenomena. Not to be held with GEOG 2440. Prerequisite: a grade of C or better in one of GEOG 1290, GEOL 1340, or GEOL 1410, GEOG 1291 (053.129), GEOG 1200, GEOG 1201 (053.120), (007.134) GEOL 1360 (007.136) or permission of department head.

GEOG 2300 Atmospheric Thermodynamics, Clouds and Precipitation (PS) Cr.Hrs. 3

(Formerly 053.230) Critical thermodynamic processes are discussed that are associated with the Earth's atmosphere including dry and moist processes, phases of water, stability, cloud development and precipitation processes. Prerequisites: (GEOG 1290 or GEOG 1291 (053.129) (C), or (GEOG 1200) or GEOG 1201 (053.120) (C)), and (MATH 1500 or MATH 1501 (136.150) (C), or MATH 1510 (136.151) (C), or MATH 1520 (136.152) (C), or MATH 1530 (136.153) (C)).

GEOG 2310 Introduction to Process Hydrology (PS) Cr.Hrs. 3

(Formerly 053.231) This course introduces students to the near-surface components of the hydrological cycle, including the processes of precipitation, evaporation, water-biosphere interactions, infiltration, overland and stream flow. Not to be held with (053.362). Prerequisites: (GEOG 1290 or GEOG 1291 (C), or (GEOG 1200) or GEOG 1201 (053.120) (C)), and (PHYS 1020 or PHYS 1021 (016.102) (C), or PHYS 1050 or PHYS 1051 (016.105) (C), or MATH 1500 or MATH 1501 (136.150) (C), or MATH 1510 (136.151) (C), or MATH 1520 (136.152) (C), or MATH 1530 (136.153) (C)), or permission of department head.

GEOG 2330 Place, Populations and Mobility: Geographic Perspectives (HS) Cr.Hrs. 3

An examination of the factors controlling the number and distribution of human population. Variations in fertility, mortality and mobility will be analyzed and the causes and consequences reviewed. Not to be held with GEOG 2480 (053.248). Prerequisite: a grade of C or better in a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

GEOG 2372 Geography of Tourism (HS) Cr.Hrs. 3

This course examines the social, economic and environmental dimensions of tourism and recreation. Historical and contemporary experiences from around the world will be studied. Not to be held with GEOG 2410 (053.241). Prerequisite: a grade of C or better in (GEOG 1200) or GEOG 1280, or permission of department head.

GEOG 2520 Geography of Natural Resources (HS) Cr.Hrs. 3

(Formerly 053.252) An introduction to the basic concepts of the subject and the distribution of resources. Stress will be placed on Canadian resources and resource requirements but examples from other resource systems will also be used. Prerequisite: a grade of C or better in a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

GEOG 2530 Introduction to Scientific Geographic Research (TS) Cr.Hrs. 3

(Formerly 053.253) An introduction to the use of scientific methodology in geography and the application of scientific explanatory frameworks to geographic research projects. Data collection procedures are discussed with particular emphasis on measurement, sampling designs, and interview surveying techniques. Not to be held with (053.247). Prerequisite: a grade of C or better in a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

GEOG 2540 Weather and Climate (PS) Cr.Hrs. 3

(Formerly 053.254) This half-course examines the nature, controls, and observations of weather and the variation of climate in time and space. Prerequisite: a grade of C or better in a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

GEOG 2550 Geomorphology (PS) Cr.Hrs. 3

(Formerly 053.255) This half-course surveys a broad array of landforms in the world and the geomorphic processes responsible for their creation. Attention is strongly focused on those landform processes originating at the earth's surface. Prerequisite: (GEOG 1200) or GEOG 1201 (053.120) (C), or GEOG 1290 or GEOG 1291 (053.129) (C), or permission of department head.

GEOG 2570 Geography of Canada (A) Cr.Hrs. 3

(Formerly 053.257) A regional study of Canada in which the major regions of Canada are studied with respect to geographical patterns of their physical environment, settlement, culture, economic activity, and land use. Not to be held with GEOG 2560 (053.256), GEOG 2561 or GEOG 3431 (053.343). Prerequisite: a grade of C or better in a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

GEOG 2580 Geography of the United States (A) Cr.Hrs. 3

(Formerly 053.258) A regional study of the United States in which the major regions of the United States are studied with respect to geographical patterns of their physical environment, settlement, culture, economic activity, and land use. Not to be held with GEOG 2560, GEOG 2561 (053.256). Prerequisite: a grade of C or better in a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

GEOG 2630 Geography of Culture and Environment (HS) Cr.Hrs. 3

(Formerly 053.263) An introduction to the cultural geographic study of environment, focusing on the evolution of landscape, the creation of regions, and human relationships with nature. Prerequisite: (GEOG 1200) or GEOG 1201 (053.120) (C), or GEOG 1280 or GEOG 1281 (053.128) (C), or permission of department head.

GEOG 2640 Geography of Culture and Inequality (HS) Cr.Hrs. 3

(Formerly 053.264) An introduction to the cultural geographic study of human and place inequalities, focusing on behaviour in landscape, group differences, and human identities. Prerequisite: (GEOG 1200) or GEOG 1201 (053.120) (C), or GEOG 1280 or GEOG 1281 (053.128) (C), or permission of department head.

GEOG 2700 Introduction to Arctic System Science Cr.Hrs. 3

This course introduces students to the various components of the Arctic system, including the terrestrial and marine environments, polar atmosphere, biological and chemical oceanography. Prerequisite: GEOG 1290 or (GEOG 1291)(C), or GEOG 1200 or (GEOG 1201)(C) or ENVR 1000 (C) or GEOL 1340 (C).

GEOG 2900 Geography of Canadian Prairie Landscapes (A) Cr.Hrs. 3

This course introduces students to the various geographical themes, concepts and processes within the context of the natural and anthropogenic development of the Canadian prairie region. It traces the evolution of the prairie landscape. It will focus on academic writing in the discipline. Not to be held with GEOG 2450. Prerequisite: a grade of C or better in a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

GEOG 2930 Introduction to Oceanography Cr.Hrs. 3

This course provides an introduction to the physical, chemical, biological and geological processes in the world oceans and their interactions with the overall Earth system. This course is interdisciplinary, applying geological, chemical and biological processes to the study of the world's oceans. Prerequisite: A minimum grade of "C" in GEOG 1290 (or Geog 1291) or GEOG 1200 (or GEOG 1201) or ENVR 1000 or GEOL 1340.

Geography Course Descriptions-3000 Level**GEOG 3200 Introduction to Remote Sensing (TS) Cr.Hrs. 3**

(Lab Required) (Formerly 053.320) The course is an introduction to the principles of optical, active and passive microwave remote sensing. A review of satellite and sensors and their geographic applications will be presented, along with digital image analysis techniques. Laboratory assignments will provide hands-on experience in dealing with remote sensing data. Not to be held with (053.454). Prerequisites: [(GEOG 1200) or GEOG 1201 (053.120) (C), or GEOG 1290 or GEOG 1291 (053.129) (C)], and [PHYS 1020 or PHYS 1021 (016.102) (C), or PHYS 1050 or PHYS 1051 (016.105) (C), or MATH 1300 or MATH 1301 (136.130) (C), or MATH 1500 or MATH 1501 (136.150) (C)], or permission of department head.

GEOG 3310 Atmospheric Dynamics, Storms and Radar (PS) Cr.Hrs. 3

(Formerly 053.331) The course covers the critical dynamic processes that are associated with the Earth's atmosphere including forces that control wind, the kinematics of the wind field, general circulation, hodographs, thermal wind, laws of motion, mid-latitude circulations, convective storms and the utility of weather radar. Prerequisite: GEOG 2300 (053.230) (C), or permission of department head.

GEOG 3320 Introduction to Microclimates and Micrometeorology (PS) Cr.Hrs. 3

(Formerly 053.332) This course introduces the concept of energy balance climatology and examines relationships among climate, microclimate, and environments of the Earth's surface and human-made environments. Studies include bioclimates and hydroclimates. Prerequisites: (GEOG 2310 (053.231) (C)), and (GEOG 2300 (053.230) (C)), or permission of department head.

GEOG 3340 Migration and Mobility in a Globalized World Cr.Hrs. 3

This course surveys the geographic dimensions of migration and mobility of populations, with emphasis of contemporary events. Prerequisites: a grade of C or better in GEOG 2330 or (GEOG 2480), or permission of department head.

GEOG 3390 Introduction to Climate Change and Its Causes (PS) Cr.Hrs. 3

The primary objective of this course is to provide students with a general understanding of the physical and astronomical factors that drive global climate change. Focus will be given to current and future climate change in the context of observations and modeling. Not to be held with GEOG 3610. Prerequisite: a minimum of three credit hours from Geography or Environment courses, or permission of department head.

GEOG 3460 Urban Geography (HS) Cr.Hrs. 6

(Formerly 053.346) The course studies the processes and trends of urbanization; the classification of cities; central-place theory; cities as systems; land-use patterns; social forces and factorial ecology; and urban transport problems. Prerequisite: (GEOG 1200) or GEOG 1201 (053.120) (C), or GEOG 1280 or GEOG 1281 (053.128) (C), or permission of department head.

GEOG 3640 Social Geography of the Environment (HS) Cr.Hrs. 3

This course provides an intermediate-level assessment of current geographical approaches to society and environment. Students are exposed to critical realist, social constructionist, Marxist, feminist and post-Colonial traditions as they are applied to environmental and social justice, globalization and public health. It includes discussion and a community-based learning project. Prerequisite: a grade of C or better in (GEOG 1200) or GEOG 1280, or permission of department head.

GEOG 3730 Geographic Information Systems (TS) Cr.Hrs. 3

(Lab Required) (Formerly 053.373) Weekly two-hour lab. The course introduces students to the evolving science, technology and applications of Geographic Information Systems (GIS). Related geospatial technologies such as Global Navigation Satellite Systems and Remote Sensing, as well as the field of Geomatics will be introduced. Prerequisite: a grade of C or better in a minimum of three credit hours from Geography, Geology or Environment courses numbered at the 1000 and/or 2000 level, or permission of instructor or department head. Not to be held with GEOG 2250.

GEOG 3740 Field Studies in Geography (A,TS) Cr.Hrs. 6

(Formerly 053.374) A field course designed to introduce students to either a detailed area study or to field techniques employed for specific geographic enquiry. Prerequisite: Permission of department head.

GEOG 3750 Field Studies in Geography (A,TS) Cr.Hrs. 3

(Formerly 053.375) A field course designed to introduce students to either a detailed area study or to field techniques employed for specific geographic enquiry. Prerequisite: a grade of C or better in a minimum of three credit hours from Geography courses numbered at the 1000 level, or permission of department head.

GEOG 3760 Special Topics in Geography Cr.Hrs. 6

(Formerly 053.376) This course will vary from year to year depending on the needs of students and the interests of instructors. Prerequisite: Permission of department head.

GEOG 3770 Special Topics in Geography Cr.Hrs. 3

(Formerly 053.377) This course will vary from year to year depending on the needs of students and the interests of instructors. Prerequisite: Permission of department head.

GEOG 3810 Quantitative Research Methods in Geography (TS) Cr.Hrs. 3

This course focuses on the quantitative analytical methods available for the interpretation on physical and human geography applications. Not to be held with GEOG 3680 (053.368). Prerequisite: GEOG 2530 (053.253) or STAT 1000 or STAT 1001 (005.100), or permission of department head.

GEOG 3850 Sustainable Manitoba (A) Cr.Hrs. 3

This course approaches local sustainability issues from an interdisciplinary perspective. By looking at the ecological, social and economic aspects from a variety of discipline perspectives, a fuller understanding of sustain-

ability is achieved. The broad range of perspectives is achieved through participation of guest speakers from other faculties and outside of the university as well as excursion outside the classroom. Not to be held with ENVR 3850. Prerequisite: 60 credit hours of course work, or permission of department head

GEOG 3860 Animal Geographies (HS) Cr.Hrs. 3

This course presents a variety of topics concerning the interactions between humans and animals, how humans influence and use animals, and the many roles animals play in human lives and environments. Animal Geographies lies at a meeting point between physical and human geography, where we must consider the blurring boundaries between what it means to be animal/human, and the implications of how animals are used and represented. A wide variety of perspectives, beliefs, and points of view will be explored. Prerequisite: Permission of department head.

GEOG 3870 Food Geographies Cr.Hrs. 3

This course provides a critical examination of the geographies of food at a variety of scales, from the body to the global. The course focuses on themes in three interconnected areas: 1) food production and the global food system from farm to plate including agribusiness and alternative food production and distribution models; 2) food consumption habits and beliefs and foodways as geographically contingent material culture; and 3) food (in) security and its relationship to health and wellbeing. This course is cross-listed as HNSC 3870. May not be held with HNSC 3870. Prerequisite: a grade of C or better in GEOG 1280 or GEOG 1281 or HNSC 1200 or GEOG 1200, or permission of department head.

GEOG 3920 Biological Oceanography 1: Lower Trophic Levels Cr.Hrs. 3

In this course, students will gain a background on the study of biological oceanography. Biological oceanography is a very active and important field of study worldwide due to the spatial coverage and biological activity of the world's oceans. This course examines the interaction of marine organisms with other biological life, as well as with the physical environment. Prerequisite: A minimum grade of "C" in both GEOG 2930 and BIOL 1030.

Geography Course Descriptions-4000 Level

GEOG 4050 Ecosystem Management Cr.Hrs. 3

This course will provide students with an understanding of the practical applications of ecological science, environmental policy, and resource management approaches in the large-scale planning of landscapes. The course will review ecological principles and trace the historical development of the ecosystem concept. Comparisons are made to other possible environmental management approaches. The synthesis of major elements and concepts will be reinforced through case studies on the Manitoba landscape, with an emphasis on practical learning by students through field seminars and group discussions. Not to be held with ENVR 4050. Prerequisite: Permission of department head.

GEOG 4060 Biogeography Cr.Hrs. 3

This course will provide students with a general understanding of the historical, ecological, analytical, and conservation aspects of biogeography. The course will also have a dual focus on the principles and concepts of reasons for the distribution of plants and animals worldwide, as well as incorporating discussion on as many local (Manitoba, Canada, North America) examples as possible. Not to be held with ENVR 4060. Prerequisite: Permission of department head.

GEOG 4200 Advanced Methods in Remote Sensing Cr.Hrs. 3

(Lab Required) (Formerly 053.420) Provides instruction in the current theory and application of remote sensing technology to Earth system Science. Emphasis will be placed on the processing and interpretation of remote sensing imagery and the integration of remote sensing data with other spatial data. Not to be held with (053.454). Prerequisite: GEOG 3200 (053.320) (C), or permission of department head.

GEOG 4260 Sacred Lands Cr.Hrs. 3

(Formerly 053.426) Students will increase their understanding of the importance and significance of Sacred Lands and Sacred Spaces to International Indigenous Peoples. Experiential learning, seminars, and a field component may be included. Not to be held with NATV 4260 (032.426). Prerequisite: Permission of department head.

GEOG 4280 Gender and the Human Environment Cr.Hrs. 3

This upper-level seminar course will develop in students a depth and breadth of understanding appropriate to the honours undergraduate/graduate level in the area of gender geography scholarship. From critical social science theoretical positions, this course asks students to examine what we can learn about how humans live on the earth if we see them as gendered. Just as we may also understand humans and their interactions in and with spaces, places and environments through the lenses of race, ethnicity, class, age and/or combinations of these categories with gender. Prerequisite: a grade of C or better in a minimum of six credit hours in Geography, or permission of department head.

GEOG 4290 Geographies of Health and Health Care Cr.Hrs. 3

(Formerly 053.429) This course provides an introduction to and critical examination of the geographies of health and healthcare. Topics include perceptions and determinations of health and health care; health care delivery, focusing on spatial patterns and inequities; and the relationship between environment and health, particularly impacts of environmental contamination. Prerequisite: Permission of department head.

GEOG 4300 Synoptic Meteorology and Weather Analysis Cr.Hrs. 3

(Formerly 053.430) Applied aspects of meteorology are described in terms of weather analysis and forecasting techniques for synoptic-scales and meso-scales using various meteorological tools. An introduction to severe weather forecasting techniques will also be described. Prerequisite: GEOG 3310 (053.331) (C), or permission of department head.

GEOG 4310 Boundary-Layer Climatology and Micrometeorology Cr. Hrs. 3

(Formerly 053.431) A seminar course on advanced topics in microclimatology and micrometeorology. Prerequisite: GEOG 3320 (053.332) (C), or permission of department head.

GEOG 4330 Concepts in Atmospheric Modeling Cr.Hrs. 3

This course will primarily focus on numerical modeling applications and techniques of the Earth's atmosphere with an emphasis on weather prediction. This includes understanding basic modeling terminology, numerical schemes, structure of models, types of models, what is required to run a model, and an introduction to data assimilation and ensemble techniques to weather prediction. Not to be held with GEOG 4320. Prerequisite: GEOG 3310 (C) or GEOG 3320 (C), or permission of department head.

GEOG 4350 Parks and Protected Areas Planning and Management: Field Studies Cr.Hrs. 6

The course is taught in two segments, an on-campus component and field study component taking place in Banff National Park. The on-campus component examines the historical development of the concept of parks and protected areas, the role of interpretation, management and research in the parks and emerging issues in the management of parks and protected areas. In addition, during the on-campus component planning for the field will take place. The field segment will focus on a wide variety of management issues with particular attention to Banff National Park. Emerging issues and trends will be examined and past management responses evaluated. There will be opportunities for students to investigate specific management issues of interest to them and to participate in current research being conducted in the park. This course is also offered in the Faculty of Kinesiology and Recreation Management as REC 4350. Prerequisite: Permission of department head.

GEOG 4390 Global Climate Change Cr.Hrs. 3

Students will be introduced to the complexities of climate changes through a series of introductory lectures and reading assignments that focus on recent scientific publications and review articles (mathematical skills are not required). Both sides of the climate change debate will be addressed in weekly assignments, and students will defend their conclusions in classroom discussion. Each student will take on a project in some aspect of climate change -- glaciers, sea ice, temperature trends, precipitation, agriculture, animal migration, aerosols, or a regional impact. Prerequisite: a grade of C or better in GEOG 3390 (or GEOG 3610 or 053.361), or permission of department head.

GEOG 4560 Techniques in Climatology Cr.Hrs. 3

(Formerly 053.456) Instrumentation, the sources of climatic data, and the use of satellite photography, as well as methods of analysis and presentation are discussed. Prerequisite: GEOG 3320 (053.332) (C), or permission of department head.

GEOG 4650 Models in Regional Analysis Cr.Hrs. 3

(Formerly 053.465) Emphasis is placed on the use of regression techniques in regional analysis including the classical ordinary least squares methods and two-stage least squares. Migration and industrial location models are developed and calibrated using these techniques. Prerequisite: Permission of department head.

GEOG 4660 Honours Thesis Cr.Hrs. 6

(Formerly 053.466) This course involves the production of a thesis under the supervision of a department faculty member. Prerequisite: Permission of department head.

GEOG 4670 Selected Issues Cr.Hrs. 3

(Formerly 053.467) Intensive study of selected geographic issues. Prerequisite: Prearranged written consent of an individual instructor and permission of department head.

GEOG 4720 Advanced Methods in Geographic Information Systems Cr. Hrs. 3

(Lab Required) (Formerly 053.472) Weekly two-hour lab. This course focuses on the practical application of techniques used in Geographic Information Systems (GIS) and the development of techniques used in Geographic Information Systems (GIS) and the development of GIS models. The development, testing and presentation of GIS data, models and results are studied. Prerequisite: Permission of department head.

GEOG 4780 Storms-Mesoscale Cr.Hrs. 3

This course focuses on a range of storms and mesoscale phenomena in the summer or winter. These include thunderstorms, tornadoes, squall lines, lightning, low level jets, gust fronts, blizzards, freezing rain, orographic storm, and polar lows. The emphasis is on the physical mechanisms leading to these events and it also examines how they may change in our changing climate. Not to be held for credit with GEOG 7780. Prerequisite: A grade of "C" or better in GEOG 3310 (053.331) or permission of department head.

SECTION 7: BACHELOR OF ENVIRONMENTAL SCIENCE AND BACHELOR OF ENVIRONMENTAL STUDIES DEGREE REGULATIONS, PROGRAM DESCRIPTIONS AND COURSES OFFERED BY

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7.1 Program Information

The Clayton H. Riddell Faculty of Environment, Earth, and Resources offers General, Major, and Honours degree programs leading to a Bachelor of Environmental Science (B.Env.Sc.) and Bachelor of Environmental Studies (B.Env.St.). Through an interdisciplinary approach, environmental issues relating to human populations, sustainable resource development, pollution and conservation, environmental health, and endangerment and preservation of species are explored in conjunction with alternative conditions that have the potential to reverse current trends and contribute to ecological sustainability. Students have access to undergraduate courses offered by the Clayton H. Riddell Faculty of Environment, Earth, and Resources as well as the Faculties of Agricultural and Food Sciences, Arts, Law, Engineering, Architecture, and Science in order to complete their education. They are expected to take many courses outside the Riddell Faculty enabling them to obtain a truly interdisciplinary education.

The Major and Honours degree programs serve students who desire advanced study in an environmental field. The programs are intended for students interested in professional training and the opportunity for advanced research. Honours degree programs demand higher academic performance and lead most directly to graduate studies. Students who are ineligible to enter the Honours degree program in their third year may establish this in the following year on the basis of their improved scholastic performance. See a [Riddell Faculty student advisor](#) in the Faculty general office for information. The degree programs may be pursued on a full- or part-time basis.

The B.Env.Sc. and B.Env.St. degree programs share a general structure that includes a foundation of either introductory Sciences or Social Sciences/Humanities. Students complete an environmental core and a Focus Area that is defined through consultation with a [Riddell Faculty student advisor](#) in the Faculty general office. Students completing the General degree program are required to complete 9 credit hours in a Focus Area; Major, Major Coop, Honours and Honours Coop students complete 33 credit hours in a Focus Area. Other Focus Area requirements are defined in the graduation requirements in section 7.3.1 in this Chapter. You may also refer to the [Focus Area Brochure](#) for further information.

General

To qualify for the degree Bachelor of Environmental Science (General) or Bachelor of Environmental Studies (General), students must complete 90 credit hours including all faculty and degree requirements (including the foundation, environmental core and 9 credit hours of minimum 2000-level courses in a Focus Area). Minimum performance requirements include passing grades ('D' or better) in each course and a minimum degree Grade Point Average of 2.00. There is no limit to the number of credit hours a student completes provided he/she does not exceed 48 credit hours of failed courses.

Major

To qualify for the degree Bachelor of Environmental Science (Major) or Bachelor of Environmental Studies (Major), a student must complete 120 credit hours with a minimum degree grade point average of 2.00. Focus Area requirements are as follows: 33 credit hours of which 21 credit hours must be completed at the 3000- or 4000-level; 2.00 Grade Point Average. Major (Coop) students must attain a minimum degree Grade Point Average of 2.50. There is no limit to the number of credit hours a student completes provided he/she does not exceed 18 credit hours of failed courses.

Honours

To qualify for the degree Bachelor of Environmental Science (Honours) or Bachelor of Environmental Studies (Honours), a student must complete 120 credit hours with a minimum degree grade point average of 3.25. Focus Area requirements are as follows: 33 credit hours of which 21 credit hours must be completed at the 3000- or 4000-level; 3.00 Grade Point Average and minimum 'C+' grades. There is no limit to the number of credit hours a student completes provided he/she does not exceed 18 credit hours of failed courses.

Minor in Another Department

Students in the B.Env.Sc. and B.Env.St. have the opportunity to complete a Minor in a subject field that is different than that of the declared major, and which normally consist of 18 credit hours from a department offering this option at the University of Manitoba. Students are not permitted to complete a Minor in Environmental Science or Environmental Studies. Contact a [Riddell Faculty student advisor](#) in the Faculty general office for further information about eligible Minors.

Eco-Canada Accreditation

The Environmental Science program is accredited to the [National Standard of Environmental Programs](#) in Canada by ECO Canada.

7.2 Advanced Entry Entrance Requirements

Students admitted from University 1 are placed in the Major degree program in either the Bachelor of Environmental Science or Bachelor of Environmental Studies until they have completed a minimum of 48 credit hours after which they can transfer to the General or Honours program or remain in the Major. To make a program transfer, students must consult with a [Riddell Faculty student advisor](#).

Transfer students, and Second Degree students may be eligible for direct entry into the General or Honours programs. These students should consult with a [Riddell Faculty student advisor](#) in the Faculty Dean's Office.

7.2.1 and 7.2.2 define the Advanced Entry Entrance requirements for the degree programs in the Bachelor of Environmental Science and Bachelor of Environmental Studies, respectively.

7.2.1 Bachelor of Environmental Science Advanced Entry Entrance Requirements			
Degree Program in B.Env.Sc.	Minimum Number of Credit Hours	Minimum Degree Grade Point Average	Additional Advanced Entry Entrance Requirements
Honours	48	3.25	No failures on entry ¹ ; a grade of 'B' or better in ENVR 1000 and ENVR 2000 as well as a minimum 'C+' in 6 hours of BIOL 1020 ³ , BIOL 1030 ³ or CHEM 1310 ³ and 'C' in the other course.
Honours (Coop) ²	60	3.25	No failures on entry ¹ ; ENVR 2900; students must satisfy the requirements for entrance/continuation in the regular program and (normally) have completed ENVR 1000, ENVR 2000, ENVR 2270, ENVR 3160, STAT 1000 ³ , STAT 2000 ³ , BIOL 2300 ³ (AGEC 2370), ECON 2390 (ABIZ 2390), BIOL 1020 ³ , BIOL 1030 ³ and one of GEOG 1290 ³ or GEOL 1340.
Major	24	2.00	12 credit hours in ENVR 1000, ENVR 2000, BIOL 1020 ³ , BIOL 1030 ³ , CHEM 1300 ³ , CHEM 1310 ³ , STAT 1000 ³ , STAT 2000 ³ , MATH 1500 ³ (or MATH 1200 ³ , MATH 1300 ³ , MATH 1310, MATH 1510, MATH 1520), one of GEOG 1290 ³ or GEOL 1340, PHYS 1020 ³ (or PHYS 1050 ³), PHYS 1030 ³ (or PHYS 1070 ³), with a grade of 'C+' or better in six of the 12 credit hours, and a grade of 'C' or better in the remaining six credit hours.
Major (Coop) ²	60	2.50	ENVR 2900; students must satisfy the requirements for continuation in the regular program and (normally) have completed ENVR 1000, ENVR 2000, ENVR 2270, ENVR 3160, STAT 1000 ³ , STAT 2000 ³ , BIOL 2300 ³ (AGEC 2370), ECON 2390 (ABIZ 2390), BIOL 1020 ³ , BIOL 1030 ³ , and one of GEOG 1290 ³ or GEOL 1340.
General	48	2.00	
¹ Students may be permitted to enter the program without satisfying all requirements listed. Students should consult with a Student Advisor for further information. ² Students may be permitted to enter the program without satisfying all requirements listed. Students should consult with the Cooperative Education Coordinator for further information. ³ Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified course identified in the entrance requirements chart. Université de Saint-Boniface courses end in the number '1' (e.g. CHEM 1301).			

7.2.2 Bachelor of Environmental Studies Advanced Entry Entrance Requirements			
Degree Program in B.Env.St.	Minimum Number of Credit Hours	Minimum Grade Point Average	Additional Advanced Entry Entrance Requirements
Honours	48	3.25	No failures on entry ¹ ; a grade of 'B' or better in ENVR 1000 and ENVR 2000; GEOG 1280 ³ and GEOG 1290 ³ , ENVR 3160, with a grade of 'C+' or better in six of the 15 credit hours, and a grade of 'C' or better in the remaining nine credit hours.
Honours (Coop) ²	60	3.25	No failures on entry ¹ ; ENVR 2900; students must satisfy the requirements for Entrance/continuation in the regular program and (normally) have completed ENVR 1000, ENVR 2000, ENVR 2350, ENVR 3160, GEOG 1280 ³ and GEOG 1290 ³ , ECON 2390 (ABIZ 2390), STAT 1000 ³ , one of BIOL 2390 ³ (or (AGEC 2370) (or BIOL 2300 ³), and one of BIOL 1010 ³ , (or BIOL 1030 ³).
Major	24	2.00	12 credit hours taken from ENVR 1000, ENVR 2000, BIOL 1010 ² (or BIOL 1030 ²), STAT 1000 ² , NATV 1220, GEOG 1280 ³ or GEOG 1290 ³ ; with a grade of 'C+' or better in six of the 12 credit hours, and a grade of 'C' or better in the remaining six credit hours.
Major (Coop) ¹	60	2.50	ENVR 2900; students must satisfy the requirements for continuation in the regular program and (normally) have completed ENVR 1000, ENVR 2000, ENVR 2350, ENVR 3160, GEOG 1280 ³ and GEOG 1290 ³ ; ECON 2390 (ABIZ 2390), STAT 1000 ³ , one of BIOL 2390 ³ (AGEC 2370) or BIOL 2300 ³ , and one of BIOL 1010 ³ (or BIOL 1030 ³).
General	48	2.00	
¹ Students may be permitted to enter the program without satisfying all requirements listed. Students should consult with a Student Advisor for further information. ² Students may be permitted to enter the program without satisfying all requirements listed. Students should consult with the Cooperative Education Coordinator for further information. ³ Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified course identified in the entrance requirements chart. Université de Saint-Boniface courses end in the number '1' (e.g. GEOG 1281).			

7.3 Minimum Performance Requirements for Continuation and Graduation

A student’s academic performance will be assessed with his/her application for admission to the Clayton H. Riddell Faculty of Environment, Earth, and Resources and following each term thereafter. A Riddell Faculty student advisor must approve a student’s registration each Fall/Winter and Summer term. Any revisions to this schedule should also be approved prior to the end of the registration revision period.

To be in good standing and permitted to continue in a degree program, a student must achieve the minimum standards outlined in section 7.3.1 at each point of assessment. This assessment is based on the student’s minimum degree Grade Point Average and the number of failed courses after admission to the Riddell Faculty.

To graduate from either a Bachelor of Environmental Science or the Bachelor of Environmental Studies with the intended degree designation, a student must achieve the minimum standards and graduation requirements outlined in section 7.3.1 following the final term of registration and satisfy all degree course requirements in the foundation, environment core and Focus Area as defined in section 7.1 of this Chapter. In addition, students must satisfy the residence requirement by completing either a total of 48 credit hours or their last 24 credit hours at the University of Manitoba. These courses must be acceptable for credit in either the Bachelor of Environmental Science or the Bachelor of Environmental Studies.

Students who do not meet these minimum performance requirements for continuation or graduation will be required to transfer to the appropriate program based on their performance and eligibility as defined in 7.3.1. Students who do not meet the minimum performance requirements for the General degree program will be placed on probation or academic suspension as defined in section 3.14 Academic Warning, Probation, Academic Suspension and Special Students (Academic Standing) in this Chapter.

Students required to withdraw from the Honours degree program will have the statement ‘Required to Withdraw from the Honours Program’ recorded on their transcript. Similarly, students required to withdraw out of the Major degree program will have the statement ‘Required to Withdraw from the Major Program’ recorded on their transcript.

7.3.1 Minimum Performance Requirements					
Degree Program (Credit Hours)	Minimum Performance Requirements			Additional Graduation Requirements ¹	
	Minimum Degree Grade Point Average (DGPA)	Maximum Credit Hours of Failures	Focus Area	Minimum credit hours of course work completed at the 3000- and 4000-levels	Coop Option Courses
Honours (120)	3.25	18	33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00; minimum ‘C+’ grade in each course.	39 credit hours	
Honours Coop (120)	3.25	18	33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 3.00. minimum ‘C+’ grade in each course.	39 credit hours	ENVR 2900, ENVR 3900, ENVR 3910, ENVR 3980, ENVR 3920, ENVR 3990; (ENVR 4910 and ENVR 4980 are optional)
Major (120)	2.00	18	33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.	33 credit hours	
Major (Coop) (120)	2.50	18	33 credit hours of which 21 must be at the 3000- or 4000-level; minimum cumulative GPA of 2.00.	33 credit hours	ENVR 2900, ENVR 3900, ENVR 3910, ENVR 3980, ENVR 3920, ENVR 3990; (ENVR 4910 and ENVR 4980 are optional)
General (90)	2.00	48	9 credit hours		

¹Students must satisfy the residence requirement for the degree program in order to be eligible for graduation. This is defined as either a total of 48 or the last 24 credit hours at the University of Manitoba.

7.4 Graduating with Distinction or First Class Honours

With Distinction

Students graduating with a Bachelor of Environmental Science (General) or Bachelor of Environmental Studies (General) degree will have their degree granted ‘With Distinction’ if they have a minimum Degree Grade Point Average of 3.50 on all course work.

Students graduating with a Bachelor of Environmental Science (Major) or Bachelor of Environmental Studies (Major) degree will have their degree granted ‘With Distinction’ if they have a minimum Degree Grade Point Average of 3.50 on all course work.

The term Degree with Distinction will appear both on the parchment and on the student’s transcript.

First Class Honours

Students in the Honours program will have their degree granted with 'First Class Honours' if they have a minimum Degree Point Average of 3.50 based on all acceptable course work. The term First Class Honours will appear both on the parchment and on the student's transcript.

7.5 Bachelor of Environmental Science Program Chart

7.5 Bachelor of Environmental Science^{1,2}			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
HONOURS 120 CREDIT HOURS			
ENVR 1000, ENVR 2000, BIOL 1020, BIOL 1030, CHEM 1300, CHEM 1310, MATH 1500 ³ , STAT 1000, ECON 1010 Plus 3 credit hours from the Faculty of Arts ⁴	ENVR 2270 ⁸ , ENVR 3160 ⁹ , BIOL 2300 (or AGECE 2370), ECON 2390 (ABIZ 2390), PHYS 1020 ⁵ , STAT 2000 One of PHYS 1030 ⁵ , MATH 1200, MATH 1300 ⁶ , MATH 1700 ⁶ One of GEOG 1290 or GEOL 1340 (or GEOL 1440)	ENVR 4110, ENVR 4500 Plus 33 credit hours in an approved Focus Area ⁷ Enough elective credit to total 120 credit hours for the program.	
It is recommended that students complete the W course within the first 60 credit hours of coursework.			
HONOURS COOPERATIVE OPTION 120 CREDIT HOURS			
ENVR 1000, ENVR 2000, BIOL 1020, BIOL 1030, CHEM 1300, CHEM 1310, MATH 1500 ³ , STAT 1000, ECON 1010 Plus 3 credit hours from the Faculty of Arts ⁴	ENVR 2270 ⁸ , ENVR 3160 ⁹ , BIOL 2300 (or AGECE 2370), ECON 2390 (ABIZ 2390), PHYS 1020 ⁵ , STAT 2000, ENVR 2900 One of PHYS 1030 ⁵ , MATH 1200, MATH 1300 ⁶ , MATH 1700 ⁶ One of GEOG 1290 or GEOL 1340 (or GEOL 1440)	ENVR 4110, ENVR 4500 Plus 33 credit hours in an approved Focus Area ⁷ ENVR 3900, ENVR 3980, ENVR 3990, ENVR 3910, ENVR 3920 (ENVR 4980 and ENVR 4910 are optional) Enough elective credit to total 120 credit hours for the program.	
It is recommended that students complete the W course within the first 60 credit hours of coursework.			
MAJOR 120 CREDIT HOURS			
ENVR 1000, ENVR 2000, BIOL 1020, BIOL 1030, CHEM 1300, CHEM 1310, MATH 1500 ³ , STAT 1000, ECON 1010 Plus 3 credit hours from the Faculty of Arts ⁴	ENVR 2270 ⁸ , ENVR 3160 ⁹ , BIOL 2300 (or AGECE 2370), ECON 2390 (ABIZ 2390), PHYS 1020 ⁵ , STAT 2000 One of PHYS 1030 ⁵ , MATH 1200, MATH 1300 ⁶ , MATH 1700 ⁶ One of GEOG 1290 or GEOL 1340 (or GEOL 1440)	ENVR 4110 Plus 33 credit hours in an approved Focus Area ⁷ Enough elective credit to total 120 credit hours for the program.	
It is recommended that students complete the W course within the first 60 credit hours of coursework.			
MAJOR COOPERATIVE OPTION 120 CREDIT HOURS			
ENVR 1000, ENVR 2000, BIOL 1020, BIOL 1030, CHEM 1300, CHEM 1310, MATH 1500 ³ , STAT 1000, ECON 1010 Plus 3 credit hours from the Faculty of Arts ⁴	ENVR 2270 ⁸ , ENVR 3160 ⁹ , BIOL 2300 (or AGECE 2370), ECON 2390 (ABIZ 2390), PHYS 1020 ⁵ , STAT 2000, ENVR 2900 One of PHYS 1030 ⁵ , MATH 1200, MATH 1300 ⁶ , MATH 1700 ⁶ One of GEOG 1290 or GEOL 1340 (or GEOL 1440)	ENVR 4110 Plus 33 credit hours in an approved Focus Area ⁷ ENVR 3900, ENVR 3980, ENVR 3990, ENVR 3910, ENVR 3920 (ENVR 4980 and ENVR 4910 are optional) Enough elective credit to total 120 credit hours for the program.	
It is recommended that students complete the W course within the first 60 credit hours of coursework.			
GENERAL 90 CREDIT HOURS			
ENVR 1000, ENVR 2000, BIOL 1020, BIOL 1030, CHEM 1300, CHEM 1310, MATH 1500 ³ , STAT 1000, ECON 1010 Plus 3 credit hours from the Faculty of Arts ⁴	ENVR 2270 ⁸ , ENVR 3160 ⁹ , BIOL 2300 (or AGECE 2370), ECON 2390 (ABIZ 2390), PHYS 1020 ⁵ , STAT 2000 One of PHYS 1030 ⁵ , MATH 1200, MATH 1300 ⁶ , MATH 1700 ⁶ One of GEOG 1290 or GEOL 1340 (or GEOL 1440)	ENVR 4110 Plus 9 credit hours in an approved Focus Area Enough elective credit to total 90 credit hours for the program.	
MINOR 18 CREDIT HOURS			
ENVR 1000, ENVR 2000	12 credit hours of ENVR courses numbered at the 2000-level or above.		

NOTES:

- ¹Advanced Entry into the degree programs is summarized in [section 7.2.1](#) of this *Chapter*.
- ²The courses required in this program will satisfy the University Mathematics Requirements.
- ³MATH 1510 or MATH 1520 may be taken in place of MATH 1500 (or equivalent).
- ⁴It is recommended that students consider a selection from List A below when selecting courses from the Faculty of Arts.
- ⁵PHYS 1050 and PHYS 1070 may be used in lieu of PHYS 1020 and PHYS 1030, respectively.
- ⁶MATH 1310 and MATH 1710 may be taken in place of MATH 1300 and MATH 1700 (or equivalent), respectively.
- ⁷Focus Area courses must include a minimum of 21 credit hours at the 3000- and/or 4000-level. Focus Area performance requirements are defined in [section 7.3](#) of this *Chapter*. Information on Focus Areas is available in the [Focus Area Brochure](#).
- ⁸The former ENVR 2170 may be used in lieu of ENVR 2270.
- ⁹The former ENVR 2650 may be used in lieu of ENVR 3160.

IMPORTANT: The Honours and Major programs need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

NOTE:

- To fulfil prerequisite requirements, a grade of 'C' must be achieved, unless otherwise stated, in any course stipulated as a prerequisite to a further course.
- Students should review the current course topics available through *ENVR 2010* (1.5), *ENVR 2020* (3), *ENVR 3000* (3), *ENVR 3010* (1.5), *ENVR 3020* (3), *ENVR 4000* (3), *ENVR 4010* (1.5), and *ENVR 4020* (3) as well as those offered through *GEOG 3740* (6), *GEOG 3750* (3), *GEOG 3760* (6), *GEOG 3770* (3) and *GEOG 4670* (3). Also, all courses are not offered every year or every term. The course schedule for the current academic term is available from the [Class Schedule](#).
- Students registering in certain courses may be required to participate in field trips or field components and pay a portion of the associated expenses. For details, contact the [Department of Environment and Geography general office](#).
- Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified course identified in the program requirements chart. *Université de Saint-Boniface courses end in the number '1' (e.g. CHEM 1301).*

List A: Recommended List of Faculty of Arts Electives. Students may wish to consider courses from the following list when identifying appropriate selections from the Faculty of Arts.

* In the list below indicates courses no longer offered.

- ANTH 1210** Human Origins and Antiquity (3)
- ANTH 1220** Cultural Anthropology (3)
- ANTH 1520** Critical Cultural Anthropology (3)
- ECON 1020** Introduction to Macroeconomic Principles (3)
- NATV 1200** The Native Peoples of Canada (6)
- NATV 1240** The Native Peoples of Canada, Part 2 (3)
- PHIL 1200** Introduction to Philosophy (6)
- PHIL 1290** Critical Thinking (3)
- PHIL 1320** Introductory Logic (6)
- PHIL 1510*** Historical Introduction to Philosophy (6)
- RLGN 1420** Ethics in World Religions (3)
- RLGN 2180** Theory of Nature (3)

7.6 Bachelor of Environmental Studies Program Chart

7.6 Bachelor of Environmental Studies^{1,2}			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
HONOURS 120 CREDIT HOURS			
ENVR 1000, ENVR 2000, GEOG 1280, GEOG 1290, NATV 1220 ³ , BIOL 1010 ⁴ , STAT 1000, ECON 1010	ENVR 2350, ENVR 3160 ⁷ , ECON 2390 (ABIZ 2390), BIOL 2390 ⁴ Plus 3 credit hours from List B ⁵	GEOG 3810 ⁸ , ENVR 4110, ENVR 4500 Plus 33 credit hours in an approved Focus Area ⁶ Enough elective credit to total 120 credit hours for the program.	
It is recommended that students complete the W course within the first 60 credit hours of coursework.			
HONOURS COOPERATIVE OPTION 120 CREDIT HOURS			
ENVR 1000, ENVR 2000, GEOG 1280, GEOG 1290, NATV 1220 ³ , BIOL 1010 ⁴ , STAT 1000, ECON 1010	ENVR 2350, ENVR 3160 ⁷ , ECON 2390 (ABIZ 2390), BIOL 2390 ⁴ , ENVR 2900 Plus 3 credit hours from List B ⁵	GEOG 3810 ⁸ , ENVR 4110, ENVR 4500 Plus 33 credit hours in an approved Focus Area ⁶ ENVR 3900, ENVR 3910, ENVR 3920, ENVR 3980, ENVR 3990 (ENVR 4980 and ENVR 4910 are optional) Enough elective credit to total 120 credit hours for the program.	
It is recommended that students complete the W course within the first 60 credit hours of coursework.			
MAJOR 120 CREDIT HOURS			
ENVR 1000, ENVR 2000, GEOG 1280, GEOG 1290, NATV 1220 ⁴ , BIOL 1010 ⁴ , STAT 1000, ECON 1010	ENVR 2350, ENVR 3160 ⁷ , ECON 2390 (ABIZ 2390), BIOL 2390 ⁴ Plus 3 credit hours from List B ⁵	GEOG 3810 ⁸ , ENVR 4110 Plus 33 credit hours in an approved Focus Area ⁶ Enough elective credit to total 120 credit hours for the program.	

It is recommended that students complete the W course within the first 60 credit hours of coursework.		
MAJOR COOPERATIVE OPTION 120 CREDIT HOURS		
ENVR 1000, ENVR 2000, GEOG 1280, GEOG 1290, NATV 1220 ³ , BIOL 1010 ⁴ , STAT 1000, ECON 1010	ENVR 2350, ENVR 3160 ⁷ , ECON 2390 (ABIZ 2390), BIOL 2390 ⁴ , ENVR 2900 Plus 3 credit hours from List B ⁵	GEOG 3810 ⁸ , ENVR 4110 Plus 33 credit hours in an approved Focus Area ⁶ ENVR 3900, ENVR 3910, ENVR 3920, ENVR 3980, ENVR 3990 (ENVR 4980 and ENVR 4910 are optional) Enough elective credit to total 120 credit hours for the program.
It is recommended that students complete the W course within the first 60 credit hours of coursework.		
GENERAL 90 CREDIT HOURS		
ENVR 1000, ENVR 2000, GEOG 1280, GEOG 1290, NATV 1220 ³ , BIOL 1010 ⁴ , STAT 1000, ECON 1010	ENVR 2350, ENVR 3160 ⁷ , ECON 2390 (ABIZ 2390), BIOL 2390 ⁴ Plus 3 credit hours from List B ⁵	GEOG 3810 ⁸ , ENVR 4110 Plus 9 credit hours in an approved Focus Area Enough elective credit to total 90 credit hours for the program.
MINOR 18 CREDIT HOURS		
ENVR 1000, ENVR 2000	12 credit hours of ENVR courses numbered at the 2000-level or above.	
NOTES:		
<p>¹Advanced Entry into the degree programs is summarized in 7.2.2.</p> <p>²The courses required in this program will satisfy the university mathematics requirements.</p> <p>³Students are permitted to substitute NATV 1220 with another 3 credit hours from the department (not a language) or approved alternative course. See the Riddell Faculty student advisor for assistance.</p> <p>⁴Students with an interest in the Conservation and Biodiversity Focus Area (or other Focus Areas including advanced Biology courses) are advised to complete the combination of BIOL 1020 and BIOL 1030 as well as BIOL 2300 (or AGEC 2370) instead of BIOL 1010 and BIOL 2390.</p> <p>⁵Students must complete 3 credit hours of course work containing significant international content. Students are referred to List B for a list of available courses. Students may substitute with another course as approved by the student advisor.</p> <p>⁶Focus Area courses must include a minimum of 21 credit hours at the 3000- and/or 4000-level. Focus Area performance requirements are defined in section 7.3 of this <i>Chapter</i>. Information on Focus Areas is available in the Focus Area Brochure.</p> <p>⁷ENVR 2650 may be used in lieu of ENVR 3160.</p> <p>⁸GEOG 3680 may be used in lieu of GEOG 3810.</p> <p>IMPORTANT: The Honours and Major programs need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.</p> <p>NOTE:</p> <ul style="list-style-type: none"> To fulfil prerequisite requirements, a grade of 'C' must be achieved, unless otherwise stated, in any course stipulated as a prerequisite to a further course. Students should review the current course topics available through <i>ENVR 2010</i> (1.5), <i>ENVR 2020</i> (3), <i>ENVR 3010</i> (1.5), <i>ENVR 3020</i> (3), <i>ENVR 4000</i> (3), <i>ENVR 4010</i> (1.5), and <i>ENVR 4020</i> (3) as well as those offered through <i>GEOG 3740</i> (6), <i>GEOG 3750</i> (3), <i>GEOG 3760</i> (6), <i>GEOG 3770</i> (3) and <i>GEOG 4670</i> (3). Also, all courses are not offered every year or every term. The course schedule for the current academic term is available from the Class Schedule. Students registering in certain courses may be required to participate in field trips or field components and pay a portion of the associated expenses. For details, contact the Department of Environment and Geography general office. Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified course identified in the entrance requirements chart. <i>Université de Saint-Boniface courses end in the number '1'</i> (e.g. GEOG 1281). 		

List A: Recommended List of Faculty of Arts Electives. Students may wish to consider courses from the following list when identifying appropriate selections from the Faculty of Arts.

* In the list below indicates courses no longer offered.

- ANTH 1210** Human Origins and Antiquity (3)
- ANTH 1220** Cultural Anthropology (3)
- ANTH 1520** Critical Cultural Anthropology (3)
- ECON 1020** Introduction to Macroeconomic Principles (3)
- NATV 1200** The Native Peoples of Canada (6)
- NATV 1240** The Native Peoples of Canada, Part 2 (3)
- PHIL 1200** Introduction to Philosophy (6)
- PHIL 1290** Critical Thinking (3)
- PHIL 1320** Introductory Logic (6)
- PHIL 1510*** Historical Introduction to Philosophy (6)
- RLGN 1420** Ethics in World Religions (3)
- RLGN 2180** Theory of Nature (3)

List B: Courses containing significant international content:

- ABIZ 1010** Economics of World Issues and Policies (3)
 - ECON 2550** Political Economy 2: Economic Growth and Fluctuations
- in a
- Global Economic Environment (3)
 - ECON 3670** International Trade (3)
 - POLS 2040** Introduction to International Relations (6)
 - POLS 3220** Globalization and the World Economy (3)
 - POLS 3250** International Political Economy (3)
 - GEOG 4260** Sacred Lands (3)
- or as approved by a [Riddell Faculty student advisor](#)

7.7 Environment, Earth, and Resources Course Description

EER 1000 Earth: A User's Guide Cr.Hrs. 3

This course will present a multi-disciplinary introduction to the Planet Earth as both the source of essential resources and as the site of resulting negative impacts. Focus in the course will be provided by addressing important and current topics, case studies, and concepts that the well-educated citizen of the Earth should understand and will include natural and human-induced processes within a broad range of spatial and temporal scales.

7.8 Environmental Science and Environmental Studies Course Descriptions-

Environmental Science and Environmental Studies Course Descriptions-1000 Level

ENVR 1000 Environmental Science 1 - Concepts Cr.Hrs. 3

(Formerly 128.100) This course will introduce students to the conceptual framework of the environment by examining its physical, biological, and social components. General topics to be considered will include ecological principles and the responses of natural and managed systems to disturbance; population growth; biodiversity and conservation; and environmental sustainability. Not to be held with BIOL 1340 (071.134)

Environmental Science and Environmental Studies Course Descriptions-2000 Level

ENVR 2000 Environmental Science 2 - Issues Cr.Hrs. 3

(Formerly 128.200) This course will briefly review the major features of the structure and function of natural systems along with the degree to which these have been compromised. The main component of the course, however, will concentrate on the identification of the issues that underlie environmental degradation, while exploring alternative conditions that have the potential to reverse current trends and ultimately contribute to ecological sustainability. Prerequisite: ENVR 1000 (128.100) (C) or BIOL 1340 (071.134) (C).

ENVR 2010 Field Topics in Environment Cr.Hrs. 1.5

Field and practical experience in selected topics of current interest in the Environmental Science and Studies, with the content to vary depending on the needs of students and faculty. Prerequisite: Permission of department head.

ENVR 2020 Extended Field Topics in Environment Cr.Hrs. 3

Field and practical experience in selected topics of current interest in the Environmental Science and Studies, with the content to vary depending on the needs of students and faculty. Prerequisite: Permission of department head.

ENVR 2180 Introductory Toxicology Cr.Hrs. 3

(Formerly 128.218) A survey of general principles underlying the effects of toxic substances on biological systems, including consideration of the history, scope and applications of toxicology, the mechanisms of toxic action, and some major types of toxicants. Not to be held with ENVR 2190 (128.219) or BIOL 2380 (BOTN 2180 or 001.218 or ZOOL 2180 or 022.218) or BIOL 2382 (BOTN 2190 or 001.219 or ZOOL 2190 or 022.219) or AGRI 2180 (065.218) or AGRI 2190 (065.219). Prerequisites: [BIOL 1030 or BIOL 1031 or (071.125) (C)], and [(CHEM 1310 or CHEM 1311 (002.131) (C), or CHEM 1320 (002.132) (C)].

ENVR 2190 Toxicological Principles Cr.Hrs. 1.5

(Formerly 128.219) A survey of general principles underlying the effects of toxic substances on biological systems, including consideration of the history, scope and applications of toxicology, and the mechanisms of toxic action. Not to be held with ENVR 2180 (128.218) or BIOL 2380 (BOTN 2180 or 001.218 or ZOOL 2180 or 022.218), or BIOL 2382 (BOTN 2190 or 001.219 or ZOOL 2190 or 022.219), or AGRI 2180 (065.218), or AGRI 2190 (065.219). Prerequisites: [BIOL 1030 or BIOL 1031 or (071.125) (C)], and [CHEM 1310 or CHEM 1311 (002.131) (C), or CHEM 1320 (002.132) (C)].

ENVR 2270 Environmental Problem Solving and Scientific Thinking Cr. Hrs. 3

A course to help students develop skeptical and scientific thinking around environmental issues and problems. A multi-disciplinary approach will be taken, using current topical issues as examples. Not to be held with (ENVR 2170 or 128.217). Prerequisites: ENVR 1000 or equivalent (C), or permission of instructor.

ENVR 2350 Technical Communication in the Environmental Sectors Cr. Hrs. 3

(Lab Required) (Formerly 128.235) An introduction to technical communication skills required for environmental practitioners in research, government, and industry. The course covers technical writing and literature search techniques, business writing including reports, memos and e-mails, professional presentation skills, and fundamental internet skills. Practical experience is gained through assignments and laboratory exercises. Not to be held for credit with (128.205). Prerequisite: ENVR 1000 (128.100) or BIOL 1340 (071.134) (C), or permission of department head.

ENVR 2550 Environmental Chemistry Cr.Hrs. 3

(Lab Required) (Formerly 128.255) An introduction to the chemistry of the environment. Emphasis will be on the composition of the natural environment and the processes of natural and human-introduced chemical species that take place within it. The course will provide students with the chemical basis for understanding the environment and environmental problems. Not to be held with CHEM 2550 (002.255). Prerequisite: CHEM 1310 or CHEM 1311 (002.131) (C).

ENVR 2900 Professional Development in the Environmental Sectors 1 Cr.Hrs. 1.5

(Formerly 128.290) Through self directed learning students are introduced to the environmental sectors and issues including workplace health and safety, the respectful workplace, managing workloads and expectation, and professionalism. The course is a mandatory requirement to Cooperative Education Option admission. Prerequisite: 30 credit hours of university credit.

Environmental Science and Environmental Studies Course Descriptions-3000 Level

ENVR 3000 Multidisciplinary Topics in Environmental Science 1 Cr.Hrs. 3

(Formerly 128.300) Selected topics of current interest in the Environmental Sciences and Studies. Course content to vary with each offering depending on the needs and interests of students and faculty. Prerequisites: Permission of department head, and 60 credit hours of university credit.

ENVR 3010 Field Topics in Environmental Science 1 Cr.Hrs. 1.5

(Formerly 128.301) Field and practical experience in selected topics of current interest in the Environmental Sciences and Studies, with the content to vary depending on the needs and interests of students and faculty. Prerequisite: Permission of department head.

ENVR 3020 Extended Field Topics in Environmental Science 1 Cr.Hrs. 3

(Formerly 128.302) Field and practical experience in selected topics of current interest in the Environmental Sciences and Studies, with the content to vary depending on the needs and interests of students and faculty. Prerequisite: Permission of department head.

ENVR 3110 Environmental Conservation and Restoration Cr.Hrs. 3

(Lab Required) (Formerly 128.311) Environmental conservation and restoration are introduced and approaches based on science and traditional knowledge are contrasted. An emphasis is placed on systems thinking and both local and international case studies. Not to be held with (128.310). Prerequisites: BIOL 2390 (BOTN 2280 or 001.228 or ZOOL 2290 or 022.229) (C), or BIOL 2300 (BOTN 2370 or BOTN 2371 or 001.237 or ZOOL 2370 or ZOOL 2371 or 022.237) (C), or AGECE 2370 (065.237) (C), or permission of department head.

ENVR 3160 Environmental Responsibilities and the Law Cr.Hrs. 3

Environmental responsibilities and their legal framework in terms of policies, legislation, standards and guidelines and the tools to manage responsibility are examined through lectures, case study review and discussion. Environmental liability and due diligence are reviewed in relation to responsibilities of organizations and individuals. Strategies to manage environmental liabilities, including environmental and risk assessment, are also discussed. Not to be held with (ENVR 3150 or 128.315 or ENVR 2650). Prerequisite: ENVR 2000 (C) or permission of department head.

ENVR 3180 Methods in Ecotoxicology Cr.Hrs. 3

(Lab Required) This is a laboratory-based course exploring the development, conduction and application of bioassays, biomarkers, bioindicators and biomonitors in ecotoxicology. Through a laboratory setting, students learn how to perform standard bioassays for a variety of species (plants and invertebrates) as well as systems (aquatic and terrestrial) at different levels of biological organization, from the individual to the ecosystem. Not to be held with (ENVR 3300). Prerequisites: a minimum grade of C in each of ENVR 2180 or BIOL 2380 (BOTN 2180, ZOOL 2180) or AGRI 2180, and a second year course in the Faculty of Science or the Faculty of Agricultural and Food Sciences that has a laboratory component, or permission of department head.

ENVR 3250 Environmental Assessment Cr.Hrs. 3

(Lab Required) (Formerly 128.325) The theory, principles and practices of environmental assessment as a planning and decision-making process to identify and mitigate adverse effects of development projects. Environmental assessment is defined in the context of federal and provincial legislation, and applicable standards and guidelines. Laboratory assignments involve practical experiences, case study review and basic report preparation. Prerequisites: A grade of "C" or better in [ABIZ 3550 (061.355) or ENVR 3160 or the former ENVR 3150] and [BIOL 2300 or BIOL 2301 or the former BOTN 2370 or the former BOTN 2371 or the former ZOOL 2370 or the former ZOOL 2371 or AGECE 2370] or [BIOL 2390 or the former BOTN 2280 or the former ZOOL 2290] or permission of department head.

ENVR 3340 Circumpolar Cultures and Lifestyles Cr.Hrs. 3

This course provides an introduction to the culture, lifestyles, belief systems, material culture, art, environmental issues, and politics of Aboriginal Peoples in northern Canada, Greenland, Alaska, Siberia and Scandinavia. Prerequisite: Permission of department head.

ENVR 3350 Environmental Management Systems Cr.Hrs. 3

(Formerly 128.335) This course provides an introduction to environmental management systems and specific material on the ISO 14001 international EMS standard. Auditing principles and techniques are described with specific guidance on auditing an ISO 14001 EMS. Prerequisite: Permission of department head.

ENVR 3400 Introduction to Environment and Health Cr.Hrs. 3

(Formerly 128.340) An overview of the linkages between human health and environmental issues. The course discusses the nature of environmental hazards, human exposure and health outcomes. Major environmental and human health issues such as air pollution, hazardous substances, endocrine disruptors and products in the home are covered. Not to be held with (128.421). Prerequisite: 60 credit hours of university credit.

ENVR 3500 Project in Environmental Science Cr.Hrs. 3

(Formerly 128.350) A research project in any aspect of environmental science, chosen in consultation with the department head and an appropriate supervising faculty member. Written reports and oral presentation on the results of the project will be required. The course is normally available only to final year students in the Environmental Science or Studies Program. Prerequisite: Permission of department head.

ENVR 3550 Environmental Analysis Cr.Hrs. 3

(Lab Required) (Formerly 128.355) An introduction to classical and modern techniques for sampling, sample pre-treatment, and analysis of chemical substances in aquatic atmospheric and terrestrial environments and the interpretation of data obtained from such analyses. Not to be held with CHEM 3590 or (002.347) or (002.355). Prerequisite: ENVR 2550 (128.255) (C), or CHEM 2550 (002.255) (C), or CHEM 2470 (002.247) (C), or permission of department head.

ENVR 3750 Green Building and Planning Cr.Hrs. 3

An overview of the concepts and tools of Green building design and Green Planning. The course covers the history and trends in Green Building and Planning, related policies, tools and techniques. There is a strong emphasis on learning from local case-studies through seminars and field trips. Prerequisite: ENVR 2000 and 57 credit hours, or permission of department head.

ENVR 3850 Sustainable Manitoba (A) Cr.Hrs. 3

This course approaches local sustainability issues from an interdisciplinary perspective. By looking at the ecological, social and economic aspects from a variety of discipline perspectives, a fuller understanding of sustainability is achieved. The broad range of perspectives is achieved through participation of guest speakers from other faculties and outside of the university as well as excursion outside the classroom. Not to be held with GEOG 3850. Prerequisite: 60 credit hours of course work, or permission of department head.

ENVR 3900 Professional Development in the Environmental Sectors 2 Cr.Hrs. 1.5

(Formerly 128.390) Attendance and participation in seminars, conferences and workshops to foster greater interaction between students and practitioners in the environmental sectors. Students improve professional skill sets through assignments and mock interviews. The normal sequence for participation is after completion of ENVR 3980 (128.398). Prerequisites: ENVR 2900 (128.290) (C), and 60 credit hours of university credit.

ENVR 3910 Coop Work Term Report 1 Cr.Hrs. 1.5

(Formerly 128.391) Work term report, completed in conjunction with the coop placement, designed to integrate professional experiences with the concepts and theories explored through academic study. Students must be admitted into the Coop program to be registered, and receive credit. Prerequisite: ENVR 2900 (128.290) (C). Prerequisite or Concurrent Requirement: ENVR 3980 (128.398).

ENVR 3920 Coop Work Term Report 2 Cr.Hrs. 1.5

(Formerly 128.392) Work term report, completed in conjunction with the coop placement, designed to integrate professional experiences with the concepts and theories explored through academic study. Students must be admitted into the Coop program to be registered, and receive credit. Prerequisite: ENVR 3980 (128.398) (P). Prerequisites or Concurrent Requirements: ENVR 3900 (128.390), and ENVR 3990 (128.399).

ENVR 3980 Coop Work Term 1 Cr.Hrs. 0

(Formerly 128.398) Work assignments in business, industry, research or government for students registered in the Honours or Major Cooperative program. This course is graded pass/fail. Prerequisite: ENVR 2900 (128.290) (C).

ENVR 3990 Coop Work Term 2 Cr.Hrs. 0

(Formerly 128.399) Work assignments in business, industry, research or government for students registered in the Honours or Major Cooperative program. This course is graded pass/fail. Prerequisite or Concurrent Requirement: ENVR 3900 (128.390).

Environmental Science and Environmental Studies Course Descriptions-4000 Level

ENVR 4000 Multidisciplinary Topics in Environmental Science 2 Cr.Hrs. 3

(Formerly 128.400) Selected topics of current interest in the Environmental Sciences and Studies. Course content to vary with each offering depending on the needs and interests of students and faculty. Prerequisites: Permission of department head, and 60 credit hours of university credit.

ENVR 4010 Field Topics in Environmental Science 2 Cr.Hrs. 1.5

(Formerly 128.401) Field and practical experience in selected topics of current interest in the Environmental Sciences and Studies, with the content to vary depending on the needs and interests of students and faculty. Prerequisite: Permission of department head.

ENVR 4020 Extended Field Topics in Environmental Science 2 Cr.Hrs. 3

(Formerly 128.402) Field and practical experience in selected topics of current interest in the Environmental Sciences and Studies, with the content to vary depending on the needs and interests of students and faculty. Prerequisite: Permission of department head.

ENVR 4050 Ecosystem Management Cr.Hrs. 3

This course will provide students with an understanding of the practical applications of ecological science, environmental policy, and resource management approaches in the large-scale planning of landscapes. The course will review ecological principles and trace the historical development of the ecosystem concept. Comparisons are made to other possible environmental management approaches. The synthesis of major elements and concepts will be reinforced through case studies on the Manitoba landscape, with an emphasis on practical learning by students through field seminars and group discussions. Not to be held with GEOG 4050. Prerequisite: Permission of department head.

ENVR 4060 Biogeography Cr.Hrs. 3

This course will provide students with a general understanding of the historical, ecological, analytical, and conservation aspects of biogeography. The course will also have a dual focus on the principles and concepts of reasons for the distribution of plants and animals worldwide, as well as incorporating discussion on as many local (Manitoba, Canada, North America) examples as possible. Not to be held with GEOG 4060. Prerequisite: Permission of department head.

ENVR 4110 Critical Thinking and the Environment Cr.Hrs. 3

(002.455). Prerequisite: ENVR 3550 (128.355) (C), or (002.355) (C), or CHEM 3590 (C), or (002.347) (C), or permission of department head.

ENVR 4650 Advanced Issues in Environmental Law and Policy Cr.Hrs. 3

This course provides an in-depth review of Canadian law and policy relating to environmental protection and management. In particular, the course describes the laws governing a variety of topics related to the environment, including constitutional responsibilities, federal and provincial environmental legislation, water law, parks and protected areas, wildlife and fisheries management, species at risk, and international law including climate change. Prerequisite: a minimum grade of C in ENVR 3160 (or the former ENVR 2650), or permission of department head.

ENVR 4910 Coop Work Term Report 3 Cr.Hrs. 1.5

(Formerly 128.491) Work term report, completed in conjunction with the coop placement, which is designed to integrate professional experiences with the concepts and theories explored through academic study. Students must be admitted into the Coop program to be registered, and receive credit. Prerequisite: ENVR 3990 (128.399) (P).

ENVR 4980 Work Term 3 Cr.Hrs. 0

(Formerly 128.498) Work assignments in business, industry, research or government for students registered in the Honours or Major Cooperative program. This course is graded pass/fail. Prerequisite: ENVR 3990 (128.399)

(Lab Required) (Formerly 128.411) Topical issues and responses regarding the environment including conservation, management, and policy making are critically evaluated at local, national, and global scales. Term projects emphasizing applied work with environmental organizations and researchers are presented. Not to be held with (128.410 or 001.468). Prerequisites: ENVR 2000 (128.200) (C), and 72 credit hours of course work, or permission of department head.

ENVR 4180 Ecotoxicological Risk Characterization Cr.Hrs. 3

A biologically based, advanced course that will give students working knowledge of current processes and techniques for ecotoxicological risk characterization. The course material will cover the topics of problem definition, dose response characterization, exposure characterization, risk assessment, and risk management decision making. Prerequisite: ENVR 2180 (128.218) (C), or BIOL 2380 (BOTN 2180 or 001.218 or ZOOL 2180 or 022.218) (C), or AGRI 2180 (065.218) (C).

ENVR 4400 Advanced Issues in Environment and Health Cr.Hrs. 3

(Formerly 128.440) An evaluation of global and local environmental health issues and the assessment and management tools used to manage these risks. Case studies of environmental issues and their human health effects are covered. Students have the opportunity to work on a substantial interdisciplinary environmental health project. Not to be held with (128.422). Prerequisite: ENVR 3400 (128.340) (C).

ENVR 4500 Thesis Project in Environmental Science and Studies Cr.Hrs. 6

(Formerly 128.450) A research thesis project in any aspect of environmental science or environmental studies, chosen in consultation with the course coordinator and an appropriate supervisor, typically a faculty member. Written reports and oral presentation on the results of the thesis project will be required. The course is normally available only to final year students in the Environmental Science Honours or Environmental Studies Honours Program. Prerequisites: Permission of course coordinator, and a GPA of 3.00 in the last 30 credit hours.

ENVR 4550 Aquatic Chemistry Cr.Hrs. 3

(Formerly 128.455) An examination of biogeochemical processes affecting the distribution, speciation and bioavailability of chemical substances in the aquatic environment. The theoretical basis for the chemical behaviour of natural water systems is discussed, as well as the description of the processes involved in wastewater treatment. Not to be held with CHEM 4550

(P).

SECTION 8: DEPARTMENT OF GEOLOGICAL SCIENCES: BACHELOR OF SCIENCE IN GEOLOGICAL SCIENCES - GEOLOGY, GEOPHYSICS, AND GENERAL DEGREE REGULATIONS, PROGRAM DESCRIPTIONS AND COURSES OFFERED BY

Head: Mostafa Fayek

Campus Address & General Office: 240 Wallace Building

Telephone: (204) 474-9371

Fax: (204) 474-7623

Website: umanitoba.ca/geoscience

8.1 Academic Staff

Please refer to the Clayton H. Riddell Faculty of Environment, Earth, and Resources website at: umanitoba.ca/environment/about/academic_staff.html

8.2 Program Information

The Geological Sciences deal with the history of the Earth and its life, especially that which is recorded in rocks. Different component parts of the Earth system, the lithosphere, biosphere, atmosphere and hydrosphere, operate at different length and time scales. During interactions between the spheres there is feedback between the component parts as energy and mass are exchanged, transferred and redistributed. In a geological context, the feedback can occur on a global scale, or on very small scales such as that which we see in minerals. More recently humans have become a major force in this Earth system because we have intervened in many of these exchanges.

Considering the Earth's past, geoscientists typically work with long time scales (in the order of millions to billions of years). We also use Hutton's original philosophy of uniformitarianism, stated as the present is the key to the past, to solve geological problems. However, as we see changes at the Earth's surface (our environment) occurring on very short time scales we need to learn to extract the signal of human activity from the Earth's pre-human past. Once we understand and quantify the nature and extent of the Earth's natural evolution as well as our more recent environmental impact, geological sciences can help predict future changes to the Earth.

Geology and Geophysics are the sciences that provide the quantitative data on the physical and chemical behaviour and characteristics of Earth materials - rocks, minerals, fluids and gases. These data are needed to model the behaviour of minerals in nature as well as many industrial systems. The theoretical and instrumental expertise needed to tackle many resource extraction, mineral processing and environmental problems is resident in geological science departments. From a broad Earth, environmental and resource perspective our collective future will depend on sustainable use of our Earth's resources and care of the environment.

The three-year General program (comprising of 90 credit hours) in Geological Sciences is designed to give students a basic understanding of the discipline in combination with a concentration of courses in a second subject area. The General Program is not intended for those students who seek a career in the geosciences. Rather, it is a useful consideration for students planning to enter the Bachelor of Education program (see the Faculty of Education in this calendar) or other programs that require an undergraduate degree for admission. Students intending to pursue a career in the geosciences or graduate study should hold an Honours or Major degree (comprising at least 120 credit hours) in Geology or Geophysics.

Professional Registration

The professional practice of geoscience in Canada is governed by provincial/territorial law and is regulated by professional geoscience associations. In Manitoba, the Association of Professional Engineers and Geoscientists (APEGM) regulates professional practice. The requirements for professional registration are acceptable academic preparation and a subsequent period of acceptable geoscience experience. Students considering professional registration should take the B.Sc. Geological Sciences Honours or Major degree and make appropriate course selections, particularly in the basic sciences. Students should consult with the Department of Geological Sciences. Graduates who do not meet the academic requirements may be required by the professional association to take additional courses or examinations. Current registration information for APEGM is available in the department or from the association's web site: www.apegm.mb.ca

Geological Sciences Prerequisite Information

To fulfil prerequisite requirements, a grade of 'C' must be achieved in any course stipulated as a prerequisite to a further course in Geological Sciences.

8.3 Degree Regulations

8.3.1 B.Sc. in Geological Sciences (Major) Geology or Geophysics

To qualify for the degree, a student must complete a minimum of 120 credit hours with passing grades ('D' or better) in each course and with a minimum degree grade point average of 2.30 as indicated in the Graduation Requirements Table (see section 8.3.5). Students must complete all Faculty requirements as well as the University Written English and Mathematics requirement as described in the Chapter, General Academic Regulations, in this Calendar.

Students admitted to the Major program will normally have completed University 1 requirements, which include six credit hours of courses from the Faculty of Arts, six credit hours of courses from the Faculty of Science and six credit hours from either the Clayton H. Riddell Faculty of Environment, Earth, and Resources, the Faculty of Arts or the Faculty of Science. Students who do not meet this requirement while in University 1 must do so within the Major program.

Minor in Another Department

Students in the B.Sc. Geological Sciences have the opportunity to complete a Minor in a subject field that is different than that of the declared major, and which normally consist of 18 credit hours from a department offering this option at the University of Manitoba. Students in the B.Sc. Geological Sciences are not permitted to complete a Minor in Geological Sciences. The Minor requirements are described in section 3.2 of this Chapter. Contact the department and/or a [Riddell Faculty student advisor](#) in the Faculty Dean's Office for further information about eligible Minors.

Entrance to the Major

To enter a Major program in Geology or Geophysics, a student must have completed at least 24 credit hours with a minimum Degree Grade Point Average of 2.50 as stipulated in Entrance and Continuation Requirements Table (see section 8.3.4). In addition, the student must attain the minimum grade requirements specified for individual Year 1 courses according to the program tables for the Major in Geology (section 8.4) or the Major in Geophysics (see section 8.5). Students who do not obtain the entrance requirements for the Major program in their first year but who are interested in obtaining the Major degree should consult with the [department](#).

Continuation in the Major

A student's academic performance is assessed first with his/her application for admission to the Riddell Faculty and then following each term in which the student is registered. To be in good standing and permitted to continue in the degree program, a student must maintain a minimum degree Grade Point Average of 2.30 as stipulated in the Entrance and Continuation Requirements Table (section 8.3.4). Students who do not meet the minimum performance requirement will be required to withdraw from the Major program and will be placed in the General program provided their Degree Grade Point Average is 2.00 or above. Students will have the notation 'Required to Withdraw from the Major Program', recorded on their transcript.

If below 2.00, students will be placed on academic warning, probation or academic suspension as outlined in section 3.14 Academic Warning, Probation, Academic Suspension and Special Students (Academic Standing) in this Chapter.

Failed courses: A student is required to repeat those failed courses that are specified as required courses for the program. Students are subject to the University of Manitoba regulations (see General Academic Regulations, Academic Evaluation, 1.2 Repeating a Course as described in this Calendar) and the Riddell Faculty degree regulations regarding eligibility to repeat a course. Students who need to repeat a course more than once to fulfil degree requirements must contact a [Riddell Faculty student advisor](#) for approval prior to registration. Students cannot exceed 18 credit hours of failed courses (F's) as calculated on courses applicable to the degree program (DGPA).

Repeating GEOL 4920 Technical Report: Lower priority for entry will be given to students repeating GEOL 4920 after a VW or after a grade has been assigned. The course may be repeated only once after a grade of F.

Program approval

The department head (or designate) and a [Riddell Faculty student advisor](#) in the Faculty Dean's Office must approve a student's Major program each term. Students must also obtain departmental approval for all revisions to their programs. For departmental approval, please contact [Brenda Miller](#). The [Advanced/Major/Honours Program Approval](#) forms are available on the Riddell Faculty web page. (umanitoba.ca/environment/undergraduate)

Graduation in the Major

In order to graduate from the Geology or Geophysics Major, students must complete all degree program and faculty requirements as stipulated in section 3 and section 8 of this Chapter. Students must also achieve the minimum performance requirements as outlined in the Graduation Requirements Table (see section 8.3.5). This is defined as a minimum Degree Grade Point Average of 2.30 on 120 or 121 credit hours which constitute the degree.

Residence Requirement for Major Students

A student must successfully complete a minimum of 60 credit hours at the University of Manitoba. The courses used to satisfy the requirement must be acceptable for credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources. Residence requirements apply both to first and second-degree students.

Recognition of Academic Merit

Degree with Distinction

To obtain a degree with distinction a student must achieve a minimum 3.50 Degree Grade Point Average on all courses constituting the Major degree. The term 'Degree with Distinction' will appear both on the parchment and on the student's transcript.

8.3.2 B.Sc. in Geological Sciences (Honours) Geology or Geophysics

The Honours programs are the most heavily concentrated programs offered and lead most directly to graduate studies. A student is required to achieve higher grade standards than in the Major degree program. The Honours degree may be pursued on a part-time basis, although it must be recognized that students will require additional terms to complete degree requirements. Students must complete the degree program within 8 years of gaining initial admission to the Honours program. Failure to complete the Honours degree within the 8-year time limit may require a student to transfer into the Major program.

A student will normally begin the Honours program in second year and must meet the entrance requirements set out below. Students in full-time study can expect to complete the prescribed courses in four years. Honours programs lead to either the B.Sc. Geological Sciences (Hons.) (Geology) or the B.Sc. Geological Sciences (Hons.)(Geophysics).

To be eligible for any award granted exclusively on the basis of academic performance, a student must normally be enrolled in a full-time program as defined by the department.

Students must complete the University Written English and Mathematics requirement as described in the chapter, General Academic Regulations, of this Calendar.

Entrance to Honours

To enter the Honours program in Geology or Geophysics, a student must have completed at least 24 credit hours with the minimum Degree Grade Point Average as stipulated in the Entrance and Continuation Requirements Table (section 8.3.4). In addition, the student must attain the minimum grade requirements specified for individual Year 1 courses according to the program tables for Honours Geology (section 8.4) or Honours Geophysics (section 8.5). Students who are ineligible to enter Honours with their admission to the Riddell Faculty may establish eligibility the following year on the basis of their second year of academic performance.

To enter the Honours degree program, a student must complete a program approval form available in the department general office and have it approved by the department head, or designate, and a [Riddell Faculty student advisor](#) in the Faculty Dean's Office.

Continuation in Honours

A student's academic performance is assessed first with his/her application for admission to the Riddell Faculty and then following each term in which the student is registered. To be in good standing and permitted to continue in the degree program, a student must maintain the performance requirement as stipulated in the Entrance and Continuation Requirements Table (section 8.3.4). Students who do not meet the minimum performance requirements will be placed on academic warning, probation or academic suspension as outlined in section 3.14 Academic Warning, Probation, Academic Suspension and Special Students (Academic Standing) in this Chapter. Students who do not maintain this minimum average to remain in the program will be required to withdraw from the Honours program and, if eligible, will be placed in the Major program. Students will have the notation 'Required to Withdraw from the Honours Program' recorded on their transcript.

Failed courses: A student is required to repeat those failed courses that are specified as required courses for the program. Students are subject to the University of Manitoba regulations (see General Academic Regulations, Academic Evaluation, 1.2 Repeating a Course as described in this Calendar) and the Riddell Faculty degree regulations regarding eligibility to repeat a course. Students who need to repeat a course more than once to fulfil degree requirements must contact a [Riddell Faculty student advisor](#) for approval prior to registration. Students cannot exceed 18 credit hours of failed courses (F's) as calculated on courses applicable to the degree program (DGPA).

Repeating GEOL 4870 Honours Thesis: Lower priority for entry will be given to students repeating GEOL 4870 after a VW or after a grade has been assigned. The course may be repeated only once after a grade of F.

Program Approval

The department head (or designate) and a [Riddell Faculty student advisor](#) in the Faculty Dean's Office must approve a student's Major program each term. Students must also obtain departmental approval for all revisions to their programs. For departmental approval, please contact [Brenda Miller](#). The [Advanced/Major/Honours Program Approval](#) forms are available on the Riddell Faculty web page. (umanitoba.ca/environment/undergraduate)

Residence Requirement for Honours Students

A student must successfully complete a minimum of 60 credit hours at the University of Manitoba. The courses used to satisfy the requirement must be acceptable for credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources. Residence requirements apply both to first and second-degree students.

Graduation from Honours

In order to graduate from the Honours Geology and Geophysics programs, students must complete all degree program and faculty requirements as stipulated in section 3 and section 8 of this Chapter. Students must also achieve the minimum performance requirements as outlined in the Graduation Requirements Table (see section 8.3.5). This is defined for the Honours Geology program as a minimum Degree Grade Point Average of 3.00 on 120 credit hours which constitute the degree and for Honours Geophysics as a minimum Degree Grade Point Average of 2.80 on the 120 (121) credit hours which constitute the degree.

Recognition of Academic Merit

First Class Honours

To graduate with First Class Honours, a student must achieve a Degree Grade Point Average of 3.50. The term 'First Class Honours' will appear both on the parchment and on the student's transcript of marks.

Honours Program Notes:

Double Honours Programs

Double Honours programs may be available. The program must be arranged in consultation with the departments concerned.

Honours Requirements and Options

Students who do not obtain the entrance requirements for the Honours program in their first year but who are interested in obtaining an Honours degree should consult with the department before registering for their second year.

ACADEMIC CALENDAR 2015-2016

Honours Geology Options

For students who wish to increase the focus of their knowledge, recommended electives are listed below:

Environmental Geoscience: **BIOL 2300 (or AGE 2370), CIVL 4250, SOIL 4060, SOIL 4130, SOIL 4500, GEOL 4370, GEOG 3390, ENVR 2180 (BIOL 2380 or AGRI 2180), ENVR 3110, ENVR 3250**, or others approved by the department. (Students are responsible for completion of prerequisites for these courses.)

Honours Geophysics Option

Students who wish to enter the Honours Geophysics Option and have not taken 6 credit hours of introductory Geological Sciences (eg., **GEOL 1340 and one of GEOL 1400, GEOL 1410, or GEOL 1420**) may arrange with the department to make up this credit. Students must contact the department during the spring preceding entrance to the Honours program. All course choices in the Honours program should be made after consultation with the coordinator of the Geophysics program.

8.3.3 B.Sc. in Geological Sciences (General)

Degree Program Structure

A Geological Sciences component consisting of a minimum of 30 credit hours.

A Minor of 18 credit hours (minimum) in a different department or an interdisciplinary program. e.g. in the Clayton H. Riddell Faculty of Environment, Earth, and Resources, or the Faculty of Arts, or the Faculty of Science. The Minor requirements are described in section 3.2 of this Chapter. Contact the department and/or a Riddell Faculty

[student advisor](#) in the Faculty Dean's Office for further information about eligible Minors.

Students will normally complete the Faculty of Arts and Faculty of Science courses requirements, which include 6 credit hours from the Faculty of Arts, 6 credit hours from the Faculty of Science. Students who have not met these requirements in their first year must meet the requirements prior to graduation.

Entrance to the General

To be admitted to the General program, a student must have completed at least 24 credit hours with a minimum Cumulative Grade Point Average of 2.00. In addition, a student must have completed GEOL 1340 with the grade of 'C'. Refer to Section 8.6 for further program requirements.

Continuation in the General

A student's academic performance is assessed first with his/her application for admission to the Riddell Faculty and then following each term in which the student is registered. To be in good standing and permitted to continue in the degree program, a student must maintain a minimum Degree Grade Point Average of 2.00 as stipulated in the Entrance and Continuation Requirements Table (section 8.3.4). Students who do not meet the minimum performance requirement will be placed on academic warning, probation or academic suspension as outlined in section 3.14 Academic Warning, Probation, Academic Suspension and Special Students (Academic Standing) in this Chapter.

Failed courses: A student is required to repeat those failed courses that are specified as required courses for the program. Students are subject to the University of Manitoba regulations (see General Academic Regulations, Academic Evaluations, 1.2 Repeating a Course as described in this Calendar) and the Riddell Faculty degree regulations regarding eligibility to repeat a course. Students who need to repeat a course more than once to fulfil degree requirements must contact a [Riddell Faculty student advisor](#) for approval prior to registration. Students cannot exceed 30 credit hours of failed courses (F's) as calculated on courses applicable to the degree program (DGPA).

Graduation in the General

To qualify for the degree, students must complete 90 credit hours, inclusive of Geological Sciences courses, a minor in a second department or program, and any University 1 requirements. Minimum performance requirements include passing grades ("D" or better) in each course, a minimum degree grade point average of 2.00 in Geological Sciences courses, and an overall degree grade point average of 2.00 on the 90 credit hours which constitute the degree. Note: Where a Geological Sciences course listed in the calendar has required prerequisites, a student must hold a minimum grade of "C" in each prerequisite course.

Residence Requirement for General Students

Students must complete a total of 48 credit hours at the University of Manitoba, or they must complete their final 30 credit hours at the University of Manitoba in order to satisfy the residency requirement. The courses used to satisfy the requirement must be acceptable for credit in the Clayton H. Riddell Faculty of Environment, Earth, and Resources.

Recognition of Academic Merit

Degree with Distinction

To obtain a degree with distinction, a student must achieve a minimum 3.50 Degree Grade Point Average on all courses constituting the General degree. The term 'Degree with Distinction' will appear both on the parchment and on the student's transcript.

8.3.4 Geological Sciences Advanced Entry Entrance and Continuation Requirements		
Degree Program	Minimum Degree Grade Point Average	
	Entrance	Continuation
Major (Geology)	2.50 ¹	2.30 ¹
Major (Geophysics)	2.50 ¹	2.30 ¹
Honours (Geology)	3.00 ¹	3.00 ¹
Honours (Geophysics)	2.80 ¹	2.80 ¹
General (Geological Sciences)	2.00 ¹	2.00 ¹

Notes:

¹In addition to the minimum degree grade point average noted in this chart, specific courses (with minimum grades) are required for entry and these are noted in the program chart for each program.

8.3.5 Geological Sciences Graduation Requirements	
Degree Program	Minimum Degree Grade Point Average
Major (Geology) (120)	2.30
Major (Geophysics) (120)	2.30
Honours (Geology) (120)	3.00
Honours (Geophysics) (120)	2.80
General (Geological Sciences) (90)	2.00

8.4 B.Sc. Geological Sciences (Geology) Program Chart

8.4 B.Sc. Geological Sciences (Geology) ¹			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
HONOURS GEOLOGY 120 CREDIT HOURS			
GEOL 1340 ⁶ (B) and one of GEOL 1400, GEOL 1410, or GEOL 1420 6 credit hours from the Faculty of Arts	GEOL 2440, GEOL 2500, GEOL 2520, GEOL 2530, GEOL 2800, GEOL 2770, GEOL 3910 ⁵	GEOL 2060, GEOL 3110, GEOL 3130, GEOL 3310, GEOL 3440, GEOL 3490, GEOL 3900, GEOL 4910 ⁵ 6 credit hours of Geological Sciences Electives from Lists A and B ⁴	GEOL 4670, GEOL 4870 12 credit hours of Geological Sciences Electives from Lists A and B ⁴ not yet taken. Enough elective credit to total 120 credit hours for the program.
CHEM 1300, PHYS 1020 ² , and MATH 1500 ³ must be completed within the first 60 credit hours of course work. It is recommended that students complete the W course within the first 60 credit hours of course work.			
MAJOR GEOLOGY 120 CREDIT HOURS			
GEOL 1340 ⁶ (C+) and one of GEOL 1400, GEOL 1410, or GEOL 1420 6 credit hours from the Faculty of Arts	GEOL 2440, GEOL 2500, GEOL 2520, GEOL 2530, GEOL 2800, GEOL 2770, GEOL 3910 ⁵	GEOL 2060, GEOL 3110, GEOL 3130, GEOL 3310, GEOL 3440, GEOL 3490, GEOL 3900, GEOL 4910 ⁵	GEOL 4670, GEOL 4920 15 credit hours of Geological Sciences Electives from Lists A and B ⁴ not yet taken Enough elective credit to total 120 credit hours for the program.
CHEM 1300, PHYS 1020 ² , and MATH 1500 ³ must be completed within the first 60 credit hours of course work. It is recommended that students complete the W course within the first 60 credit hours of course work.			

Notes:

¹The courses required in this program will satisfy the [University Mathematics requirement](#).

²PHYS 1050 may be used in lieu of PHYS 1020.

³MATH 1510 or MATH 1520 may be used in lieu of MATH 1500.

⁴Among the Geological Sciences Electives, all students must complete at least 9 credit hours from List A. In addition, Honours students must complete 9 credit hours from List B or courses from List A not yet completed; Major students must complete at least 6 credit hours from List B or courses from List A not yet completed. NOTE: With departmental approval, students may substitute 6 credit hours of 2000-level or higher courses from other departments in order to satisfy professional registration requirements. See Other Note 1 below.

⁵Students will register for GEOL 3910 and GEOL 4910 in Summer term. NOTE: Students should be aware that they are expected to contribute to transportation and accommodation costs. See the department office at the beginning of each year for information.

⁶Students who have GEOL 1440 (007.144) or the former 007.124 should consult with the department. At the discretion of the department, GEOL 1440 (007.144) or 007.124 may be permitted in lieu of GEOL 1340 for entry.

IMPORTANT: The Honours and Major programs need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program. (Letters in brackets indicate the minimum prerequisite standing in a specific course required for entry to the program).

One of GEOL 1400, GEOL 1410, or GEOL 1420 is highly recommended to be taken in Year 1, but will not be considered when assessing entrance requirements to the program. If this requirement is not fulfilled in Year 1, it must be completed by the end of Year 2.

NOTE:

- To fulfil prerequisite requirements, a grade of 'C' must be achieved in any course stipulated as prerequisite to a further course in Geological Sciences.
- All courses are not offered every year. The course schedule for the current academic term is available from the [Class Schedule](#).
- Students registering in certain courses may be required to pay a portion of the costs associated with field trips. For details, contact the [department general office](#).
- Equivalent courses offered through Université de Saint Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number '1' (e.g. CHEM 1301).

Other Note 1: Geological Sciences - Geology Electives Lists A and B

List A Electives: Honours and Major students must complete a minimum of 9 credit hours from the following courses:

GEOL 2390	Environmental Geology (3)
GEOL 4280	Instrumental Techniques In Geology (3)L
GEOL 4300	Mineral Deposits (3)L
GEOL 4520	Petroleum Geology (3)L
GEOL 4890	Basin Analysis (3)L

List B Electives: Honours students are required to complete a minimum of 9 credit hours; Major students must complete a minimum of 6 credit hours from the following courses:

GEOL 3140	Gemology (3)L
GEOL 3420	Engineering Geology (3)
GEOL 3450	Hydrogeology (3) L
GEOL 3740	Exploration Seismology (3)L
GEOL 3750	Geology and Geophysics of the Planets (3)L
GEOL 3810	Applied Geophysics (3)L
GEOL 4260	Applied Geophysics Field Course (3)
GEOL 4270	Advanced Studies in Earth Sciences (3)
GEOL 4310	Paleontologic Principles (3)L
GEOL 4360	Mineral Exploration Techniques (3) L
GEOL 4370	Global Change (3)
GEOL 4380	Mineral Resource Development (3)
GEOL 4740	Geophysics Field School (6)
GEOG 3730	Geographic Information Systems (3)L

and/or up to 6 credit hours of additional courses not yet completed from List A.

NOTE: With departmental approval, up to 6 credit hours of 2000-level or higher courses from other departments may be substituted for courses in List B in order to satisfy professional registration (APEGM) requirements.

8.5 B.Sc. Geological Sciences (Geophysics) Program Chart

8.5 B.Sc. Geological Sciences (Geophysics) ⁵			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
HONOURS GEOPHYSICS 121 CREDIT HOURS			
GEOL 1340 ⁶ (B) and one of: GEOL 1400, GEOL 1410, or GEOL 1420 PHYS 1050(B) [or PHYS 1020(B+)], PHYS 1070(B), MATH 1210 ¹ , MATH 1510 ¹ (B), and MATH 1710 ¹ (B) [or MATH 1500(B) and MATH 1700(B)1] Plus 6 credit hours from the Faculty of Arts, which should include the required 'W' course	GEOL 2060, GEOL 2440, GEOL 2520, GEOL 2530, GEOL 2540 PHYS 2390, PHYS 2490, MATH 2130 ² , MATH 2132 ² , COMP 1010	GEOL 3130, GEOL 3740, GEOL 3810, GEOL 4670, GEOL 4740 ⁴ , GEOL 4810, GEOL 4870, CHEM 1300, PHYS 2600, MATH 2120 ³ , 9 credit hours of Geological Sciences Geophysics Electives from List A, 6 credit hours of Geological Sciences Geophysics Electives from List P and 6 credit hours of Geological Sciences Geophysics Electives from List B. Enough elective credit to total 121 credit hours for the program.	
MAJOR GEOPHYSICS 121 CREDIT HOURS			
GEOL 1340 ⁶ (C+) and one of: GEOL 1400, GEOL 1410, or GEOL 1420 PHYS 1050(C+) [or PHYS 1020(B)], PHYS 1070(C), MATH 1210 ¹ , MATH 1510 ¹ (C+), and MATH 1710 ¹ (C) [or MATH 1500(C+) and MATH 1700(C)1] 6 credit hours from the Faculty of Arts, which should include the required 'W' course	GEOL 2060, GEOL 2440, GEOL 2520, GEOL 2530, GEOL 2540 PHYS 2390, PHYS 2490, MATH 2130 ² , MATH 2132 ² , COMP 1010	GEOL 3130, GEOL 3740, GEOL 3810, GEOL 4670, GEOL 4810, GEOL 4920, CHEM 1300, PHYS 2600, MATH 2120 ³ , GEOL 4740 ⁴ 6 credit hours of Geological Sciences Geophysics Electives from List A, 3 credit hours of Geological Sciences Geophysics Electives from List P and 6 credit hours of Geological Sciences Geophysics Electives from List B. Enough elective credit to total 121 credit hours for the program.	
<p>NOTES:</p> <p>¹MATH 1690 may be taken in place of MATH 1500 (or MATH 1510) and MATH 1700 (or MATH 1710); MATH 1300 may be taken in place of MATH 1210. Selection of MATH 1300 or MATH 1210 will determine the prerequisite background for Mathematics courses required in years 2, 3 and 4.</p> <p>²MATH 2720 and MATH 2730 may be taken in place of MATH 2130 and MATH 2132. Students should note that MATH 1300 is a prerequisite to MATH 2720 and a corequisite to MATH 2730.</p> <p>³MATH 2600 may be taken in place of MATH 2120</p> <p>⁴GEOL 4740 will normally be taken immediately following the spring examinations on or about May 1 and will continue for approximately three weeks. Registration will show as Summer Term. NOTE: Students are expected to contribute to the costs of transportation, lodging, and food. Contact the Department for further information.</p> <p>⁵The courses required in this program satisfy the University Mathematics Requirement.</p> <p>⁶Students who have GEOL 1440 (007.144) or the former 007.124 should consult with the department. At the discretion of the department, GEOL 1440 (007.144) or 007.124 may be permitted in lieu of GEOL 1340 for entry.</p> <p>One of GEOL 1400, GEOL 1410, or GEOL 1420 is highly recommended to be taken in Year 1, but will not be considered when assessing advanced entry entrance requirements to the program. If this requirement is not fulfilled in Year 1, it must be completed by the end of Year 2.</p> <p>IMPORTANT: The Honours and Major programs need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program. (Letters in brackets indicate the minimum prerequisite standing required for further study)</p> <p>NOTE:</p> <ul style="list-style-type: none"> To fulfil prerequisite requirements, a grade of 'C' must be achieved in any course stipulated as prerequisite to a further course in Geological Sciences. All courses are not offered every year. The course schedule for the current academic term is available from the Class Schedule Students registering in certain courses may be required to pay a portion of the costs associated with field trips. For details, contact the department general office. Equivalent courses offered through Université de Saint- Boniface may be used in lieu of the specified courses identified in the degree program chart. <u>Université de Saint-Boniface courses end in the number '1' (e.g. PHYS 1051).</u> 			

ACADEMIC CALENDAR 2015-2016

Other Note 1: Geological Sciences - Geophysics Electives Lists A, B and P

List A Electives: Honours students are required to complete a minimum of 9 credit hours; Major students must complete a minimum of 6 credit hours from the following courses:	
GEOL 4250	Theory and Application of Geophysical Inversion Methods (3)L
GEOL 4320	Physics of the Earth: Seismology and Heat Flow (3)
GEOL 4330	Physics of the Earth: Geomagnetism and Gravity (3)
List B Electives: Honours students are required to complete a minimum of 6 credit hours; Major students must complete a minimum of 6 credit hours from the following courses:	
GEOL 2390	Environmental Geology (3)
GEOL 2770	Principles of Inorganic Geochemistry (3)L
GEOL 3110	Petrogenesis of Igneous Rocks (3)L
GEOL 3420	Engineering Geology (3)
GEOL 3440	Structure and Metamorphism (3)L
GEOL 3450	Hydrogeology (3)L
GEOL 3490	Glacial Geology and Geomorphology (3)L
GEOL 3750	Geology and Geophysics of the Planets (3)L
GEOL 3900	Sedimentology (3)L
GEOL 3910	Introduction to Field Mapping (3)
GEOL 4270	Advanced Studies in Earth Sciences (3)
GEOL 4300	Mineral Deposits (3)L
GEOL 4360	Mineral Exploration Techniques (3)L
GEOL 4370	Global Change (3)
GEOL 4380	Mineral Resource Development (3)
GEOL 4520	Petroleum Geology (3)L
GEOL 4890	Basin Analysis (3)L
GEOL 4910	Advanced Field Mapping (3)
GEOG 3730	Geographic Information Systems (3)L
Any List A or P not already taken, or any advanced level Geological Sciences, Physics or Mathematics course(s) approved by department.	
List P Electives: Honours students are required to complete a minimum of 6 credit hours; Major students must complete a minimum of 3 credit hours from the following courses:	
CHEM 2290	Chemical Energetics and Dynamics: Macroscopic Descriptions (3)L
MECH 2260	Introduction to Fluid Mechanics (3)L
PHYS 2610	Circuit Theory and Introductory Electronics (3)L
PHYS 2650	Classical Mechanics 1 (3)
PHYS 3630	Electro - and Magnetostatic Theory (3)
PHYS 3670	Classical Thermodynamics (3)
Or alternate physical science course(s) approved by department.	

8.6 B.Sc. Geological Sciences (General) Program Chart

8.6 B.Sc. Geological Sciences (General)		
YEAR 1	YEAR 2	YEAR 3
GENERAL 90 CREDIT HOURS		
GEOL 1340 ¹ (C) plus one of GEOL 1400, GEOL 1410, or GEOL 1420 A minimum grade of 'C' on 6 credit hours from a second department or program for a minor ³ Meet the Faculty of Arts and Faculty of Sciences courses requirement ⁵	GEOL 2540 ² plus a further 21 credit hours in Geological Sciences courses numbered at the 2000-level or above A further 12 credit hours for the minor ⁴ Enough elective credit to total 90 credit hours for the program.	
It is recommended that students complete the M and W course requirements within the first 60 credit hours of course work.		
MINOR GEOLOGICAL SCIENCES 18 CREDIT HOURS		
GEOL 1340 and one of GEOL 1400, GEOL 1410, or GEOL 1420	Plus 12 credit hours chosen from 2000- and 3000-level courses	
Notes: ¹ Students who have GEOL 1440 (007.144) or the former 007.124 should consult with the department. At the discretion of the department, GEOL 1440 (007.144) or 007.124 may be permitted in lieu of GEOL 1340 for advanced entry. One of GEOL 1400, GEOL 1410, or GEOL 1420 is highly recommended to be taken in Year 1, but will not be considered when assessing advanced entry entrance requirements to the program. If this requirement is not fulfilled in Year 1, it must be completed by the end of Year 2. ² GEOL 2500 may be used in lieu of GEOL 2540. Manitoba 40S Chemistry, CHEM 0090 or equivalent is a prerequisite for GEOL 2540 and GEOL 2500. CHEM 1300 is highly recommended and should be taken in Year 1. ³ Students should determine their minor prior to the end of the Year 2 of the program. ⁴ A minor will normally correspond to a Minor as outlined in a program chart for a specific department or program, e.g. refer to program charts for departments in the Clayton H. Riddell Faculty of Environment, Earth, and Resources, or in the Faculty of Arts, or in the Faculty of Science ⁵ Any requirements not met in Year 1 must be completed before graduation. NOTE: <ul style="list-style-type: none"> • To fulfil prerequisite requirements, a grade of 'C' must be achieved in any course stipulated as prerequisite to a further course in Geological Sciences. • All courses are not offered every year. The course schedule for the current academic term is available from the Class Schedule • Students registering in certain courses may be required to pay a portion of the costs associated with field trips. For details, contact the department general office. Equivalent courses offered through Université de Saint-Boniface may be used in lieu of the specified courses identified in the degree program chart. Université de Saint-Boniface courses end in the number '1' (e.g. GEOG 1281).		

8.7 Environment, Earth, and Resources Course Description

EER 1000 Earth: A User's Guide Cr.Hrs. 3

This course will present a multi-disciplinary introduction to the Planet Earth as both the source of essential resources and as the site of resulting negative impacts. Focus in the course will be provided by addressing important and current topics, case studies, and concepts that the well-educated citizen of the Earth should understand and will include natural and human-induced processes within a broad range of spatial and temporal scales.

8.8 Geological Sciences Course Descriptions

Geological Sciences Course Descriptions-1000 Level

GEOL 1340 The Dynamic Earth Cr.Hrs. 3

(Lab Required) (Formerly 007.134) An introduction to dynamics of the Earth's interior and surface that created the environment in which life evolved and that continue to change the world in which people now live. Taught with GEOL 2250. Not to be held with (GEOL 1440 or 007.144) or GEOL 2250 (007.225) or (007.123) or (007.124). Recommended for students intending to proceed in further courses in the Geological Sciences.

GEOL 1400 Time-Trekker's Travelog: Our Evolving Earth Cr.Hrs. 3

Take a trip across billions of years, as we explore awesome times in the evolution of our planet and its life -- from dust to us! Not to be held with (GEOL 1350 or 007.135 or 007.123).

GEOL 1410 Natural Disasters and Global Change Cr.Hrs. 3

Discover how and when natural disasters occur, and how to identify and recognize them. Explore the Earth processes that lead to natural disasters and global change. Not to be held with (GEOL 1360 or 007.136).

GEOL 1420 Exploring the Planets Cr.Hrs. 3

Discover the Solar System as we explore ancient ideas and modern concepts. Emphasis will be on recent space exploration and a comparison of the Earth and its neighbours. Not to be held with (GEOL 1370 or 007.137 or 007.124).

Geological Sciences Course Descriptions-2000 Level

GEOL 2060 Introductory Geophysics Cr.Hrs. 3

(Lab Required) (Formerly 007.206) An introduction to geophysical exploration, Earth physics, satellite geophysics and remote sensing. Emphasis will be on quantitative modeling and will include geophysical measurements and handling of data. Prerequisites: [GEOL 1340 or (007.134), or (GEOL 1440 or 007.144), or (007.123), or (007.124) (C)], and [MATH 1300 (136.130), or MATH 1310 (136.131), or MATH 1500 (136.150), or MATH 1510 (136.151), or MATH 1520 (136.152), or MATH 1530 (136.153) (C)], and [PHYS 1020 (016.102), or PHYS 1050 (016.105) (C)], or permission of department head.

GEOL 2250 Geology for Engineers Cr.Hrs. 4

(Lab Required) (Formerly 007.225) Principles of physical geology; materials in processes in geology; classification of igneous, metamorphic, and sedimentary rocks; elementary geological and geophysical surveying techniques; geological hazards, volcanism, earthquakes, landsliding, processes of weathering, transportation and geomorphology. For Engineering students only. Not to be held with GEOL 1340 (007.134), or (GEOL 1440 or 007.144), or (007.123), or (007.124).

GEOL 2390 Environmental Geology Cr.Hrs. 3

(Formerly 007.239) Examination of geological processes and material as they interact with human activities, environmental planning, and management. Also available by correspondence. Prerequisite: university geology or GEOG 1290 or GEOG 1291 (053.129) (C), or (GEOG 1200) or GEOG 1201 (053.120) (C), or permission of department head.

GEOL 2440 Structural Geology 1 Cr.Hrs. 3

(Lab Required) (Formerly 007.244) Elementary mechanical principles of rock deformation, brittle and continuous deformation, geometry of faults, folds, joints, cleavage, lineations. Descriptive geometric and stereonet solution to structural geology problems, cross sections, structural contour maps. Prerequisite: GEOL 1340 (007.134) (C), or (GEOL 1440 or 007.144) (C), or (007.123) (C), or (007.124) (C).

GEOL 2500 Introduction to Mineralogy Cr.Hrs. 3

(Lab Required) (Formerly 007.250) An introduction to the chemistry, physics and classification of minerals. Brief, systematic description of about 200 of the most important minerals. Laboratory: hand specimen identification. For Major and Honours Geology students only. Entry to other students would be after consultation with the department and by permission. Not to be held with GEOL 2540 or (007.207) or (007.262). Prerequisites: (40S Chemistry or CHEM 0900 (002.090) (Pass)), and (GEOL 1340 (007.134) (C), or (GEOL 1440 or 007.144) (C), or (007.123) (C), or (007.124) (C), or (007.132) (C), or (007.133) (C)), or permission of department head. CHEM 1300 (002.130) is highly recommended. This course is intended for Major or Honours Geology students.

GEOL 2520 Igneous and Metamorphic Petrology Cr.Hrs. 3

(Lab Required) (Formerly 007.252) The classification, occurrence and origin of igneous and metamorphic rocks. The study and identification of rocks using hand specimens and thin sections. Prerequisites: (GEOL 2500 (007.250) (C) and GEOL 2800 (C), or (007.260) (C)), or GEOL 2540 (C).

GEOL 2530 Introductory Sedimentary Petrology and Stratigraphy Cr. Hrs. 3

(Lab Required) (Formerly 007.253) An introduction to sedimentary deposits and principles of stratigraphic analysis. Occurrence, classification and origin of sedimentary deposits. Facies concept, stratigraphic classification and correlation. Prerequisites: (GEOL 2500 (007.250) (C) and GEOL 2800 (C), or (007.260) (C)), or GEOL 2540 (C).

GEOL 2540 Introductory Mineralogy with Essential of Mineral Optics Cr. Hrs. 3

(Lab Required) An introduction to the chemical composition, crystal structure, physical and optical properties of the most common minerals. Discussion of the occurrence of minerals in nature. Laboratory: Identification of minerals in hand specimens and thin sections. Not intended for students in Major or Honours Geology programs. Not to be held with GEOL 2500 (007.250). Prerequisites: (40S Chemistry or CHEM 0900 (002.090) (Pass) or equivalent), and (GEOL 1340 (007.134) (C), or (GEOL 1440 or 007.144) (C), or (007.123) (C), or (007.124) (C)), or permission of department head. CHEM 1300 (002.130) is highly recommended.

GEOL 2570 Energy and Mineral Resources Cr.Hrs. 3

(Formerly 007.257) An introduction to the geological factors and processes responsible for the origin, concentration and distribution of fuels, geothermal resources, metallic and nonmetallic minerals. Available by correspondence only. Not for credit in a Major or Honours program in Geological Sciences. Prerequisite: Any university-level Geology course, or permission of department head.

GEOL 2770 Principles of Inorganic Geochemistry Cr.Hrs. 3

(Lab Required) (Formerly 007.277) The cosmic abundance of the elements, nucleosynthesis, geological differentiation of the elements; chemical petrology of igneous, metamorphic and sedimentary rocks. An introduction to aqueous and low-temperature geochemistry. Prerequisite: GEOL 2500 (007.250) (C), or GEOL 2540 (C). Prerequisite or Concurrent Requirement: CHEM 1300 (002.130).

GEOL 2800 Optics and Spectroscopy of Minerals Cr.Hrs. 3

(Lab Required) Use of the petrographic microscope; microscopic recognition of common rock-forming minerals; introduction to spectroscopic techniques in geosciences (including optical, vibrational and luminescence techniques). Not to be held with (007.260). Prerequisite or Corequisite: GEOL 2500 (007.250) (C), or permission of department head.

Geological Sciences Course Descriptions-3000 Level**GEOL 3110 Petrogenesis of Igneous Rocks Cr.Hrs. 3**

(Lab Required) (Formerly 007.311) Crystallization processes in magma and resultant textures; physical, chemical, and kinetic processes of magmatic systems. Prerequisites: (GEOL 2520 (007.252) (C)), and (GEOL 2770 (007.277) (C)).

GEOL 3130 Communication Methods in the Geological Sciences Cr. Hrs. 3

(Lab Required) (Formerly 007.313) Practice in oral and written description of geologic subjects; tools of library and database research; manuscript organization; abstract writing; computer-aided table, figure, and slide preparation. Prerequisites: (GEOL 2500 (007.250) (C)), and (GEOL 2440 (007.244) (C)). This course is for students in the Honours and Major Geological Sciences programs only.

GEOL 3140 Gemology Cr.Hrs. 3

(Lab Required) (Formerly 007.314) An introduction to the scientific study of natural and synthetic gem materials, methods of their identification and principles of gemstone appraisals. Laboratory: identification of gemstones using optical methods. Prerequisites: (GEOL 2500 (007.250) (C)), and (GEOL 2800 (C), or (007.260) (C), or GEOL 2540 (C)).

GEOL 3310 Paleontology Cr.Hrs. 3

(Lab Required) (Formerly 007.331) The study of fossils: invertebrate paleontology, with an introduction to paleontologic principles, vertebrate paleontology, and paleobotany. Prerequisite: GEOL 1340 (007.134) (C), or (GEOL 1440 or 007.144) (C), or (007.123) (C), or (007.124) (C), or permission of department head.

GEOL 3420 Engineering Geology Cr.Hrs. 3

(Formerly 007.342) Engineering properties of rocks, laboratory testing and site investigations in engineering geology. Rocks as construction materials, engineering geology of tunnels, bridges, dams, reservoirs, shorelines, sanitary landfills, landslides, seismic risk areas, etc. Prerequisites: (GEOL 2440 (007.244) (C)), and (GEOL 2520 (007.252) (C)), and (GEOL 2530 (007.253) (C)).

GEOL 3440 Structure and Metamorphism Cr.Hrs. 3

(Lab Required) Structural and metamorphic geology, links between deformation and metamorphism, and the application of pressure-temperature and time paths to study metamorphic equilibria. Not to be held with (GEOL 3290 or 007.329). Prerequisites: GEOL 2440, and GEOL 2520, and GEOL 3910, or permission of department head.

GEOL 3450 Hydrogeology Cr.Hrs. 3

(Lab required) The hydrologic cycle and basic hydrologic processes; properties of aquifers and principles of groundwater flow; well hydraulics and groundwater resource evaluation; regional groundwater flow and subsurface geology; and basic chemical hydrogeology. Not to be held with CIVL 4250. Prerequisites: (MATH 1500 or MATH 1510 (C)), and (PHYS 1020 or PHYS 1050 (C)), and CHEM 1300 (C), and (GEOL 2060 or GEOG 2310 (C)), and GEOL 2530 (C).

GEOL 3490 Glacial Geology and Geomorphology Cr.Hrs. 3

(Lab Required) (Formerly 007.349) Principles of landform development with emphasis on glacial deposition. Aerial photo and map interpretation in lab. Not to be held with GEOG 3580 (053.358). Prerequisite: GEOL 2530 (007.253) (C).

GEOL 3740 Exploration Seismology Cr.Hrs. 3

(Lab Required) (Formerly 007.374) Collection of seismic data (land and sea); simple elastic wave theory; geometry of refraction and reflection seismology; rock velocity determination; seismic noise and signal; data corrections; data enhancement techniques; representation of data; survey procedures. Prerequisites: (GEOL 2060 (007.206) (C)), and (MATH 1500 (136.150) (C), or MATH 1510 (136.151) (C), or MATH 1520 (136.152) (C), or MATH 1530 (136.153) (C), or MATH 1690 (136.169) (C)).

GEOL 3750 Geology and Geophysics of the Planets Cr.Hrs. 3

(Lab Required) (Formerly 007.375) Physical and chemical nature of the inner and outer planets and their satellites, asteroids and meteorites. The application of geophysical, geochemical and petrological techniques to planetology; remote sensing study of geological features of planetary surfaces and atmospheres. Prerequisite: GEOL 2060 (007.206) (C), or permission of department head.

GEOL 3810 Applied Geophysics Cr.Hrs. 3

(Lab Required) (Formerly 007.381) The application of geophysical methods including gravity, magnetics, seismic reflection and refraction, electrical and electromagnetics methods in exploration, and environmental and engineering problems. Prerequisite: GEOL 2060 (007.206) (C).

GEOL 3900 Sedimentology Cr.Hrs. 3

(Lab Required) (Formerly 007.390) The study of depositional environments of sedimentary rocks. Facies analysis and modeling of sedimentary deposits. Prerequisite: GEOL 2530 (007.253) (C).

GEOL 3910 Introduction to Field Mapping Cr.Hrs. 3

(Formerly 007.391) Twelve day course introducing field mapping techniques including field navigation and basic field interpretations. Students are responsible for costs of room and board during the field course. Offered in the Summer term. Not to be held with (007.449). Prerequisites: (GEOL 2440 or 007.244)(C)), and (GEOL 2520 (007.252)(C)), and (GEOL 2530 (007.253)(C)), and permission of department head.

Geological Sciences Course Descriptions-4000 Level**GEOL 4250 Theory and Application of Geophysical Inversion Methods Cr.Hrs. 3**

(Lab Required) (Formerly 007.425) Introduction to generalized and linear/non-linear inversion theory. Inversion techniques for the potential field, electrical and seismic data will be discussed. Application to global problems will also be discussed. Prerequisites: (GEOL 2060 (007.206) (C)), and (MATH 2100 (136.210) (C), or MATH 1300 (136.130) (C), or MATH 1310 (136.131) (C)).

GEOL 4260 Applied Geophysics Field Course Cr.Hrs. 3

(Formerly 007.426) One and one-half weeks field instruction in the planning and execution of geophysical surveys and the use of portable geophysical instruments. Taught with the first half of GEOL 4740 (007.474). Not to be held with GEOL 4740 (007.474). Prerequisites: GEOL 3810 (007.381 or 007.380) (C), and permission of department head.

GEOL 4270 Advanced Studies in Earth Sciences Cr.Hrs. 3

(Formerly 007.427) Advanced study in a selected subject in Earth sciences. Prerequisite: Permission of department head.

GEOL 4280 Instrumental Techniques in Geology Cr.Hrs. 3

(Lab Required) (Formerly 007.428) Lecture and laboratory course covering the application of microbeam, mass spectrometer, diffraction and wet geochemical analytical techniques in mineralogy and geochemistry. Includes coverage of ICP, PIXE, powder and single crystal diffraction and electron microprobe analysis. Prerequisites: (GEOL 2520 (007.252) (C)), and (GEOL 2530 (007.253) (C)), and (GEOL 2770 (007.277) (C)).

GEOL 4300 Mineral Deposits Cr.Hrs. 3

(Lab Required) (Formerly 007.430) The tectonic setting and deformational and structural nature of ore deposits. The physics and chemistry of ore deposition and ore bearing fluids. The mineralogical, textural and environmental constraints on resource exploitation. Prerequisites: (GEOL 3110 (007.311) (C)), and (GEOL 3900 (007.390) (C)).

GEOL 4310 Paleontologic Principles Cr.Hrs. 3

(Lab Required) (Formerly 007.431) Interpretation of Earth history using fossils: topics in taxonomy, functional morphology, paleoecology, evolution, biostratigraphy, and biogeography. Prerequisite: GEOL 3310 (007.331) (C), or permission of department head.

GEOL 4320 Physics of the Earth: Seismology and Heat Flow Cr.Hrs. 3

(Formerly 007.432) Seismology and the structure, physical properties and equations of state of the Earth's interior; thermal constitution and the history of the Earth. Prerequisites: (GEOL 2060 (007.206) (C)), and (PHYS 2390 (C), and PHYS 2490 (C), or (016.237) (C)).

GEOL 4330 Physics of the Earth: Geomagnetism and Gravity Cr.Hrs. 3

(Formerly 007.433) Geomagnetism and geoelectricity; paleomagnetism; figure, rotation and gravity of the Earth. Prerequisites: (GEOL 2060 (007.206) (C)), and (PHYS 2390 (C), and PHYS 2490 (C), or (016.237) (C)).

GEOL 4360 Mineral Exploration Techniques Cr.Hrs. 3

(Lab Required) The course will examine methodologies used in exploration and evaluation of Canadian mineral deposits and case studies illustrating the application of these methods. Prerequisite: GEOL 3910 (C), or GEOL 3810 (C). Recommended pre- or co-requisite: GEOL 4300.

GEOL 4370 Global Change Cr.Hrs. 3

(Formerly 007.437) Examination of the major processes controlling global change through time. The causes, magnitude, and periodicity of changes in the geological record resulting from the variability and interaction of continents, oceans, atmospheres, climate, Earth-sun relationships, and ice sheets, with an emphasis on paleoclimate. Prerequisite: GEOL 3900 (007.390) (C). Prerequisite or Concurrent Requirement: GEOL 3490 (007.349).

GEOL 4380 Mineral Resource Development Cr.Hrs. 3

Examination of economic, political, social, and environmental considerations that affect exploration and mining activity. Prerequisite: GEOL 3130 (C+) and pre- or co-requisite: GEOL 4300.

GEOL 4520 Petroleum Geology Cr.Hrs. 3

(Lab Required) (Formerly 007.452) A study of the physical properties, origins and maturation, migration, and accumulation of petroleum products. Prerequisite: GEOL 3900 (007.390) (C).

GEOL 4670 Global Tectonics Cr.Hrs. 3

(Lab Required) (Formerly 007.467) The structure and properties of, and physical processes taking place within, the Earth's interior. Continental cratons and their margins, orogenic belts, structural and petrologic features of the ocean basins, modern diastrophism, global tectonic theories. Prerequisites: (GEOL 3440 or (GEOL 3290) (C)), or GEOL 4320 (C), or permission of department head.

GEOL 4740 Geophysics Field Course Cr.Hrs. 6

(Formerly 007.474) Three weeks of making geophysical surveys. Starts immediately following April examinations. Maps and reports to be submitted at the end of the three-week period. Students are responsible for costs of room and board during the field course. Offered in alternate Summer terms. Not to be held with GEOL 4260 (007.426). Prerequisites: GEOL 3810 (007.381 or 007.380) (C), and permission of department head.

GEOL 4810 Geophysical Data Analysis Cr.Hrs. 3

(Formerly 007.481) The theory and application of spectral methods in geophysics. The use of Fourier Transforms, convolution, power spectra, coherence, transfer functions, covariance, correlation and filtering. Prerequisite: PHYS 2490 or (016.237) (C), or permission of department head.

GEOL 4870 Honours Thesis Cr.Hrs. 6

(Formerly 007.487) A thesis based on a research project conducted by a fourth-year Honours student in Geology or Geophysics. Selection of a project and supervisor to be arranged prior to September 30 and submitted in writing to the department head. Consult with the department for submission deadlines. Not to be held with (007.495) or (007.496). Prerequisite: Permission of department head.

GEOL 4890 Basin Analysis Cr.Hrs. 3

(Lab Required) (Formerly 007.489) The study of major sedimentary basins. Qualitative and quantitative aspects of basin origin, classification, evolution, fluid content and diagenesis, and sedimentary facies architecture. Prerequisite: GEOL 4520 (007.452) (C).

GEOL 4910 Advanced Field Mapping Cr.Hrs. 3

(Formerly 007.491) Twelve-day course developing field mapping techniques including independent mapping and interpretation and synthesis in complex geological terrains. Students are responsible for costs of room and board during the field course. Offered in the Summer term. Not to be held with (007.449). Prerequisites: (GEOL 3440 or (GEOL 3290) (C)), and GEOL 3910 (C), and permission of department head.

GEOL 4920 Technical Report Cr.Hrs. 3

(Formerly 007.492) A technical report based on a geoscience research project conducted by a fourth year Major student in Geology or Geophysics. Not to be held with GEOL 4870 (007.487). Normally this course is available after completion of Year 3 requirements in Geology or Geophysics Major program. Prerequisite: Permission of department head.

EXTENDED EDUCATION

Dean: Gary Hepburn

Associate Dean: Kathleen Matheos

Campus Address & General Office: 166 Extended Education Complex

Fax: (204) 474 7661

Website: umanitoba.ca/extended

Chapter Contents

SECTION 1: EXTENDED EDUCATION

SECTION 2: PROGRAM AREAS

- 2.1 Access/Aboriginal Focus Programs
- 2.2 Continuing Education Programs
- 2.3 Distance and Online Education
- 2.4 English Language Studies and International Programs
- 2.5 General Studies
- 2.6 Inter-Universities North Program
- 2.7 Military Support Office
- 2.8 Off Campus Study
- 2.9 Summer Session

SECTION 1: EXTENDED EDUCATION

Extended Education provides a central focus for adult, distance, summer, and continuing education in the university and undertakes planning and general administration for these programs and services. Insofar as possible, the university accepts the principle of parity of accessibility to its services in all areas of the province regardless of economic, geographic, physical, or social disadvantage.

Extended Education coordinates a wide range of programs through which degree courses and non-degree or certificate courses are offered. Degree courses are drawn from the offerings of various faculties, colleges, and schools. Students must apply to, be admitted to, and register in a particular faculty, college, or school to receive credit towards a degree.

SECTION 2: PROGRAM AREAS

2.1 Access/Aboriginal Focus Programs

Area Director: Dr. Diedre A. Desmarais

General Office: 221 Migizii Agamik, 114 Sidney Smith St.

Telephone: 204-474-8000

umanitoba.ca/extended/access-afp

Established in 1975, Access' mandate is to support those students who have not had the opportunity to pursue post secondary education due to social, economic and/or cultural barriers. The Aboriginal Focus Programs were established in 1998 with the mandate to create and provide community-based programs responding to the post secondary, and professional development needs of Aboriginal peoples. These two distinct areas were integrated on July 1, 2011 combining the unique program development skills of the Aboriginal Focus Programs with the expertise of delivering strong academic, personal and financial supports to students who have experienced barriers to post secondary education. The amalgamation of these two areas strengthens our capacity to provide students with unique programs in tandem with the supports needed to enhance capacity for success. In 2014, in order to further enhance student success a new initiative was developed to provide academic supports and programming in math and science. This includes enhanced teaching capacity, supplemental academic supports for specific science courses and non-degree offers in math and science skills. Additionally we provide intensive supports related to academic reading and writing. We take pride in our holistic approach to program development and student support and have progressively sought gifted educators to help us carry forward continued excellence in all our educational endeavors.

Aboriginal Focus Programs

AFP offers certificate and diploma programs as well as degree programs through cooperative arrangements with Aboriginal stakeholders and faculties of the University of Manitoba. Programs are offered in a central location, as in-house training to staff of an organization, or as community-based programs. Programs are offered as 'open enrolment' or as block-funded cohort programs through an arrangement with an employer or sponsor. Delivery methodology can be part-time or full-time study, and can incorporate technology-based delivery where technology access permits. Aboriginal organizations that identify a need for specific post-secondary or adult education not currently available may be interested in knowing that AFP has the capacity to develop new programs to meet their needs. The following are programs currently being offered:

Aboriginal Counseling Skills Certificate

The Aboriginal Counseling Skills program provides individuals who are employed by First Nation, Metis and Inuit social service agencies with the knowledge and skills required to provide culturally appropriate counseling services to individuals and families. An Aboriginal philosophy of recognizing the strengths and resilience of families within the counseling relationship is emphasized. The certificate is offered as a general intake program in Winnipeg or as a community-based program through agreements with Aboriginal agencies. The Faculty of Social work offers graduates 3 allocated and 6 unallocated hours of credit.

Aboriginal Environmental Stewardship Diploma

The Aboriginal Environmental Stewardship (AESD) Program is a partnership program between Aboriginal Focus Programs and the University of Manitoba's Clayton H. Riddell Faculty of Environment, Earth and Resources and the Faculty of Arts: Department of Native Studies. The 60-credit hour diploma offers a post-secondary education program that provides the core principles of environmental science, stewardship and indigenous environmental justice. The program is designed to offer students an Indigenous community-focused perspective of environmental issues within Manitoba. The objective will be to integrate global and regional environmental issues related to the ecological, and cultural impacts as well as legal implications of resource use and exploration in the 21st century. The curriculum will focus on the incorporation of Indigenous Knowledge within a scientific framework. The AESD program is offered on-campus or as a community-based program through collaboration with external stakeholders.

Program and Graduation Requirements:

- Students must pass 60 credit hours of the program (30 credit hours of required courses, 28.5 credit hours of elective courses, and 1.5 credit hours of work experience).
- Students must achieve an average GPA of 2.5 (C+) in the program and must not have a grade lower than a "C" in every program course.
- Students must complete all course work within six (6) years from the date of the first registration in the program. Application for extension of this time limit must be approved by the Dean of Extended Education.

Course No.		Cr. Hrs.	ENVR 3000	Multidisciplinary Topics in Environmental Science 1
Required Courses		27		Ecosystem Management Techniques 3
ARTS 1110	Introduction to University	3		Biogeography 3
NATV 1220	The Native Peoples of Canada 1	3		Concepts in Wildlife Management 3
ENVR 1000	Environmental Science 1 – Concepts	3		Ecology of the Boreal Region 3
NATV 1240	Then Native Peoples of Canada 2	3		Parks and Protected Areas 3
ENVR 2000	Environmental Science 2 – Issues	3		Indigenous Stewardship 3
ENVR 3160	Environmental Responsibilities and Law	3	ENVR 3010	Field Topics in Environmental Science 1
NATV 2100	Aboriginal Spirituality	3		Water Quality Assessment 1.5
ENVR 3250	Environmental Assessment	3		Issues in Sustainable Forestry 1.5
NATV 3310	Canadian law and Aboriginal People	3		Soil Characterization 1.5
GEOG 4260	Sacred Lands and Sacred Spaces of Indigenous Peoples	3		Wildlife and/or Fisheries Techniques 1.5
Elective Courses		28.5	EER 1000	Earth: A User's Guide 3
ENVR 2010	Field Studies in Environment		GEOL 1340	The Dynamic Earth 3
	GPS Field Survey and Sampling	1.5	GEOG 1290	Introduction to Physical Geography 3
	Field Readiness and Outdoor Survival	1.5	BIOL 1000	Biology: Foundations of Life 3
	Wildlife Sampling, Stewardship and GIS	1.5	BIOL 1010	Biology: Biological diversity and Interaction 3
ENVR 2010	Extended Field Topics in Environmental Science 1		BIOL 2390	Introductory Ecology 3
	Basic Communication and Statistical Skills	3	Required	Work Experience Program 1.5
	Biological and Ecological Concepts	3	An academic committee will select the elective courses for each cohort offering of the program.	
	Landscape Sampling and Boreal Forest Stewardship	3		
	Environmental Health	3		

First Nations Community Wellness Diploma

The First Nations Community Wellness (FNCW) Diploma offers an excellent program of studies for people who wish to expand their knowledge and skills in Aboriginal mental health and community wellness services. The Diploma is offered in partnership with First Nations and Inuit Health and the University of Manitoba's Extended Education, as well as the Faculties of Social Work, Kinesiology, Health Sciences, College of Nursing and Arts: Native Studies and Psychology. The FNCW Diploma provides students with higher education that respects Indigenous knowledge and Western theory through education based on Aboriginal values concerning wellness. The 60-credit hours of the FNCW Diploma are typically delivered as 7-day modules in an off-campus location or via blended/technology-based delivery. Students are eligible for transfer of credit into degree programs in the participating faculties at the University of Manitoba.

Program and Graduation Requirements:

- Students must pass 60 credit hours of the program including 33 credit hours of required courses, and 27 credit hours of elective courses or the equivalent of degree and non-degree credit.
- Students must achieve an average GPA of 2.0 (C) in the program.
- Students must complete all course work within six (6) years from the date of the first registration in the program. Application for extension of this time limit must be approved by the Dean of Extended Education.

Course No.		Cr. Hrs.
Required Courses		33
ARTS 1110	Introduction to University	3
SWRK 2080	Interpersonal Communication Skills	3
NATV 1220	The Native Peoples of Canada 1	3
NURS 3350	Counselling Skills for Nurses	3
PSYC 1200	Introduction to Psychology	6
NATV 2100	Aboriginal Spirituality	3
HNSC 1100	Nutrition for Healthy Living	3
PERS 1200	Physical Activity, Health and Wellness	3
SWRK 4070	Addictions (Select Topics in Social Work)	3
NATV 3240	Native Medicine and Health	3
Elective Courses		27
PERS 1400	Concepts of Recreation and Leisure	3
HNSC 2130	Nutrition through the Life Cycle	3
HNSC 1200	Food: Facts & Fallacies	3
FMLY 1020	Family Issues Across the Lifespan	3
FMLY 1012	Introduction to Social Development	3
FMLY 2012	Development, Conflict and Displacement	3
SWRK 4050	Community Management and Evaluation (Select Topics in Social Work)	3
SWRK 2050	Community and Organizational Theory	3
SWRK 3100	Systematic Inquiry in Social Work	3
PSYC 3460	Abnormal Psychology	3
NATV 3100	Aboriginal Healing Ways	3
NATV 3240	Native Medicine and Health	3
NATV 4250	Topics on Aboriginal Identities	3
NURS 1260	Human Growth and Development	3
NURS 3340	Providing Care in a Culturally Diverse Society	3
PHED 3770	Aboriginal Games and Activities	3
PERS 2200	Program Planning Principles	3

Elective courses will be selected by the First Nations Community Wellness Diploma's Curriculum and Management Committee once a specialization has been determined.

Aboriginal Child and Family Services Diploma Program

The Aboriginal Child and Family Services Diploma Program provides an opportunity for students to build their knowledge and skills base in the area of child protection and family enhancement. The program would be of interest to those individuals who are currently employed, or who anticipate future employment in the field of Aboriginal Child Welfare. The diploma consists of 60 credit hours with students completing 9 required courses and 12 credit hours of electives. There is also a comprehensive program orientation to provide students with the foundational skills to assist in their studies. Students are eligible for transfer of credit into degree programs in the participating faculties at the University of Manitoba.

Access Programs

Established in 1975, Access' mandate is to support those students who have not had the opportunity to pursue post secondary education due to academic, social, economic and/or cultural barriers. The following are programs currently being offered:

University of Manitoba Access Program (UMAP)

In cooperation with the Province of Manitoba, the University of Manitoba Access Program (UMAP) facilitates university studies at the undergraduate degree level for persons who traditionally have not had the opportunity for such experience because of social, economic and cultural reasons, lack of formal education or residence in remote areas. Students in this program are provided with academic and personal supports. Financial assistance may be available. For information, call 474-8000 or, within Manitoba, 1-800-432-1960, extension 8000.

Health Careers Access Program (HCAP)

This program is designed to prepare Manitoban Aboriginal persons (Status, Non-Status, Metis, Inuit) for entry to the health professional programs such as Medicine, Dentistry, Dental Hygiene, Pharmacy, Medical Rehabilitation (Occupational, Physical and Respiratory Therapy) and Nursing. Through the cooperation of the Province of Manitoba and the University of Manitoba, students in this program are provided with academic and personal supports. Financial assistance may be available. For information call 474-8000 or, within Manitoba, 1-800-432-1960, extension 8000.

Professional Health Program (PHP)

This program is designed to support Aboriginal persons (Status, Non-Status, Metis, Inuit) in any of the professional health programs. Housed within the Centre for Aboriginal Health Education at the Bannatyne Campus this program provides academic and personal supports. Limited financial assistance may be available. For information call 474-8000 or, within Manitoba, 1-800-432-1960, extension 8000.

2.2 Continuing Education Programs

Director: Stephanie Olson

General Office: 166 Extended Education Complex

Telephone: 204 474 9921

A wide selection of certificates, seminars, and short courses are offered for professional professional and personal development in University Preparation, Post-Graduate Programs, Education, Management and Leadership, Health and Social Services. For more information call 204-474-9921 or visit http://umanitoba.ca/faculties/con_ed/coned/.

University Preparation

Mathematical Skills

This course is designed for, but not exclusive to students preparing to enter first-year mathematics courses. Students will learn how to apply mathematical skills consistently and with confidence. The course includes a review of fundamental concepts, demonstrations, problem solving, applications and regular testing.

Education

Certificate in Adult and Continuing Education

The Certificate in Adult and Continuing Education prepares adult educators and trainers for leadership roles in the design and development of adult learning programs, workplace training and professional development activities. The program is aimed at anyone responsible for designing, developing and implementing successful adult learning programs within their organizations. Learners will build the skills required for effective needs assessment, program development, instructional design and program evaluation.

Certificate in Teaching English as a Second Language

In collaboration with the Faculty of Education, a Certificate in Teaching English as a Second Language is offered to prepare learners for a teaching career in ESL. Together with an introduction to the theoretical basis of second language instruction, students will develop practical skills for planning and delivering effective and dynamic English language classes. The CTESL program is fully accredited by TESL Canada.

Management and Leadership

Certificate Program in Management and Administration (CIM)

The Certificate in Management and Administration is designed for supervisors, managers and professionals who are seeking to enhance their management and leadership skills and obtain a University of Manitoba credential along with a professional designation. Offered in proud partnership with the Canadian Institute of Management, the program includes courses in business administration, managerial communication, financial management, and strategic analysis. Graduates will earn the right to use the designation CIM, Certified in Management.

Certificate in Financial and Management Accounting

The Certificate in Financial and Management Accounting is an entry-level program that provides a thorough overview of current principles and practices in accounting and finance. It is designed for professionals wishing to increase their knowledge of general finance and accounting concepts that lead to sound policy- and decision-making in a business context. The certificate program includes comprehensive coverage of financial and management accounting topics, including financial reporting, cost accounting, and management information systems.

Human Resource Management Certificate

The Human Resource Management Certificate provides students with the leadership, teamwork, communication and strategic planning skills necessary for a successful career in human resources. This comprehensive program covers key topics such as employee relations, human resource legislation, and organization and staff development while introducing students to the professional competencies required for CHRP designation. This intensive program of studies is ideally suited for professionals looking to start or advance their career in human resources.

Quality Management Certificate

The Quality Management Certificate is designed for professionals wishing to implement or manage quality assurance and control programs within their organizations. It provides learners with the necessary knowledge and skills to implement effective quality assurance principles and plan and manage quality control processes. This intensive program is beneficial for professionals working in a wide range of sectors – the government, education, health-care, manufacturing and the service industry.

Certificate in Manitoba Municipal Administration

The Certificate in Manitoba Municipal Administration provides students with the knowledge and skills required to assume administrative responsibilities within small to mid-sized municipalities. This comprehensive program, which can be completed in one year, covers key topics for current and future municipal administrators, including municipal accounting, municipal law and municipal administration.

Post-Baccalaureate Certificate in Aerospace Program Management

The Post-Baccalaureate in Aerospace Program Management offers the tools and knowledge needed to be a leader in the sophisticated and dynamic aerospace industry. The Post-Baccalaureate Certificate is an advanced credential in aerospace program management designed for current and future project, production and operational managers, design engineers, and procurement and logistics specialists wishing to enter the field or advance their career in the aerospace industry. Learners will develop an in-depth understanding of the complete life cycle of an aerospace system: from initial identification of system requirements; to the design, manufacturing and marketing of the system; to its ongoing employment and maintenance.

Post-Baccalaureate Certificate in Applied Leadership

Engagement, collaboration and teamwork are important attributes for successful leaders in the 21st century. Developing these skills through deepened self-awareness and a comprehensive understanding of how to enact and inspire organizational change is the goal of the Post-Baccalaureate Certificate in Applied Leadership. Designed for current and emerging leaders, this is an innovative program that helps professionals grow and expand their leadership potential so that they may become more effective organizational leaders. As a post-graduate program, it also proves a pathway to the Master's in Business and Administration (MBA) at the University of Manitoba's Asper School of Business.

Health and Social Services**Certificate in Applied Counselling**

The Applied Counselling Certificate provides an introduction to the counselling process and helps learners develop effective counselling strategies. It is ideally suited for anyone working in a counselling context through paid or volunteer work. Participants' varied workplaces include: health care, education, social services, and government.

Case Management Symposium

The annual Case Management Symposium focuses on providing case managers with the knowledge and tools to help clients return to work. An exciting line up of experts in the field will explore different topics each year, and guide participants through a series of sessions. This event will also allow professionals in the field to connect with various community resources. The Case Management Symposium is beneficial for case managers, community health and social service providers, human resource professionals and insurance providers.

2.3 Distance and Online Education

Interim Director: Lynette Phyfe

General Office: 185 Extended Education Complex

Telephone: 204-474-8012

Website: umanitoba.ca/distance/

Each year, over 8,000 students complete degree credit courses offered by Distance and Online Education (DE). DE allows students to complete courses without attending scheduled classes. If you require a flexible study schedule, would like to study year round, or appreciate the convenience of studying at home, DE provides you with the opportunity to complete your degree. Many students choose to enroll in on-campus and DE courses at the same time.

DE courses are offered from the following faculties/schools: Agricultural and Food Sciences; Art; Arts; Asper School of Business; Clayton H. Riddell Environment, Earth and Resources; Education; Health Sciences; Kinesiology and Recreation Management; Science; and Social Work.

Complete degree programs offered include a Bachelor of Arts, Bachelor of Arts in Geography, Bachelor of Arts Integrated Studies, Bachelor of Social Work, and a Post-Baccalaureate Diploma in Education.

Distance and Online Education Courses

All DE courses are offered online through a learning management system (LMS) which allows you to log on to the UM web server and access your course website in a secure environment.

Courses vary but standard features include: course materials, course discussion, links to library and/or web resources and access to assignment grades. Courses may include scheduled web conferences and/or audio/video resources. Required textbooks and/or audio/visual materials can be ordered from the UM Book Store at umanitoba.ca/bookstore.

Accessing Online Courses

The technologies required for studying by DE can vary depending on the course. Some courses with web conferencing may require high speed internet and a headset. Specific course requirements can be found under the DE course section in Aurora Student.

For information regarding accessing courses, claiming a UMnetID, and technical requirements for online courses, please refer to umanitoba.ca/distance.

Registration

All registration activities must be done using Aurora Student at aurora.umanitoba.ca. To search for DE course offerings, choose Distance and Online Education under the 'Campus' field. All DE section numbers are prefaced by the letter 'D', i.e. D01, D02, etc. You may register for DE courses and on-campus courses at the same time.

Please refer to umanitoba.ca/registrar for registration procedures. If you have registration questions, please contact DE as indicated below.

Terms and Examinations

Fall (3 cr. hrs.)	September - December
Winter (3 cr. hrs.)	January - April
Fall/Winter (6 cr. hrs.)	September - April
Dist Ed Winter/Summer (6 cr. hrs.)	January - July
Summer (3 cr. hrs.)	May - August

Final exams are held in April, July, August, and December. You are expected to be available at the scheduled day/time during the examination period. For detailed information regarding examination invigilation and examination centres, please refer to www.umanitoba.ca/distance.

Fees

For information regarding DE tuition fees and additional compulsory fees (e.g., registration fee, library fee, student services fees, etc.) please refer to umanitoba.ca/registrar or call 474-9420. Undergraduate International Students are subject to an International Differential Fee.

Contacting Distance and Online Education

To view or request the DE Course Calendar, go to umanitoba.ca/distance or search the course offerings using Aurora Student at aurora.umanitoba.ca.

For inquiries, contact:

Distance and Online Education

185 Extended Education Complex

Telephone: (204) 474-8012

Canada: Toll-Free 1-888-216-7011, ext. 8012

Fax: (204) 474-7661

Email: de_info@umanitoba.ca

umanitoba.ca/distance

2.4 English Language Studies and International Programs

Director: Stephanie Olson

General Office: 166 Extended Education Complex

Telephone: 204 474 8016

English Language Studies and International Programs (ELSIP) provides opportunities for language learners to gain proficiency in English as well as other languages.

The Intensive English Program (IEP) offers eight levels of English as a Second Language instruction from beginner to advanced through sessions ranging in length from four weeks to one year, and consisting of 26 hours of classroom instruction per week throughout the year. Academic instruction and socio-cultural activities constitute the basis of this program. Students are housed in residence on campus or with a homestay family. Customized programs are also offered for groups coming from Mexico, Japan and Korea.

ELSIP also offers part-time and full-time TOEFL iBT, IELTS and TOEIC preparation courses several times per year and is an official TOEFL iBT testing site.

At its downtown Winnipeg campus, ELSIP offers adult EAL classes for newcomers sponsored by the government.

In addition to ESL language instruction, ELSIP offers various conversational language courses such as French, Spanish, German and Mandarin for beginner to advanced level students. Courses are part-time; sessions run from September to December, January to April and April to June.

In collaboration with the Faculty of Education, a Certificate in Teaching English as a Second Language (CTESL) is offered to meet the needs of individuals who are pursuing a teaching career in ESL. The Certificate program consists of five 40-hour courses, including four required courses and one approved elective course. Courses may be taken full-time or part-time.

2.5 General Studies

Director: Bill Kops

General Office: 185 Extended Education Complex

STUDENT SERVICES:

General Studies Student Advisors are available to assist with course and program planning and to provide admission and registration information on a drop-in basis or by appointment throughout the year.

Drop-in basis: Monday through Friday, 9:00 a.m. to 3:00 p.m. in 185 Extended Education Complex

Telephone: Monday through Friday, 8:30 a.m. to 4:30 p.m.

Student Advisor: Karen Nickerson (204) 474-8330

Assistant Student Advisor: Michelle Kidd (204) 474-7154

Toll free in Canada: 1-888-216-7011 (ext. 7154 or 8330)

Fax: (204) 474-7660

Email: general.studies@umanitoba.ca

Web: umanitoba.ca/extended/general_studies

General Studies provides opportunities for students to take credit courses at the University of Manitoba without being enrolled in a degree program. Our students come from all walks of life: professionals developing their careers; students satisfying entrance requirements to professional and other faculties; seniors enriching their lives; students visiting from other institutions; individuals exploring a career change. Whatever your educational interests, General Studies is a great option for study at the University of Manitoba. Courses are available in the Fall and Winter terms, Summer Session, through Distance and Online Education, and Off-Campus Study.

ADMISSION:

Prospective students are required to submit an online application to Extended Education (General Studies) in one of the following categories: Auditing Student, Mature Student (Canadian Military only), Special Student or Visiting Student. Detailed information on entrance requirements and descriptions of the student categories may be found on the Admissions website: umanitoba.ca/admissions or by contacting the General Studies office.

REGISTRATION

For information about registration, course descriptions, rules, regulations and procedures visit the following website: umanitoba.ca/extended/general_studies and click on Registration.

Please take the time to become familiar with the academic regulations and requirements of the University of Manitoba and the specific academic regulations and requirements of General Studies by reviewing the following website: umanitoba.ca/extended/general_studies. As well, you may wish to seek the advice of a General Studies Student Advisor.

Initial Access Times

General Studies students registering for on-campus, distance and online courses may register starting in August. For more information about initial access times and how to determine your specific time, please refer to the University of Manitoba home page: umanitoba.ca or access Aurora Student in July (select: Enrolment & Academic Records, Registration, Registration Time & Status).

Instructions

For information on how to register for courses using Aurora Student go to umanitoba.ca/registrar/tutorial.

Prior to registering, applicable prerequisites for each course must have been fulfilled before attempting to register. This information may be found in Aurora Student (Course Catalog).

If you are an external transfer student, external credits are not evaluated for transfer credit until you apply to a degree program. However, General Studies will enter overrides for external course(s) that have been evaluated by the University of Manitoba and that satisfy prerequisite requirements, provided you have obtained a final grade of 'C' or better. Contact a General Studies Student Advisor prior to registration. To access the Transfer Credit Equivalencies database, go to Aurora Student aurora.umanitoba.ca, click on Transfer Credit Equivalencies.

You may register for up to a maximum of 30 credit hours in the combined Fall and Winter terms, and up to a maximum of 15 credit hours in any one term, including Summer Session.

Returning Special Students

If you need help with course selection or have any concerns about your status, please contact a General Studies Student Advisor (see contact information above).

Visiting Students

Visiting students who have been admitted and registered previously in at least one course are eligible to register in a subsequent session without reapplying for admission provided your home university has not changed since you last registered in General Studies; you have a Letter of Permission from your home university approving the selected courses; and, you provide the Letter of Permission to General Studies prior to registering.

The Letter of Permission from your home institution overrides all prerequisites as stated in the course descriptions in the Undergraduate Calendar, except where a course requires Department Head or Instructor approval. This approval needs to be submitted to a General Studies Student Advisor prior to registration.

*We recommend that you start this process with your home institution early and have a selection of alternate courses approved in case the initial course(s) are full.

Transfer Students

A General Studies Student Advisor will enter overrides for external courses that have been evaluated by the University of Manitoba and satisfy prerequisite requirements. Contact a General Studies Student Advisor prior to registration.

Note: External credits are not officially evaluated for transfer credit until an application to a degree granting faculty/school is received by the Admissions Office. For more information regarding evaluation of external courses, contact a General Studies Student Advisor.

Auditing Students

Auditing students must obtain written permission from the course instructor to audit a course. The written permission form and your written consent must then be submitted to a General Studies Student Advisor who will manually register you for the course(s). New auditing students must apply for admission. Please contact General Studies for information.

Courses Available to General Studies Students

All courses in the following faculties and schools are available to General Studies students. Prerequisites may be required for some courses as specified in the course descriptions:

Clayton H. Riddell Faculty of Environment, Earth, and Resources
Faculty of Agricultural and Food Sciences
Faculty of Arts
Faculty of Science
I. H. Asper School of Business
School of Art

All courses offered in the following faculties require teaching faculty written approval before registering, with the exception of courses open to all students as listed under University 1:

Faculty of Architecture
Faculty of Education (5000 level courses only)
Faculty of Engineering
Faculty of Health Sciences
Faculty of Kinesiology and Recreation Management
College of Nursing
Faculty of Social Work (students with less than 30 credit hours)
Marcel A. Desautels Faculty of Music

ACADEMIC REGULATIONS AND POLICIES APPLICABLE TO ALL GENERAL STUDIES STUDENTS**Academic Performance**

Academic Assessment gauges student success at the University. Formal academic assessment shall be done following each academic term for all General Studies students who have completed 30 credit hours or more of attempts. In order to be in “good standing” in General Studies, a student must achieve a degree Grade Point Average (GPA) of 2.00 or greater at each assessment period. Students in “good standing” may continue in General Studies or, preferably, transfer to a target faculty.

Students who do not achieve a degree GPA of 2.00 will be placed “on probation”, which will appear on the student’s transcript. Once “on probation”, a student will be allowed to register for another term (or terms). At each point of assessment, a student “on probation” must achieve a term GPA of 2.00 in order to proceed. In order to clear probation, a student must achieve a degree GPA of 2.00. While “on probation”, students are encouraged to consult the General Studies Student Advisor prior to registration and on a regular basis thereafter.

If a student does not succeed in achieving a term GPA of 2.00, they will be placed on “academic suspension” for one calendar year. A student on “academic suspension” is normally not allowed to register in another faculty or school at the University of Manitoba or to attend any other post-secondary institution during the time of suspension. Following the suspension period, a student may reapply for admission to General Studies.

Credit Hour Policy

In an effort to assist students with academic decisions, all students who have completed 30 credit hours of study with General Studies will be required to meet with a General Studies Student Advisor before being allowed further registration. Until such time as the student meets with the advisor, a block will be placed on their record that prevents further registration.

2.5.1. Labour Studies Diploma Program

The Diploma in Labour Studies provides a broad educational experience in labour relations and workplace studies, including courses in economics and politics of work, unions and labour relations, employment legislation, labour law, and pensions and benefits.

Program Objectives: To provide students with understanding and skills to conduct better labour and industrial relations; and to offer courses in a format available to working people.

Program Overview: The diploma is composed of 30 credit hours in Labour Studies.

Course No. Cr. Hrs.

Required Courses

LABR 1260 Working for a Living 3

LABR 1290 Introduction to the Canadian Labour Movement 3

Electives

LABR designated 2000 level courses 6

LABR designated 3000 level courses 18

LABR 1260 and LABR 1290 are prerequisites to all other courses in the program and must be completed as the first two courses with a minimum grade of “C”. Upon successful completion of these two prerequisites, students may complete the electives in the order they choose, subject to availability.

Students are required to complete all 30 credit hours and achieve a 2.5 GPA with a minimum grade of “C” in each course.

Dual Credit: student currently admitted into another Faculty at the University of Manitoba may also apply for the Diploma in Labour Studies.

Graduation: upon completion of the designated 30 credit hours of study, the Labour Studies Coordinator will grant final authorization for graduation. Students must indicate their intent to graduate in Aurora Student or contact the General Studies student advisor.

Degree Credit: after completion of the Diploma in Labour Studies students may opt to complete an undergraduate degree at the University of Manitoba. All courses from the Diploma in Labour Studies are transferrable to a degree program in the Faculty of Arts and possibly other faculties. Students who may have received external transfer credit towards the Diploma program should note that some faculties and schools may have limitations on external transfer credit taken beyond a specific period. This information may be found in each faculty chapter of the University of Manitoba Undergraduate Calendar.

Application Process: complete the Application for Diploma in Labour Studies. Upon approval of the Application for Diploma in Labour Studies, an Application for Direct Entry will be mailed to the student. Upon completion of the Direct Entry Application to General Studies (Extended Education), the form should be mailed, faxed or delivered to General Studies, 185 Extended Education Complex, or Admissions Office, 424 University Centre.

For more detailed information about the Labour Studies Diploma Program or application process, go to: http://umanitoba.ca/faculties/coned/general_studies/general/labour_studies.html or contact a General Studies Student Advisor at 204-474-7154 or 204-474-8330.

2.6 Inter-Universities Services Program

In cooperation with Brandon University and the University of Winnipeg, undergraduate courses are offered in communities north of the 53rd parallel. Telephone: 1-866-627-8500 and ask for Lavina.

2.7 Military Support Office

General Office: 166 Extended Education Complex

Telephone: 204 474 8005

The Military Support Office is designed to assist Canadian Armed Forces personnel and their immediate family members in the pursuit of a university education.

Through this unique office, the University of Manitoba acknowledges and accommodates the difficulties which extensive mobility can create for military members wishing to complete university degree programs. Recognition is given for a wide range of military training, academic counselling services are provided by highly qualified student advisors, and provision is made for academic and financial relief when military duties interrupt studies.

Courses are available through Distance and Online Education or on campus, either part-time or full-time, and a Mature Student entry program is also offered.

Call toll-free within North America 1-888-216-7011, or e-mail military@umanitoba.ca. The MSO website is at umanitoba.ca/military.

2.8 Off-Campus Study

Director: Bill Kops

General Office: 166 Extended Education Complex

Telephone: 204 474 8019

Off-Campus Study is designed to improve accessibility and success in university for students. A flexible and convenient alternative, Off-Campus Study allows students to take degree courses at various community sites within Winnipeg, including the U of M Bannatyne Campus, Vincent Massey Collegiate, Massey Building, and the Canadian Mennonite University. Courses are taught by University of Manitoba instructors in the evenings and on weekends.

A part of Off-Campus Study is the Courses in High School program that allows Senior 4 students to take university courses while still in high school and receive university credit.

For Information

Off-Campus Study: 166 Extended Education Complex

8:30 a.m. – 4:30 p.m., Monday to Friday

Telephone: (204) 474 8019

Toll-Free in Canada telephone: 1 888 216 7011 extension 8019

Fax: (204) 474 7660

Website: umanitoba.ca/extended/off-campus

2.9 Summer Session

Director: Bill Kops

General Office: 166 Extended Education Complex

Telephone: 204 474 6963/8019

Summer Session offers a wide range of courses in May, June, July and August, including compressed on-campus courses, summer institutes, travel/study and online courses. Summer Session provides an opportunity to accelerate degree completion, ease course loads in the fall and winter, or catch up on missed courses.

May and June Day courses begin in early May and continue to late June. Most classes meet for two hours each day, either in the morning or early afternoon.

May to August Evening courses run from early May to early August. Classes are generally scheduled two evenings each week, and meet for two and one-half hours.

July and August Day courses begin in early July and continue to late August. Most classes meet for two hours each day, either in the morning or early afternoon.

For Information

Summer Session: 166 Extended Education Complex

8:30 a.m. – 4:30 p.m., Monday to Friday

Telephone: (204) 474 8019

Toll-Free in Canada telephone: 1 888 216 7011 extension 6963/8019

Fax: (204) 474 7660

E-Mail: summer@umanitoba.ca

Website: umanitoba.ca/summer

FACULTY OF HEALTH SCIENCES

Dr. Brian Postl
 Dean, Faculty of Health Sciences
 230-745 Bannatyne Avenue
 204-789-3485
Brian.postl@umanitoba.ca

Intro

The Faculty of Health Sciences was created with the amalgamation of the University's former health sciences faculties (Dentistry, Medicine, Nursing, Pharmacy, Human Ecology) and former schools (Dental Hygiene and Medical Rehabilitation). Professional Colleges within the Faculty are the: College of Dentistry (including the School of Dental Hygiene), College of Medicine, College of Nursing, College of Pharmacy, and College of Rehabilitation Sciences. All existing programs of these units will initially be offered by the proposed new faculty.

In addition to the above programs, the administration of the Interdisciplinary Health Programs (B.H.Sc. and B.H.St.) and General Human Ecology (B.H.Ecol.) program from the Faculty of Human Ecology (HE) will be transferred to the Faculty of Health Sciences (FHS). As such, effective Fall 2015 term, the programs will be transferred to, and administered by, the Faculty of Health Sciences.

BACHELOR OF HEALTH SCIENCES, HEALTH STUDIES AND HUMAN ECOLOGY(GENERAL)

Dean: Brian Postl
 Campus Address & General Office: 204 Human Ecology Building
 Telephone: (204) 474- 9225
 Fax: (204) 474-7592

Chapter Contents**SECTION 1: DEGREE PROGRAMS OFFERED****IMPORTANT INFORMATION****1.1 Degree Programs****1.2 Available Minors, Options, Concentrations and Streams****SECTION 2: ADMISSION REQUIREMENTS****SECTION 3: ACADEMIC REGULATIONS****3.1 Prerequisite, Corequisite, and Course Availability: Definitions****3.2 Scholastic Standards****3.3 Part-Time Students****3.4 Direct Entry****3.5 Repeating Courses****3.6 Challenge for Credit****3.7 Transfer of Credit****3.8 Appeals of Academic Regulations****3.9 Dean's Honour List****3.10 Degree with Distinction****3.11 Work Permit for Study Purposes****3.12 Release and Indemnification Forms****3.13 Written English and Mathematics Requirements****SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS****4.1 Advisement****4.2 Program Requirements****4.3 Program Electives****4.4 Human Ecology Program (Intake Suspended)****4.5 Interdisciplinary Health Degree Program****4.5.1 Health Sciences Degree****4.5.2 Health Studies Degree****4.5.3 Health Sciences and Health Studies Minors****4.6 Interfaculty Option in Aging****4.7 The Minor in Management****4.8 The Voluntary Minor****SECTION 5: COURSE DESCRIPTIONS**

SECTION 1: DEGREE PROGRAMS OFFERED

Important Information

"The statement below is to be reported to Senate in the Fall of 2015 for approval:

On October 1, 2014, Senate was informed of the transfer of administration of the Interdisciplinary Health Programs (B.H.Sc. and B.H.St.) from the Faculty of Human Ecology (HE) to the Faculty of Health Sciences (FHS). As such, effective the 2015-2016 academic year, the program will be transferred to, and administered by, the Faculty of Health Sciences.

There will be a need for flexibility in the implementation of the administrative change, which will be important as we review changes to the regulations governing the Interdisciplinary Health Programs during the transition period. In the interim and until such time that a review is completed and the required approval(s) received, the Interdisciplinary Health Programs will continue to be governed by the relevant components of the Faculty of Human Ecology academic regulations and the Interdisciplinary Health Programs program regulations."

"The statement below is to be reported to Senate in the Fall of 2015 for approval:

On October 1, 2014, Senate was informed of the transfer of administration of the General Human Ecology program (B.H.Ecol.) from the Faculty of Human Ecology (HE) to the Faculty of Health Sciences (FHS). As such, effective the 2015-2016 academic year, the program will be transferred to, and administered by, the Faculty of Health Sciences.

There will be a need for flexibility in the implementation of the administrative change, which will be important as we review changes to the regulations governing the General Human Ecology program during the transition period. In the interim and until such time that a review is completed and the required approval(s) received, the program will continue to be governed by the relevant components of the Faculty of Human Ecology academic regulations and the General Human Ecology program regulations."

1.1 Programs

Program/Degree	Years to Complete	*Total Credit Hours
Bachelor of Health Sciences	4*	120
Bachelor Health Studies	4*	120
Bachelor of Human Ecology (intake suspended)	4*	120

*This includes one year (30 credit hours) of study in University 1.

1.2 Available Minors, Options, Concentrations and Streams

Program	Minor Availability	Options	Streams
Health Sciences	Yes: Health Sciences Minor		
Health Studies	Yes: Health Studies Minor		
		Interfaculty Option in Aging	

SECTION 2: ADMISSION REQUIREMENTS FOR THE INTERDISCIPLINARY HEALTH PROGRAM

Admission requirements are described on the Undergraduate Admissions website at <http://umanitoba.ca/student/admissions/application/index.html>. Application process information is at <http://umanitoba.ca/student/admissions/application/deadlines/application-process.html>.

General Entrance Requirements to the Interdisciplinary Health Program: A minimum adjusted grade point average (AGPA) of 2.0 in at least 24 credit hours of University 1, including 6 credit hours from Arts and 6 credit hours from Science to total 12 credit hours, plus 12-18 credit hours of other University 1 courses, for a total of 24-30 credit hours. Students must complete at least 6 more credit hours of Arts or Science courses once admitted to the Faculty.

Other requirements for University study

High school prerequisites required for University level courses in certain programs: Mathematics 40S (pre-calculus or applied) and Chemistry 40S are required for the science requirements in the Interdisciplinary Health program. Students planning to take BIOL 1020 for any program must have Biology 40S and any Grade 12 Mathematics course.

Minimum Adjusted GPA for consideration: 2.0.

For students wishing to choose the focused approach for entry to the Interdisciplinary Health Program, the course requirements for each of the programs or areas of concentration offered by the program are described in the Start Book at <http://umanitoba.ca/firstyear/>.

SECTION 3: ACADEMIC REGULATIONS

The provisions of the chapter, General Academic Regulations and Requirements, and the chapter, University Policies, apply to all students. In addition, the Interdisciplinary Health Program has regulations and requirements, published below, that apply specifically to its students.

3.1 Prerequisite, Corequisite, and Course Availability: Definitions

Prerequisite: If a course is prerequisite to a second course, the prerequisite must be met in order to continue in the second course. The department giving the second course may require a minimum grade of 'C' in the first course to register in the second course. Some inactive (legacy) courses may be used as prerequisites.

Corequisite: If a first course is a corequisite to a second course, the first course (unless previously completed) must be taken in the same term as the second course.

Course Availability: Not all courses listed in this Calendar are offered every year. Students are referred to the on-line calendar for courses offered in the year. Interdisciplinary Health Program courses at the 3000 and 4000 level are available only to students registered in the Interdisciplinary Health Program or one of the minors or options associated with the Program. Courses at the 3000 and 4000 level may be taken with written permission from an Academic Advisor as long as there is space.

3.2 Scholastic Standards

Graduation and Grade Point Average

To graduate, a student must have passed 120 credit hours acceptable for credit in the current degree program and have obtained a minimum of 240 quality points. This is equivalent to a Degree Grade Point Average of 2.0. A pass indicates a grade of 'D' or better. A student's Degree Grade Point Average (DGPA) will be determined from the number of effective courses which apply at a particular stage. The effective courses consist of all courses passed, in addition to all failures which have not been cleared, or substituted for, in the student's record. A maximum of 150 credit hours (25 courses or the equivalent) may be attempted in order to obtain the 120 credit hours.

Effective for the admissions cycle beginning September 2009, to graduate, students in the Interdisciplinary Health Program (IHP) must attain a Degree Grade Point Average of 2.5 (300 quality points on 120 credit hours) on graduation and meet the probation standards as stated below.

Assessment

The status of each student will be assessed in May of each year in which a student is registered. Assessments can include the following comments:

- Faculty minimum met (grade point average meets the standards listed below);
- Dean's Honour (see 3.9)
- Academic Warning
- Probationary status (see below)
- Suspension (see below)
- Suspension - all attempts used (see below)

Academic warning indicates a grade point average between the minimum required at the effective credit hours (year) and the DGPA requirement of 2.0.

There is a maximum of 30 credit hours of attempts allowed for each academic program; once those attempts are used (repeated courses, grades of F or D), it is impossible to graduate.

Probationary Standing

Students must achieve or exceed the following standards at the specified stages in their academic careers. Failure to obtain the standard results in probation. Once placed on probation, students who fail to meet the appropriate performance level at the next assessment following the next registration will be academically suspended. A student is not permitted to be on probation for two consecutive years.

Assessment Standards		
Interdisciplinary Health Program: Health Sciences and Health Studies		
9 – 21 credit hours	< 2.0	Academic Warning
24 – 30 credit hours	2.0	
33 – 60 credit hours	2.2	
63 – 90 credit hours	2.4	
93 – 117 credit hours	2.5	
120+ credit hours	2.5	

Suspension

Suspended students must remain out of the Degree Program for one academic year from the date of suspension and must apply for reinstatement at the Admissions Office no later than May 1.

Where mathematically possible for a suspended student to complete the degree by repeating failed courses, a suspended student shall be automatically reinstated after remaining out of the Degree Program for one calendar year, or by achieving a degree GPA above the probationary standard.

Suspension (All Attempts Used)

When it is mathematically impossible for a student to complete the degree by repeating failed courses, a suspended student, after remaining out of the program for one calendar year, may attempt reinstatement. By completing at least 12 credit hours in one term with a minimum 'D' grade in all courses and a term grade point average of at least 2.0, the student will be reinstated. The student will start the program afresh, with previous grades of 'C' or better applicable to the program.

3.3 Part-time Students

The maximum time allowed for completion of the degree is 10 years. After completion of 24 credit hours, part-time students will be evaluated each May and must conform to the minimum performance levels.

3.4 Direct Entry

There is no direct entry for students in 2015-2016.

3.5 Repeating Courses

A student may repeat any course for the purpose of attaining a better grade. The latest registration of a repeated course will count in GPA calculations. There are no supplemental examinations for students who have failed final or deferred examinations.

3.6 Challenge for Credit

A student wishing to challenge a course for credit should contact an Academic Advisor. Letter grades are granted upon completion of the course that is challenged for credit. A list of courses for challenge is available in the Advising Office. An application is required.

3.7 Transfer of Credit

See the chapters on Admissions and Academic Regulations and Requirements at the beginning of this Calendar. Students from faculties other than University 1 or from other institutions must make an appointment with an Academic Advisor by the end of their first academic year to arrange for transfer of credit.

3.8 Appeals of Academic Regulations

The Committee on Student Standing considers petitions from students who request special consideration with respect to rules and regulations governing their programs of study and qualification for graduation.

3.9 Dean's Honour List

Eligible students who achieve a term Grade Point Average of 3.5 or higher in at least 12 credit hours per term will be included in the Deans Honour List.

3.10 Degree With Distinction

Students who graduate with a degree GPA of 3.75 and higher will receive a degree with distinction.

3.11 Work Permit for Study Purposes

International students who are registering for courses or programs that require work placement must obtain a valid Work Permit, in addition to maintaining a valid Study Permit. Work placement includes, but is not limited to, any paid or unpaid practicum, internships, work experience, field placement, and co-op programs that are a required component for the completion of their degree, diploma or certificate. Please contact your program advisor or the International Centre for Students for further information.

3.12 Release and Indemnification Forms

In elective courses, students may be required to sign a release form for off-campus activities.

3.13 Written English and Mathematics Requirements

The written English and Mathematics requirements are satisfied by required courses HMEC 2000 and STAT 1000 within the Interdisciplinary Health Program. HMEC 2000 will be available to students upon admission to the Interdisciplinary Health Program.

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

Students entering the Interdisciplinary Health Program will select one of the following two programs:

- Health Sciences Program
- Health Studies Program

In order to qualify for a degree, students must complete the 120 credit hours specified for the selected program. Elective choices provided in each program can permit students to transfer between them; however, this opportunity decreases as students progress. Students who transfer to another program must meet the full requirements of that program. There is a quota in effect for intake to each program per academic year. The quota may affect movement into a program after the September intake.

4.1 Advisement

The Interdisciplinary Health Program will provide entering students with orientation information and will refer a student to a program advisor if the student requests. All returning students in the program must submit a program plan for the succeeding year before the start of registration.

4.2 Faculty Program Requirements

The following are the guidelines for the program requirements in the Degree Program. The courses outlined for each program in the sections which follow, meets these basic requirements.

Admitted in September 2012 or Later:

All students complete a program core of 9 credit hours consisting of:

Course Number	Course Name
HEAL 2600	Integration of Health Determinants of Individuals
HMEC 2000	Research Methods and Presentation
HMEC 3000	Introduction to Social Epidemiology

- Plus a minimum of 51 additional credit hours within the Program;
- Plus a minimum of 30 additional credit hours outside the Program of which at least 6 credit hours must be from the Faculty of Science and six from the social sciences;
- Plus a minimum of 12 additional credit hours of free electives leading to a degree requirement of 120 (123) credit hours.

Notes:

1. Students in the Interdisciplinary Health Program complete PSYC 2250 or HMEC 2000.
2. Students admitted between September 2005 and September 2012 are urged to seek academic advising assistance for advice regarding completion of core course requirements.
3. Human Ecology (General) students must complete an additional 3 credit hours of free electives.

4.3 Program Electives

Courses within each program fall into one of three categories:

- Department electives must be chosen from within the program department.
- Outside electives must be chosen from a program/faculty other than Interdisciplinary Health
- Free electives may be chosen from within or outside the Interdisciplinary Health Program.

4.4 Human Ecology Program

Chair: TBA

NOTE: Intake to this program has been suspended.

Students Admitted in September 2012 or Later

Course No.		Cr Hrs
ECON 1010 and 1020	or ECON 1210 and ECON 1220 Economics	6
	Six credit hours from ECON 2310, ECON 2390, ECON 2400, ECON 2540, ECON 2550	6
FMLY 1020	Family Issues across the Lifespan	3
	Six credit hours from FMLY 1010, FMLY 1420 or FMLY 1012	6
FMLY 2350	Multicultural Family Issues	3
HMEC 2000	Research Methods and Presentation	3
HMEC 3000	Introduction to Social Epidemiology	3
HEAL 2600	Integration of Health Determinants of Individuals	3

ACADEMIC CALENDAR 2015-2016

HNSC 1200	Food: Facts and Fallacies	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
HNSC 2130	Nutrition through the Life Cycle	3
NATV 1200	The Native Peoples of Canada, or	6
NATV 1220 and NATV 1240	The Native Peoples of Canada Part 1 and The Native Peoples of Canada Part 2	
STAT 1000	Basic Statistical Analysis 1	3
PSYC 1200	Introduction to Psychology	6
or		
SOC 1200	Introduction to Sociology	
TXSC 1600	Textiles for Living	3
TXSC 1610	Textiles, Product and Consumers	3
	Science course as defined by Faculty of Science	3
	Faculty Electives (at least 9 credit hours at 3000 or 4000 level; HMEC 4090, Practicum is highly recommended; HNSC courses in the Faculty of Agricultural and Food Sciences are also allowed)	24
	Minor/option	18
Recommended Minors/Options:		
Canadian Studies, Family Social Sciences, Human Nutrition and Metabolism, Labour and Workplace Studies, Management, Native Studies, Option in Aging, Political Studies, Sociology, Urban Studies, Women and Gender Studies		
	Free electives	12

4.5 Interdisciplinary Health Program

Program Chairperson: Shahin Shooshtari

This curriculum consists of two degree programs: the Bachelor in Health Sciences and the Bachelor in Health Studies. These degree programs offer new approaches to planning, administration and delivery of health services by fully integrating biological science and social science in understanding the health of people. Students will gain experience of dealing with health issues at the individual, community and institutional levels, as well as across the lifespan. The two degrees can serve as the foundation for careers in health care teams and community health management. They offer a general course of study, not a professional status. Students can use both degree programs to build the knowledge and prerequisites for entry into professional programs in the health and social science fields, such as medicine, dentistry and others. The Bachelor of Health Sciences degree provides students with an interdisciplinary background and skill set that will contribute to their preparation for a future in biomedical and health-related careers. This interdisciplinary skill set is seen as advantageous for future physicians and students applying for professional education.

4.5.1 Health Sciences Degree		
Students Admitted in September 2012 or Later		
Course No	Course Name	Cr Hrs
First year/foundation courses:		
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interaction	3
BIOL 1410	Anatomy of the Human Body	3
BIOL 1412	Physiology of the Human Body	3
CHEM 1300	University 1: Structure and Modeling in Chemistry	3
CHEM 1310	University 1: Introduction to Physical Chemistry	3
PSYC 1200	Introduction to Psychology	6
STAT 1000	Basic Statistical Analysis 1	3
ECON 1210	Introduction to Canadian Economic Issues & Policies	3
FMLY 3780 or FMLY 3790	Introduction to the Development of or Evaluation of Programs for Children and Families	3
GMGY 1010 or GMGT 2070	Business and Society or Organizational Behaviour	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
HMEC 3000	Introduction to Social Epidemiology	3
HMEC 2000 or PSYC 2250	Research Methods and Presentation or Introduction to Psychological Research	3
NATV 1220 or NATV 1240	Native Peoples of Canada 1 or 2	3
PHIL 1290	Critical Thinking	3

	Take 6 credit hours from the following 9 credit hours:	6
GEOG 4290	Geographies of Health and Health Care	3
PHIL 2740	Ethics in Biomedicine	3
SOC 2490	Sociology of Health and Illness	3
HEAL 2600	Integration of Health Determinants of Individuals	3
HEAL 3600	Integration of Health Determinants for Communities	3
HEAL 4600	Integration of Health Determinants for Canada and the World	3
HEAL 4620	Health Sciences Capstone	3
	Elective Courses: To be taken from an approved list of Science courses. At least 24 credit hours must be from the 3000 or 4000 level. A minimum of 21 of the 36 credit hours must be from the Sciences. Approved list on Faculty website.	36
	Free Electives	15

4.5.2 Health Studies Degree

Students Admitted in September 2012 or Later		
Course No	Course Name	Cr Hrs
ANTH 1210	Human Origins and Antiquity	3
ANTH 1220	Cultural Anthropology	3
BIOL 1020	Biology 1: Principles and Themes	3
BIOL 1030	Biology 2: Biological Diversity, Function and Interaction	3
PSYC 1200	Introduction to Psychology	6
SOC 1200	Introduction to Sociology	6
STAT 1000	Basic Statistical Analysis 1	3
ECON 1210	Introduction to Canadian Economic Issues & Policies	3
FMLY 3780 or FMLY 3790	Introduction to the Development of or Evaluation of Programs for Children and Families	3
GMGT 1010 or GMGT 2070	Business and Society or Organizational Behaviour	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
HMEC 3000	Introduction to Social Epidemiology	3
HMEC 2000 or PSYC 2250	Research Methods and Presentation or Introduction to Psychological Research	3
NATV 1220 or NATV 1240	Native Peoples of Canada 1 or 2	3
PHIL 1290	Critical Thinking	3
	Take 6 credit hours from the following 9 credit hours:	6
GEOG 4290	Geographies of Health and Health Care	3
PHIL 2740	Ethics in Biomedicine	3
SOC 2490	Sociology of Health and Illness	3
HEAL 2600	Integration of Health Determinants of Individuals	3
HEAL 3600	Integration of Health Determinants for Communities	3
HEAL 4600	Integration of Health Determinants for Canada and the World	3
HEAL 4610	Health Studies Capstone	3
	Elective Courses: To be taken from an approved list of Social Science courses. At least 24 credit hours must be from the 3000 or 4000 level. A minimum of 21 of the 36 credit hours must be from the Social Sciences. Approved list on Faculty website.	36
	Free Electives	15

Notes:

- Before entering continuing years in the Interdisciplinary Health Program, the overall program must be planned with academic advice. Program advising begins in early April.
- Students are strongly encouraged to seek the advice of Academic Advisors in the Interdisciplinary Health Program in order to plan their programs to develop pathways of knowledge that will assist them in moving toward careers in chosen fields.
- Students in both programs are required to structure their course selections as follows:
In Health Sciences, students are required to take 21 credit hours of science and 12 credit hours of social science courses from 36 credit hours of Approved Electives.
In Health Studies, students are required to take 21 credit hours of social science and 12 credit hours of science courses from 36 credit hours of Approved Electives.
- Students in both programs are required to take at least 24 credit hours at the 3000 and 4000 levels from 36 credit hours of Approved Electives. Students should consult the University Calendar to ensure that they have the appropriate pre- or corequisites before they attempt to register in a course. A number of courses are cross-listed between departments/faculties. The Academic Advisor will give additional guidance.

4.5.3 Health Sciences and Health Studies Minors

Minors in Health Sciences and Health Studies are offered by the Interdisciplinary Health Degree program.

Health Sciences Minor:

HEAL 2600	Integration of Health Determinants of Individuals
HEAL 3600	Integration of Health Determinants for Communities
HEAL 4600	Integration of Health Determinants for Canada and the World
	6 credit hours of Science Orientation courses at the 3000 or 4000 level*
	3 credit hours of Social Science Orientation courses at the 3000 or 4000 level*
TOTAL	18 credit hours

Health Studies Minor:

HEAL 2600	Integration of Health Determinants of Individuals
HEAL 3600	Integration of Health Determinants for Communities
HEAL 4600	Integration of Health Determinants for Canada and the World
	6 credit hours of Social Science Orientation courses at the 3000 or 4000 level*
	3 credit hours of Science Orientation courses at the 3000 or 4000 level*
TOTAL	18 credit hours

*Courses from the approved program electives list for the Interdisciplinary Health Degree Program are listed online at: http://umanitoba.ca/faculties/human_ecology/programs/idh/bhsciences/429.html.

4.6 Interfaculty Option in Aging

An Option in Aging is offered by and in the following faculties, schools, and colleges: Arts, Faculty of Health Sciences: Bachelor of Human Ecology Family Social Sciences Degree Program, Interdisciplinary Health Program, Nursing, Kinesiology and Recreation Management, Social Work, and Agricultural and Food Sciences: Bachelor of Science in Human Nutritional Sciences Program.

To complete the option, students in the Interdisciplinary Health Program must complete each of the following requirements:

Interfaculty Option in Aging		
Required Courses (6 credit hours):	HMEC 2650 or REC 2650 or SWRK 2650 <i>The Social Aspects of Aging</i>	KIN 2610 or NURS 2610 <i>Health and Physical Aspects of Aging</i>
At least six (6) credit hours of discipline-specific (professional) applied work in the student's department of registration	Human Ecology Courses: FMLY 4300 HMEC 4090 Agricultural and Food Sciences Course: HNSC 4362	Application is required for all field placement or practicum courses.
Six (6) credit hours of aging-related courses from participating units	Human Ecology Courses: FMLY 3220 FMLY 3240 FMLY 4220 Agricultural and Food Science Courses: HNSC 2130 HNSC 4310	

Upon completion of these requirements, a comment will be added to the student's transcript.

4.7 The Minor in Management

A Management Minor is offered by the Asper School of Business. Interdisciplinary Health students may complete this Minor as part of the electives portion of their programs. The Minor will consist of any 18 credit hours of Management courses. Students must meet prerequisites for all courses.

4.8 The Voluntary Minor

Students in the Interdisciplinary Health Program may declare and complete a Minor from departments and interdisciplinary programs in which a Minor is offered. A Family Social Sciences Minor is available. Information about Minors in programs other than Interdisciplinary Health is found in the appropriate description of departmental/school/faculty program offerings in the Undergraduate Calendar.

Completion of the Minor is entirely optional. Students may not, however, declare both their Major and Minor from the same department/interdisciplinary program. No course may be used as part of a prescribed program in the Interdisciplinary Health Program and also be part of a prescribed Minor. For example, if a course in Chemistry is part of a student's degree requirements, it cannot be used as part of a Minor in another program. Completion of a Minor may require that a student take more than the minimum number of credit hours for graduation.

SECTION 5: COURSE DESCRIPTIONS

General Human Ecology Course Descriptions-2000 Level

HMEC 2000 Research Methods and Presentation Cr.Hrs. 3

An introduction to research designs, methods and techniques, as well as the practice of disseminating results, in the context of selected determinants of health. Applications in natural and social sciences will be presented. Skills related to presenting research findings will be taught. Prerequisite: STAT 1000 (005.100). Not to be held with HMEC 2050 (028.205).

HMEC 2030 Human Ecology: Perspectives and Communication Cr.Hrs. 3

(Lab Required)(Formerly 028.203) Theory and practice of written and oral communication set within the context of the subject matter of areas of Human Ecology. Students may not hold credit for HMEC 2030 (028.203W) and 028.103 and 028.204.

HMEC 2050 Introduction to Research in Human Ecology Cr.Hrs. 3

(Formerly 028.205) A general introduction to research issues in natural and social sciences and their application in the various subject areas in human ecology. Prerequisites: [HMEC 2030 (028.203W or 028.103W)] and STAT 1000 (005.100)M.

HMEC 2650 The Social Aspects of Aging Cr.Hrs. 3

(Formerly 028.265) An examination of the social aspects of aging. Emphasis on understanding the aging process as a life transition involving adaptation through interaction with social and physical environments. Students may not hold credit for HMEC 2650 (028.265) or SWRK 2650 (047.265) or REC 2650 (123.265).

General Human Ecology Course Descriptions-3000 Level

HMEC 3000 Introduction to Social Epidemiology Cr.Hrs. 3

This course provides an overview of the basic concepts, principles and methods of social epidemiology and their applications for research and practice from a human ecology perspective. Applications to social determinants of health across the life course may include but are not limited to income and food security, early child development and others. Prerequisites: HMEC 2000 [or HMEC 2050] or any 2000-level or higher research course and [HEAL 2600 or HMEC 2030].

HMEC 3100 Communication for Professional Practice Cr.Hrs. 3

(Formerly 028.310) Advanced communication skills as applied to professional practice in the fields of human ecology. Students may not hold credit for HMEC 3100 (028.310) and 028.204. Prerequisites: 39 credit hours in the Human Ecology program and HMEC 2030 (028.203 or 028.103).

HMEC 3500 Developmental Health Cr.Hrs. 3

This course examines how social inequalities affect population health across the lifespan. It is guided by the determinants health with a particular focus on socioeconomic variables. Local, provincial, national and international perspectives provide meaningful insight into the roles of equality and inequality. Prerequisite: Any 2000 level research methods course.

General Human Ecology Course Descriptions-4000 Level

HMEC 4090 Practicum in Human Ecology Cr.Hrs. 6

(Formerly 028.409) This is a partnership among the university, field supervisor, and the student. It provides an opportunity for students to work in a supervised setting (e.g., health, social services or business) with health professionals as field supervisors. Students also have in-class experiences and assignments with an academic instructor. Prerequisite: 84 credit hours in the Human Ecology General or Interdisciplinary Health program and consent of instructor. Application required. Limited Enrolment.

Interdisciplinary Health Degree Program Course Descriptions

HEAL 1600 Health and Health Professions Cr.Hrs. 3

(Formerly BIOL 1110) Students discuss the Inter-relationship between health, health determinants, and the impact that sciences, health-science, behavioural-social sciences, and technology, have on health care and the health professions. Participants will consider their own role as health care consumers. Not to be held with BIOL 1110.

HEAL 2600 Integration of Health Determinants of Individuals Cr.Hrs. 3

Students study, integrate and apply the determinants that affect the health of individuals throughout the life span to selected case or learning scenarios. The case or learning scenarios present a variety of issues in the delivery of health-related services that are intended to benefit individual health. Prerequisites: One of CHEM 1300 (002.130) or BIOL 1020 (071.102) or STAT 1000 (005.100); and one of PSYC 1200 (017.120) or SOC 1200 (77.120) or consent of instructor.

HEAL 3600 Integration of Health Determinants for Communities Cr. Hrs. 3

Students study, integrate and use community level determinants of population health in selected case or learning scenarios. These cases present a variety of issues in the design of health related services that are intended to benefit population health. Prerequisites: HEAL 2600 with a grade of "C" or higher and 39 credit hours in the Curriculum for Interdisciplinary Health or consent of instructor.

HEAL 4600 Integration of Health Determinants for Canada and the World Cr.Hrs. 3

Students use selected case or learning scenarios to study the determinants of population health that depend on decision making in governmental or international agencies. The case scenarios present a variety of issues in the governance and management of population health. Prerequisites: HEAL 3600 and 57 credit hours in the Curriculum for Interdisciplinary Health or consent of instructor.

HEAL 4610 Health Studies Capstone Cr.Hrs. 3

Students will explore selected topics from the social sciences to synthesize and evaluate actions that can affect the health of people. The course summarizes the social sciences knowledge that forms the basis for all health related professional work. Prerequisite: A grade of C+ in HEAL 3600 and 57 credit hours in the Curriculum for Interdisciplinary Health or consent of instructor. Restricted to students in Health Sciences and Health Studies.

HEAL 4620 Health Sciences Capstone Cr.Hrs. 3

Students will explore selected topics from the biological sciences to synthesize and evaluate actions that can affect the health of people. The course summarizes the biological science knowledge that forms the basis for all health related professional work. Prerequisite: a grade of C+ in HEAL 3600 and 57 credit hours in the Curriculum for Interdisciplinary Health or consent of instructor. May not hold with HEAL 4610

HEAL 4650 Selected Topics in Interdisciplinary Health Cr.Hrs. 3

The opportunity to carry out individual study in the area of interdisciplinary health. When enrolment warrants, special topics may be offered in a regular course format. Prerequisite: Consent of Instructor and Chairperson.

COLLEGE OF DENTISTRY

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Chapter Contents

SECTION 1: DEGREE PROGRAMS OFFERED

1.1 Programs

1.2 The Profession of Dentistry

SECTION 2: ADMISSION REQUIREMENTS

2.1 Doctor of Dental Medicine

2.2 Bachelor of Science in Dentistry

2.3 International Dentist Degree Program

SECTION 3: COLLEGE ACADEMIC REGULATIONS

3.1 Essential Skills and Abilities for Admission, Promotion and Graduation in the DMD Program

3.2 Policy on Student Attendance

3.3 College of Dentistry/School of Dental Hygiene Professional Unsuitability By-Law

3.4 Criminal Record/Adult Abuse Registry/Child Abuse Registry

3.5 Immunization and Blood Borne Diseases Policy

3.6 CPR Certification

3.7 Instruments, Computers and Textbooks

3.8 Voluntary Withdrawal

3.9 Required Withdrawal

3.10 Decisions Concerning Academic Promotions

3.11 Incomplete Standing in the College of Dentistry

3.12 Supplemental Examinations

3.13 Honours and Awards

3.14 E-Mail Accounts

3.15 Financial Aid

3.16 Registration Exceptions

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

4.1 First Year

4.2 Second Year

4.3 Third Year

4.4 Fourth Year

SECTION 5: COURSE DESCRIPTIONS

SECTION 1: DEGREE PROGRAMS OFFERED

Program/Degree	Years to Complete	Total Credit Hours (dental program only)
Doctor of Dental Medicine (D.M.D.) (4 year program)	Minimum time to graduation: Six years (University 1, plus one year or 2 years in either the Faculty of Science or Arts, plus four years in the College of Dentistry).	157
Doctor of Dental Medicine (D.M.D.) (International Dental Degree Program [IDDP] 2 year program)	After a 8 week summer orientation students in this program complete the 3 rd and 4 th year of the dental program.	74
Bachelor of Science in Dentistry (note: only students enrolled in the D.M.D. program are eligible for admission)	This program is completed over two (2) summers, normally commencing after first year in the dental program.	NA

1.2 The Profession of Dentistry

The College of Dentistry is dedicated to educating dental, dental hygiene and graduate students in a progressive learning environment, conducting research in oral health, and serving the community and the oral health professions as a source of knowledge and expertise. The college serves as a bridge between the fundamental scientific foundation of the profession and its translation into health care for the public. Dentists enhance and promote the total health of patients through oral health management. Dentists are concerned with promoting oral health and preventing and alleviating the effects of oral diseases and conditions in order to contribute to the well-being of their patients.

The curriculum is designed to ensure that students graduate as competent dentists prepared to meet the oral health care needs of their patients. It provides the knowledge of basic biomedical, behavioural and clinical sciences and biomaterials, the cognitive and behavioural skills, and the professional and ethical values necessary for practice as a dental professional.

Information on the Dental Hygiene program is in the chapter, [School of Dental Hygiene](#).

Licensing Requirements

A graduate of the College of Dentistry is entitled to apply to the Manitoba Dental Association to obtain a license to practice within the province of Manitoba. For information on licensing requirements and the application process please contact: The Registrar, [Manitoba Dental Association](#), 202 - 1735 Corydon Avenue, Winnipeg, Manitoba R3N 0K4; telephone (204) 988 5300; e-mail: office@manitobadentist.ca

National Examining Body

Graduates of this college are required to sit a written examination and an objective structured clinical examination during the calendar year of their graduation, administered by the National Dental Examining Board of Canada. The NDEB certification granted to graduates who pass these examinations, entitles them to apply for a license to practice in all provinces of Canada. The provinces of Ontario and Quebec have additional requirements. For information contact: The Registrar, [National Dental Examining Board](#), 80 Elgin Street, 2nd Floor, Ottawa, Ontario K1P 6R2; telephone (613) 236 5912; e-mail: director@ndeb.ca

Other Licensing Bodies

For regulations governing licensure in other areas (e.g., other provinces, the United States), candidates are advised to write the licensing body in the province/state in which they are interested.

SECTION 2: ADMISSION REQUIREMENTS**2.1 Doctor of Dental Medicine**

Minimum time to graduation: Six years (University 1, plus one year in the Faculty of Science or Arts or Extended Education; or 2 years in the Faculty of Science or Arts; plus four years in the College of Dentistry).

The following is a summary of the admission requirements. Equivalent academic courses completed at recognized universities elsewhere will be considered. All admission requirements, as well as application deadline dates and forms, are included in an application bulletin that is available from on the university's website ([dentistry](#)).

Minimum 60 credit hours of pre-Dentistry study including:

BIOL 1020 and BIOL 1030

CHEM 1300 and CHEM 1310

CHEM 2210 and CHEM 2220

CHEM 2360 and CHEM 2370 or MBIO 2360 and MBIO 2370

PHYS 1020 and PHYS 1030 or PHYS 1050 and PHYS 1070

6 credit hours of English (taught through the English Department, usually with ENGL prefix)

24 credit hours of electives, 6 of which must be in the non-applied sciences or non-pure sciences.

All science courses must include the laboratory component.

Other requirements

High school prerequisites: Chemistry 40S, Pre-Calculus Mathematics 40S or Applied Mathematics 40S, Physics 40S and Biology 40S.

The 6 credit hours of English satisfies the written English requirement; the mathematics requirement must be met in the first 60 credit hours even though it is not a specific admissions requirement (PHYS 1020(M) meets the mathematics "M" requirement).

The English Canadian Dental Aptitude Test (DAT) must be written no later than the November test date prior to the application deadline.

A personal interview is required.

Admission is competitive.

Information on the admission process may be accessed through the College of Dentistry's web page (<http://umanitoba.ca/healthsciences/dentistry/>) or by visiting the Admission website at: <http://umanitoba.ca/student/admissions/programs/dentistry.html>

Selection criteria: Grades, interview and DAT score equally weighted.

Students should be aware that if admitted they must provide an official Adult Criminal Record Check (including Vulnerable Persons Screening), an Adult Abuse Registry Check and a Child Abuse Registry Check as well as a signed acknowledgement of the Essential Skills and Abilities for Admission, Promotion and Graduation in the DMD Program document prior to registration. See Section 3 for further information on these requirements.

2.2 Bachelor of Science in Dentistry

In addition to the basic professional degree, the college offers the Bachelor of Science in Dentistry to interested dental students wishing to undertake research during their undergraduate program. The program is designed to assure that participation in it will not interfere with the student's dental degree. Through active participation in a research program, the students will be given the opportunity to develop skills in applying scientific knowledge to dental practice and an interest in dental research. In addition, the program will serve as a preparatory step for entry into various graduate programs. Information on admission to this program is available from the Dean's Office and through the College of Dentistry's web page <http://umanitoba.ca/healthsciences/dentistry/>.

2.3 International Dentist Degree Program (IDDP)

The College of Dentistry, University of Manitoba, offers the International Dentist Degree Program (IDDP) to graduates of international dental programs that are not accredited by the Commission on Dental Accreditation of Canada. After an 8 week summer orientation program, students enter the 3rd year of the regular dental program of the College. Upon satisfactory completion of the 3rd and 4th years of the dental program, IDDP participants will be awarded the Doctor of Dental Medicine (DMD) degree. All graduates of DMD programs in Canada, once having passed the National Dental Examining Board of Canada (NDEB) examinations, are eligible for licensure/registration as a dentist in all provinces in Canada.

Requirement to the IDDP program can be found at the College of Dentistry's website at: http://umanitoba.ca/faculties/health_sciences/dentistry/iddp/index.html. Please note that there are two tracks which may be applied to.

Should you have specific questions that cannot be answered from the above website, please call the IDDP Coordinator at (204) 977-5611.

SECTION 3: COLLEGE ACADEMIC REGULATIONS

All students are asked to note that some academic policies and regulations are under review and are subject to change. Please check the Web Calendar at umanitoba.ca for updated information.

The provisions of the chapter, General Academic Regulations and Requirements, and the chapter, University Policies, apply to all students. In addition, the College of Dentistry has regulations and requirements, published below that apply specifically to its students.

The College of Dentistry expects all students to participate fully in their educational experience. This means participation above and beyond the requirements of individual courses. For example, as a part of their clinical experiences, all students must learn skills of a clinical nature, such as local anesthesia, rubber dam placement, etc. Our teaching approach includes having students practice these skills on each other. All students are expected to participate in these activities.

Further, the college has an expectation of all students that they are aware of and maintain attitudes and behaviours which exhibit a level of professionalism, empathy, and consideration of all members of their community, including faculty, staff, students or patients, similar to what is expected of an oral health practitioner.

The following policies have been adopted by the College to aid students in understanding the value the College places on these conducts/behaviours.

3.1 Essential Skills and Abilities for Admission, Promotion and Graduation in the DMD Program

As an accredited Canadian dental program, the College of Dentistry, Faculty of Health Sciences at the University of Manitoba is responsible for providing a program of study that ensures graduates have the necessary qualifications (academic knowledge, clinical skills, and professional behaviors and attitudes) to enter the regulated profession of Dentistry in Canada. Becoming and being a dentist requires a wide range of highly specialized skills and abilities. Some of these are taught in dental school, while others must be brought by the individual as an innate set of essential skills and abilities. The criteria for becoming registered/ licensed as a dentist in Canada requires a level of motor skills and other attributes that are not necessary in other professional occupations. Similarly, the ability to provide reasonable accommodation for special learning needs in dentistry may not be the same as it is for other academic programs.

It is important to note that an offer of admission to the College of Dentistry is not evidence that the dental program has verified that an applicant has the prerequisite skills and abilities for success in the program or in obtaining future professional licensure. However, these skills and abilities are essential if students are to be successful in achieving the competency standards of the profession.

For progression in, and graduation, from the dental program, all students must conduct themselves in a professional manner, and must have the Essential Skills and Abilities (Technical Standards) discussed under the following five broad areas: Observation/perception; Communication; Motor/tactile function; Cognition; Emotional functioning

All applicants to the undergraduate program of the College of Dentistry are expected to review The Essential Skills and Abilities for Admission, Promotion and Graduation in the DMD Program document to assess their ability to meet these standards; all applicants offered admission will be required to acknowledge such review and assessment. Any candidate for the DMD degree who cannot demonstrate the required skills and abilities throughout their course of study may be requested to withdraw from the program.

Detailed information for the above policy can be found at: http://umanitoba.ca/healthsciences/dentistry/student_resources/policies.htm

3.2 Policy on Student Attendance

The College of Dentistry has a social mandate to ensure that graduating dentists are caring, skilled healthcare providers who are worthy of the public trust endowed upon them. In fulfilling this mandate, the College of Dentistry has developed comprehensive programs of education and experience to ensure that graduates meet these high expectations. Unlike non-professional education programs, where students can pick and choose their education and experiences based on personal preferences, Dental School requires students to attend and participate actively in all components of the program.

While students are required to complete assignments and pass examinations, these are not considered to be equivalent to attending Dental School. When the University confers the DMD degree, it attests to society not only that the student has shown successful examination performance, but that the student has participated in the entire educational experience defined by the College of Dentistry and has thereby demonstrated an appropriate level of professional learning and responsibility.

Students at the University of Manitoba, College of Dentistry, are required to attend all scheduled classes, examinations, small group sessions, laboratories, pre-clinical labs, and clinics unless expressly indicated otherwise by the course coordinator in the course outline/syllabus.

Students are required to be on time for all scheduled classes, examinations, small group sessions, laboratories, and pre-clinical labs. Students arriving more than 10-minutes late will be recorded as absent.

Students who do not comply with the Student Attendance Policy will face academic consequences.

Detailed information for the above policy can be found at: http://umanitoba.ca/healthsciences/dentistry/student_resources/policies.html

3.3 College of Dentistry/School of Dental Hygiene Professional Unsuitability By-Law

Students must at all times demonstrate suitability for the dental profession. In this regard students are obligated to act with integrity and diligence in carrying out their professional responsibilities, and their behaviour and conduct in relation to others must be characterized by consideration, respect and good faith.

The College of Dentistry may require a student to withdraw from the College when the student has been found unsuited for the practices of dentistry or dental hygiene because the student has been found to have engaged in unprofessional behaviour. A student may be required to withdraw at any time throughout the academic year.

Grounds which may require withdrawal are: demonstrated behaviour which is exploitive, irresponsible, intentionally injurious or destructive to patients; and/or compromised professional judgment through self-interest and/or conflict of interest; and/or an acquired criminal conviction, either in Canada or any other jurisdiction, which is of such a nature as to place in question his/her fitness for the dental professions; and/or participation in any activity related to patient care or any activity related to the practice of the dental professions while under the influence of alcohol or drugs or while abusing prescription drugs; and/or engaging in behaviour or conduct that if engaged in by a practising dentist/dental hygienist would likely result in disciplinary action, including suspension or revocation of the license to practise, by the Manitoba Dental Association or the College of Dental Hygienists of Manitoba.

Detailed information for the above policy can be found at: http://umanitoba.ca/healthsciences/dentistry/student_resources/policies.html

3.4 Criminal Record/Child Abuse Registry

An adult criminal record, an adult abuse registry and a child abuse registry self-declaration will be required of all applicants at the time of application. A formal Adult Criminal Record Check (including vulnerable sector screening), a formal Adult Abuse Registry Check and a formal Child Abuse Registry Check are required at the time of registration, and annually thereafter keeping in accordance with existing policies of other health, education and social service programs at the University of Manitoba.

Failure to provide these documents may impact on registration and a student's ability to progress in the Dental program.

3.5 Immunization and Blood Borne Diseases Policy

The College of Dentistry and School of Dental Hygiene maintain comprehensive immunization requirements to protect the wellbeing of our students and the health of patients and communities with whom they will have contact during their curriculum.

All students enrolled in the College of Dentistry must have immunity demonstrated against the following diseases: tetanus, diphtheria, pertussis, polio, measles, mumps, rubella, varicella (chickenpox), and hepatitis B. Students need to undergo testing for tuberculosis (TB) infection, unless the student already has a past history of TB infection or TB disease documented. Students must receive yearly influenza vaccinations. Students who cannot receive certain immunizations due to allergies or pregnancy must provide a physician's certificate stating this.

ACADEMIC CALENDAR 2015-2016

Before the first day of classes, all students must complete and return the University of Manitoba Immunization Record Form (Package A), as provided by the Dentistry Student Services Office. Please note that any supplemental immunization documentation provided to support this document and/or any future submissions of immunization materials must be signed by a physician or nurse. All students are responsible for updating their immunizations as needed.

Students will not be permitted to attend clinics until all immunization requirements are satisfied.

For the collection and management of student immunization records, the College of Dentistry/School of Dental Hygiene partner with the Faculty of Health Science Immune Program. The Director of Immunizations and the Program Assistant collect and organize immunization data as well as provide immunization services to students at the Bannatyne campus.

All students are expected to comply with the requirements of the Faculty of Health Science Immune Program which may change from time to time due to the immunization requirements of external health care facilities where students will be expected to attend as a part of their dental/dental hygiene program.

3.6 CPR Certification

Accepted candidates will be required to show proof of CPR certification by October 15 of each year. The CPR Certification level required by the College of Dentistry is: Health Career Provider (HCP CPR Level C). This certification must be maintained on a yearly basis up to the date of graduation.

3.7 Instruments Computers and Textbooks

Students entering the College of Dentistry will be expected to own or purchase a PC laptop computer (only PC is supported by the College given the software that is used in our clinical facilities) that is compliant with University computer standards (see Bookstore - Computers on Campus for annual listing) and Vital Source Technology software requirements. The expenditure of a computer may range approximately from \$1000 to \$4000 within the first year of the program. The Vital Source Technologies cost over the four year program is approximately \$4000 USD and depending on the Canadian exchange rate, students make four annual payments of approximately \$1000/year to cover the full costs. These costs are included as part of the Clinical Instrument Fees (formerly called Dental Kit fee).

Students are responsible for Clinical Instrument Fees (formerly called Dental Kit fee) which represent the cost and administration of dental instruments and sundry items used in the clinical component of dental education. The cost of instruments is broken down into 2 categories: student owned instruments and college owned instruments.

Student owned instruments are specific instruments that are the student's property and are retained by students after graduation. College owned instruments are specific instruments that are the college's property and remain within the college (students are responsible for returning in good condition). Instruments are structured in this manner to meet sterilization standards and to ensure an efficient and effective clinical operation.

Administration costs of instruments include staff salaries required to support functions such as inventory control, instrument sterilization and dispensing, maintenance, etc.).

Over the four years of dentistry, the cost of such instruments/fees has been approximately \$47,500; the bulk of the expenditure is incurred in the first two years. The college is unable to provide refunds for clinical instrument fees and will not accept returns of any student computer software (including Vital Source Technologies), clinical instruments or other items, should a student leave the college for whatever reason and upon graduation.

3.8 Voluntary Withdrawal

Students intending to withdraw from a portion or all of their courses must report immediately in person or in writing to the Dean's Office. No fees will be refunded without the authorization of the dean. Please Note: Computer Software, Clinical Instrument (former Dental Kit) fees and/or Clinical Instrument items are non-refundable. See also the chapter on General Academic Regulations and Requirements.

Students who withdraw from the College of Dentistry without notice will be considered to have terminated their connection with the college. If a subsequent application for registration is approved, they will be required to conform to the rules and regulations, fee schedules, sequence of courses, etc., in effect at the time of such subsequent application.

In cases where a student is obliged to withdraw after the final date of withdrawal published in the Calendar because of ill health or other sufficient reasons, their cases will be considered by the dean of the college.

3.9 Required Withdrawal

The Senate of the university has approved bylaws granting certain faculties, colleges and schools the authority to require a student to withdraw on the basis of unsuitability for the practice of the profession to which the program of study normally leads. Senate has approved such a bylaw for the College of Dentistry (see item 3.3 above).

Full policy information can be found at: http://umanitoba.ca/healthsciences/dentistry/student_resources/policies.html

3.10 Decisions Concerning Academic Promotions

The letter grade "D" is the lowest acceptable level of performance in each undergraduate course leading to the degree of D.M.D. when the work of any given year is being taken for the first time. (In the case of a repeated year, the minimum passing grade in each course is "C".)

A student who has a failing grade registered against him/her may not register for the program of the subsequent year, but may, at the discretion of Dental College Council, be permitted to repeat the failed year.

A minimum term GPA of 2.0 in each year is required to qualify a student for standing in that year.

A student who fails to obtain a minimum term GPA of 2.0 and who is not granted supplemental privileges will be considered to have failed the year.

Except by special permission of Dental College Council, no student may repeat more than one year in Dentistry, nor may any year be repeated more than once.

The work requirements of any repeated year may be modified, even increased, at the discretion of the Dental College Council.

The passing grade in each course of a repeated year in Dentistry is "C".

If a student receives an "F" grade in a fourth year clinical course, they will be required to register and pay a fee for the entire repeated year, and the work in that year may be modified or even increased by Dental College Council.

3.11 Incomplete Standing in the College of Dentistry

The incomplete "I(F)" designation is restricted to clinical courses.

Successful completion of clinical course requirements is through extended clinics rather than supplemental assessment.

A student who is unable to complete the quantitative clinical requirements in a course by the end of the academic year may apply for an incomplete grade classification ["I(F)"] and extension of time. Details of this application procedure can be obtained from the College.

3.12 Supplemental Examinations

A "Supplemental Examination" is an examination which may be offered as a privilege to a student who has failed a course or failed to achieve a satisfactory result. Such examinations are offered in order to grant the student an opportunity to rectify the inadequacy without repeating the course.

Information on Supplemental Examinations can be found in the chapter, General Academic Regulations at the beginning of this Calendar. Specific information on The College of Dentistry's supplemental privileges can be obtained from the College.

3.13 Honours and Awards

Dean's Honour List: awarded to students in each year of the dental program who have achieved a minimum sessional (fall & winter term combined) G.P.A. of 3.8.

To qualify for Graduation with Honours, a candidate for the D.M.D. degree must qualify for the Dean's Honour List in both third and fourth year.

A student who repeats a year at his/her own request, i.e., not at the request of Dental College Council, is not eligible for the Dean's Honour List or to receive any awards for the work in that repeated year.

The following policy applies to the eligibility of part-time students for academic awards: in allocating any award, the only academic performance of a student to be considered is that attained during the year(s) for which the award is made. Therefore, a part-time student is not eligible for any purely academic award, other than one in an individual course. However, a part-time student who is carrying 80 per cent or more of the normal course load for the year is eligible for any award where conditions other than academic merit apply, and further, subject to the provisions set forth above, any part-time student is eligible for any award in the individual courses taken in the year for which the award is made.

3.14 E-Mail Accounts

All students are expected to have an e-mail account with the University of Manitoba and check it regularly. The College of Dentistry does not support communications with its students through external e-mail addresses.

3.15 Financial Aid

A number of loan and bursary funds are available to dental students. Applications and further information are available through the University of Manitoba's [Financial Aid and Awards Office](#).

3.16 Registration Exceptions

Upon receipt of initial (and annually thereafter) Criminal Record (including Vulnerable Sector Screening), Adult Abuse Registry Check and Child Abuse Registry Check, the College of Dentistry registers all students in their courses.

Students who have a failing grade/s registered against them and/or have other outstanding academic matters (i.e. deferred or supplemental examinations, modified program, etc.) in regards to the previous academic session will not be registered in the next ensuing academic session until all outstanding matters have been cleared. Students who fall into this category should contact the student advisor for further information.

A student advisor is available in D028 Dental Building or by calling (204) 789-3484.

ACADEMIC CALENDAR 2015-2016

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

4.1 First Year

	Admitted 2011 and Forward	Credit Hours
DDSS 1100	Periodontology 1	1
DDSS 1110	Radiology 1	1
DENT 1202	Early Clinical Experience	3
DENT 1210	Dental Practice Management	1
ORLB 1302	Cell and Tissue Biology	4
ORLB 1310	Head, Neck and Nervous System Part 1	4
ORLB 1320	Head, Neck and Nervous System Part 2	3
ORLB 1330	Human Growth and Development	3
ORLB 1340	Oral Tissues Structure and Function	3
PDSD 1400	Orthodontics 1	2
RSTD 1500	Dental Materials 1	2
RSTD 1512	Operative Dentistry 1	6
RSTD 1520	Dental Anatomy	3
RSTD 1530	Occlusion	2
RSTD 1550	Introduction to Dentistry	2

4.2 Second Year

	Admitted 2011 and Forward	Credit Hours
DDSS 2100	Periodontology 2	2
DDSS 2110	Radiology 2	1
DDSS 2122	Oral Pathology	5
DDSS 2130	Pain and Anxiety Control 1	1
DENT 2202	Introduction to Comprehensive Care	4
ORLB 2300	Pathology and Microbiology 1	1
ORLB 2312	Structure and Function of Major Organ Systems	4
ORLB 2320	Cariology and Plaque Associated Diseases	3
ORLB 2330	Nutrition in Dentistry	2
PDSD 2400	Orthodontics 2	2
PDSD 2410	Pediatric Dentistry 1	3
PDSD 2420	Dental Public Health	1
RSTD 2502	Dental Materials Science 2	2
RSTD 2510	Operative Dentistry 2	3
RSTD 2520	Endodontology 1	2
RSTD 2532	Fixed Prosthodontics 1	6
RSTD 2540	Removable Partial Denture Prosthodontics	3
RSTD 2552	Complete Denture Prosthodontics	4

4.3 Third Year *

	Admitted 2011 and Forward	Credit Hours
DDSS 3102	Periodontology 3	3
DDSS 3112	Oral Diagnosis and Radiology 1	2
DDSS 3120	Pain and Anxiety Control 2	1
DDSS 3132	Oral and Maxillofacial Surgery 1	2
DDSS 3142	Medicine	2
DDSS 3152	Temporomandibular Disorder & Orofacial Pain	2
DENT 3210	Dental Practice Management 3	1
ORLB 3300	Pathology and Microbiology 2	1
ORLB 3320	Pharmacology and Therapeutics	3
PDSD 3402	Orthodontics 3	2
PDSD 3412	Pediatric Dentistry 2	3
PDSD 3422	Dental Public Health/ Preventive Dental Science	2
RSTD 3512	Operative Dentistry 3	5
RSTD 3522	Endodontology 2	3
RSTD 3532	Fixed Prosthodontics 2	5
RSTD 3542	Complete and Removable Partial Dental Prosthodontics	3

*IDDP Students must also complete an 8 week Orientation prior to commencing the 3rd year of the program (DENT 2440, IDDP Orientation – 6 credit hours)

4.4 Fourth Year

	Admitted 2011 and Forward	Credit Hours
DDSS 4122	Oral and Maxillofacial Surgery 2	1
DDSS 4150	Hospital Dentistry	1
DENT 4202	Interdisciplinary Patient Centred Care Case Studies	2
DENT 4210	Dental Practice Management 4	2
DENT 4222	General Practice Dentistry	10
DENT 4232	General Practice Seminars	2
DENT 4240	Dental Jurisprudence	1
PDSD 4402	Orthodontics 4	2
PDSD 4412	Pediatric Dentistry 3	2
PDSD 4422	Community Dentistry Externship	4
RSTD 4522	Advanced Topics in Endodontics	1

SECTION 5: COURSE DESCRIPTIONS

First Year Courses as of 2011

DDSS 1100 Periodontology 1 Cr.Hrs. 1

Predominately a pre-clinical laboratory course designed to introduce students to periodontal examination procedures and to basic non-surgical periodontal therapy. May not be held with DDSS 1020.

DDSS 1110 Radiology 1 Cr.Hrs. 1

A series of lectures which introduces the student to: the elementary principles of dental radiology; radiation physics, radiation biology, imaging techniques, x-ray equipment and radiation protection. May not be held with DDSS 1140.

DENT 1202 Early Clinical Experience Cr.Hrs. 3

A series of lectures and clinical participation sessions designed to introduce the student to clinical dentistry and the relevance of basic science courses in the dental curriculum. May not be held with DENT 1010. Course evaluated on a pass/fail basis.

DENT 1210 Dental Practice Management 1 Cr.Hrs. 1

This course is an introduction to the Dental Practice Management curriculum which is distributed throughout the four year program. It comprises the modules on the Essentials of Effective Leadership and Strategic Leadership; Managing the Workplace and Conflict Resolution; Essentials of Interpersonal Communication Skills; and Team Building.

ORLB 1302 Cell and Tissue Biology Cr.Hrs. 4

Structure, function and chemical composition of eucaryotic cells and oral bacteria will be studied. Taste signaling, diseases, and molecular interactions within and between cells and the immune system will be described in detail. May not be held with ORLB 1050.

ORLB 1310 Head, Neck and Nervous System, Part 1 Cr.Hrs. 4

Gross anatomy of the head and neck are described and observed by regional dissection. Overviews of the nervous system and surface anatomy of the mouth are included. May not be held with ORLB 1060.

ORLB 1320 Head, Neck and Nervous System, Part 2 Cr.Hrs. 3

An introduction to the structure and function of the central and peripheral nervous systems and associated structures, the neurophysiology and the stomatognathic system, pain and analgesics. May not be held with ORLB 1070.

ORLB 1330 Human Growth and Development Cr.Hrs. 3

Human development from the origin of the reproductive cells through fertilization, conception, embryonic/fetal development, birth, growth and aging. Particular emphasis is given to development and growth of structures of the head and neck. May not be held with ORLB 1080.

ORLB 1340 Oral Tissues, Structure and Function Cr.Hrs. 3

This course is designed to present the normal morphology, developmental biology, biochemical structure, metabolism and functions of the dentition and para oral tissues, cartilage, bone and exocrine glands of the head and neck. Structural functional aspects of oral anatomy, biochemistry/molecular biology and physiology will be included. May not be held with ORLB 1090.

PDSO 1400 Orthodontics 1 Cr.Hrs. 2

A series of lectures, workshops and practica designed to introduce the student to the orthodontic perspectives of applied: growth and development of craniofacial structures, relationship of craniofacial growth to general body growth, cephalometric and facial analysis, etiology and classification of malocclusion, development of the dentition, basic biomechanics and preliminary orthodontic wire bending and manipulation in orthodontics. May not be held with PDSO 1020.

RSTD 1500 Dental Materials 1 Cr.Hrs. 2

This course introduces the materials commonly used in dental practice. Composition, chemistry, properties, manipulation and manipulative variables are covered by lecture, laboratory exercises and demonstrations. May not be held with RSTD 1070.

RSTD 1512 Operative Dentistry 1 Cr.Hrs. 6

A lecture and laboratory course introducing the fundamentals of operative dentistry. Lectures and laboratory exercises in the principles of cavity preparation, utilization of rotary and hand instruments and manipulation, placement and finishing of restorative materials are presented. May not be held with RSTD 1100.

RSTD 1520 Dental Anatomy Cr.Hrs. 3

A lecture and laboratory/seminar course introducing dental terminology, tooth identification, dental morphology and concepts of dental anatomy as it relates to the intraoral functional relationship. May not be held with RSTD 1110.

RSTD 1530 Occlusion Cr.Hrs. 2

A lecture and laboratory course designed to introduce the student to the concepts of dental occlusion and the relationship between the anatomy of the teeth and the TMJ. May not be held with RSTD 1110.

RSTD 1550 Introduction to Dentistry Cr.Hrs. 2

A series of lectures and seminars which introduce the student to the profession, its structure and governance. Professionalism, dental ethics and communication skills are also introduced. May not be held with RSTD 1120 or RSTD 1540. Course evaluated on a pass/fail basis.

Second Year Courses as of 2012

DDSS 2100 Periodontology2 Cr.Hrs. 2

An introductory course with emphasis on periodontal structures in health and disease, the etiology and diagnosis of periodontal disease, as well as the role of occlusion. May not be held with DDSS 2120.

DDSS 2110 Radiology 2 Cr.Hrs. 1

A series of lectures in the theoretical and practical principles of radiographic interpretation of common oral pathologic conditions as well as selected examples of pathologic conditions exhibiting important radiographic principles. May not be held with DDSS 2180.

DDSS 2122 Oral Pathology Cr.Hrs. 5

A series of lectures emphasizing recognition, description, etiopathogenesis, clinical and/ or radiographic features, biologic behaviour, treatment and/or management of oral and paraoral conditions. May not be held with DDSS 2010.

DDSS 2130 Pain and Anxiety Control 1 Cr.Hrs. 1

A series of lectures to introduce the student to: local anaesthetics, local anaesthesia techniques, avoidance and management of complications and selection of appropriate drugs and techniques. May not be held with DDSS 2020.

DENT 2202 Introduction to Comprehensive Care Cr.Hrs. 4

This course is an introduction to an integrated, patient-centered program with patient needs as the primary focus. The course introduces students to clinical protocol and patient record documentation and communication. Students receive experience in comprehensive treatment planning as well as basic treatments in periodontics, operative dentistry, and pain control. Course evaluated on a pass/fail basis. May not be held with DENT 2430.

ORLB 2300 Pathology and Microbiology 1 Cr.Hrs. 1

Study of the basic mechanisms of microbial pathogenicity and general pathology as they relate to dentistry and dental treatment. Includes the pathogenesis of bacterial, viral and fungal infections and the aetiology of neoplastic, inflammatory and metabolic diseases. May not be held with ORLB 2100.

ORLB 2312 Structure and Function of Major Organ Systems Cr.Hrs. 4

This course emphasizes the basic structure at both organ and cellular levels of a number of organ systems and an understanding of their role in total body function. May not be held with ORLB 2070.

ORLB 2320 Cariology and Plaque Associated Diseases Cr.Hrs. 3

A study of the various dietary, host and microbial factors in the etiology of dental caries and periodontal disease, and a discussion of the various methods of plaque control. May not be held with ORLB 2090.

ORLB 2330 Nutrition in Dentistry Cr.Hrs. 2

The course covers the role of nutrition in general health and disease with emphasis on the prevention and management of oral problems in Dentistry. May not be held with ORLB 2150.

PDSD 2400 Orthodontics-2 Cr.Hrs. 2

A series of lectures and laboratories to introduce the student to: clinical protocol for examination, diagnosis and treatment planning of malocclusions, concepts of occlusion and biomechanics of orthodontic therapy, and fabrication of orthodontic appliances. May not be held with PDSD 2020.

PDSD 2410 Pediatric Dentistry- 1 Cr.Hrs. 3

A series of lectures and laboratories to introduce the student to: the fundamental principles of dental growth and development of children, introduction to operative dentistry and preventative techniques commonly used in dentistry for children. May not be held with PDSD 2070.

PDSD 2420 Dental Public Health Cr.Hrs. 1

A series of lectures dealing with dental epidemiology, demography, water fluoridation, and dental health education, program planning and evaluation. The organization of the Canadian health care system is examined with special reference to dental care and Aboriginal health issues. May not be held with PDSD 2130.

RSTD 2502 Dental Materials-2 Cr.Hrs. 2

This course develops a scientific basis for the selection, application, manipulation and clinical performance of dental materials. The relationship between the properties of a material and its manipulation, application and clinical behaviour is developed. May not be held with RSTD 2020.

RSTD 2510 Operative Dentistry-2 Cr.Hrs. 3

A lecture and laboratory course presenting modern and advanced techniques in tooth restoration. Composite resins, adhesion to tooth structure, esthetic restorations and protection of tooth vitality. Introduction to clinical treatment modalities and treatment priorities. May not be held with RSTD 2050.

RSTD 2520 Endodontolgy-1 Cr.Hrs. 2

Introduction to root canal therapy as a clinical practice, pulp and periapical pathology. The majority of the teaching is directed at the understanding and actual performance of practical endodontic techniques, performed in the laboratory setting on mannequins using extracted human teeth. May not be held with RSTD 2060.

RSTD 2532 Fixed Prosthodontics 1 Cr.Hrs. 6

This course consists of lecture and laboratory instruction introducing basic fixed prosthodontic techniques. May not be held with RSTD 2140.

RSTD 2540 Removable Partial Denture Prosthodontics Cr.Hrs. 3

The didactic portion of this course presents the principles for the treatment of partially edentulous patients. The procedures and techniques founded on the basic principles make up the laboratory exposure. May not be held with RSTD 2220.

RSTD 2552 Complete Denture Prosthodontics Cr.Hrs. 4

The didactic portion of this course presents the principles for the treatment of edentulous patients. Emphasis is placed on techniques of treatment in the laboratory component. May not be held with RSTD 2230.

Third Year Courses as of 2013

DDSS 3102 Periodontology 3 Cr.Hrs. 3

This combined didactic and clinical course is designed to provide experience which will allow students to apply their earlier and current didactic learning to the clinical environment. The lecture periods concern themselves principally with verbal descriptions of treatment modalities and techniques, including non-surgical, surgical intervention and temporomandibular joint problems. Inter-relationships with other clinical disciplines also receives considerable attention. May not be held with DDSS 3220.

DDSS 3112 Oral Diagnosis and Radiology 1 Cr.Hrs. 2

This course includes a lecture component covering history-taking, clinical examination, diagnosis and treatment of soft and hard tissue lesions, emergency treatment, dental treatment of patients with systemic disease, and clinical experience. May not be held with DDSS 3200.

DDSS 3120 Pain and Anxiety Control 2 Cr.Hrs. 1

This course consists of lectures/seminars and clinical experience in: physiology of pain psychology of anxiety, management of medical emergencies, parenteral injections, and therapeutics of the various modalities of pain and anxiety control. May not be held with DDSS 3230.

DDSS 3132 ORAL AND MAXILL SURGERY 1 Cr.Hrs. 2

This course consists of lectures, seminars and clinics, covering all aspects of oral and maxillofacial surgery with an emphasis on those procedures performed by the general practitioner. May not be held with DDSS 3210.

DDSS 3142 Medicine Cr.Hrs. 2

Lectures or seminars describing the basic mechanisms, symptoms, diagnosis and management of various disease processes included in internal medicine and their dental correlations. May not be held with DDSS 3030.

DDSS 3152 Temporomandibular Disorders and Orofacial Pain Cr.Hrs. 2

The course reviews the foundational clinical sciences in pain biology, and function of the masticatory muscles and TMJ. It discusses the contemporary classification, diagnosis and management of Temporomandibular disorders and related orofacial pain disorders. May not be held with DDSS 3190.

ORLB 3300 Pathology and Microbiology 2 Cr.Hrs. 1

A study of selected infectious diseases and the application of general diagnostic pathology in dental practice. May not be held with ORLB 3020.

ORLB 3320 Pharmacology and Therapeutics Cr.Hrs. 3

A discussion of the basic pharmacodynamics, pharmacokinetics, mechanisms of actions, doses and adverse effects of therapeutic agents prescribed and administered by dentists. This will include antibiotics, analgesics, anxiolytics, anti-viral and anti-fungal agents. Subsequently drugs used in the management of systemic diseases will be discussed including mechanisms of actions and adverse effects, with particular focus on those which are dentally-related. May not be held with ORLB 3060 or ORLB 3310.

PDSD 3402 Orthodontics 3 Cr.Hrs. 2

A series of seminars covering the analysis, diagnosis, treatment planning, and mechanotherapy using records of selected cases. The clinical component consists of the diagnosis and treatment planning for individuals seeking orthodontic treatment. The clinical experience includes exposure to removable and fixed mechanotherapy, screening of patients seeking orthodontic care and follow-up of retention of completed cases. May not be held with PDSD 3040.

PDSD 3412 Pediatric Dentistry 2 Cr.Hrs. 3

A series of seminars and clinics to give the student a basic understanding and some clinical experience with: clinical procedures, emergency treatment, psychological management, preventative medical considerations and the provision of total dental care to pediatric patients. May not be held with PDSD 3050.

PDSD 3422 Dental Public Health/ Preventative Dental Science Cr.Hrs. 2

(a) Dental Public Health-The course focuses on the social and psychological variables that impact on dental care for specific age and disease-related issues in the population. Patient utilization rates and program organization-are reviewed. (b) Preventative Dental Science Techniques and therapy used to prevent dental diseases are covered. The application of these modalities to specific patient categories follows. May not be held with PDSD 3140.

RSTD 3512 Operative Dentistry 3 Cr.Hrs. 5

A lecture and clinical course emphasizing diagnosis, treatment planning and the application of fundamental principles of operative and esthetic dentistry. Lectures and clinical treatments dealing with current restorative materials and techniques. My not be held with RSTD 3020.

RSTD 3522 Endodontology 2 Cr.Hrs. 3

This course emphasizes the rationale and biologic basis for the practical technique previously taught. Techniques are discussed in greater detail and are applied to treatment of patients. The second part of the course deals with pulp biology and periapical pathology to prepare the student for understanding the rationale behind pulpal protection, prevention and treatment of pulpal disease. Laboratory exercises are performed on more complex root canal systems in preparation for General Practice Clinic. May not be held with RSTD 3050.

RSTD 3532 Fixed Prosthodontics 2 Cr.Hrs. 5

An introduction to the clinical practice of fixed prosthodontic techniques. An emphasis is placed on diagnosis and treatment-planning. Clinical exposure is supplemented by lecture materials. May not be held with RSTD 3040.

RSTD 3542 Complete and Removable Partial Denture Prosthodontics Cr. Hrs. 3

This course consists of a series of lectures and clinics. Theories of applied prosthodontics are discussed and applications of this knowledge are made concurrently through the clinical treatment of patients. May not be held with RSTD 3090.

Fourth Year Courses as of 2014**DDSS 4122 Oral & Maxillofacial Surgery 2 Cr.Hrs. 1**

(Formerly DDSS 4210) This course consists of lectures, seminars and clinics covering all aspects of oral and maxillofacial surgery with an emphasis on those procedures performed by the general practitioner. May not be held with DDSS 4210.

DDSS 4150 Hospital Dentistry Cr.Hrs. 1

(Formerly DDSS 4130) This course is designed to provide the student with a familiarization with hospital protocol, reinforcement of understanding in medicine, surgery, pharmacology and therapeutics, the dental treatment of medically compromised patients at the Health Sciences Centre, and handicapped patients in other institutional settings. May not be held with DDSS 4130. Course evaluated on a pass/fail basis.

DENT 4202 Interdisciplinary Patient Centred Care Case Studies Cr.Hrs. 2

(Formerly DENT 4020) Lectures and development of portfolio case designed to enable the student to obtain, organize and critically evaluate information in order to facilitate treatment planning. May not be held with DENT 4020.

DENT 4210 Dental Practice Management 4 Cr.Hrs. 2

(Formerly RSTD 4170) The management, evaluation, economics, organization, design, location, selection and marketing of a dental practice are covered by lectures and seminars. In addition, ethical considerations of dental practice, the options available to new dental graduates and the role of professional associations are discussed. May not be held with RSTD 4170.

DENT 4222 General Practice Dentistry Cr.Hrs. 10

(Formerly DENT 4030) This course consists of an integrated, patient-centered clinical program with patient needs as the primary focus. Patients will be assigned to students and organized to provide the required clinical experiences typical of a contemporary general dental practice. May not be held with DENT 4030.

DENT 4232 General Practice Seminars Cr.Hrs. 2

Topics relating to General Practice Dentistry are reviewed and reinforced in preparation for clinical practice and National Board Examinations. This course supports the General Practice Dentistry (DENT 4222) program with procedure reviews as needed. May not be held with DENT 4030.

DENT 4240 Dental Jurisprudence Cr.Hrs. 1

(Formerly RSTD 4160) This course provides an overview of the Canadian legal system. It defines and discusses legal concepts relevant to dentistry including issues in negligence, contracts, confidentiality, business and human rights. Identifying a dentist's legal responsibilities to patients, peers, employees, profession and society will underlie the entire course. May not be held with RSTD 4160.

PDSD 4402 Orthodontics 4 Cr.Hrs. 2

(Formerly PDSD 4060) This course consists of seminars on special topics related to the provision of orthodontic therapy. In addition, the clinical component including the diagnosis and treatment planning for individuals seeking orthodontic treatment as well as the continuation of treatment commenced in PDSD 3040. Clinical seminars cover the analysis, diagnosis, treatment planning, mechanotherapy and post-treatment evaluation of previously treated cases. May not be held with PDSD 4060.

PDSD 4412 Pediatric Dentistry 3 Cr.Hrs. 2

(Formerly PDSD 4050) This course consists of clinical experience including exposure to common pediatric dentistry problems, caries preventive and control procedures, routine conservative procedures and the dental treatment of children in community-based clinics. May not be held with PDSD 4050.

PDSD 4422 Community Dentistry Externship Cr.Hrs. 4

(Formerly PDSD 4080) This clinical program is centred in community clinics in the province of Manitoba. The clinics serve the elderly, aboriginal, low income or northern patients. Health education seminars may be a requirement at some sites, prepared and delivered by the student interns. May not be held with PDSD 4080. Course evaluated on a pass/fail basis.

RSTD 4522 Advanced Topics in Endodontics Cr.Hrs. 1

(Formerly RSTD 4060) Seminars designed to enhance the clinical endodontics experience with literature review of diagnosis, more complex treatment methods and materials, case selection and student evidence-based literature and case presentations. May not be held with RSTD 4060.

General Dentistry Course Descriptions**DENT 1202 Early Clinical Experience Cr.Hrs. 3**

A series of lectures and clinical participation sessions designed to introduce the student to clinical dentistry and the relevance of basic science courses in the dental curriculum. May not be held with DENT 1010. Course evaluated on a pass/fail basis.

DENT 1210 Dental Practice Management 1 Cr.Hrs. 1

This course is an introduction to the Dental Practice Management curriculum which is distributed throughout the four year program. It comprises the modules on the Essentials of Effective Leadership and Strategic Leadership; Managing the Workplace and Conflict Resolution; Essentials of Interpersonal Communication Skills; and Team Building.

DENT 2202 Introduction to Comprehensive Care Cr.Hrs. 4

This course is an introduction to an integrated, patient-centered program with patient needs as the primary focus. The course introduces students to clinical protocol and patient record documentation and communication. Students receive experience in comprehensive treatment planning as well as basic treatments in periodontics, operative dentistry, and pain control. Course evaluated on a pass/fail basis. May not be held with DENT 2430.

DENT 3210 Dental Practice Management 3 Cr.Hrs. 1

This course is the third in a series of Dental Practice Management courses distributed throughout the four-year program. It comprises the modules on managerial decision-making and negotiations; operations management; self-assessment in practice; and effective management of patient and employees.

DENT 4202 Interdisciplinary Patient Centred Care Case Studies Cr.Hrs. 2 (Formerly DENT 4020) Lectures and development of portfolio case designed to enable the student to obtain, organize and critically evaluate information in order to facilitate treatment planning. May not be held with DENT 4020.

DENT 4210 Dental Practice Management 4 Cr.Hrs. 2

(Formerly RSTD 4170) The management, evaluation, economics, organization, design, location, selection and marketing of a dental practice are covered by lectures and seminars. In addition, ethical considerations of dental practice, the options available to new dental graduates and the role of professional associations are discussed. May not be held with RSTD 4170.

DENT 4222 General Practice Dentistry Cr.Hrs. 10

(Formerly DENT 4030) This course consists of an integrated, patient-centered clinical program with patient needs as the primary focus. Patients will be assigned to students and organized to provide the required clinical experiences typical of a contemporary general dental practice. May not be held with DENT 4030.

DENT 4232 General Practice Seminars Cr.Hrs. 2

Topics relating to General Practice Dentistry are reviewed and reinforced in preparation for clinical practice and National Board Examinations. This course supports the General Practice Dentistry (DENT 4222) program with procedure reviews as needed. May not be held with DENT 4030.

DENT 4240 Dental Jurisprudence Cr.Hrs. 1

(Formerly RSTD 4160) This course provides an overview of the Canadian legal system. It defines and discusses legal concepts relevant to dentistry including issues in negligence, contracts, confidentiality, business and human rights. Identifying a dentist's legal responsibilities to patients, peers, employees, profession and society will underlie the entire course. May not be held with RSTD 4160.

Dental Diagnostic and Surgical Sciences Course Descriptions

DDSS 1100 Periodontology 1 Cr.Hrs. 1

Predominately a pre-clinical laboratory course designed to introduce students to periodontal examination procedures and to basic non-surgical periodontal therapy. May not be held with DDSS 1020.

DDSS 1110 Radiology 1 Cr.Hrs. 1

A series of lectures which introduces the student to: the elementary principles of dental radiology; radiation physics, radiation biology, imaging techniques, x-ray equipment and radiation protection. May not be held with DDSS 1140.

DDSS 2100 Periodontology 2 Cr.Hrs. 2

An introductory course with emphasis on periodontal structures in health and disease, the etiology and diagnosis of periodontal disease, as well as the role of occlusion. May not be held with DDSS 2120.

DDSS 2110 Radiology 2 Cr.Hrs. 1

A series of lectures in the theoretical and practical principles of radiographic interpretation of common oral pathologic conditions as well as selected examples of pathologic conditions exhibiting important radiographic principles. May not be held with DDSS 2180.

DDSS 2122 Oral Pathology Cr.Hrs. 5

A series of lectures emphasizing recognition, description, etiopathogenesis, clinical and/or radiographic features, biologic behaviour, treatment and/or management of oral and paraoral conditions. May not be held with DDSS 2010.

DDSS 2130 Pain and Anxiety Control 1 Cr.Hrs. 1

A series of lectures to introduce the student to: local anaesthetics, local anaesthesia techniques, avoidance and management of complications and selection of appropriate drugs and techniques. May not be held with DDSS 2020.

DDSS 3102 Periodontology 3 Cr.Hrs. 3

This combined didactic and clinical course is designed to provide experience which will allow students to apply their earlier and current didactic learning to the clinical environment. The lecture periods concern themselves principally with verbal descriptions of treatment modalities and techniques, including non-surgical, surgical intervention and temporomandibular joint problems. Inter-relationships with other clinical disciplines also receives considerable attention. May not be held with DDSS 3220.

DDSS 3112 Oral Diagnosis and Radiology 1 Cr.Hrs. 2

This course includes a lecture component covering history-taking, clinical examination, diagnosis and treatment of soft and hard tissue lesions, emergency treatment, dental treatment of patients with systemic disease, and clinical experience. May not be held with DDSS 3200.

DDSS 3120 Pain and Anxiety Control 2 Cr.Hrs. 1

This course consists of lectures/seminars and clinical experience in: physiology of pain psychology of anxiety, management of medical emergencies, parenteral injections, and therapeutics of the various modalities of pain and anxiety control. May not be held with DDSS 3230.

DDSS 3132 ORAL AND MAXILL SURGERY 1 Cr.Hrs. 2

This course consists of lectures, seminars and clinics, covering all aspects of oral and maxillofacial surgery with an emphasis on those procedures performed by the general practitioner. May not be held with DDSS 3210.

DDSS 3142 Medicine Cr.Hrs. 2

Lectures or seminars describing the basic mechanisms, symptoms, diagnosis and management of various disease processes included in internal medicine and their dental correlations. May not be held with DDSS 3030.

DDSS 3152 Temporomandibular Disorders and Orofacial Pain Cr.Hrs. 2

The course reviews the foundational clinical sciences in pain biology, and function of the masticatory muscles and TMJ. It discusses the contemporary classification, diagnosis and management of Temporomandibular disorders and related orofacial pain disorders. May not be held with DDSS 3190.

DDSS 4112 Oral Diagnosis and Radiology 2 Cr.Hrs. 2

(Formerly DDSS 4200) This clinical course is designed to give the student clinical experience with: treatment planning, diagnostic techniques, differential diagnosis, emergency treatment and non-surgical management related to oral pathologic conditions. May not be held with DDSS 4200.

DDSS 4122 Oral & Maxillofacial Surgery 2 Cr.Hrs. 1

(Formerly DDSS 4210) This course consists of lectures, seminars and clinics covering all aspects of oral and maxillofacial surgery with an emphasis on those procedures performed by the general practitioner. May not be held with DDSS 4210.

DDSS 4150 Hospital Dentistry Cr.Hrs. 1

(Formerly DDSS 4130) This course is designed to provide the student with a familiarization with hospital protocol, reinforcement of understanding in medicine, surgery, pharmacology and therapeutics, the dental treatment of medically compromised patients at the Health Sciences Centre, and handicapped patients in other institutional settings. May not be held with DDSS 4130. Course evaluated on a pass/fail basis.

Oral Biology Course Descriptions**ORLB 1302 Cell and Tissue Biology Cr.Hrs. 4**

Structure, function and chemical composition of eucaryotic cells and oral bacteria will be studied. Taste signaling, diseases, and molecular interactions within and between cells and the immune system will be described in detail. May not be held with ORLB 1050.

ORLB 1310 Head, Neck and Nervous System, Part 1 Cr.Hrs. 4

Gross anatomy of the head and neck are described and observed by regional dissection. Overviews of the nervous system and surface anatomy of the mouth are included. May not be held with ORLB 1060.

ORLB 1320 Head, Neck and Nervous System, Part 2 Cr.Hrs. 3

An introduction to the structure and function of the central and peripheral nervous systems and associated structures, the neurophysiology and the stomatognathic system, pain and analgesics. May not be held with ORLB 1070.

ORLB 1330 Human Growth and Development Cr.Hrs. 3

Human development from the origin of the reproductive cells through fertilization, conception, embryonic/fetal development, birth, growth and aging. Particular emphasis is given to development and growth of structures of the head and neck. May not be held with ORLB 1080.

ORLB 1340 Oral Tissues, Structure and Function Cr.Hrs. 3

This course is designed to present the normal morphology, developmental biology, biochemical structure, metabolism and functions of the dentition and para oral tissues, cartilage, bone and exocrine glands of the head and neck. Structural functional aspects of oral anatomy, biochemistry/molecular biology and physiology will be included. May not be held with ORLB 1090.

ORLB 2300 Pathology and Microbiology 1 Cr.Hrs. 1

Study of the basic mechanisms of microbial pathogenicity and general pathology as they relate to dentistry and dental treatment. Includes the pathogenesis of bacterial, viral and fungal infections and the aetiology of neoplastic, inflammatory and metabolic diseases. May not be held with ORLB 2100.

ORLB 2312 Structure and Function of Major Organ Systems Cr.Hrs. 4

This course emphasizes the basic structure at both organ and cellular levels of a number of organ systems and an understanding of their role in total body function. May not be held with ORLB 2070.

ORLB 2320 Cariology and Plaque Associated Diseases Cr.Hrs. 3

A study of the various dietary, host and microbial factors in the etiology of dental caries and periodontal disease, and a discussion of the various methods of plaque control. May not be held with ORLB 2090.

ORLB 2330 Nutrition in Dentistry Cr.Hrs. 2

An examination of the fundamentals of nutrition and the relationship between nutrition and health within the context of the health professions. The focus is on nutritional strategies used to promote health and in the treatment of common health conditions. The primarily on-line content is followed up with a combination of oral health specific patient/clinical exercises for Dentistry students. May not be held with ORLB 2150, HYG 2370, HNSC 2170, or PHRM 2420.

ORLB 3300 Pathology and Microbiology 2 Cr.Hrs. 1

A study of selected infectious diseases and the application of general diagnostic pathology in dental practice. May not be held with ORLB 3020.

ORLB 3320 Pharmacology and Therapeutics Cr.Hrs. 3

A discussion of the basic pharmacodynamics, pharmacokinetics, mechanisms of actions, doses and adverse effects of therapeutic agents prescribed and administered by dentists. This will include antibiotics, analgesics, anxiolytics, anti-viral and anti-fungal agents. Subsequently drugs used in the management of systemic diseases will be discussed including mechanisms of actions and adverse effects, with particular focus on those which are dentally-related. May not be held with ORLB 3060 or ORLB 3310.

Preventive Dental Science Course Descriptions**PDS 1400 Orthodontics 1 Cr.Hrs. 2**

A series of lectures, workshops and practica designed to introduce the student to the orthodontic perspectives of applied: growth and development of craniofacial structures, relationship of craniofacial growth to general body growth, cephalometric and facial analysis, etiology and classification of malocclusion, development of the dentition, basic biomechanics and preliminary orthodontic wire bending and manipulation in orthodontics. May not be held with PDS 1020.

PDS 2400 Orthodontics-2 Cr.Hrs. 2

A series of lectures and laboratories to introduce the student to: clinical protocol for examination, diagnosis and treatment planning of malocclusions, concepts of occlusion and biomechanics of orthodontic therapy, and fabrication of orthodontic appliances. May not be held with PDS 2020.

PDS 2410 Pediatric Dentistry- 1 Cr.Hrs. 3

A series of lectures and laboratories to introduce the student to: the fundamental principles of dental growth and development of children, introduction to operative dentistry and preventative techniques commonly used in dentistry for children. May not be held with PDS 2070.

PDS 2420 Dental Public Health Cr.Hrs. 1

A series of lectures dealing with dental epidemiology, demography, water fluoridation, and dental health education, program planning and evaluation. The organization of the Canadian health care system is examined with special reference to dental care and Aboriginal health issues. May not be held with PDS 2130.

PDS 3402 Orthodontics 3 Cr.Hrs. 2

A series of seminars covering the analysis, diagnosis, treatment planning, and mechanotherapy using records of selected cases. The clinical component consists of the diagnosis and treatment planning for individuals seeking orthodontic treatment. The clinical experience includes exposure to removable and fixed mechanotherapy, screening of patients seeking orthodontic care and follow-up of retention of completed cases. May not be held with PDS 3040.

PDS 3412 Pediatric Dentistry 2 Cr.Hrs. 3

A series of seminars and clinics to give the student a basic understanding and some clinical experience with: clinical procedures, emergency treatment, psychological management, preventative medical considerations and the provision of total dental care to pediatric patients. May not be held with PDS 3050.

PDS 3422 Dental Public Health/ Preventative Dental Science Cr.Hrs. 2

(a) Dental Public Health-The course focuses on the social and psychological variables that impact on dental care for specific age and disease-related issues in the population. Patient utilization rates and program organization are reviewed. (b) Preventative Dental Science Techniques and therapy used to prevent dental diseases are covered. The application of these modalities to specific patient categories follows. May not be held with PDS 3140.

PDS 4402 Orthodontics 4 Cr.Hrs. 2

(Formerly PDS 4060) This course consists of seminars on special topics related to the provision of orthodontic therapy. In addition, the clinical component including the diagnosis and treatment planning for individuals seeking orthodontic treatment as well as the continuation of treatment commenced in PDS 3040. Clinical seminars cover the analysis, diagnosis, treatment planning, mechanotherapy and post-treatment evaluation of previously treated cases. May not be held with PDS 4060.

PDS 4412 Pediatric Dentistry 3 Cr.Hrs. 2

(Formerly PDS 4050) This course consists of clinical experience including exposure to common pediatric dentistry problems, caries preventive and control procedures, routine conservative procedures and the dental treatment of children in community-based clinics. May not be held with PDS 4050.

PDS 4422 Community Dentistry Externship Cr.Hrs. 4

(Formerly PDS 4080) This clinical program is centred in community clinics in the province of Manitoba. The clinics serve the elderly, aboriginal, low income or northern patients. Health education seminars may be a requirement at some sites, prepared and delivered by the student interns. May not be held with PDS 4080. Course evaluated on a pass/fail basis.

Restorative Dentistry Course Descriptions

RST 1500 Dental Materials 1 Cr.Hrs. 2

This course introduces the materials commonly used in dental practice. Composition, chemistry, properties, manipulation and manipulative variables are covered by lecture, laboratory exercises and demonstrations. May not be held with RST 1070.

RST 1512 Operative Dentistry 1 Cr.Hrs. 6

A lecture and laboratory course introducing the fundamentals of operative dentistry. Lectures and laboratory exercises in the principles of cavity preparation, utilization of rotary and hand instruments and manipulation, placement and finishing of restorative materials are presented. May not be held with RST 1100.

RST 1520 Dental Anatomy Cr.Hrs. 3

A lecture and laboratory/seminar course introducing dental terminology, tooth identification, dental morphology and concepts of dental anatomy as it relates to the intraoral functional relationship. May not be held with RST 1110.

RST 1530 Occlusion Cr.Hrs. 2

A lecture and laboratory course designed to introduce the student to the concepts of dental occlusion and the relationship between the anatomy of the teeth and the TMJ. May not be held with RST 1110.

RST 1550 Introduction to Dentistry Cr.Hrs. 2

A series of lectures and seminars which introduce the student to the profession, its structure and governance. Professionalism, dental ethics and communication skills are also introduced. May not be held with RST 1120 or RST 1540. Course evaluated on a pass/fail basis.

RST 2502 Dental Materials-2 Cr.Hrs. 2

This course develops a scientific basis for the selection, application, manipulation and clinical performance of dental materials. The relationship between the properties of a material and its manipulation, application and clinical behaviour is developed. May not be held with RST 2020.

RST 2510 Operative Dentistry-2 Cr.Hrs. 3

A lecture and laboratory course presenting modern and advanced techniques in tooth restoration. Composite resins, adhesion to tooth structure, esthetic restorations and protection of tooth vitality. Introduction to clinical treatment modalities and treatment priorities. May not be held with RST 2050.

RST 2520 Endodontology-1 Cr.Hrs. 2

Introduction to root canal therapy as a clinical practice, pulp and periapical pathology. The majority of the teaching is directed at the understanding and actual performance of practical endodontic techniques, performed in the laboratory setting on mannequins using extracted human teeth. May not be held with RST 2060.

RST 2532 Fixed Prosthodontics 1 Cr.Hrs. 6

This course consists of lecture and laboratory instruction introducing basic fixed prosthodontic techniques. May not be held with RST 2140.

RST 2540 Removable Partial Denture Prosthodontics Cr.Hrs. 3

The didactic portion of this course presents the principles for the treatment of partially edentulous patients. The procedures and techniques founded on the basic principles make up the laboratory exposure. May not be held with RST 2220.

RST 2552 Complete Denture Prosthodontics Cr.Hrs. 4

The didactic portion of this course presents the principles for the treatment of edentulous patients. Emphasis is placed on techniques of treatment in the laboratory component. May not be held with RST 2230.

RST 3512 Operative Dentistry 3 Cr.Hrs. 5

A lecture and clinical course emphasizing diagnosis, treatment planning and the application of fundamental principles of operative and esthetic dentistry. Lectures and clinical treatments dealing with current restorative materials and techniques. May not be held with RST 3020.

RST 3522 Endodontology 2 Cr.Hrs. 3

This course emphasizes the rationale and biologic basis for the practical technique previously taught. Techniques are discussed in greater detail and are applied to treatment of patients. The second part of the course deals with pulp biology and periapical pathology to prepare the student for understanding the rationale behind pulpal protection, prevention and treatment of pulpal disease. Laboratory exercises are performed on more complex root canal systems in preparation for General Practice Clinic. May not be held with RST 3050.

RST 3532 Fixed Prosthodontics 2 Cr.Hrs. 5

An introduction to the clinical practice of fixed prosthodontic techniques. An emphasis is placed on diagnosis and treatment-planning. Clinical exposure is supplemented by lecture materials. May not be held with RST 3040.

RST 3542 Complete and Removable Partial Denture Prosthodontics Cr.Hrs. 3

This course consists of a series of lectures and clinics. Theories of applied prosthodontics are discussed and applications of this knowledge are made concurrently through the clinical treatment of patients. May not be held with RST 3090.

RST 4522 Advanced Topics in Endodontics Cr.Hrs. 1

(Formerly RST 4060) Seminars designed to enhance the clinical endodontics experience with literature review of diagnosis, more complex treatment methods and materials, case selection and student evidence-based literature and case presentations. May not be held with RST 4060.

SCHOOL OF DENTAL HYGIENE

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Chapter Contents

SECTION 1: DEGREE PROGRAMS OFFERED

1.1 Programs

1.2 The Profession of Dental Hygiene

SECTION 2: ADMISSION REQUIREMENTS

2.1 Diploma in Dental Hygiene

2.2 Bachelor of Science in Dental Hygiene, Degree Completion Program

SECTION 3: FACULTY ACADEMIC REGULATIONS

3.1 Diploma in Dental Hygiene

3.2 Bachelor of Science in Dental Hygiene, Degree Completion Program

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

4.1 Diploma in Dental Hygiene

4.2 Bachelor of Science in Dental Hygiene, Degree Completion Program

SECTION 5: COURSE DESCRIPTIONS

5.1 Diploma in Dental Hygiene

5.2 Bachelor of Science in Dental Hygiene, Degree Completion Program

SECTION 1: DEGREE PROGRAMS OFFERED

1.1. Programs

Program/Degree	Years to Complete	Total Credit Hours
Diploma in Dental Hygiene	Minimum time to graduation: Three years via Direct Entry or University 1 (or satisfaction of prerequisites), plus two years	101
Bachelor of Science in Dental Hygiene, Degree Completion Program	Minimum time to graduation: Dependent upon prior education (i.e. completion of a pre-professional year [Univ 1] prior to entry into the Diploma in Dental Hygiene program). Upon admission to the B.Sc.D.H. program part-time students would be expected to complete the program within two to three (2-3) years.	120*

* See section 4.2 for details on how this credit hour requirement is satisfied.

1.2 The Profession of Dental Hygiene

Dental hygiene is a self regulated health service profession concerned primarily with the prevention of oral disease and the promotion of optimum oral health. As a licensed professional, the dental hygienist's scope of practice is regulated by provincial legislation. The dental hygiene process of care consists of five components: assessment, dental hygiene diagnosis, planning, implementation, and evaluation. Current practice settings include: Private dental practice, community health centres, institutions (e.g., hospitals, long-term care facilities), primary health care centres, home care and other outreach programs, educational institutions (e.g., universities, community colleges), the military, research, and industry. Dental hygienists acquire competence through instruction in basic sciences, oral health sciences, the humanities and clinical practice. Through more than 600 hours of a competency-based clinical curriculum, students are prepared to meet the needs of a broad range of population groups.

The School of Dental Hygiene Mission Statement: In a dynamic environment of excellence and progressive learning, the University of Manitoba, School of Dental Hygiene prepares future dental hygienists to enhance the health and well being of the public through oral health promotion, disease prevention and therapeutic means; and to be active members of the global health care community.

Practice Requirements

After successful completion of the National Dental Hygiene Certification Board Examination, in Manitoba, graduates must apply to the College of Dental Hygienists of Manitoba for a licence to practice as a dental hygienist. Dental hygienists must fulfil the requirements of the respective provincial regulatory authorities licensing bodies. The minimum educational credential for licensure in the province of Manitoba is the Diploma in Dental Hygiene. Licensed dental hygienists may continue their education by completing a Bachelor of Science Degree in Dental Hygiene.

SECTION 2: ADMISSION REQUIREMENTS

2.1 Diploma in Dental Hygiene

The following is a summary of admission requirements. All admission requirements, as well as application deadline dates and forms, are included in an applicant information bulletin that is available from the Admissions Office, Enrolment Services, 424 University Centre; this information is also posted on the university's website.

2.1.a Direct Entry

General Direct Entry/University of Manitoba Admission Requirements

Manitoba high school graduation, with five full credits at the Grade 12 level, in courses designated S (Specialized), G (General), or U (Dual Credit –University), with a minimum of three of these credits in S or U courses.

Specific Requirements for the School of Dental Hygiene

General Requirements as above, plus a minimum 85% average over the following, with no less than 60% in each course:

a. English 40S

b. TWO of Mathematics 40S (either Pre-Calculus, recommended, or Applied), Biology 40S or Chemistry 40S*

* Although not required for admission, students must complete Mathematics 40S (Applied or Pre-Calculus), Biology 40S and Chemistry 40S in order to register for first year required courses for Dental Hygiene.

Notes: Candidates must meet the specific subject requirements, minimum grades, average or other requirements as listed for the program. Should demand exceed available positions, higher averages may be required to be competitive (higher than 85%). Only Canadian Citizens and Permanent Residents will be considered for admission.

Selection criteria: 100 per cent based on academic standing.

2.1. b Advanced Entry Applicants

The following is a summary of the admission requirements for Advanced Entry. Applicants to this category must successfully complete the following courses prior to application. Course are normally completed within University 1, however, equivalent academic courses completed at recognized universities elsewhere will be considered.

ENGL 1400 or ENGL 1340

CHEM 1300 and CHEM 1310 or CHEM 1320

PSYC 1200

BIOL 1410 and BIOL 1412

STAT 1000

6 credit hours of electives (Sociology is strongly recommended) for a total of 30 credit hours.

Other Requirements

Minimum GPA for consideration: 3.00 with no grade less than C, with the exception of English which requires the minimum grade of C+. Admission is competitive.

Selection criteria: 100 per cent based on academic standing for the Regular Applicant Category. An interview, biographical sketch and letters of reference are considered within the Special Applicant Category. Preference will be given to Manitobans in the Special Applicant Category (includes the Canadian Indigenous/Aboriginal Peoples applicant category) and on the alternate list.

2.2 Bachelor of Science in Dental Hygiene, Degree Completion Program

The program will be available to dental hygiene diploma graduates of the University of Manitoba or other accredited dental hygiene educational institutions wishing to complete requirements for the baccalaureate degree on a full-time or part-time basis. Transfer of credit for courses completed at other institutions will be possible through appropriate University procedures. The School will evaluate credits from other institutions on an individual basis.

The following is a summary of the admission requirements. All admission requirements, as well as application deadline dates and forms, are included in an applicant information bulletin that is available from the [Admissions Office, Enrolment Services](#), 424 University Centre; this information is also posted on the university's website.

Admission to the degree completion program requires of students that:

- They must possess a Diploma in Dental Hygiene from either a university or community college program accredited by either the Commission on Dental Accreditation of Canada or the American Dental Association’s Commission on Dental Accreditation.
- They must possess the National Dental Hygiene Certification Board (NDHCB) Certificate
- They must hold current licensure to practice dental hygiene in Canada and be eligible for licensure to practice in Manitoba.
- They must possess all the pre-requisite course requirements prior to admission (see prerequisite requirements, options A & B below)

Prerequisite Requirements		
Option A		
This option is for those graduate of accredited dental hygiene programs who completed a proscribed pre-professional year of university studies prior to entry into their dental hygiene program		
Required Prerequisites (minimum C grade in each course)	Research methods (REHB 2450; PSYC 2250) or equivalent	3 credit hours
	Basic Statistical Analysis (STAT 1000; PSYC 2260) or equivalent	3 credit hours
	Total	6 credit hours
Option B		
This option is for dental hygienists who are graduates of accredited two year programs which did not require a pre-professional year of university studies		
Required Prerequisites (minimum C grade in each course)	Research Methods (REHB 2450) or equivalent	3 credit hours
	Basic Statistical Analysis (STAT 1000) or equivalent	3 credit hours
	Free choice electives	15 credit hours
	TOTAL	21 credit hours

The required minimum grade for specified prerequisite courses including electives is a C. There is a required minimum overall grade point average of 3.0 (B) in the candidates Diploma in Dental Hygiene or Associated Degree Program.

Selection is competitive. In the event of a surplus number of applicants, selection will be based on the grade point average (GPA) over the most recently completed 60 credit hours of study completed at the accredited post secondary level.

SECTION 3: FACULTY ACADEMIC REGULATIONS

All students are asked to note that some academic policies and regulations are under review and are subject to change. Please check the Web Calendar at umanitoba.ca for updated information.

The provisions of the chapter, General Academic Regulations and Requirements, and the chapter, University Policies, apply to all students. In addition, the School of Dental Hygiene has regulations and requirements, published below, that apply specifically to its students.

Direct Entry students are to be aware that as they will be registered in courses outside of the School of Dental Hygiene (non HYGN courses), they may be subject to the rules and regulations of the faculty/school in which those courses reside (primarily the Faculties of Arts and Science). Direct Entry students are encouraged to become familiar to the rules and regulations of these faculties/schools . Please contact the School of Dental Hygiene for further information.

3.1 Diploma in Dental Hygiene

3.1a Essential Skills and Abilities for Admission, Promotion and Graduation in Dental Hygiene Diploma Program

As an accredited Canadian dental hygiene program, the College of Dentistry, School of Dental Hygiene at the University of Manitoba is responsible for providing a program of study that ensures graduates have the necessary qualifications (academic knowledge, clinical skills, and professional behaviors and attitudes) to enter the regulated profession of Dental Hygiene in Canada. Becoming and being a dental hygienist requires a wide range of highly specialized skills and abilities. Some of these are taught in dental hygiene school, while others must be brought by the individual as an innate set of essential skills and abilities. The criteria for becoming registered/ licensed as a dental hygienist in Canada requires a level of motor skills and other attributes that are not necessary in other professional occupations. Similarly, the ability to provide reasonable accommodation for special learning needs in dental hygiene may not be the same as it is for other academic programs.

It is important to note that an offer of admission to the College of Dentistry, School of Dental Hygiene is not evidence that the dental hygiene program has verified that an applicant has the prerequisite skills and abilities for success in the program or future professional licensure. However, these skills and abilities are essential if students are to be successful in achieving the competency standards of the profession.

For progression in, and graduation, from the dental hygiene program, all students must conduct themselves in a professional manner, and must have the Essential Skills and Abilities (Technical Standards) discussed under the following five broad areas: Observation/perception; Communication; Motor/tactile function; Cognition; Emotional functioning.

ACADEMIC CALENDAR 2015-2016

All applicants to the dental hygiene diploma program of the College of Dentistry School of Dental Hygiene are expected to review the Essential Skills and Abilities for Admission, Promotion and Graduation in Dental Hygiene Diploma Program document to assess their ability to meet these standards; all applicants offered admission will be required to acknowledge such review and assessment.

Any candidate for the diploma in dental hygiene program who cannot demonstrate the required skills and abilities throughout their course of study may be requested to withdraw from the program.

Detailed information for the above policy can be found at: http://umanitoba.ca/healthsciences/dentistry/student_resources/policies.html

3.1.b College Of Dentistry/School Of Dental Hygiene Professional Unsuitability By-Law

Students must at all times demonstrate suitability for the dental/dental hygiene profession. In this regard students are obligated to act with integrity and diligence in carrying out their professional responsibilities, and their behaviour and conduct in relation to others must be characterized by consideration, respect and good faith.

The College of Dentistry may require a student to withdraw from the College/School when the student has been found unsuited for the practices of dentistry or dental hygiene because the student has been found to have engaged in unprofessional behaviour. A student may be required to withdraw at any time throughout the academic year.

Grounds which may require withdrawal are: demonstrated behaviour which is exploitive, irresponsible, intentionally injurious or destructive to patients; and/or compromised professional judgment through self-interest and/or conflict of interest; and/or an acquired criminal conviction, either in Canada or any other jurisdiction, which is of such a nature as to place in question his/her fitness for the dental professions; and/or participation in any activity related to patient care or any activity related to the practice of the dental professions while under the influence of alcohol or drugs or while abusing prescription drugs; and/or engaging in behaviour or conduct that if engaged in by a practising dentist/dental hygienist would likely result in disciplinary action, including suspension or revocation of the license to practise, by the Manitoba Dental Association or the College of Dental Hygienists of Manitoba.

Detailed information for the above policy can be found at:

http://umanitoba.ca/healthsciences/dentistry/student_resources/policies.html

3.1.c Criminal Record/Child Abuse Registry

An adult criminal record, an adult abuse registry and a child abuse registry self-declaration will be required of all applicants at the time of application. A formal Adult Criminal Record Check (including vulnerable sector screening), a formal Adult Abuse Registry Check and a formal Child Abuse Registry Check are required at the time of registration, and annually thereafter keeping in accordance with existing policies of other health, education and social service programs at the University of Manitoba.

Direct Entry students will be required to provide these documents upon admission to the program and prior to October 1 of that year.

Failure to provide these documents may impact on registration and a student's ability to progress in the Dental Hygiene program.

3.1.d Immunization and Bloodborne Diseases Policy

The College of Dentistry and School of Dental Hygiene maintain comprehensive immunization requirements to protect the wellbeing of our students and the health of patients and communities with whom they will have contact during their curriculum.

All students enrolled in the School of Dental Hygiene must have immunity demonstrated against the following diseases: tetanus, diphtheria, pertussis, polio, measles, mumps, rubella, varicella (chickenpox), and hepatitis B. Students need to undergo testing for tuberculosis (TB) infection, unless the student already has a past history of TB infection or TB disease documented. Students must receive yearly influenza vaccinations. Students who cannot receive certain immunizations due to allergies or pregnancy must provide a physician's certificate stating this.

Before the first day of classes, all students must complete and return the University of Manitoba Immunization Record Form (Package A), as provided by the School of Dental Hygiene/Dentistry Student Services Office. Please note that any supplemental immunization documentation provided to support this document and/or any future submissions of immunization materials must be signed by a physician or nurse. All students are responsible for updating their immunizations as needed.

Students will not be permitted to attend clinics until all immunization requirements are satisfied.

For the collection and management of student immunization records, the College of Dentistry/School of Dental Hygiene partner with the Faculty of Health Science Immune Program. The Director of Immunizations and the Program Assistant collect and organize immunization data as well as provide immunization services to students at the Bannatyne campus.

All students are expected to comply with the requirements of the Faculty of Health Science Immune Program which may change from time to time due to the immunization requirements of external health care facilities where students will be expected to attend as a part of their dental/dental hygiene program.

Direct Entry students are responsible to have all immunization requirements in place prior to their entrance into their second year (first clinical year) of the program. Further information will be provided upon admission to the School.

3.1.e CPR Certification

Accepted candidates will be required to show proof of CPR certification by October 15 of each year. The CPR Certification level required by the School of Dental Hygiene is: Health Career Provider (HCP CPR Level C). This certification must be maintained on a yearly basis up to the date of graduation.

Direct Entry students will not need to provide this certification in year 1 of their program; they will be expected to complete this requirement by October 15th of their first clinical year.

3.1.f Instruments, Computer, Textbooks and Uniforms

Students entering the School of Dental Hygiene will be expected to own or purchase a PC laptop computer (only PC is supported by the School/College given the software that is used in our clinical facilities) that is compliant with University computer standards (see Bookstore - Computers on Campus for annual listing) and Vital Source Technologies software requirements. The expenditure of a computer may range approximately from \$1000 to \$4000 and the cost of Vital Source Technologies software over the two clinical years of the program is approximately \$2000USD.* These costs replace former text-book expenditures and are included as part of the Dental Hygiene Clinical Instrument Fees (formerly called Dental Kit fee).

Students are responsible for Dental Hygiene Clinical Instrument Fees (formerly called Dental Kit fee) which represent the cost and administration of dental instruments and sundry items used in the clinical component of dental education. The cost of instruments is broken down into 2 categories: student owned instruments and college owned instruments.

Student owned instruments are specific instruments that are the student's property and are retained by students after graduation. College owned instruments are specific instruments that are the college's property and remain within the college (students are responsible for returning in good condition). Instruments are structured in this manner to meet sterilization standards and to ensure an efficient and effective clinical operation.

Administration costs of instruments include staff salaries required to support functions such as inventory control, instrument sterilization and dispensing, maintenance, etc.).

Over the two clinical years of the program, the cost of such instruments/fees has been approximately \$17,200. The college is unable to provide refunds for Dental Hygiene Clinical Instrument Fees and will not accept returns of any student computer software (including Vital Source Technologies), clinical instruments or other items, should a student leave the college for whatever reason and upon graduation.

*Direct entry students will not be expected to purchase a laptop computer, Vital Source Software, or be charged Dental Hygiene Clinical Instrument (former Dental Kit) fees until the start of their second year of the program (first clinical year).

Please Note: Computer Software (including Vital Source Technologies), Clinical Instrument (former Dental Kit) fees and/or Clinical Instrument items are non-refundable.

3.1.g Progression Rules/Promotions

Some of the following may not apply to Direct Entry students during their first year of the program, but will come into effect once they are registered in years two and three of the program (once registered in HYG courses as described in Section 4). Further clarification will be communicated to Direct Entry Students upon admission to the School of Dental Hygiene.

i) Rules and Regulations - Direct Entry Year 1 – DH 1

The letter grade of "C" is the lowest acceptable level of performance per course in DH 1 (pre-professional year), with the exception of English, which is a C+, to progress further in the dental hygiene program.

Students admitted to the School via Direct Entry must complete the first year (DH 1) curriculum, including electives, within 2 years of admission. If students do not successfully complete the first year course requirements within this time frame, they will, except under special circumstances under the discretion of the Director of the School of Dental Hygiene, be required to withdraw from the program; this does not preclude these students from re-applying to the program via the advanced entry route.

Direct entry students must achieve a minimum term grade point average of 2.0 in all terms during the completion of their pre-professional program (DH 1).

ii) Rules and Regulations - Years DH 2 and DH 3

In years DH 2 and DH3 the lowest acceptable grade is a "D" if the course is being taken for the first time (see below for a minimum requirement of repeated courses).

A minimum sessional grade point average of 2.0 in years DH 2 and DH 3 of the program is required to qualify a student for standing in that year. A student in years DH 2 and DH 3 who fails to obtain a minimum sessional grade point average of 2.0 and who is not granted supplemental privileges will be considered to have failed the year.

Except by special permission of Dental College Council, no student in years DH 2 and DH 3 may repeat more than one year of the program, nor may any single year be repeated more than once. The work requirements of any repeated dental hygiene course year may be modified at the discretion of the Dental College Council. The passing grade in each course of a repeated year in Dental Hygiene is "C".

A student in DH 2 or DH 3 who has obtained a grade of "F" in more than two subjects or who fails to obtain a sessional G.P.A. of 2.0 will be regarded as having failed the year and will be required to repeat the work of that year in a succeeding annual session.

iii) Attendance

Regular attendance is expected of all students in all School of Dental Hygiene courses. Students should make themselves familiar with School of Dental Hygiene attendance policies and should be aware that there may be academic consequences with not complying with these regulations. For details on these policies please see the University of Manitoba's Attendance Policy as listed in the on-line Calendar as well as individual HYG N course outlines for specific course requirements.

Only under exceptional circumstances may students be granted approval for absences exceeding one day for reasons other than illness. Students must make such a request in advance from the Director of the School to obtain prior approval.

Students registered in the School of Dental Hygiene are expected to conform to any new requirements that may be adopted from year to year. Any student returning to resume studies after an interval away is expected to conform to any new requirements that have been adopted during their absence.

3.1.h Examinations

Deferred Examinations A deferred examination is a privilege that may be granted to a student who is unexpectedly unable to write an examination as scheduled or a student who knows in advance that he or she is unable to write an examination at the scheduled time. Making a false or misleading claim may be considered an offence under the Student Discipline Bylaw. Penalties may range from a failed grade in the course to suspension or expulsion.

A dental hygiene student (DH 1, 2 and 3) who is unable to sit an examination because of illness or other affliction may file an application for a deferred examination with the Director of the School of Dental Hygiene. Application for deferral must normally be filed within 48 hours of the missed examination, for students in DH 1, and within seven days of the examination, for students in DH 2 and DH 3, and must be accompanied by a medical certificate or an otherwise appropriate document certifying the inability of the student to write the examination at the regular scheduled time, and, where possible, indicating the period of disability. Based on the overall application submission, the Director shall determine if the application is approved.

When an application for a deferred HYG N examination is approved, the Director, in consultation with the course coordinator concerned may:

- a. Permit a student to take a deferred examination in such a form as the Director//course coordinator may determine.
- b. Grant standing in a course without examination. In such cases a grade shall be assigned to the course on the basis of term work and assignments.

Supplemental Examinations A supplemental examination is an examination that may be offered as a privilege to a dental hygiene student who has failed a dental hygiene (HYGN) course or failed to achieve a satisfactory result. Such examinations are offered in order to grant the student an opportunity to rectify the inadequacy without repeating the course.

Supplemental examination privileges are permitted in the School of Dental Hygiene for all HYG N courses with the exception of those in which remediation/re-examination is not realistically feasible. Such privileges must be approved by Dental College Council. Students seeking supplemental privileges should contact the Director indicating her/his request. Applications to write a supplemental examination must be accompanied by the paid fee before the supplemental examination can be written. The student will be notified in a letter from the Director's Office if she/he is granted the privilege and under what specific conditions.

A student in DH 2 and DH 3 who has failed in not more than two HYG N courses at the end of the regular term, may, at the discretion of the Director and with approval from Dental College Council, be awarded the privilege of one or two supplemental examination(s). A student must maintain a minimum sessional (combined Fall and Winter terms) GPA of 2.0 in that year in order to be eligible for supplemental privileges.

The passing grade in supplemental examinations is "C" for each course.

A student who is granted supplemental privileges is obliged to sit the examination at the earliest opportunity. The student must contact the course coordinator within 7 days of the date the notification letter from the Director's Office to schedule a plan for remediation and a date to write their supplemental examination. Supplemental examinations must be held prior to the opening of the Fall academic session.

A student who has not successfully exercised supplemental privileges will be considered to have failed the year and may be required to repeat the entire year or a modified program as required by Dental College Council. If/when the condition is removed in that session, the student will be regarded as having completed the year to which the condition applied.

NOTE: DH I students (direct entry in pre-professional program) should note that supplemental examination privileges are not normally permitted within the courses in which they will be registered. Failure of any course/s in year DH 1 of the program (pre-professional year) will normally require the course/s to be repeated during the next available offering of the course. DH 1 students should be aware that this may impact the student's ability to progress in the dental hygiene program (see Section iii).

3.1.i Honours and Awards

Dean's Honours: awarded to students in each year of the dental hygiene Diploma program who have achieved a minimum sessional (fall & winter term combined) G.P.A. of 3.8. In addition, only students registered for 80 per cent or more of the normal course load during a regular session are eligible for Honours Standing.

A student who fails in one or more subjects, or who fails the year at the regular final examination, is not eligible to obtain Honours Standing or to receive any awards for the work of that year.

A student repeating a year's work is not eligible to obtain Honours Standing or to receive any awards for the work of that year.

The following policy applies to the eligibility of part-time students for academic awards:

A student who is carrying less than 80 per cent of the normal course load for the year is only eligible for an award in the individual subjects taken by him/her.

A student who is repeating a course may not be eligible for an award in that subject.

3.1.j Voluntary Withdrawal

Students intending to withdraw from a portion or all of their courses must report immediately in person or in writing to the Director's Office. Please note: Computer Software (Including Vital Source Technology software), Dental Hygiene Clinical Instrument (former Dental Kit) fees and/or Clinical Instrument items are non-refundable. See also the chapter, on General Academic Regulations and Requirements.

Students who withdraw from the School of Dental Hygiene without notice will be considered to have terminated their connection with the school. If a subsequent application for registration is approved, they will be required to conform to the rules and regulations, fee schedules, sequence of courses, etc., in effect at the time of such subsequent application.

In cases where a student is obliged to withdraw after the final date of withdrawal published in the Calendar because of ill health or other sufficient reasons, their cases will be considered on an individual basis by the Director of the School.

3.1.k Required Withdrawal

Senate has approved by-laws granting the School of Dental Hygiene the authority to require a student to withdraw on the basis of professional unsuitability; such right may be exercised at any time throughout the academic year.

This right to require a student to withdraw prevails notwithstanding any other provisions in the academic regulations of the particular faculty or school regarding eligibility to proceed or repeat.

Full policy information can be found at:

http://umanitoba.ca/healthsciences/dentistry/student_resources/policies.html

3.1.l E-Mail Accounts

All students are expected to have an e-mail account with the University of Manitoba and check it regularly. The School of Dental Hygiene does not support communications with its students through external e-mail addresses.

3.1.m Registration exceptions

Direct Entry students should contact the School of Dental Hygiene for information on registration.

Upon receipt of initial (in year two; and annually thereafter) Criminal Record (including Vulnerable Sector Screening), Adult Abuse Registry Check and Child Abuse Registry Checks, the School of Dental Hygiene registers all students in their courses (Years 2 and 3). Diploma students who have a failing grade/s registered against them and/or have other outstanding academic matters (i.e. deferred or supplemental examinations, modified program, etc.) in regards to the previous academic session will not be registered in the next ensuing academic session until all outstanding matters have been cleared. Students who fall into this category should contact the student advisor for further information. A student advisor is available in D028 Dental Building or by calling (204) 789-3484.

3.2 Bachelor of Science in Dental Hygiene, Degree Completion Program

3.2.a Academic Progress

A minimum Degree Grade Point Average of 2.0 must be maintained in the Bachelor of Science in Dental Hygiene for clear standing. A grade of C is considered a passing grade for all courses applied towards degree requirements. Students who do not maintain a minimum GPA of 2.0 may be required to withdraw from the program.

3.2.b Licensure

Students in the Bachelor of Science in Dental Hygiene program must maintain professional licensure during their registration at the School of Dental Hygiene. Students should also note that licensure with the College of Dental Hygienists' of Manitoba may be required for registration within certain core courses (example: teaching practicum) of the program. Students are responsible for all fees associated with the maintenance of current licensure as well as application for licensure within Manitoba as may be required.

3.2.c Criminal Record/Child Abuse Registry

An adult criminal record, an adult abuse registry and a child abuse registry self-declaration will be required of all applicants at the time of application. A formal Adult Criminal Record Check (including vulnerable sector screening), a formal Adult Abuse Registry Check and a formal Child Abuse Registry Check are required at the time of registration, and annually thereafter keeping in accordance with existing policies of other health, education and social service programs at the University of Manitoba.

3.2.d Writing Skills

Once in the program, students who do not exhibit ability to communicate in writing may be required to seek remediation in writing skills.

3.2.e Transfer of Credit

The School may consider University credits earned outside of dental hygiene diploma programs or earned as part of an incomplete degree for transfer credit. If a student earned credit for a required course in the baccalaureate program as part of a diploma in dental hygiene or as part of another degree, an alternative course must be submitted for consideration.

3.2.f Residence Requirements

Baccalaureate Degree-Completion Program students are required to complete at least 30 credit hours of University of Manitoba courses of the total 120 credits for the degree, with the minimum grade of "C" in each course.

3.2.g Clinic Attire

Students in the B.Sc.Dental Hygiene program must maintain appropriate clinic attire when participating in clinical activities. Students will be required to purchase clinic uniforms as specified at the time of registration.

3.2.h Program Length/Registration

Students in the Bachelor of Science in Dental Hygiene, Degree Completion Program should note that after initial registration, the length of time to complete the B.Sc.D.H. program is variable dependent upon whether courses are taken full-time or part-time. Part-time students would be expected to complete the program within two to three (2-3) years. Students should be aware that the B.Sc.D.H. program tuition fee does not include tuition fees assessed against registration in courses administered outside of the Dental Hygiene Program (non HYGn courses). Further information on fees may be obtained from the University of Manitoba's web-site: umanitoba.ca

3.2.i Voluntary Withdrawal

Students intending to withdraw from a portion or all of their courses must report immediately in person or in writing to the Director's Office. Please note that all program tuition fees for the Bachelor of Science in Dental Hygiene program are non-refundable. See the chapter, on General Academic Regulations and Requirements for further information on voluntary withdrawal.

Students who withdraw from the School of Dental Hygiene without notice will be considered to have terminated their connection with the school. If a subsequent application for registration is approved, they will be required to conform to the rules and regulations, fee schedules, sequence of courses, etc., in effect at the time of such subsequent application.

In cases where a student is obliged to withdraw after the final date of withdrawal published in the Calendar because of ill health or other sufficient reasons, their cases will be considered by the Director of the School.

3.2.j E-Mail Accounts

All students are expected to have an e-mail account with the University of Manitoba and check it regularly. The School of Dental Hygiene does not support communications with its students through external e-mail addresses.

3.2.k Registration exceptions

Bachelor of Science Students who will be taking courses outside of the School of Dental Hygiene will be required to follow registration regulations/restrictions governed by the faculty in which those courses reside. Normal course repeat rules and restrictions will apply. Students in the B.Sc. program will also be responsible to ensure that they have verified their initial access time for registration; consulted with an advisor and/or obtained required program approval for outside courses as necessary; checked for timetable updates for all external courses; registered and assessed their fees after registration in all courses. A student advisor is available in D028 Dental Building or by calling (204) 789-3484.

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

4.1 Diploma in Dental Hygiene

For students admitted as of Spring, 2012 and forward. Students admitted prior to 2012 should refer to the version of the University of Manitoba Undergraduate Calendar in effect on the date of their admission for clarification of program/graduation requirements. Further information may also be obtained from the School of Dental Hygiene.

First Year (Direct Entry)		
Course No.		Credit Hours
ENGL 1400 *	Thematic Approaches to the Study of Literature	3
* or ENGL 1340		
PSYC 1200	Introduction to Psychology	6
BIOL 1410 and	Anatomy of the Human Body and	3
BIOL 1412	Physiology of the Human Body	3
STAT 1000	Basic Statistical Analysis 1	3
6 credit hours of electives	Electives (Sociology is strongly recommended)	6
CHEM 1300 and	University 1 Chemistry: Structure and Modeling in Chemistry	3
CHEM 1310	University 1 Chemistry: An Introduction to Physical Chemistry	3
Or	Or	
CHEM 1320	University 1 Chemistry: An Introduction to Organic Chemistry	6
	Total credit hours	30
Second Year/First Clinical Year (Year 1 Advanced Entry)		
HYGN 1232	Oral and Dental Anatomy	3
HYGN 1234	Preclinical Dental Hygiene	2
HYGN 1236	Dental Hygiene Theory and Practice I	4
HYGN 1238	Dental Hygiene Clinical Practice I	3
HYGN 1242	Dental Hygiene Theory and Practice II	4
HYGN 1262	Dental Radiology	3
HYGN 1270	Biology of the Head and Neck	3
HYGN 1280	Microbiology and Infectious Diseases	3
HYGN 1292	Dental Hygiene Preclinical Restorative Techniques	2
HYGN 1320	Dental Materials	2
HYGN 1340	Communications	2
HYGN 1352	Community Health I	3
HYGN 1360	Periodontology I	2
	Total credit hours	36
Third Year/Second Clinical Year		
HYGN 2100	Dental Hygiene Portfolio*	2
HYGN 2280	Pharmacology	2
HYGN 2300	Pathology	3
HYGN 2312	Dental Hygiene Clinical Practice II	4
HYGN 2314	Dental Hygiene Theory and Practice III	4
HYGN 2316	Dental Hygiene Clinical Practice III	4
HYGN 2318	Dental Hygiene Theory and Practice IV	5
HYGN 2340	Periodontology II	2
HYGN 2350	Biology of Oral Tissues	2
HYGN 2362	Community Health II	3
HYGN 2370	Nutrition in Dentistry	2
HYGN 2380	Pain Management	2
	Total credit hours	35

* Registration in HYGN 2100, Dental Hygiene Portfolio will also occur within the first clinical year of the Dental Hygiene program. However, no grade will be assigned and it will not be factored into GPA calculations.

4.2 Bachelor of Science in Dental Hygiene, Degree Completion Program

Accredited dental hygiene programs in Canada and the U.S. have been traditionally offered as either stand-alone two year programs with direct entry from high school, or as two-year programs requiring a pre-professional year of studies prior to admission into the professional program. In order to provide access to a broad range of potential degree completion students, two options have been developed.

ACADEMIC CALENDAR 2015-2016

Option A. This option is for those graduates of accredited 3 year dental hygiene programs, or equivalent, or those who have completed a proscribed pre-professional year prior to entry into their dental hygiene program.

Dental hygienists from the University of Manitoba who graduated between 1993 and 2007 must complete 21 credit hours

Dental hygienists from the University of Manitoba who graduated after 2007 must complete 19 credit hours

Graduates of other (non-University of Manitoba) dental hygiene programs who completed a pre-professional year prior to entry into their dental hygiene program, may be granted up to 15 credit hours from the pre-professional year and 75 credit hours from the 2-year dental hygiene program towards their degree. These graduates will be required to complete 30 hours of University of Manitoba credits in order to complete the degree and satisfy the residency requirement.

Option B. Dental hygienists who are graduates of accredited two year programs without the pre-professional year, must complete the 21 credit hours as described below plus 24 credit hours of free-choice electives. This requirement applies to graduates from the University of Manitoba (prior to 1993) as well as other accredited two-year dental hygiene programs in North America with no pre-professional year. As in Option A, the residency requirement of 30 credit hours for those non-University of Manitoba graduates will be upheld.

University of Manitoba Graduates

Students with diplomas in dental hygiene from the University of Manitoba will complete 19 credit hours if they graduated after 2007 and 21 credit hours if they graduated between 1993 and 2007. Dental hygienists who graduated from the University before 1993 will complete 24 credit hours of electives in addition to 21 dental hygiene baccalaureate credit hours (total 45).

Year of Graduation (U of M)	Pre-Professional Year	Total Dental Hygiene Program Credit Hours Granted	Option	Credit Hours for BScDH Completion	Total BScDH Credit Hours
After 2007	Yes	1 + 2 years or 3 years (30 + 71 = 101 Credit Hours)	Option A	1 year (19 Credit Hours)	120 credits hours
Between 1993 and 2007	Yes	1 + 2 Years (30 + 69 = 99 Credit Hours)	Option A	1 year (21 credit hours)	120 credit hours
Before 1993	No	2 Years 75 Credit Hours	Option B	2 years (45 credit hours)	120 credit hours

Graduates of Other Accredited North American Dental Hygiene Programs

* Residency Requirement

Pre - Professional Year	Total Dental Hygiene Program Credit Hours Granted	Option	Credit Hours for BScDH Completion	Total BScDH Credit Hours
Yes	Pre-Prof. Year (accept 15 credit hours) + 2 years DH (75 Credit Hours) = 90 Cr. Hrs.	Option A	1 year *(30 credit hours)	120 credits hours
No	2 Years 75 Credit Hours	Option B	2 years *(45 credit hours)	120 credit hours

Degree Completion Curriculum

Dental Hygiene Core (Minimum 12)

Mandatory Courses (2)

HYGN 2380 Pain Management (2)

Elective Courses

HYGN 4412 Dental Hygiene Practice Management and Leadership (3)

HYGN 4460 Community Health Independent Study (3)

HYGN 4470 Community Health Independent Study 2 (3)

HYGN 4492 Current Issues in Dental Hygiene (3)

HYGN 4520 Advanced Independent Study (3)

HYGN 4530 Teaching Practicum (3)

HYGN 4540 Advanced Teaching Practicum (3)

HYGN 4550 Advanced Independent Study II (3)

Potential Electives - Not part of the Core Program
(up to 21 Cr. Hrs)

HYGN 4500 Advanced Oral Pathology (UBC) (3)

HYGN 4510 Microbiology & Immunology (3)

HYGN 4472 Assessment & Treatment Planning for Advanced Periodontal Disease (3)

Courses approved as Potential Electives outside of the School of Dental Hygiene

NURS 1260 Human Growth & Development (3)

PHIL 1290 Critical Thinking (3)

SOC 2490 Sociology of health & Illness (3)

SOC 3540 Sociology of Health Care Systems (3)

HNSC 1210 Nutrition for Health & Changing Lifestyles (3)

PHIL 2740 Ethics & Biomedicine (3)

SECTION 5: COURSE DESCRIPTIONS

Direct Entry (Year 1)-Required Course Descriptions

CHEM 1300 University 1 Chemistry: Structure and Modelling in Chemistry Cr.Hrs. 3

(Lab Required) (Formerly 002.130) Atomic and molecular models and their applications to chemistry, including a discussion of solid, liquid, and gaseous states, and of mixtures. Not to be held with CHEM 1301. Prerequisites: Applied Mathematics 40S or Pre-calculus Mathematics 40S, or the former Mathematics 40S (300); and Chemistry 40S (or equivalent) or CHEM 0900 (002.090) (P), or a minimum grade of "B" in CHEM 1000 or CHEM 1001 (002.100).

ENGL 1310 Literary Topics 1 Cr.Hrs. 3

(Formerly 004.131) Topics relating to literature and culture will vary yearly. See the Class Schedule for a list of current topics. English 40S or the former English 300 are strongly recommended, but English 40G or the former 301 or 305 will also be accepted. As the course content will vary from year to year, students may take this course more than once for credit.

STAT 1000 Basic Statistical Analysis 1 Cr.Hrs. 3

(Formerly 005.100) An introduction to the basic principles of statistics and procedures used for data analysis. Topics to be covered include: gathering data, displaying and summarizing data, examining relationships between variables, sampling distributions, estimation and significance tests, inference for means. Not to be held with STAT 1001, STAT 2220 (005.222). Prerequisite: Any grade 12 or 40S Mathematics, or equivalent.

PSYC 1200 Introduction to Psychology Cr.Hrs. 6

(Formerly 017.120) Basic concepts and principles of individual behaviour are examined, particularly those of human development, normal and abnormal behaviour, social psychology, learning, perception, and psychological measurement. Students may not hold credit for PSYC 1200 (017.120) and any of: PSYC 1211 (017.121) or PSYC 1221 (017.122) or the former PSYC 1201 (017.120). Prerequisite for all other courses in Psychology.

BIOL 1410 Anatomy of the Human Body Cr.Hrs. 3

(Lab Required) (Formerly ZOOL 1320, 022.132) Microanatomy and gross anatomy discussed including changes occurring from conception to old age. Although this course may be used as an elective in an Arts or Science program, it may not be used to meet a program requirement of an Honours or Major program in the Biological Sciences. No prerequisite. High school Biology strongly recommended.

CHEM 1310 University 1 Chemistry: An Introduction to Physical Chemistry Cr.Hrs. 3

(Lab Required) (Formerly 002.131) Thermochemistry, chemical thermodynamics, and chemical kinetics. Prerequisite: CHEM 1300 or CHEM 1301 (002.130) (C).

CHEM 1320 University 1 Chemistry: An Introduction to Organic Chemistry Cr.Hrs. 3

(Lab Required) (Formerly 002.132) Structures, properties and reactions of organic molecules. Not to be held with CHEM 2210 or CHEM 2211 (002.221) Prerequisite: CHEM 1300 or CHEM 1301 (002.130) (C).

BIOL 1412 Physiology of the Human Body Cr.Hrs. 3

(Lab Required) (Formerly ZOOL 1330, 022.133) Function of all systems discussed with homeostatic regulatory mechanisms as foundation themes. Although this course may be used as an elective in an Arts or Science program, it may not be used to meet a program requirement of an Honours or Major program in the Biological Sciences. Not available to students who have previously obtained credit in, or are currently registered in both of BIOL 2410 (or equivalent - ZOOL 2530, BIOL 2411, ZOOL 2531, 022.253) and BIOL 2420 (or equivalent - ZOOL 2540, BIOL 2421, ZOOL 2541, 022.254). Prerequisite: BIOL 1410 (ZOOL 1320, 022.132) (C); or one of BIOL 1030, BIOL 1031, or the former 071.125 (C). This prerequisite is waived for students in the Baccalaureate Program for Registered Nurses.

Dental Hygiene Course Descriptions-1000 Level

HYGN 1232 Oral and Dental Anatomy Cr.Hrs. 3

This course consists of a self-study CD and laboratory work dealing with the normal development, morphology, structure, and functions of the dentition and related structures. Corequisites: HYGN 1234 and HYGN 1236.

HYGN 1234 Preclinical Dental Hygiene Cr.Hrs. 2

This introductory course teaches the necessary dental hygiene skills in laboratory and preclinical settings. Students are introduced to foundational assessment and implementation skills necessary to begin client care at the novice level. Corequisites: HYGN 1232 and HYGN 1236.

HYGN 1236 Dental Hygiene Theory and Practice 1 Cr.Hrs. 4

This introductory course provides the necessary foundational knowledge requisite for preclinical experience and early client care. It includes the theory and principles underlying the practice of dental hygiene based on the four phases of the Dental Hygiene Process of Care and the concept of Professionalism. Corequisites: HYGN 1232 and HYGN 1234.

HYGN 1238 Dental Hygiene Clinical Practice I Cr.Hrs. 3

The course focus is on the cognitive, psychomotor and affective knowledge and skills requisite to the dental hygiene process of care. It includes the principles underlying the practice of dental hygiene and facilitates the development of a self-directed and self-aware professional. Prerequisites: HYGN 1234 and HYGN 1236. Corequisite: HYGN 1242.

HYGN 1242 Dental Hygiene Theory and Practice II Cr.Hrs. 4

A continuation of foundational knowledge requisite for clinical care on less complicated clients that includes the theory and principles underlying the practice of dental hygiene based on the Dental Hygiene Process of Care. Prerequisites: HYGN 1234 and HYGN 1236. Corequisite: HYGN 1238.

HYGN 1262 Dental Radiology Cr.Hrs. 3

An introduction to the production of x-rays, radiation biology, radiation protection, imaging materials, imaging techniques, recognition of radiographic landmarks and structures, and quality control of radiographs. Corequisites: HYGN 1234 and HYGN 1238.

HYGN 1270 Biology of the Head and Neck Cr.Hrs. 3

(Formerly 070.127) Anatomy, physiology, histology and embryology of the head and neck.

HYGN 1280 Microbiology and Infectious Diseases Cr.Hrs. 3

(Formerly 070.128) A study of different types of microorganisms. Infectious diseases will be discussed in terms of reservoirs, transmission, pathogenesis, treatment and prevention. Emphasis will be given to common communicable diseases, the oral microflora and its role in disease and health.

HYGN 1292 Dental Hygiene Preclinical Restorative Techniques Cr.Hrs. 2

A study of the principles and techniques of restorative dentistry. Introduction information on restorative dentistry specialties.

HYGN 1320 Dental Materials Cr.Hrs. 2

(Formerly 070.132) A study of the properties of materials used in the oral environment for restorative, prosthetic, orthodontic and preventive purposes. Laboratory demonstrations and exercises are designed to demonstrate the correct preparation and handling of dental materials.

HYGN 1340 Communications Cr.Hrs. 2

(Formerly 070.134) This course provides an introduction to basic principles of communication in relation to everyday and professional interactions. The students are sensitized to the process of communication, its complexities and its related dynamics. Particular attention is given to enabling students to develop effective professional communication skills that have the potential to promote client compliance and harmonious working relationships.

HYGN 1352 Community Health I Cr.Hrs. 3

An introductory, participatory course in community oral health promotion intended to inspire a sense of community responsibility in students as health professionals responding to community needs through classroom teaching, interviews and debates.

HYGN 1360 Periodontology I Cr.Hrs. 2

(Formerly 070.136) A study of the normal tissues of the periodontium, and an introduction to periodontal diseases, their etiology, epidemiology and treatment, especially as these relate to dental hygiene practice. A critical analysis of periodontal cases is included.

Dental Hygiene Course Descriptions-2000 Level

HYGN 2100 Dental Hygiene Portfolio Cr.Hrs. 2

This two credit hour course houses the evaluation component of the programmatic portfolio of student competencies that all students commence at enrolment and complete prior to graduation.

HYGN 2280 Pharmacology Cr.Hrs. 2

(Formerly 070.228) Drugs used in clinical practice; a general knowledge of drugs by groups with emphasis on agents such as local anesthetics, analgesics, and antibiotics used extensively in the practice of dentistry.

HYGN 2300 Pathology Cr.Hrs. 3

(Formerly 070.230) A study of the principles of general and oral pathology involving pathologic mechanisms, disorders of physiologic systems, and pathologic conditions and diseases affecting oral and para-oral structures.

HYGN 2312 Dental Hygiene Clinical Practice II Cr.Hrs. 4

This competency-based clinical course amalgamates theoretical knowledge and clinical skills in both general clinical and community based clinical settings. Students provide care to clients with moderate oral health needs. This course is evaluated on a pass/fail basis. Prerequisites: HYGN 1238 and HYGN 1242. Corequisite: HYGN 2314.

HYGN 2314 Dental Hygiene Theory and Practice III Cr.Hrs. 4

Learning, motivation, and behaviour modification theories are applied to oral health promotion. Dental hygiene care plans are developed using a human needs model and process of care. Ethics, jurisprudence and practice standards are discussed. Prerequisites: HYGN 1238 and HYGN 1242. Corequisite: HYGN 2312.

HYGN 2316 Dental Hygiene Clinical Practice III Cr.Hrs. 4

This course advances the student's clinical dental hygiene skills to a level of minimal competency. Students provide dental hygiene care to clients with high oral health needs to facilitate their attainment of optimal oral health. This course is evaluated on a pass/fail basis. Prerequisites: HYGN 2312 and HYGN 2314. Corequisite: HYGN 2318.

HYGN 2318 Dental Hygiene Theory and Practice IV Cr.Hrs. 5

The oral health needs of persons with disabilities and the development of dental hygiene care plans to address those needs are discussed as well as issues of access to dental hygiene care, employment, quality assurance, and professional growth and development. Prerequisites: HYGN 2312 and HYGN 2314. Corequisite: HYGN 2316.

HYGN 2340 Periodontology II Cr.Hrs. 2

(Formerly 070.234) Continuation of the study of etiology, diagnosis and treatment of periodontal disease.

HYGN 2350 Biology of Oral Tissues Cr.Hrs. 2

(Formerly 070.235) Consideration of physiology of the oral environment and its microflora in relation to health, dental caries and periodontal diseases.

HYGN 2362 Community Health II Cr.Hrs. 3

Student abilities to deliver community oral health education/promotion programs, with attention given to barriers and strategies used to meet the unique needs of target populations less likely to have optimal oral health are further developed. Prerequisite: HYGN 1352.

HYGN 2370 Nutrition in Dentistry Cr.Hrs. 2

An examination of the fundamentals of nutrition and the relationship between nutrition and health within the context of the health professions. The focus is on nutritional strategies used to promote health and in the treatment of common health conditions. The primarily on-line content is followed up with a combination of oral health specific patient/clinical exercises for Dental Hygiene students. May not be held with ORLB 2330, HNSC 2170, or PHRM 2420.

HYGN 2380 Pain Management Cr.Hrs. 2

(Formerly 070.238) This course is designed to enhance the dental hygiene student's knowledge of the mechanisms of pain control through the administration of topical and local anesthetic agents. Emphasis will be placed on the pharmacology of dental anesthetic agents and their interaction with the client's current conditions and medications.

Dental Hygiene Course Descriptions-4000 Level

HYGN 4412 Dental Hygiene Practice Management and Leadership Cr.Hrs. 3

This course is designed to provide the student with the necessary knowledge and skills to facilitate the transition to the practice environment. The focus of the course is leadership, workplace dynamics, management, developing alternate practice settings and working with third party payers. Oral health care management in a variety of organizations such as community health agencies, private practice, research and industry will all be discussed.

HYGN 4460 Community Health Independent Study Cr.Hrs. 3

This course is a practicum and/or independent study course focusing on the design and/or implementation and evaluation of the health promotion program process in; the field. Students may choose to host an oral health awareness raising event for the public, provide community-based oral health promotion activity at a selected site, develop a small-scale oral health promotion program for an underserved population group or a similar community-based project.

HYGN 4470 Community Health Independent Study II Cr.Hrs. 3

This course is a continuation of HYGN 4460 (Community Health Independent Study) and provides a further opportunity for the student to build on the previous independent study course or focus on the design and/or implementation and evaluation of an additional health promotion program. In either case, students may choose from oral health awareness raising event for the public, community-based oral health promotion activity, small-scale oral health promotion programming or similar community oral health project.

HYGN 4492 Current Issues in Dental Hygiene Cr.Hrs. 3

This seminar course focuses on current topics concerning the profession of dental hygiene in Canada and Internationally. Exploration of global topics will enable the student to glean a broad view of the profession.

HYGN 4500 Advanced Oral Pathology Cr.Hrs. 3

A web-based CD-ROM distance education course designed to present the clinical and pathobiologic aspects of diseases that affect oral and maxillofacial tissues or present with significant oral manifestations of systemic diseases. This course is presented in conjunction with the University of Manitoba and the University of British Columbia.

HYGN 4510 Microbiology and Immunology Cr.Hrs. 3

This Web CT course is offered in conjunction with the University of British Columbia. Microbiological and immunological concepts that are the scientific basis for understanding human response in health and disease will be explored. This course builds on knowledge acquired from dental hygiene entry-to-practice level education and dental hygiene practice.

HYGN 4520 Advanced Independent Study I Cr.Hrs. 3

This course will enable the degree-completion student to explore issues or areas of interest in dental hygiene with the mentorship of a dental hygiene faculty member. Dependent upon the extent of the project, students may enroll in either three or six hours of study.

HYGN 4530 Teaching Practicum Cr.Hrs. 3

This course provides students with a seminar course in clinical teaching methodologies and the opportunity to practice teach within an undergraduate dental hygiene program under the supervision and mentorship of dental hygiene faculty members.

HYGN 4540 Advanced Teaching Practicum Cr.Hrs. 3

This course is a continuation of HYGN 4530 (Teaching Practicum) and provides the opportunity to extend the practice teaching experience into a second term, thus strengthening the individual's skills as a dental hygiene educator. This experience will occur under the supervision and mentorship of dental hygiene faculty members.

HYGN 4550 Advanced Independent Study II Cr.Hrs. 3

This course is a continuation of HYGN 4520 (Advanced Independent Study) and provides the opportunity for the student to pursue a more complex project which cannot be completed within the first course. Students will have selected their project topic in HYGN 4520 and will continue their exploration and write-up of this topic with the guidance of a dental hygiene faculty mentor.

COLLEGE OF MEDICINE

Dean: Brian Postl

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Chapter Contents

DEPARTMENT OF COMMUNITY HEALTH SCIENCES-FAMILY SOCIAL SCIENCES

DEPARTMENT OF COMMUNITY HEALTH SCIENCES-FAMILY SOCIAL SCIENCES-SECOND DEGREE

SECTION 1: MEDICAL EDUCATION

- 1.1 Mission Statement
- 1.2 History of the College
- 1.3 The Neil John Maclean Health Sciences Library
- 1.4 Graduate Studies
- 1.5 Master of Physician Assistant Studies
- 1.6 Department of Medical Education
- 1.7 Continuing Professional Development

SECTION 2: ADMISSION TO THE COLLEGE OF MEDICINE

- 2.1 Degree Offered
- 2.2 Eligibility Requirements for Admission
- 2.3 Eligibility Requirements for Transfer
- 2.4 Immunization Requirements
- 2.5 Certification in Cardio-Pulmonary Resuscitation (CPR)

SECTION 3: ACADEMIC REGULATIONS

- 3.1 Requirements for the Degree of Doctor of Medicine (M.D.)
- 3.2 Requirements for Registration to Practise Medicine

SECTION 4: THE PROGRAM FOR THE M.D. DEGREE

- 4.1 Governance
- 4.2 General Statement
- 4.3 The Plan of the Curriculum

SECTION 5: STUDENT EVALUATION AND ACADEMIC PROGRESS

- 5.1 Responsibility
- 5.2 Evaluation of Students in the Pre-Clerkship Program
- 5.3 Evaluation of the Students in the Clerkship Program
- 5.4 Regulations for Students Taking Leave from the Clerkship Program
- 5.5 Reappraisal and Appeal of Failed Rotations and Examinations

SECTION 6: ACADEMIC RESEARCH IN MEDICAL EDUCATION

- 6.1 Intro Medicine
- 6.2 Med II Summer Research Program

SECTION 7: ADDITIONAL DEGREES IN MEDICINE

- 7.1 Bachelor of Science in Medicine (B.Sc. (Med.))
- 7.2 MD/PhD Program

SECTION 8: REGISTRATION INFORMATION

SECTION 9: COURSE DESCRIPTIONS

Department of Community Health Sciences

Family Social Sciences and Second Degree

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Chapter Contents

SECTION 1: DEGREE PROGRAMS OFFERED

1.1 Degree Programs

1.2 Available Minors, Options, Concentrations and Streams

1.3 Professional Designations

SECTION 2: ADMISSION REQUIREMENTS

SECTION 3: ACADEMIC REGULATIONS

3.1 Prerequisite, Corequisite, and Course Availability: Definitions

3.2 Scholastic Standards

3.3 Part-Time Students

3.4 Direct Entry

3.5 Repeating Courses

3.6 Challenge for Credit

3.7 Transfer of Credit

3.8 Appeals of Academic Regulations

3.9 Dean's Honour List

3.10 Degree with Distinction

3.11 Work Permit for Study Purposes

3.12 Release and Indemnification Forms

3.13 Written English and Mathematics Requirements

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

4.1 Advisement

4.2 Program Requirements

4.3 Program Electives

4.4 Family Social Sciences Program

4.4.1 Students admitted in September 2015 or later

4.4.2 Aging and Developmental Health Option

4.4.3 Child and Youth Developmental Health Option

4.4.4 Family Economic Health Option

4.4.5 Family Violence Option

4.4.6 Social Development Option

4.5 The After Degree Program in Family Social Sciences

4.6 The Family Social Sciences Minor

4.7 Interfaculty Option in Aging

4.8 The Minor in Management

4.9 The Voluntary Minor

SECTION 5: COURSE DESCRIPTIONS

SECTION 1: DEGREE PROGRAMS OFFERED

1.1 Programs

Program/Degree	Years to Complete	*Total Credit Hours
Bachelor of Human Ecology (Family Social Sciences)	4*	120
Bachelor Human Ecology (The After Degree Program in Family Social Sciences)	2**	60

*This includes one year (30 credit hours) of study in University 1.

**Approximate as prerequisites must be met in order to progress.

1.2 Available Minors, Options, Concentrations and Streams

Program	Minor Availability	Options	Streams
Family Social Sciences	Yes: Family Social Sciences Minor	Aging and Developmental Health Child and Youth Developmental Health Family Economic Health Family Violence Social Development	
		Interfaculty Option in Aging	

Family Social Sciences Options

Aging and Developmental Health Option

Child and Youth Developmental Health Option

Family Economic Health Option

Family Violence Option

Social Development Option

The Interfaculty Option in Aging

1.3 Professional Designations

Home economists in Manitoba, and other provinces, are regulated by legislation. Graduates may apply to the Manitoba Association of Home Economists (MAHE) for interim professional home economist (IPHE) status, and subsequently qualify as a professional home economist (PHEc).

"On June 24, 2014, the Board of Governors, on recommendation of Senate, approved the merger of the Department of Family Social Sciences to the Department of Community Health Sciences. Accordingly, effective July 1, 2015, all associated programs in Family Social Sciences will become part of the Faculty of Health Sciences, College of Medicine, and Department of Community Health Sciences.

The proposal submitted to Senate noted the need for flexibility in the implementation of this transition, which will be important as we review changes to the regulations governing the undergraduate Family Social Sciences programs during the transition period. In the interim and until such time that a review is completed and the required approval(s) received, the Family Social Sciences programs will continue to be governed by the relevant components of the Faculty of Human Ecology academic regulations and the Family Social Sciences regulations”

SECTION 2: ADMISSION REQUIREMENTS FOR FAMILY SOCIAL SCIENCES

Admission requirements are described on the Undergraduate Admissions website at <http://umanitoba.ca/student/admissions/application/index.html>. Application process information is at <http://umanitoba.ca/student/admissions/application/deadlines/application-process.html>.

General Entrance Requirements to the Bachelor of Human Ecology - Family Social Sciences Degree Program: A minimum adjusted grade point average (AGPA) of 2.0 in at least 24 credit hours of University 1, including 6 credit hours from Arts and 6 credit hours from Science to total 12 credit hours, plus 12-18 credit hours of other University 1 courses, for a total of 24-30 credit hours. Students must complete at least 6 more credit hours of Arts or Science courses once admitted to the Faculty. Beginning in September, 2012, high school students will be eligible to apply for direct entry to the Degree Program. Detailed information is posted on the University website (above).

For students wishing to choose the focused approach for entry to the Bachelor of Human Ecology, - Family Social Sciences Degree Program the course requirements for each of the programs or areas of concentration offered by the Degree Program are described in the Start Book at <http://umanitoba.ca/firstyear/>.

Direct Admission into the Bachelor of Human Ecology - Family Social Sciences Degree Program from High School

To be eligible for admission based on high school, students must have: General Requirements to the University of Manitoba, plus a minimum 85% average over the following, with no less than 60% in each course:

- a. English 40S
- b. Applied Mathematics 40S or Pre-Calculus Mathematics 40S
- c. A third 40S course (Biology, Chemistry, Physics or computer Science 40S recommended)

SECTION 3: DEPARTMENT ACADEMIC REGULATIONS

The provisions of the chapter, General Academic Regulations and Requirements, and the chapter, University Policies, apply to all students. In addition, the Bachelor of Human Ecology - Family Social Sciences Degree Program has regulations and requirements, published below, that apply specifically to its students.

3.1 Prerequisite, Corequisite, and Course Availability: Definitions

Prerequisite: If a course is prerequisite to a second course, the prerequisite must be met in order to continue in the second course. The department giving the second course may require a minimum grade of 'C' in the first course to register in the second course. Some inactive (legacy) courses may be used as prerequisites.

Corequisite: If a first course is a corequisite to a second course, the first course (unless previously completed) must be taken in the same term as the second course.

Course Availability: Not all courses listed in this Calendar are offered every year. Students are referred to the on-line calendar for courses offered in the year. Family Social Sciences courses at the 3000 and 4000 level are available only to students registered in the Bachelor of Human Ecology - Family Social Sciences Degree Program or one of the minors or options associated with the Degree Program. Courses at the 3000 and 4000 level may be taken with written permission from an Academic Advisor as long as there is space.

3.2 Scholastic Standards

Graduation and Grade Point Average

To graduate, a student must have passed 120 credit hours acceptable for credit in the current degree program and have obtained a minimum of 240 quality points. This is equivalent to a Degree Grade Point Average of 2.0. A pass indicates a grade of 'D' or better. A student's Degree Grade Point Average (DGPA) will be determined from the number of effective courses which apply at a particular stage. The effective courses consist of all courses passed, in addition to all failures which have not been cleared, or substituted for, in the student's record. A maximum of 150 credit hours (25 courses or the equivalent) may be attempted in order to obtain the 120 credit hours.

Assessment

The status of each student will be assessed in May of each year in which a student is registered. All Direct Entry students will be assessed formally upon completion of at least 24 credit hours in May of each year using the Bachelor of Human Ecology - Family Social Sciences Degree Program assessment standards. Assessments can include the following comments:

- Faculty minimum met (grade point average meets the standards listed below);
- Dean's Honour (see 3.9)
- Academic Warning

- Probationary status (see below)
- Suspension (see below)
- Suspension - all attempts used (see below)

Academic warning indicates a grade point average between the minimum required at the effective credit hours (year) and the DGPA requirement of 2.0.

There is a maximum of 30 credit hours of attempts allowed for each academic program; once those attempts are used (repeated courses, grades of F or D), it is impossible to graduate.

Probationary Standing

Students must achieve or exceed the following standards at the specified stages in their academic careers. Failure to obtain the standard results in probation. Once placed on probation, students who fail to meet the appropriate performance level at the next assessment following the next registration will be academically suspended. A student is not permitted to be on probation for two consecutive years.

Assessment Standards		
Bachelor of Human Ecology Family Social Sciences Degree Program		
Effective Credit Hours	Minimum Grade Point Average	
9 – 21 credit hours	< 2.0	Academic Warning
24 – 30 credit hours	1.80	
33 – 60 credit hours	1.85	
63 – 90 credit hours	1.90	
93 – 117 credit hours	1.95	
120+ credit hours	2.0	

Suspension

Suspended students must remain out of the Bachelor of Human Ecology - Family Social Sciences Degree Program for one academic year from the date of suspension and must apply for reinstatement at the Admissions Office no later than May 1.

Where mathematically possible for a suspended student to complete the degree by repeating failed courses, a suspended student shall be automatically reinstated after remaining out of the Degree Program for one calendar year, or by achieving a degree GPA above the probationary standard.

Suspension (All Attempts Used)

Where it is mathematically impossible for a student to complete the degree by repeating failed courses, a suspended student, after remaining out of the faculty for one calendar year, may attempt reinstatement. By completing at least 12 credit hours in one term with a minimum 'D' grade in all courses and a term grade point average of at least 2.0, the student will be reinstated. The student will start the program afresh, with previous grades of 'C' or better applicable to the program.

3.3 Part-time Students

The maximum time allowed for completion of the degree is 10 years. After completion of 24 credit hours, part-time students will be evaluated each May and must conform to the minimum performance levels.

3.4 Direct Entry

All Direct Entry students will be assessed formally upon completion of at least 24 credit hours in May of each year using the Bachelor of Human Ecology Family Social Science Degree Program's assessment standards. Probationary standing is assessed using the criteria listed. Direct Entry students who complete fewer than 24 credit hours by May of their first year will not be formally assessed until the following May. Students who complete 9 - 21 credit hours with a grade point average of less than 2.0 will be placed on academic warning.

3.5 Repeating Courses

A student may repeat any course for the purpose of attaining a better grade. The latest registration of a repeated course will count in GPA calculations. There are no supplemental examinations for students who have failed final or deferred examinations.

3.6 Challenge for Credit

A student wishing to challenge a course for credit should contact an Academic Advisor. Letter grades are granted upon completion of the course that is challenged for credit. A list of courses for challenge is available in the Advising Office. An application is required.

3.7 Transfer of Credit

See the chapters on Admissions and Academic Regulations and Requirements at the beginning of this Calendar. Students from faculties other than University 1 or from other institutions must make an appointment with an Academic Advisor by the end of their first academic year to arrange for transfer of credit.

3.8 Appeals of Academic Regulations

The Committee on Student Standing considers petitions from students who request special consideration with respect to rules and regulations governing their programs of study and qualification for graduation.

3.9 Dean's Honour List

Eligible students who achieve a term Grade Point Average of 3.5 or higher in at least 12 credit hours per term will be included in the Deans Honour List.

3.10 Degree With Distinction

Students who graduate with a degree GPA of 3.75 and higher will receive a degree with distinction.

3.11 Work Permit for Study Purposes

International students who are registering for courses or programs that require work placement must obtain a valid Work Permit, in addition to maintaining a valid Study Permit. Work placement includes, but is not limited to, any paid or unpaid practicum, internships, work experience, field placement, and co-op programs that are a required component for the completion of their degree, diploma or certificate. Please contact your program advisor or the International Centre for Students for further information.

3.12 Release and Indemnification Forms

In elective courses, students may be required to sign a release form for off-campus activities.

3.13 Written English and Mathematics Requirements

The written English and Mathematics requirements are satisfied by required courses HMEC 2000 and STAT 1000 within the Bachelor of Human Ecology Family Social Science Degree Program. HMEC 2000 will be available to students upon admission to the Degree.

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

For students entering the Bachelor of Human Ecology - Family Social Sciences Degree Program:

In order to qualify for a degree, students must complete the 120 credit hours specified for the selected program. Elective choices provided in each program can permit students to transfer between them; however, this opportunity decreases as students progress. Students who transfer to another program must meet the full requirements of that program. There is a quota in effect for intake to each program per academic year. The quota may affect movement into a program after the September intake.

4.1 Advisement

The Bachelor of Human Ecology Family Social Sciences Degree Program will provide entering students with orientation information and will refer a student to a program advisor if the student requests. All returning students in the Degree Program must submit a program plan for the succeeding year before the start of registration.

4.2 Faculty Program Requirements

The following are the guidelines for the program requirements in the Degree Program. The courses outlined in the sections which follow, meet these basic requirements.

Admitted in September 2015 or Later:

All students complete a Degree Program core of 9 credit hours consisting of:

Course Number	Course Name
HEAL 2600	Integration of Health Determinants of Individuals
HMEC 2000	Research Methods and Presentation
HMEC 3000	Introduction to Social Epidemiology

- Plus a minimum of 51 additional credit hours within the Degree Program;
- Plus a minimum of 27 additional credit hours outside the Degree Program of which at least 6 credit hours must be from the Faculty of Science and six from the social sciences;
- Plus a minimum of 12 additional credit hours of free electives leading to a degree requirement of 120 (123) credit hours.

Notes:

Students admitted before September, 2005 and graduating after May, 2005, will make the following program adjustments because of the deletion of the former 028.408 (HMEC 4080) as a degree requirement.

- Family Social Sciences students must complete an additional 3 credit hours of FMYL electives at the 3000-4000 level.

Students admitted between September 2005 and September 2015 are urged to seek academic advising assistance for advice regarding completion of core course requirements.

4.3 Program Electives

Courses within each program fall into one of three categories:

- Program electives must be chosen from within the program department.
- Outside electives must be chosen from a Faculty other than the Bachelor of Human Ecology Family Social Sciences Degree Program.
- Free electives may be chosen from within or outside the Degree Program.

4.4 Family Social Sciences

Head: Stephen Moses - Community Health Sciences

Applying knowledge from the social and physical sciences, students in Family Social Sciences examine factors affecting human psychosocial health and wellbeing. They study human development from infancy to old age within the context of families, communities, and culture.

Students are required to choose at least one area, or option, in which to focus their studies. The name of their option will appear as a “comment” on their transcripts. They may select from the following options: 1) Aging and Developmental Health Option; 2) Child and Youth Developmental Health Option; 3) Family Economic Health; 4) Family Violence; 5) Social Development. Family Social Sciences graduates are permitted to complete any option after their degree as a Special Student. Not every Family Social Sciences course will be offered every year. A chart providing course rotation information is available on the Family Social Sciences web page.

The Family Social Sciences program can provide students with academic preparation or complementary courses for programs such as Law, Social Work, Education or Graduate Studies.

In March of each year, program planning sessions are provided to assist students in their selection of courses for subsequent years of study.

4.4.1 Students Admitted in September 2015 or Later

Courses to be taken by all Family Social Sciences students:

Course Number	Course Name	Credit Hours
STAT 1000	Basic Statistical Analysis	3
One of STAT 2000, COMP 1260 or any other Science course	Basic Statistical Analysis 2, Introductory Computer Usage 1, or any other Science course	3
One of: ECON 1010, 1020, 1210 or 1220	Principles of Economics, Introduction to Canadian Economic Issues, or Introduction to Global and Environmental Economic Issues and Policies	3 - 6
HMEC 2000	Research Methods and Presentation	3
HMEC 3000	Introduction to Social Epidemiology	3
HEAL 2600	Integration of Health Determinants of Individuals	3
FMLY 1000	Families in Contemporary Canadian Society	3
FMLY 1010	Human Development in the Family	3
FMLY 1012	Introduction to Social Development	3
FMLY 1420	Family Management Principles	3
FMLY 2400	Family Financial Health	3
FMLY 2500	Diversity and Families	3
FMLY 3750	Fundamentals of Health Promotion	3
FMLY 3780	Introduction to the Development of Programs for Children and Families	3
FMLY 3790	Introduction to the Evaluation of Programs for Children and Families	3
PSYC 1200 or SOC 1200	Introduction to Psychology or Introduction to Sociology	6
	Program Electives	24
	FMLY Elective (3 cr. hr. must be at the 3000 level or higher)*	3
	Outside Electives	12 – 15
	Free Electives	27

Notes:

1. If students choose ECON 1010 and 1020 (former 1200) or ECON 1210 and 1220, 12 credit hours of outside electives are required.
2. All courses listed in the general Family Social Sciences section (above) are required. In addition, students must choose at least one area (Option) in which to focus their studies. In the following section, the courses required to fulfill each Option are listed. They will partially meet department, outside and free elective requirements. More courses will be required to complete the 120 credit hour degree. Students are encouraged to take more than one Option. Each Option must consist of 18 non-overlapping credit hours; that is, no course can satisfy the requirement of more than one Option.
3. * Any non-required FMLY course is a Bachelor of Human Ecology (Family Social Sciences) program elective. At least one of the non-specified program electives must be at the 3000-4000 level. For more information, students are asked to contact the Academic Advisor for the Bachelor of Human Ecology Family Social Sciences Degree Program.

ACADEMIC CALENDAR 2015-2016

4.4.2 Aging and Developmental Health Option

This option is also part of the Interfaculty Option in Aging, which can fulfill the requirement for an option within the Family Social Sciences major.

Aging and Development Health Option		
Course Number	Course Name	Credit Hours
HMEC or REC or SWRK 2650	Social Aspects of Aging	3
NURS or KIN 2610	Health and Physical Aspects of Aging	3
FMLY 4300	Field Experience (must be focused on Aging)	6
	At least 3 credit hours from:	3
FMLY 3220	Death and the Family	
FMLY 3240	Families in Later Years	
FMLY 4220	Aging and Risk in a Global Context	
	At least 3 credit hours from:	3
NURS 2200	Selected Topics in Aging and Health	
PSYC 2490	Abnormal Psychology	
PSYC 3070	Adult Development	
PSYC 3490	Individual Differences	
PSYC 3610	Memory	
KIN 4500	Physical Activity and Aging	
REC 4250	Leisure and Aging	
RLGN 1410	Death and Concepts of the Future	
SOC 2490	Sociology of Health and Illness	
SOC 2620	The Sociology of Aging	
SOC 3540	The Sociology of Health Care Systems	

4.4.3 Child and Youth Developmental Health Option

Child and Youth Developmental Health Option		
Course Number	Course Name	Credit Hours
FMLY 2600	Foundations of Childhood Developmental Health	3
FMLY 3600	Adolescents in Families and Societies	3
FMLY 3330 or FMLY 4604 or FMLY 4606	Parenting and Developmental Health in Children or Children in Adversity or A Social Justice Perspective on Indigenous Maternal and Child Health	3
	At least 9 credit hours from:	9
ANTH 2300	Anthropology of Childhood	
FMLY 2800	Family Violence	
FMLY 3610	Developmental Health of Children and Youth	
FMLY 3800	Conflict Resolution in the Family	
FMLY 3802	Intimate Partner Violence	
FMLY 3806	Children, Violence and Rights	
FMLY 4330	Management of Family Stress	
FMLY 4480	Work and Family Issues	
FMLY 4602	Family Relationships, Health and Well-Being	
HNSC 1210	Nutrition for Health and Changing Lifestyles	
HNSC 2130	Nutrition through the Life Cycle	
NURS 4420	Prevention of Illness	
NURS 4440	Health Promotion in the Community	
PSYC 2440	Behaviour Modification Principles	
PSYC 3070	Adult Development	
PSYC 3150	Behaviour Modification Applications	
PSYC 3310	Adolescent Development	
PSYC 3360	Experimental Child Psychology	
PSYC 3860	Language Acquisition	
SOC 3830	Youth, Crime and Society	

4.4.4 Family Economic Health Option

Family Economic Health Option		
Course Number	Course Name	Credit Hours
	At least 9 credit hours from:	9
FMLY 3400	Families as Consumers	
FMLY 4330	Management of Family Stress	
FMLY 4400	Family Economics: Poverty and Wealth	
FMLY 4460	Family Financial Counselling	
FMLY 4480	Work and Family Issues	
	At least 9 credit hours from (select at least 3 credit hours from courses numbered 3000 or 4000):	9
ACC 1100	Introductory Financial Accounting	
ACC 1110	Introductory Managerial Accounting	
ANTH 2430	Ecology, Technology and the Society	
ANTH 2550	Culture and the Individual	
ECON 2310	Canadian Economic Problems	
ECON 2350	Community Economic Development	
ECON 2362	Economics of Gender	
ECON 2390	Introduction to Environmental Economics	
ECON 3720	Urban and Regional Economics and Policies	
FIN 2200	Corporation Finance	
FIN 3420	Security Analysis	
FMLY 3012	Social Development Policies	
FMLY 3240	Families in Later Years	
FMLY 3610	Developmental Health of Children and Youth	
FMLY 4012	Theories of Social Development	
FMLY 4220	Aging and Risk in a Global Context	
FMLY 4602	Family Relationships, Health and Well-Being	
GEOG 1280	Introduction to Human Geography	
GEOG 2210	Economic Geography	
GMGT 2070	Organizational Behaviour	
HRIR 2440	Human Resource Management	
HNSC 1210	Nutrition for Health and Changing Lifestyles	
HNSC 2130	Nutrition through the Life Cycle	
MKT 2210	Fundamentals of Marketing	
MKT 3230	Consumer Behaviour	
NATV 1200	The Native Peoples of Canada	
NATV 1220	The Native Peoples of Canada, Part 1	
NATV 1240	The Native Peoples of Canada, Part 2	
NURS 4440	Health Promotion in the Community	
SOC 3370	Sociology of Work	
SOC 3380	Power, Politics and the Welfare State	
SOC 3890	Power and Social Inequality: A Comparative Perspective	
TXSC 1600	Textiles for Apparel End Uses	
TXSC 1610	Textiles, Product and Consumers	
TXSC 2600	Textiles for Apparel End Uses	
TXSC 2610	Textiles for Non Apparel End Uses	
TXSC 2620	Consumer and Organizational Behaviour Toward Textile Products	
TXSC 3600	Global Apparel and Textiles Trade	

ACADEMIC CALENDAR 2015-2016

4.4.5 Family Violence Option

Family Violence Option		
Course Number	Course Name	Credit Hours
FMLY 2800	Family Violence	3
FMLY 3802 or FMLY 3806	Intimate Partner Violence or Children, Violence and Rights	3
FMLY 4802	Family Violence Prevention	3
At least 9 credit hours from (select at least 3 credit hours from courses numbered 3000 or 4000):		9
ANTH 3380	Anthropology and Contemporary Social Issues	
FMLY 3610	Developmental Health of Children and Youth	
FMLY 3800	Conflict Resolution in the Family	
FMLY 4220	Aging and Risk in a Global Context	
FMLY 4330	Management of Family Stress	
FMLY 4602	Family Relationships, Health and Well-Being	
FMLY 4604	Children in Adversity	
NATV 1220	The Native Peoples of Canada, Part 1	
NATV 1240	The Native Peoples of Canada, Part 2	
NURS 3300	Women and Health	
NURS 3400	Men's Health: Concerns, Issues and Myths	
PSYC 3470	Dyadic Relationships	
SOC 2370	Ethnic Relations	
SOC 2510	Criminology	
SOC 3700	Sociology of Law	
SOC 3790	Women, Crime and Social Justice	
SOC 3830	Youth, Crime and Society	
SWRK 3130	Contemporary Canadian Social Welfare	
WOMN 3560	Feminist Perspectives on Violence Against Women	

4.4.6 Social Development Option

Social Development Option		
Course Number	Course Name	Credit Hours
At least 9 credit hours from:		9
FMLY 2012	Development, Conflict, and Displacement	
FMLY 3012	Theories of Social Development	
FMLY 4012	Social Development Policies	
FMLY 4400	Family Economics, Poverty and Wealth	
Three (3) credit hours from:		3
HMEC/SWRK/REC 2650	Social Aspects of Aging	
FMLY 2800	Family Violence	
FMLY 3240	Families in Later Years	
FMLY 3400	Families as Consumers	
FMLY 3800	Conflict Resolution in the Family	
FMLY 4220	Aging and Risk in a Global Context	
FMLY 4330	Stress in the Family	
FMLY 4480	Work and Family Issues	
FMLY 4602	Family Relationships, Health and Well-Being	
FMLY 4604	Children in Adversity	
Six (6) credit hours from:		6
ANTH 1220	Cultural Anthropology	
LABR 3220	Global Sweatshops, Global Struggles	
NATV 1220	The Native Peoples of Canada, Part 1	
NATV 1240	The Native Peoples of Canada, Part 2	
POLS 1000	Democracy and Development	
POLS 2070	Introduction to Canadian Government	
POLS 4710	Political Theory and the Family	
SOC 2320	Canadian Society and Culture	
SOC 3890	Power and Inequality in Comparative Perspective	
SWRK 2050	Community and Organizational Theory	
WOMN 1600	Introduction to Women's and Gender Studies in the Social Sciences	

4.5 The After Degree Program in Family Social Sciences

An After Degree Program (ADP) in Family Social Sciences is offered to students who have completed a previous undergraduate degree. ADP students must complete 60 credit hours in total to earn their second degree in Family Social Sciences. All Family Social Sciences U1 prerequisites are waived. In order to facilitate ADP students completing the program in a timely manner, they will automatically be permitted (without special permission from the course instructor) to take Family Social Sciences 2000 level prerequisites as corequisites for any required Family Social Sciences 3000 and/or 4000 level courses. Please consult with the Academic Advisor when planning programs prior to registration. ADP students are required to choose at least one option and meet its requirements at the second year level and beyond. These 18 credit hours may include courses external to the Bachelor of Human Ecology Social Sciences Degree Program that are required to complete an option. If a second option is not chosen, then these credit hours must be taken within the program. There are no free electives in the ADP.

Students admitted in September 2015 or Later

Bachelor of Human Ecology Family Social Sciences Degree Program Core Courses (any 6 credit hours. See note 3):

At least 6 credit hours from:		
HMEC 2000, HMEC 3000, or HEAL 2600	Research Methods and Presentation, Introduction to Social Epidemiology, or Integration of Health Determinants of Individuals (see note 3)	6 - 9
Family Social Sciences Requirements (see note 4):		
FMLY 2400	Family Financial Health	3
FMLY 2500	Diversity and Families	3
FMLY 3750	Fundamentals of Health Promotion	3
FMLY 3780	Introduction to the Development of Programs for Children and Families	3
FMLY 3790	Introduction to the Evaluation of Programs for Children and Families	3
And a minimum of 6 credit hours from (see note 5):		
FMLY 2600	Foundations of Childhood Developmental Health	
FMLY 2800	Family Violence	
FMLY 2012	Development, Conflict, and Displacement	
HMEC/SWRK/ REC 2650	The Social Aspects of Aging	
Family Social Sciences Option (see note 6)		15
Family Social Sciences Electives (see note 7)		12-15
STAT 1000	Basic Statistical Analysis (see note 8)	3
TOTAL		60

NOTES:

1. The same entrance requirements will be applied to ADP students in order to maintain current Degree Program standards.
2. Basic social science knowledge is assumed because ADP students have previously completed an undergraduate degree; waiving U1 requirements for FSS courses acknowledges the skills, background and maturity of this particular group of students.
3. This choice provides students who have previously taken a research methods course with the option of avoiding redundancy in their program. Students are free to take all three core courses if they feel it would benefit them. If students select 9 credit hours of core courses, the FSS electives component is reduced to 15 credit hours.
4. This set of courses is currently required of all undergraduate FSS students and is required for students in the ADP.
5. Students are required to take a minimum of any two (6 credit hours) of the introductory level courses across options. Review the list of options found in the 120 credit hour undergraduate degree program to assist with planning for prerequisites for higher level courses.
6. Each FSS option is a total of 18 credit hours; ADP students will have taken at least one 2000 level course (3 credit hours) required by the chosen option as part of their program requirements, leaving the remaining 15 credit hours to be completed to fulfil the option. Completion of the option may include courses external to the Bachelor of Human Ecology Family Social Sciences Degree Program that are required to complete an option.
7. ADP students are encouraged to specialize in two options simultaneously to strengthen and broaden their expertise. If a second option is chosen, these credit hours may include courses external to the Bachelor of Human Ecology Family Social Sciences Degree Program that are required to complete the option. If students have completed the 2000 level course required for the second option, the requirement to complete the option is 15 credit hours. If a second option is not chosen, then these credit hours must be taken within the department.
8. Students who have previously completed an undergraduate statistics course can either transfer it in directly (if already assessed as equivalent) or can request to have it assessed for advanced standing; if successful, students will be required to add 3 credit hours to their program from courses selected from Family Social Sciences.

ADP in FSS is 60 credit hours. If students have taken any of the required courses for this degree, they can be transferred in. ADP students will need to take additional courses in order to fulfill the University of Manitoba's Residency Requirement. This requirement states all students must complete at least 60 credit hours in the Bachelor of Human Ecology - Family Social Sciences degree program at the University of Manitoba. Students may want to discuss additional courses with the Academic Advisor's office.

4.6 The Family Social Sciences Minor

A minor in Family Social Sciences is offered by the Bachelor of Human Ecology Family Social Sciences Degree Program. Students must complete 18 credit hours, distributed as follows: Six (6) credit hours in Family Social Sciences at the 1000 level, and at least three (3) credit hours in Family Social Sciences at the 2000 level, and at least three (3) credit hours in Family Social Sciences at the 3000 or 4000 level, with no more than 6 credit hours at the 1000 level.

Students must check with their home Faculties to see if the Family Social Sciences minor is available in their programs.

4.7 Interfaculty Option in Aging

An Option in Aging is offered by and in the following faculties, schools, and colleges: Arts, Faculty of Health Sciences: Bachelor of Human Ecology Family Social Sciences Degree Program, Interdisciplinary Health, Nursing, Kinesiology and Recreation Management, Social Work, and Agricultural and Food Sciences: Bachelor of Science in Human Nutritional Sciences Program and Bachelor of Science in Textile Science Program.

To complete the option, students must complete each of the following requirements:

Interfaculty Option in Aging		
Required Courses (6 credit hours):	HMEC 2650 or REC 2650 or SWRK 2650 <u>The Social Aspects of Aging</u>	KIN 2610 or NURS 2610 <u>Health and Physical Aspects of Aging</u>
At least six (6) credit hours of discipline-specific (professional) applied work in the student's department of registration	Human Ecology Courses: FMLY 4300 HMEC 4090 Agricultural and Food Sciences Course: HNSC 4362	Application is required for all field placement or practicum courses.
Six (6) credit hours of aging-related courses from participating units	Human Ecology Courses: FMLY 3220 FMLY 3240 FMLY 4220 Agricultural and Food Science Courses: HNSC 2130 HNSC 4310	

Upon completion of these requirements, a comment will be added to the student's transcript.

4.8 The Minor in Management

A Management Minor is offered by the Asper School of Business. Bachelor of Human Ecology Family Social Sciences Degree Program students may complete this Minor as part of the electives portion of their programs. The Minor will consist of any 18 credit hours of Management courses. Students must meet prerequisites for all courses.

4.9 The Voluntary Minor

Students in the Bachelor of Human Ecology Family Social Sciences Degree Program may declare and complete a Minor from departments and interdisciplinary programs in which a Minor is offered. The Family Social Sciences Minor is available through the Bachelor of Human Ecology Family Social Sciences Degree Program. Information about Minors in programs is found in the appropriate description of departmental/school/faculty program offerings in the Undergraduate Calendar.

Completion of the Minor is entirely optional. Students may not, however, declare both their Major and Minor from the same department/interdisciplinary program. No course may be used as part of a prescribed program in the Bachelor of Human Ecology Family Social Science Degree Program and also be part of a prescribed Minor. For example, if a course in Chemistry is part of a student's degree requirements in the Bachelor of Human Ecology Family Social Sciences Degree Program, it cannot be used as part of a Minor in another program. Completion of a Minor may require that a student take more than the minimum number of credit hours for graduation.

SECTION 5: FAMILY SOCIAL SCIENCES COURSE DESCRIPTIONS

Family Social Sciences Course Descriptions-1000 Level

FMLY 1000 Families in Contemporary Canadian Society Cr.Hrs. 3

(Formerly 062.102 and FMLY 1020) This course provides an introduction to issues in contemporary families from an interdisciplinary perspective. Changing and diverse family forms and experiences are reviewed. An overview of issues pertinent to family well-being, including but not limited to immigration, poverty, homelessness, racism, addiction, disability, divorce, and physical and mental illness is provided. Not to be held with 062.114 or 062.102 or FMLY 1020.

FMLY 1010 Human Development in the Family Cr.Hrs. 3

(Formerly 062.101) Introductory survey of key aspects of human development processes within the family context from a life span perspective. Not to be held with NURS 1260 (049.126).

FMLY 1012 Introduction to Social Development Cr.Hrs. 3

This course is an introduction to Social Development with a particular emphasis on families and communities. Social development is concerned with the advancement of the common good, the effective management of social problems, the meeting of human needs, and the equitable distribution of society's resources. As such, this course explores the social factors and conditions that promote or hinder social development and how this affects the well-being of individual, families, and communities in contemporary societies. Not to be held with 062.172 or FMLY 1900

FMLY 1420 Family Management Principles Cr.Hrs. 3

(Formerly 062.142) An introductory course that uses an ecosystem perspective resources, decision-making, planning, implementing, evaluating, and communication within family contexts. Applications to balancing work and family, individual and family stress, family finance, environmental issues, and the use of time and human resources will be made. Not to be held with the former 062.142.

FMLY 1900 Families, Housing and Community: An Introductory Perspective Cr.Hrs. 3

(Formerly 062.190) An introduction to understanding housing and community for individuals and families; shelter outside mainstream; neighbourhoods and communities; links between well being and poverty, housing, and community; some policy and program issues; various approaches used in studying this topic. Opportunity for some field experience. Not to be held with 062.172.

Family Social Sciences Course Descriptions-2000 Level

FMLY 2012 Development, Conflict, and Displacement Cr.Hrs. 3

The course is an introduction to development, conflict, and displacement as they affect individuals, families and communities. Specifically, this course examines the current phenomenon of induced displacement due to social conflicts, natural disasters, or uneven development in developing countries. Students will examine concepts and issues arising from induced displacement and explore community based responses to this problem. Not to be held with FMLY 2900. Prerequisite: 1012 or consent of the instructor.

FMLY 2400 Family Financial Health Cr.Hrs. 3

A survey of topics that have an impact on the financial health of Canadian families, including personal money management, mortgage financing, credit and debt, educational and retirement planning, taxation, insurance, savings and investments. The course prepares students to help families maximize resources and increase their financial literacy. Prerequisite: FMLY 1420 (051.142). Not to be held with the former FMLY 2070 (062.207).

FMLY 2500 Diversity and Families Cr.Hrs. 3

(Formerly 062.235 and FMLY 2350) Using the theoretical frameworks of intersectionality and social ecology, this class addresses how diversity in Canada is influenced by age, gender, ability, thnicity, race, as well as family relationships, institutions and social policies. A focus on human rights and anti-racism education is emphasized. Not to be held with 062.235 or FMLY 2350. Prerequisite: FMLY 1000 (FMLY 1020 or 062.102) or FMLY 1010 or equivalent.

FMLY 2600 Foundations of Childhood Developmental Health Cr.Hrs. 3

(Formerly 062.260) This course examines implications of theory and research in child development for promoting developmental health. Laboratory component focuses on working with children and evaluating effects of developmental progress. Prerequisite: Minimum grade of C in FMLY 1010 (062.101). Limited enrolment.

FMLY 2800 Family Violence Cr.Hrs. 3

(Formerly 062.280) A survey of the extent and nature of various forms of family violence across the life course. Topics include physical and sexual child abuse, sibling violence, partner violence, and elder abuse. Emphasis is on prevalence, incidence, causes, consequences and solutions. Prerequisite: FMLY 1010 (062.101) or FMLY 1000 (FMLY 1020 or 062.102) or PSYC 1200 (017.120) or SOC 1200 (077.120).

FMLY 2900 Families, Housing and Community: A Development Perspective Cr.Hrs. 3

(Formerly 062.290) Focus is on developmental issues for individuals, families and communities. Of particular interest is the interrelationship between facilitating community development and the developmental well being of residents. Social, psychological, cultural and political components are considered. Prerequisite: FMLY 1900 (062.190 or 062.172) or consent of instructor.

Family Social Sciences Course Descriptions-3000 Level

FMLY 3012 Theories of Social Development Cr.Hrs. 3

This course is a survey of social development theories that have influence the study and practice of development since the 1950s. It addresses the question of why theories of social development are necessary and why different theories emerged at particular times in history. This course examines explanations of development and underdevelopment as they impact on individuals, families and communities. Not to be held with FMLY 4900. Prerequisite: FMLY 1012.

FMLY 3220 Death and the Family Cr.Hrs. 3

(Formerly 062.322) An examination of dying and death of family members throughout the family life cycle. Specific topics included are the meaning of death, the process of dying, caring relationships, grief and bereavement. Prerequisite: FMLY 1000 (FMLY 1020 or 062.102) or PSYC 1200 (017.120) or SOC 1200 (077.120).

FMLY 3240 Families in Later Years Cr.Hrs. 3

(Formerly 062.324) An investigation of family issues in the later years of life, such as housing, intergenerational relations, adjustment to retirement, sibling relations, grandparenting, death. Students may not hold credit for FMLY 3240 (062.324) and the former 062.321. Prerequisites: [FMLY 1010 (062.101) and FMLY 1000 (FMLY 1020 or 062.102)] or PSYC 1200 (017.120) or SOC 1200 (077.120).

FMLY 3330 Parenting and Developmental Health Cr.Hrs. 3

Examines parenting and its influence on developmental health, with consideration of change across time, the context in which parenting occurs, and the effect of the parent-child relationship on developmental health. Prerequisites: FMLY 2600 or FMLY 3600. Not to be held with 062.435.

FMLY 3400 Families as Consumers Cr.Hrs. 3

An examination of the factors that influence the consumer behaviour of individuals and families across the life course, with particular attention to the situation of vulnerable consumers. Theory, education, policy and practice are related to contemporary consumer issues and the impact of consumption behaviour on the environment. Prerequisites: [FMLY2400 or FMLY 2070 (062.207)] and [ECON 1210 (018.121) or ECON 1220 (018.122) or ECON 1010 or ECON 1020]. Not to be held with the former FMLY 3450 (062.345).

FMLY 3470 Selected Studies in the Family I Cr.Hrs. 3

(Formerly 062.347) The opportunity to carry out an individual study in the area of the family of particular interest to the student. When enrolment warrants, the department may offer selected topics in a regular course format. Prerequisite: consent of instructor.

FMLY 3600 Adolescents in Families and Society Cr.Hrs. 3

(Formerly 062.360) This course is designed to help students understand the nature of adolescent relationships with their families in communities. The application of theory and research on adolescent relationships to professional practice with families and communities is emphasized. Prerequisite: FMLY 2600 (062.260) and completion of 54 credit hours.

FMLY 3610 Developmental Health of Children and Youth Cr.Hrs. 3

(Formerly 062.361) Population health gradients are largely set early in life and are affected by the environments in which children live. This course examines current knowledge of the social determinants of child and adolescent health. Consideration is given to policy implications, including directions for program development and evaluation. Not to be held with the former 062.450. Prerequisite: FMLY 2600 (062.260). Not to be held with 062.450.

FMLY 3750 Fundamentals of Health Promotion Cr.Hrs. 3

This course provides an interdisciplinary life course perspective on theories and methods of health promotion. Current research, practices and policies in health promotion targeting individuals, families and communities will be critically reviewed with regard to issues of gender, culture, age, functional ability, socio-economic status, sexual orientation, and other determinants of health.

FMLY 3780 Introduction to the Development of Programs for Children and Families Cr.Hrs. 3

(Formerly 062.378) An introduction to the theory and practice of program development with special emphasis on programs for children and families. The course will cover techniques for conducting need assessments, as well as the process of planning and implementing programs to address community need. Prerequisite: HMEC 2000 or HMEC 2050 (028.205).

FMLY 3790 Introduction to the Evaluation of Programs for Children and Families Cr.Hrs. 3

(Formerly 062.379) An introduction to the theory and practice of program evaluation with special emphasis on child and family programs. Considers the purpose of evaluation, types of evaluation, evaluation design and analysis, and the evaluation process. Prerequisite: HMEC 2050 (028.205).

FMLY 3800 Conflict Resolution in the Family Cr.Hrs. 3

(Formerly 062.380) Students will examine the nature and development of conflict in family relationships throughout the life span. Implications of conflict for the quality of family relationships and individual development will be addressed. Prerequisite: FMLY 2800 (062.280) and completion of 54 credit hours.

FMLY 3802 Intimate Partner Violence Cr.Hrs. 3

A critical examination of theory and research on violence in intimate relationships. Topics will include violence in dating, common-law, marital, ex-partner and same-sex relationships. Prerequisite: FMLY 2800.

FMLY 3806 Children, Violence and Rights Cr.Hrs. 3

Violence against children in their families takes many forms, from sexual exploitation to honour killings. We will explore, through a child rights lens, the forces contributing to violence against children, its impact on human lives, and approaches to prevention being implemented around the world. Prerequisite: FMLY 2800. Not to be held with FMLY 3804.

FMLY 3900 Families, Housing and Community: A Policy Perspective Cr.Hrs. 3

(Formerly 062.390) Examines policy relative to families, housing and community. Primer on public policy process and links to families. Examines housing policies at federal, provincial, and municipal levels and their impact on individuals and families. Opportunity for some field experience. Prerequisite: FMLY 1900 (062.190) or consent of instructor. Not to be held with 062.473.

Family Social Sciences Course Descriptions-4000 Level

FMLY 4012 Social Development Policies Cr.Hrs. 3

This course examines the formulation of social development policies and the impact of these policies on the well-being of individuals, families, and communities. The course uses a seminar format to foster students' capacity to understand and examine policy issues. Students will develop skills in understanding, analyzing, and formulation social development policies. Actual social development case studies will be evaluated and alternative family and community oriented policies discussed. Not to be held with FMLY 3900. Prerequisite: FMLY 1012.

FMLY 4220 Aging and Risk in a Global Context Cr.Hrs. 3

This course will take an interdisciplinary perspective on definitions of risk associated with a variety of determinants that shape the daily lived experience of older adults, their families and communities, and the institutions that care for them. Students will evaluate programs, policies and research, and engage in a final project of their choice. Prerequisite or Corequisite: HMEC 2650 or SWRK 2650 or REC 2650 or NURS 2610 or KIN 2610.

FMLY 4300 Field Experience Cr.Hrs. 6

(Formerly 062.430) Provide students with field experience in a supervised setting. The course consists of 120 hours of supervised work in an assigned setting and seminar time with peers and field experience coordinator. Grade is pass/fail. Prerequisite: 84 credit hours and consent of instructor. Not to be held with 062.436 or 062.455 or 062.456 or 062.457.

FMLY 4330 Management of Family Stress Cr.Hrs. 3

(Formerly 062.433) Theories which influence family behaviour during stress are discussed, and coping/managerial skills to mitigate the effects of the stressors are examined. Stress management advice from agencies and in educational settings is analyzed. Prerequisite: FMLY 1000 (FMLY 1020 or 062.102).

FMLY 4400 Family Economics: Poverty and Wealth Cr.Hrs. 3

Analysis of principles, major problems and trends in the economic welfare of individuals and families in both the Canadian and global economies. Emphasis on families and their relationships to the economy such as income inequality, family economic policy, human capital, poverty and resource distribution within families. Prerequisites: [FMLY 2400 or FMLY 2070 (or 062.207)] and [one of ECON 1210 (or 018.121) or ECON 1220 (or 018.122) or ECON 1010 or ECON 1020. Not to be held with the former FMLY 4450 (or 062.445)].

FMLY 4460 Family Financial Counselling Cr.Hrs. 3

(Formerly 062.446) Theory and practice of financial counselling of debt-burdened families. Debt analysis. Appraisal of alternate solutions and of legal and psycho-social factors in terms of family well-being and financial capacity. Prerequisite: FMLY 3450 (062.345).

FMLY 4470 Selected Studies in the Family II Cr.Hrs. 3

(Formerly 062.447) The opportunity to carry out advanced study in the area of the family of particular interest to the student. When enrolment warrants, the department may offer selected topics in a regular course format. Prerequisite: consent of instructor.

FMLY 4480 Work and Family Issues Cr.Hrs. 3

(Formerly 062.448) An exploration of the interface between paid work and unpaid work and families in the Canadian and international contexts. Topics include demographic trends; parenting, child and elder care; management of work-family conflict; development of workplace solutions; and social policy implications. Prerequisite: FMLY 2400 (or FMLY 2070 or 062.207) and 84 credit hours.

FMLY 4500 Senior Thesis Cr.Hrs. 6

The preparation and presentation of a comprehensive review of the literature and an empirical investigation of an approved topic. Prerequisite: Registered in the final year of the Family Social Sciences program and consent of Department Head. Application required. Enrolment limited.

FMLY 4600 Risk and Resilience in Behavioural and Social Development Cr.Hrs. 3

(Formerly 062.460) The development of behavioural and social difficulties are examined from a risk and resilience perspective. The interaction of factors at all levels of the human ecological system are considered in terms of their impact on increasing risk and/or building resilience in children and youth. Prerequisite: FMLY 2600 (062.260). Not to be held with 062.437.

FMLY 4602 Family Relationships, Health and Well-being Cr.Hrs. 3

This course provides an indepth survey of the interaction between family relationship dynamics, health and well-being across the life course period. The influence of family members on health-related behaviours is reviewed and preventive family-based interventions are evaluated. Prerequisite: FMLY 3600 (or 062.360).

FMLY 4604 Children in Adversity Cr.Hrs. 3

Millions of children live with violence, trauma and other adverse circumstances. We will explore the interactions among individual, family, cultural, legal and policy factors as they affect children's developmental pathways in the face of adversity. Prerequisite: FMLY 2600 or FMLY 3600. May not be held with FMLY 4600 or 62.437.

FMLY 4606 A Social Justice Perspective on Indigenous Maternal and Child Health Cr.Hrs. 3

This course examines the local and global challenges regarding the health care and health care needs of Indigenous peoples, with particular attention to childbearing women, new mothers, and young children. Interdisciplinary theories and methods applied to the study of Indigenous peoples are critically evaluated from Indigenous and social justice perspectives. Prerequisite: FMLY 2500(FMLY 2350 or 062.235) or NURS 3330 (049.333) or NATV 1220 (032.122) or NATV 1240 (032.124).

FMLY 4800 Senior Seminar in Family Violence and Conflict Resolution Cr.Hrs. 3

(Formerly 062.480) Advanced study in the areas of family violence and/or conflict resolution. Special emphasis is placed upon current research and/or practice. Prerequisite: FMLY 3800 (062.380) and completion of 72 credit hours.

FMLY 4802 Family Violence Prevention Cr.Hrs. 3

Family violence prevention theories, research, practices and policies will be critically reviewed with regard to issues such as gender, culture, sexual orientation and others. Prerequisites: FMLY 2800. Not to be held with the former FMLY 4800 (0662.480).

FMLY 4900 Families, Housing and Community: An Action Perspective Cr.Hrs. 3

(Formerly 062.490) Examines relationships between families, housing and community; impact of communities on children; best practices for enhancing quality of life in communities; participatory processes for working with communities. Significant on-site learning. Emphasis on inner-city. Prerequisite: FMLY 2900 (062.290) or FMLY 3900 (062.390) or consent of instructor.

SECTION 1: MEDICAL EDUCATION

1.1 Mission Statement

The Mission of the College of Medicine is to develop and deliver high quality educational programs for undergraduate and postgraduate students of medicine and medical rehabilitation, for graduates and post-doctoral fellows in the basic medical sciences and for physicians in practice; conduct research and other scholarly inquiry in the basic and applied medical sciences; and, contribute to the improvement of health status in Manitoba and beyond by providing advice, disseminating information to health professionals and the public, and by cooperating in the planning for the development and delivery of health care services.

The Mission of the Undergraduate Medical Education Program is to develop, deliver and evaluate a high quality educational program for the MD Program.

Our Graduates will approach their profession with a spirit of Discovery by:

- Welcoming and adapting to the ever-changing nature of medicine
- Appreciating the continuum of basic science and human wellness
- Building a broad and unbiased foundation of medical knowledge
- Maintaining openness to practice medicine and conduct broader academic work in urban hubs and in rural and Northern communities, in Canada and around the world

Our Graduates will embrace Scholarship by:

- Pursuing academic excellence at every stage of their careers as clinicians, researchers, academics, and administrators
- Appropriately applying medical research and innovation to patient care
- Committing to the practice of lifelong learning as professionals
- Committing to the lifelong maintenance of an evidence-based practice
- Healing through knowledge and compassion and acting as educators for patients, allied health professionals, and one another

Our Graduates will lead and collaborate within their communities by:

- Advocating for the health and safety needs of individual patients and collective populations
- Communicating effectively with all health care professionals, including generalists, specialists, and allied professionals and those in related sectors
- Exemplifying professionalism and sustaining a climate of respect in all aspects of their lives
- Fostering an atmosphere of cultural safety for all patients and populations by practicing with open-mindedness and unconditional goodwill.
- Providing expert and compassionate medical care to diverse patient populations in Canada and beyond
- In doing so, graduates of the College of Medicine at the University of Manitoba will become exemplary physicians prepared to undertake the responsibilities entrusted to them

Medical education in Manitoba is designed to provide students with the knowledge and experience they need to practise medicine in a profession where new developments in science and public health policy create an ever-changing environment. In the first two years of the program, referred to as Pre-Clerkship, the subject matter is divided into Modules comprised of courses which cover core concepts in Human Biology, Health and Disease. The final two years, referred to as Clerkship are spent in direct contact with patients and doctors in a range of rural and metropolitan clinical settings in which students gain experience with Increasing responsibility for patient care and management.

1.2 History of the College

Medical education in Manitoba had its beginnings in 1883 when 13 physicians applied to the local legislature for a charter to form the Manitoba Medical College. The college was chartered as an affiliate of the University of Manitoba. The number of students registered for the first session was 15, and the number in attendance at each session from that date to the present has ranged from 15 to 440. The university came to the aid of the Medical School from time to time by furnishing full-time professors in chemistry, physiology, pathology, bacteriology, and zoology. With the session of 1918-1919 the Manitoba Medical College ceased to exist as a separate institution. It made a gift of all its property and equipment to the University of Manitoba "on condition that the university establish a Faculty of Medicine, and carry on the work of medical education in an efficient manner."

In 1921, a building for the accommodation of the departments of Physiology, Biochemistry, and Bacteriology was erected on the old Medical School property, and a further unit was completed in February, 1922. In January, 1956, the new wing of the medical building was officially opened, which included new quarters for the Medical Library. In February, 1965, the Chown Building was opened providing five-stories of administration offices and space for Pharmacology and Therapeutics and the Computer Department for Health Sciences. The Basic Medical Sciences Building, containing undergraduate teaching facilities, opened in 1973. It provides accommodation for anatomy, biochemistry, physiology, and medical microbiology. The Brodie Centre officially opened in the spring of 1996; it provides a library, research and recreational facilities. In 2004, the Office of the Dean and the Education Offices relocated to new administrative facilities in the Brodie Centre. General teaching facilities are located in the medical buildings, and facilities for clinical instruction are provided in the teaching hospitals affiliated with the University of Manitoba and in related institutions. The varied settings in which medicine is practised in Winnipeg and in rural and northern Manitoba also provide students with the opportunity to study community medicine outside the major teaching institutions.

1.3 Neil John Maclean Health Sciences Library

The Neil John Maclean Health Sciences Library provides access to a wide range of evidence-based medicine resources in print and electronic format. Online resources include core medical textbooks such as Harrison's Principles of Internal Medicine, drug reference resources such as Lexi-Comp, and clinical point of care tools such as UptoDate, First Consult, MD-Consult, and Access Medicine. The Library subscribes to over 4,500 online journals and the articles in this collection are dynamically linked from important medical databases such as PubMed, EMBASE, and Scopus. Students can access all of the online resources on-campus using the Bannatyne campus wireless network and from home with a student ID number and password. The Library's facilities include 12 seminar rooms, which can be booked by students for group study, 92 study carrels, and 32 computers for walk-in use. Librarians offer training on the use of key medical resources and information management both as part of the curriculum and in regularly scheduled sessions throughout the year.

1.4 Graduate Studies

Graduate Studies information about graduate studies in medicine or related sciences, and information regarding opportunities for medical research may be obtained from: The Assistant Dean (Graduate Studies and Research), College of Medicine, University of Manitoba, A108 Chown Building, 753 McDermot Avenue, Winnipeg, MB, R3E OW3.

More than 300 graduate students are doing research and pursuing Masters and Doctoral degree programs in the College of Medicine. Their research training programs offer opportunities to conduct research at a number of sites including Bannatyne Campus, the National Virology Lab, St. Boniface Research Centre, and the Institute for Bio-Diagnostics. Graduate programs are available in the Departments of Anatomy, Biochemistry and Medical Genetics, Community Health Sciences, Immunology, Medical Microbiology, Pathology, Pharmacology, Physiology, and Surgery.

1.5 Master of Physician Assistant Studies

The Master of Physician Assistant Studies program is the first graduate level program for Physician Assistant Education in Canada. Upon completion of the comprehensive two year program, graduates receive a Master of Physician Assistant Studies degree. The program educates outstanding Physician Assistant clinicians who serve their communities and advance the profession in Manitoba and Canada. The program also nurtures the future leaders of the profession, and leads the field in academic preparation of Physician Assistants in Canada. For further information, please refer to the Physician Assistant Studies Program [website](#)

1.6 Department of Medical Education

The mandate of the Department of Medical Education is to work in a collaborative manner across all programs and schools within the College of Medicine to provide expertise and services related to medical education including curriculum development, faculty development, and design of evaluation tools and assessment. The second purpose of the Department of Medical Education is to engage in research and scholarly activity related to medical education.

1.7 Continuing Professional Development

The Continuing Professional Development Program (Medicine) is an accredited academic unit responsible for creating a variety of certified educational programs for physicians and other primary care practitioners throughout the Province of Manitoba and North-western Ontario. These educational sessions incorporate plenary, small group, interactive and e-learning activities to a consistently growing audience. Each year, CPD-Med develops and co-develops over one hundred educational sessions. In addition, the program provides support in the form of event planning, organization of clinical traineeships and coordination to externally developed CPD events on a fee-for-service basis, as well as, providing accreditation of CPD events on behalf of the Royal College of Physicians and Surgeons of Canada (RCPSC). CPD-Med also provides assistance in maintaining educational standards for accredited regular scheduled series programs in a number of departments in the College of Medicine.

For information contact:

Continuing Professional Development, College of Medicine, Faculty of Health Sciences
260 Brodie Centre - 727 McDermot Avenue
Winnipeg, Manitoba R3E 3P5
(204) 789-3660 Fax (204) 789-3911
umanitoba.ca/cpd/

SECTION 2: ADMISSION TO THE COLLEGE OF MEDICINE

The Applicant Information Bulletin is the official policy document for Admission. The document can be found at: www.umanitoba.ca/student/admissions/media/medicine_bulletin.pdf The Applicant Information Bulletin is reviewed and updated annually and may be subject to change.

2.1 Degrees Offered

Doctor of Medicine (M.D.)

BSc (MED)- Bachelor of Science in Medicine

MD/PhD

Minimum time to graduation: Four years in the College of Medicine following an undergraduate degree.

2.2 Program Pools and Streams

Manitoba Applicant Pool

Bilingual Stream

Out of Province Applicant Pool

Aboriginal Applicant Pool

2.3 Eligibility Requirements for Admission

Refer to the Applicant Information Bulletin for the eligibility requirements:

<http://umanitoba.ca/faculties/medicine/admissions/applying.html>

2.4 Additional Requirements for Transfer

- Technical Standards Requirement; the College of Medicine has identified the requisite skills and abilities for admission, promotion and graduation in the MD program; these can be found at [http://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Essential_Skills__Abilities_for_Admissions_Promotion_Graduation\(1\).pdf](http://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Essential_Skills__Abilities_for_Admissions_Promotion_Graduation(1).pdf).

Accommodation Policy; the College of Medicine supports individuals with disabilities who may require accommodation to meet the requisite skills and abilities; the policy can be found at [http://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Accommodation_for_Undergraduate_Medical_Students_with_Disabilities\(2\).pdf](http://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Accommodation_for_Undergraduate_Medical_Students_with_Disabilities(2).pdf).

- Adult Criminal Record, Child Abuse Registry and Adult Abuse Registry Checks; all applicants must complete a self-declaration regarding adult criminal records, pending criminal charges and registration on the child abuse registry as an offender; this self-declaration must be done at the time of application; an adult criminal record check, declaration of pending criminal charges and child abuse registry self-check are required at the time of registration and annually thereafter;
- Professional Registration; all medical students must be eligible for, and become registered with the College of Physicians and Surgeons of Manitoba (CPSM) by the time of registration; eligibility requirements can be viewed on the CPSM website at: www.cpsm.mb.ca;
- All applicants must have participated and been successful in the Multiple Mini Interview (MMI).
- Immunization requirements can be viewed at http://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/immunestatus.html.

Students must have CPR designated as "Health Care Provider Level C" acceptable to the standards of the Heart and Stroke Foundation at the time of registration in Year I. Students must have annual renewal of their CPR registration acceptable to the standards of the Heart and Stroke Foundation throughout the Undergraduate Medical Education program. Evidence of current renewal must be provided on an annual basis prior to the beginning of the academic year. Failure to comply, may result in exclusion from all academic programs until renewal is obtained.

2.5 Eligibility Requirements for Transfer

Applications for transfer are only accepted from students registered and in good standing at an LCME accredited medical school. Transfers can only be considered if there is a seat available through attrition. Details regarding the transfer policy can be found at the following link: http://umanitoba.ca/faculties/medicine/alumni/media/Transfer_Policy.pdf.

SECTION 3: ACADEMIC REGULATIONS

The provisions of the chapter, General Academic Regulations and Requirements, and the chapter, University Policies, apply to all students. College of Medicine regulations and requirements change from time to time. Detailed information concerning the general regulations governing admissions, evaluation, academic progress and withdrawal for an undergraduate medical student may be obtained from the Undergraduate Medical Education Office. These regulations include the following:

- A student will not be permitted to register unless the student is in good academic and financial standing from the previous year.
- No year may be repeated more than once.
- A student who withdraws from the College of Medicine without prior written notice will be considered to have terminated connection with the College and will not be eligible for re-admission.
- A student who withdraws from the College having given due notice of intention to withdraw is eligible for re-admission. If re-admission is approved the student will be required to conform to the rules and regulations, fee schedules, sequence of courses, in effect at the time of such readmission.
- A student may, after completion of the work of a full year, be granted a leave of absence for one year subject to certain conditions related to the purpose of the leave of absence and on subsequent registration will be required to conform to the rules and regulations, fee schedules, and sequence of courses in effect at the time of such registration. The Leaves of Absence (LOA) Policy can be viewed at http://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Leave_of_Absence.pdf.
- A student who has been or expects to be prevented from attending any regular examination by reason of illness or other cause beyond the student's control should at once notify the Associate Dean, Students and must abide by the requirements of the Deferred Examination Policy and Procedures

found at http://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Deferred_Examination.pdf.

- The College Executive Council reserves the right to require a student to withdraw from the program for which the student is enrolled when it believes the student to be unsuited, on general considerations of scholarship, or conduct for the profession, or the field within the profession, to which the program of studies normally leads. This right prevails notwithstanding any other provision in the college regulations.
- Each student is required to present the personal and professional appearance, attitudes and behaviours expected of members of the medical profession. The College of Medicine has a process through which lapses in professionalism are reported, investigated, and, when necessary, will result in remedial or punitive actions up to and including dismissal. The College of Medicine Professionalism website provides additional information at http://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/professionalism.html
- Each student must complete the undergraduate program for the M.D. degree of the College of Medicine within seven years of entry to first-year Medicine, exclusive of those students undertaking additional academic pursuits which are acceptable to the Progress Committee. The Leaves of Absence (LOA) Policy can be viewed at http://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Leave_of_Absence.pdf. When a student fails to complete the program, Progress Committee will review the academic record of the student. The reasons for the prolonged duration of the student's program are confidential but must be approved as valid by the Associate Dean, UGME.

3.1 Requirements for the Degree of Doctor of Medicine (M.D.)

Every candidate for the degree of Doctor of Medicine must have satisfied the following requirements:

- Subsequent to the successful completion of the required university studies, a student must have attended four full sessions of not less than nine months each in this or some other school of medicine approved by the University of Manitoba, the last two years of which must have been spent as a student of the University of Manitoba.
- A student must have completed the required work, have fulfilled satisfactorily all special requirements, have received satisfactory grades throughout the entire medical program, and have discharged all indebtedness to the university.

Degrees: All degrees in Medicine will be conferred by the Senate of the university on the recommendation of the College Executive Council at a regular meeting of the University Senate or at a meeting specially called for that purpose.

3.2 Requirements for Registration to Practise Medicine

A university degree in medicine does not in itself confer the right to practice the profession of medicine in Canada. That right is obtained from a provincial registering body in the particular province in which the graduate desires to practice, and follows the successful completion of the Medical Council of Canada's two qualifying examinations.

3.2.1 Federal Registration: The Medical Council of Canada

The Medical Council of Canada was established in 1912 by the Canada Medical Act. Its purpose is to grant a qualification to practice medicine acceptable for license in every province of Canada. It is not a licensing body, but "anyone who secures the diploma of the Medical Council of Canada by examination is registered on the Canadian Medical Register. This registration entitles one to become licensed to practice medicine in any province in Canada upon payment of the necessary fee and on meeting other provincial requirements."

The Medical Council of Canada examinations are normally taken by undergraduate medical students of the University of Manitoba at the end of the fourth year. There is a fee for this examination. Examinations are held annually in Winnipeg in May and November, and registration for these examinations may be made with The Registrar, Medical Council of Canada, 2283 St. Laurent Boulevard, Ottawa, ON K1G 5A2. The deadline for application is usually in December; candidates are advised to contact the Medical Council of Canada for current information: www.mcc.ca.

3.2.2 Provincial Registration

The College of Physicians and Surgeons of Manitoba is the regulation body for the physicians in Manitoba. Each medical student must be registered with the College of Physicians and Surgeons of Manitoba in each year of the academic program. For information on registration in Manitoba contact: The College of Physicians and Surgeons of Manitoba, 1000-1661 Portage Ave., Winnipeg, MB R3G 3T7; telephone: (204) 774 4344 or <http://cpsm.mb.ca/>.

SECTION 4: THE PROGRAM FOR THE M.D. DEGREE

4.1 Governance

The program and its curriculum are the responsibility of the College Executive Council. The policies, regulations, implementation and modifications of the educational program for the M.D. degree are determined by the College Executive Council on the recommendation of the College of Medicine Undergraduate Medical Education Curriculum Executive Committee. The Curriculum Executive Committee is chaired by the Associate Dean, UGME. The Terms of Reference for this committee and committee membership can be viewed at the following [link](#). The Curriculum Executive Committee is responsible for the curriculum, teaching, and evaluation in the educational program leading to the M.D. degree.

4.2 General Statement

The UGME program has undergone an exhaustive comprehensive curriculum renewal process which commenced in 2010. The new clerkship was introduced in August 2013, and the new preclerkship was introduced in August 2014. The curriculum was created to be a fully integrated spiral scaffold curriculum throughout all 4 years that fulfills UGME global objectives, Future of Medical Education (FMEC) recommendations and LCME/CCME standards. It was fashioned to be a Person to Community Centered curriculum (as opposed to organ system or department base).

The program is a continuum over the four years but is divided into the Pre-Clerkship, Years 1 and 2, and the Clerkship, Years 3 and 4, for administrative purposes. The mission and objectives of the program can be found at the following [link](#)

The College of Medicine does not support students' limitation of their studies to only fields and disciplines of personal interest. Nonetheless, students are encouraged to pursue areas of interest and to develop their own education through clerkship electives and summer clinical exposures or research experiences. Students learn to use information, skills and behaviour from multiple sources of teaching to prevent and solve the health care issues that face their patients and society. Students learn that physicians are part of an interdisciplinary team and health care system that provides accessible, continuous and comprehensive health care.

In order to modify and enhance the educational program, the opinions of students and their evaluation of the program and its teachers are formally sought and respected by faculty. This information is used by the Curriculum Executive Committee to improve the program.

4.3 The Plan of the Curriculum

4.3.1 Professionalism

Professionalism, behaviour and attitudes befitting medical professionals, are an important component of the Undergraduate Medical Education curriculum. The goal is to instill the attributes of professionalism and to emphasize to medical learners that professional characteristics and attributes are necessary for the practice of medicine and for their identity as physicians.

The College of Medicine has developed a professionalism charter that serves as a framework for defining and demonstrating medical professionalism.

In cases where lapses in the level of professionalism necessary to underpin medical education are recognized, the College of Medicine uses a Professionalism Report by which single egregious or recurrent lapses in student professionalism can be brought to the school's attention. A summary statement will be included on an individual's Medical Student Performance Record if two or more validated reports have been received. The College of Medicine maintains the option to dismiss students on the basis of unprofessional behaviour, regardless of performance in the curriculum.

4.3.2 Pre-Clerkship Program:

The goals and objectives of the UGME Pre-Clerkship curriculum are based on the mission and objectives of the undergraduate program as outlined in the following [link](#). The evaluation of student academic progress is based on achievement of the learning objectives provided to students on-line via a curriculum management system known as the Online Portal for Advanced Learning (OPAL).

The curriculum framework is based upon the principles of scaffolding and integration. The program comprises Human Biology, Health and Disease Modules commencing with a four week module – Foundation of Medicine. This module provides a basic science foundation relevant to the study and practice of medicine with the focus on principles, themes and overarching framework- these normal structure and function of molecules, cells and tissues and how homeostasis is maintained at these levels; how cells respond to perturbations in homeostasis and some of the possible consequences; major mechanisms that underlie the development of disease, and exogenous factors that threaten health.

This is followed by 23 weeks of the Human Biology and Health Modules which in sequence are: Blood and Immunology 1, Cardiovascular 1, Respiratory 1, Neuroscience 1, Musculoskeletal 1, Endocrine/Metabolism 1, Woman's Reproductive Health 1, Gastroenterology, Hepatology, Nutrition 1 and Urinary Tract 1 courses. These courses cover the normal development, anatomy, histology, physiology and processes for the various systems, predominantly basic sciences with clinical cases (normal or abnormal) to contrast or help illustrate normal. Each course will include an overview of burden of illness or diseases related to that system. The courses will be presented in the mornings while the afternoons will consist of five Longitudinal Courses that will proceed throughout all four years. These include:

- (1) Clinical Reasoning
- (2) Professionalism
- (3) Population Health
- (4) Clinical Skills
- (5) Indigenous Health

The content, where relevant will parallel the morning module courses.

Following completion of the Human Biology and Health Modules, the same course names will appear as Human Health and Disease Modules. This is 36 weeks in total with the first 9 weeks completing year 1 of study. Health and Disease Modules starts with an Introduction to Infectious Disease and Therapeutics course followed by Cardiovascular 2 and Respiratory 2. Year 2 of study commences with the remainder of the M2 courses in sequence: Blood and Immunology 2, Neuroscience 2, Endocrine/Metabolism 2, Woman's Reproductive Health 2, Gastroenterology, Hepatology and Nutrition 2, Urinary Tract 2 and Musculoskeletal 2. All the courses are presented as abnormal processes, predominantly clinical cases with review and application of basic sciences. Modules will be presented in the mornings while the afternoons will be five Longitudinal Courses again including:

- (1) Clinical Reasoning
- (2) Professionalism
- (3) Population Health
- (4) Clinical Skills
- (5) Indigenous Health

The content, where relevant, will parallel the morning module courses. Each course provides an overview of burden of illness and societal impact of diseases, and for each specific abnormality or disease where relevant the epidemiology, scientific basis and anatomy review, prevention and screening, cultural, social and ethical issues, natural history and prognosis, diagnosis, therapeutics and disease management. These may be covered during the morning module course or the afternoon Longitudinal course. The impact of Translational Research, Evidence Based Medicine and Health Care Systems will be highlighted where appropriate.

Year 1 will conclude with a one week rural primary care exposure.

Year 2 will conclude with a 10 week Consolidation module. The module will ensure all the content from the previous modules are assimilated, and includes single symptom presentations with broad differential diagnosis, multisystem disease such as complicated diabetes, “Themes” or disciplines such as pediatrics, geriatrics and systemic diseases such HIV, SLE and multiple myeloma. The first week of the consolidation module will be the pain management and dermatology courses. The subsequent 9 weeks will be small group case based discussions to ensure all the 137 Composite Clinical Presentations have been covered at appropriate level.

The two-year Pre-Clerkship curriculum brings together teachers and facilitators from across all College Departments, other healthcare related faculties and disciplines as well as members of the public. All basic medical sciences, including anatomy, molecular biology, biochemistry, human genetics, immunology, microbiology, physiology contribute to the curriculum as do the clinically applied basic sciences of pathology, pharmacology and community health sciences. Clinical departments including anaesthesia, clinical health psychology, family medicine, internal medicine, obstetrics, gynaecology, ophthalmology, otolaryngology, paediatrics, psychiatry, surgery are involved in all aspects of the curriculum.

An overview of the UGME Framework within the Pre-Clerkship component of the Undergraduate Medical Education program can be viewed at the following [link](#)

Methods of Teaching

A variety of approaches are used to facilitate learning. These include self-directed learning, small group sessions, whole group sessions, lab practicals and simulation.

Methods of Assessment

Formative and summative assessments are provided throughout the Pre-Clerkship curriculum. These include self-reflection, learning portfolios, tutor feedback, instructional tests, multiple choice examinations, practical examinations, and short and long answer examinations.

Attendance

Certain learning sessions within the UGME program are designated as “mandatory attendance” sessions. These are generally sessions in which patients or their families are involved; clinical skills are being taught; or clinical care is being provided. Attendance at these sessions is recorded and reported to the UGME office, and contributes to the evaluation of the learner’s professionalism. The Attendance Policy can be viewed at the following [link](#)

The procedures outlined in this policy do not preclude course directors, session leaders and instructors from tracking student learner attendance in their sessions and discussing any concerns related to attendance with the learners.

4.3.3 Clerkship Program:

The Clerkship component of Curriculum Renewal introduced in 2013 was created to facilitate the integrated 4 year scaffold curriculum with central governance, supervised responsibility for patient care and mandatory academic time with frequent feedback and evaluation. The program is governed by the Clerkship Curriculum Committee for which the terms of reference and membership can be viewed on the [website](#)

The Clerkship (Years 3 and 4) consists of Transition to Clerkship (5 weeks), Core Clinical Rotations (48 weeks), Electives, Selectives and CaRMS interviews (17 weeks), and Transition to Residency (12 weeks)

Transition to Clerkship (TTC) (5 weeks): The goal of TTC is for the students to expand their focus from learning during preclerkship years to the actual provision of care in various health care settings. This will help the students translate the knowledge gained in pre-clerkship to the clinical setting and the actual provision of care. This includes the supervised responsibilities that accompany provision of preventative health and management of disease by use of simulation, patient assessments, small group sessions and shadowing experiences. The Transition to Clerkship is launched with a prominent local keynote speaker and reciting of hippocratic oath, includes two weeks in various community settings and culminates in a transition to clinical service week shadowing the student’s first rotation. This includes buddy call without direct responsibility.

Core Clerkship Rotations (48 weeks): There are four 12 week blocks comprising 8 major clinical disciplines combining 2 disciplines per block to facilitate delivery of joint academic time: Surgery and Anesthesia, Internal Medicine and Emergency Medicine, Pediatrics and Obstetrics/Gynecology and Psychiatry with Family Medicine/Public Health. For more specific outline see http://umanitoba.ca/faculties/medicine/education/undergraduate/program_overview.html. The primary responsibility of the clerks in the program is the care of patients under the supervision of postgraduate students and faculty. Settings for the clerkship experience are varied, including wards and outpatient facilities of the hospitals, doctors’ offices, rural settings and community-based hospitals. A formal Academic half day occurs weekly with mandatory attendance shared and created equally by the UGME office and Longitudinal Courses, and the respective core clinical rotations. The Longitudinal Courses are those that proceed throughout all four years and include:

- (1) Clinical Reasoning
- (2) Professionalism
- (3) Population Health
- (4) Clinical Skills
- (5) Indigenous Health

The UGME academic time includes reflection exercises and assignments. A Scholarship in Medicine Project (SiMed3) is included during this time period. The core rotations each have additional scheduled academic sessions.

Electives and CaRMS National Interview Period (17 weeks): There are 15 weeks of electives running into CaRMS National Interview Period. Throughout the elective periods, students must pursue education in a minimum of three different disciplines with a minimum duration of two weeks each. Electives may be pursued in a setting of the student's own choice, but must be approved by the Director, Electives. Students are responsible for all costs associated with electives and CaRMS interviews, e.g. transportation, accommodation etc.

Transition to Residency (12 weeks): Following completion of the CaRMS interviews will be two 3 week elective periods selected from a catalogue of options sandwiching CaRMS match week. During this time period students will be participating in A Scholarship In Medicine Capstone Project. The CaRMS match week will include preparation for PGME sessions including types of practise, leadership skills, team work and medical legal/licensure sessions. Transition to Residency will conclude with a 4 week Comprehensive Review and Advanced Cardiac Life Support (ACLS) course

4.3.4 Requests for Conscience-Based Objections

The College of Medicine acknowledges that at times, learners may object to participating in educational activities. Learners who object to participation in educational activities may refer to the Conscience Based Exemptions Policy available [online](#) in order to seek a Conscience-Based Objection.

SECTION 5: STUDENT EVALUATION AND ACADEMIC PROGRESS

5.1 Responsibility

The policies and procedures for the evaluation of the students in the program for the M.D. degree are the responsibility of the College Executive Council.

Progress Committee: The Progress Committee meets regularly to evaluate the performance and progress of students enrolled in the Undergraduate Medical Education program.

The responsibilities of the Progress Committee include:

- Recommending to the College Executive Council the academic standards by which the progress of students are judged and ensuring that examiners have followed the policies and procedures set by the College Executive Council.
- Determining which students may proceed to the next stage of the program or to graduation.
- Determining which students should write supplemental examinations, or be required to take remedial study, or be required to repeat all or part of the academic year before promotion to the next stage of the program or graduation.
- Placing students on Monitored Academic Status or Probationary Academic Status.
- Ensuring that the Student Evaluation Committees have followed the policies and regulations of evaluation that have been approved by the College Executive Council.

The Preclerkship and Clerkship Student Evaluation Committees (PSEC, CSEC) conduct the evaluation of the students. The knowledge, clinical and communication skills, attitudes and behaviour of the students are evaluated by examination, assessment of performance and completion of assignments.

The responsibilities of the PSEC, and CSEC include:

- Planning and administration of the evaluation of all aspects of student examinations and performance.
- Planning and administration of all supplemental examinations.
- Planning and administration of all other measures of academic performance.
- Planning and administration of remedial training for students with unsatisfactory academic performance.
- The reporting of the results of examinations, supplemental examinations, other academic performance evaluation and remedial training to the Progress Committee.

5.2 Evaluation in the Pre-Clerkship Program

The College of Medicine is currently going through a period of significant Curriculum Renewal. Changes will be phased in beginning with the Preclerkship that will begin in August, 2014.

5.2.1 For Preclerkship Students in the "old" Curriculum (Class of 2017 and earlier):

5.2.1.1. Summative Examinations

The PSEC will inform the students of the pre-determined pass mark for each examination at the beginning of their block. The students, however, will be given the overall as well as the actual marks obtained in the different sections of the examination. Student results will be reported to them as a pass or fail; neither grades nor honours will be given. Grades and relative performance will be recorded in the students' active files. A student can view his or her active file in accordance with the Student Records Policy and procedures [online](#)

The College of Medicine uses a Pass/Fail system where grades are not reported external to the College of Medicine. Transcripts and Medical Student Performance Reports will indicate only whether a student has passed or failed a year or block. However, within the College of Medicine, student grades will be used to help identify students at academic risk and to help select students for distinctions such as awards and specialized programs.

There are written comprehensive examinations based on the objectives at the end of each block i.e. three in first year and three in second year. In addition, there is a mid-block examination in Block 1. Each examination may use various methods of evaluation: multiple choice questions, short answer questions, etc. There may also be take-home assignments in each course that contribute to the final mark.

The student's performance in the Clinical Skills course will be assessed by OSCE-type examination, typically conducted at the end of Year II. Expectations for student conduct and information related to pass marks for summative examinations can be found in the following UGME policies.

- [Examination Conduct Policy](#)

[Examination Results Policy](#)

[Deferred Examinations Policy](#)

[Examination Accommodation Procedures](#)

5.2.1.2 Failures of the Evaluation in Pre-Clerkship Years 1 and 2

The UGME Promotion and Failure Policy governs decisions related to student promotion and failure at the Pre-Clerkship level can be found [online](#)

Students failing up to two examinations are permitted to supplementary examinations in accordance with the Supplemental Examination Policy that can be viewed [online](#)

Students who fail any supplementary examination in first or second year will fail that year.

Students who are granted supplemental privileges are expected to undertake remedial study at a time determined by the Director, Remediation. Remediation usually occurs during the summer period. Following the remediation, they will sit a supplemental examination comparable but different from that failed. Students who fail the Clinical Skills program will be granted supplemental privileges and receive a remedial period during the summer vacation that will take into account the areas of weakness revealed by their performance and the examination. The performance of students during the remedial period will be evaluated by a preceptor and will normally include a written examination and/or repeated OSCE. Students who fail to reach the standard expected after remediation will fail the year.

Students in Year 1 and Year 2 who are successful on the supplemental examination(s) will be promoted.

Year 1 students who fail the year must apply for re-admission to medical school before June 1. Students being considered for re-admission will usually be interviewed by the Admissions Committee to determine how they might better approach medical school so that they might succeed on a second attempt. The Admissions Committee will advise the Associate Dean, Students who will recommend to the Progress Committee whether the student should be re-admitted.

Students who fail Year 2 will automatically repeat it and are not subject to review by the Admissions Committee.

5.2.1.3 Formative Evaluation in Pre-Clerkship

A variety of formative evaluative exercises are conducted in Pre-Clerkship including instructional tests, practice questions, reflective writing, self-evaluation, and peer-evaluations.

5.2.1.4 Remediation in Pre-Clerkship

A student who fails an examination is required to meet with the Director, Remediation for a remediation assessment. The exact nature of the remediation may vary and will be determined on a case by case basis by the Director, Remediation in conjunction with the Course Coordinator. The student will also be required to meet with the Associate Dean, Students, who may also direct the student to other college members or services for students.

5.2.2. For Preclerkship Students in the "new" Curriculum (Class of 2018 and beyond):

5.2.2.1. Summative Examinations

The PSEC will inform the students of the pre-determined pass mark for each examination at the beginning of their course or module. The students, however, will be given the overall as well as the actual marks obtained in the different sections of the examination. Student results will be reported to them as a pass or fail; neither grades nor honours will be given. Grades and relative performance will be recorded in the students' active files. A student can view his or her active file in accordance with the Student Records Policy and procedures [online](#)

The College of Medicine uses a Pass/Fail system where grades are not reported external to the College of Medicine. Transcripts and Medical Student Performance Reports will indicate only whether a student has passed or failed a year, course, or module. However, within the College of Medicine, student grades will be used to help identify students at academic risk and to help select students for distinctions such as awards and specialized programs.

For modular courses, there are written comprehensive examinations based on the objectives at the end of each course or module. In addition, there are mid-course or mid-modular assessments (often examinations) for each course. Each examination may use various methods of evaluation: multiple choice questions, short answer questions, etc. There may also be take-home assignments in each course that contribute to the final mark. Longitudinal courses will have multiple forms of assessment throughout the year, and may include written examinations, take-home assignments, OSCE examinations, or other forms of assessment.

Expectations for student conduct and information related to pass marks for summative examinations can be found in the following UGME policies.

- [Examination Conduct Policy](#)
- [Examination Results Policy](#)
- [Deferred Examinations Policy](#)
- [Examination Accommodation Procedures](#)

5.2.2.2 Failures of the Evaluation in Pre-Clerkship Years 1 and 2

The UGME Promotion and Failure Policy governs decisions related to student promotion and failure at the Pre-Clerkship level can be viewed [here](#)

Students failing a number of examinations up to the maximum allowable failures for modular courses or up to two longitudinal courses are permitted to sit supplementary examinations in accordance with the Supplemental Examination Policy that can be viewed [online](#)

Students who fail any supplementary examination in a first or second year modular course will be given a third attempt to pass the particular course via a second supplemental examination. Students who fail this third attempt will fail the year. Students who fail any supplemental examination in a first or second year longitudinal course will fail that year.

Students who are granted supplemental privileges are expected to undertake remedial study at a time determined by the Director, Remediation. Remediation usually occurs during the summer period. Following the remediation, a student will sit a supplemental examination comparable but different from that failed. The performance of students during the remedial period will be evaluated by a preceptor and will normally include an oral and/or written examination and/or repeated OSCE. Students who fail to reach the standard expected after remediation will fail the year.

Students in Year 1 and Year 2 who are successful on the supplemental examination(s) will be promoted.

Students who fail Year 2 will automatically repeat it and are not subject to review by the Admissions Committee.

5.2.2.3. Formative Evaluation in Pre-Clerkship

A variety of formative evaluative exercises are conducted in Pre-Clerkship including instructional tests, practice questions, reflective writing, self-evaluation, and peer-evaluations.

5.2.2.4. Remediation in Pre-Clerkship

A student who fails an examination is required to meet with the Director, Remediation for a remediation assessment. The exact nature of the remediation may vary and will be determined on a case by case basis by the Director, Remediation in conjunction with the Course Coordinator. The student will also be required to meet with the Associate Dean, Students, who may also direct the student to other college members or services for students. Remediation Policy and Procedures can be viewed [online](#)

5.3 Evaluation of Students in the Clerkship Program

The College of Medicine is currently going through a period of significant Curriculum Renewal. This process began in August 2013.

5.3.1 For Students beginning Clerkship prior to August 2013:

During the clerkship years students will be evaluated on their competence and this will include assessment of their cognitive knowledge and understanding, clinical skills, problem solving and judgement, technical skills, interpersonal attributes and general professional responsibility. Evaluation will be the responsibility of the Committee of Evaluation, Clerkship (COE Clerkship).

5.3.1.1 Methods of Summative Evaluation (General)

The policy and procedures applicable for evaluation are:

- [Examination Conduct Policy](#)

[Examination Results Policy](#)

[Deferred Examinations Policy](#)

[Examination Accommodation Procedures](#)

Various methods will be used to assess students, including the final evaluation reports (FITERs); written external NBME examinations and OSCE-type exams. Student performance for evaluation purposes during examinations may be recorded in writing, orally, by computer, by audio or by video taping. All material necessary to generate the mark such as papers, computer records and tapes will be destroyed once the student has passed that evaluation. Such material can be of help to a student needing remediation before the examination.

To achieve this quality assurance, the Clerkship Student Evaluation Committee may use direct observation or indirect observation by audio and video monitoring. Quality assurance material is subject to the aforementioned regulations of the university and the College. Furthermore, this material, which could identify the individual student will not be released to anyone, other than the Dean and Clerkship Student Evaluation Committee without the written consent of the student.

5.3.1.2 The Introduction to Clerkship (ITC)

The goal of Introduction to Clerkship (ITC) is to prepare the student for clerkship rotations. Students will be assessed for attendance and performance in learning groups. The purpose of student evaluations in ITC is to ensure that students are ready to begin the clerkship rotations.

Readiness for clerkship must be demonstrated in many areas including: basic medical knowledge and its application; clinical skills in evaluating patients; analysis of clinical data; problem identification and diagnosis; planning of investigation; planning of management and therapy; relationships to patients and staff. These attributes will be evaluated in a variety of ways throughout ITC.

Method of Evaluation

Students failing to attend mandatory sessions will be reported to the Associate Dean UGME, who will inform the Clerkship Student Evaluation Committee. Each student will receive a warning from the Associate Dean's office. If this warning is ignored the student's attendance record and performance will be considered by the Clerkship Student Evaluation Committee and the student may be failed for the sessions missed. A suitable remedial period may be provided. If the student does not perform satisfactorily in the remedial period the ITC will be failed.

The student must be informed of a recommendation for failure within seven working days of the end of the session. The pass/fail decision will be given by the departmental representative to the Clerkship Student Evaluation Committee. In the case of a failing evaluation the reasons for failure must be documented and submitted to the Clerkship Student Evaluation Committee.

5.3.1.3 ITC Remediation**Failure for inadequate attendance**

The coordinator of the module of sessions missed may, with approval of the Director, Clerkship Curriculum, provide the student with a remedial course, of comparable educational experience in that subject; the student will have to attend and perform satisfactorily to pass the ITC.

5.3.1.4 The Major Clinical Clerkships**Method of Evaluation**

The evaluation of the students during the clinical clerkship rotations may be assessed by review of clinical performance, written examinations, and projects.

Clinical Performance

The objectives of the Clerkship Program are consistent with the Undergraduate Medical Education Objectives found [online](#)

The Midpoint In-Training Report (MITER) is a formative evaluative exercise in rotations of four weeks or longer. The student uses this report to complete a self-evaluation which is then discussed with the student's preceptor. If a student's early performance is likely to lead to a failure, the Clerkship Director must advise the student of an impending failure by the midway point of the rotation. In such cases, the student must be given help to improve performance to the expected standard. The Clerkship Director, or designate, will collect preceptor assessments throughout the rotation. The Clerkship Director, or designate, will use all evaluations to make a final decision on the student's performance at the end of the rotation in that department. A Final In-Training Evaluation Report (FITER) of each student's achievement of these objectives will be completed for each rotation.

A failing student must be informed of the failure by the Clerkship Director, or designate, preferably before the end of the rotation but not later than seven working days after the rotation is complete. All results will be submitted to the undergraduate committee of the department, who, for a failure, will review all the evaluations and preceptors' pass/fail assessments and determine the overall pass/fail standing for the student during the rotation in question.

The pass/fail recommendation, with the FITER and any supporting evidence for that decision, will be submitted by the departmental representative to the Clerkship Student Evaluation Committee. The pass/fail decision will be reviewed and affirmed if there is a majority vote of the members of Clerkship Student Evaluation Committee present at the first meeting of the Clerkship Student Evaluation Committee following the completed rotation. In the case of a tie, the chair of Clerkship Student Evaluation Committee will have the deciding vote, otherwise he or she will not vote.

On occasions, Progress Committee may deem it necessary to forward feed student summative evaluation information to subsequent Clerkship Directors, or designates. In such instances, the student will be informed and the process will follow that outlined in the Forward Feeding Policy and Procedures found [online](#)

Clerkship Written Examinations

Students will take the National Board of Medical Examiners (NBME) subject examinations at the end of the following clerkship periods: Obstetrics/ Gynaecology, Paediatrics, Psychiatry, and Surgery. For internal medicine, the NBME examination will take place after the internal medicine selective rotation. For core surgery the NBME examination will take place following the major surgery rotation. The passing standard for National Board Exams will be the 11th percentile of the entire reference group. Students failing a NBME examination will re-sit this examination as outlined in the Supplemental Examination Policy: http://umanitoba.ca/faculties/medicine/education/undergraduate/media/Supplemental_Examinations.pdf

5.3.1.5 The Comprehensive Clinical Examination (CCE)

The goal of the Comprehensive Clinical Examination (CCE) is to objectively evaluate student clinical competence in generic skills of data collection, interpersonal relationships, along with the content of the case for diagnosis, investigation, and management of common clinical problems. This examination frequently uses standardized patients to test these clinical skills. The CCE committee is a sub-committee of the Clerkship Student Evaluation Committee and is chaired by the CCE coordinator. The CCE is marked to a standard predetermined by the CCE committee and the results of the examination are submitted to the Clerkship Student Evaluation Committee.

5.3.1.6 The Multiple Specialty Rotation in Clerkship (MSR)

Method of Evaluation

The evaluation of students during each component of the MSR clerkship rotation includes assessments of attendance, performance and could include College prepared examinations. Students will be expected to attend all clinical, small group, and laboratory sessions. Clinical performance will be judged, where applicable, as in the major clerkships. The Clerkship Director, or designate, must advise each student by the midway point of each component of the rotation if his or her performance is likely to lead to a failing assessment in that component. In such cases, the student must be given help to improve performance to the expected standard. The Clerkship Director, or designate, will use all evaluations to make a final decision on the student's performance at the end of each component of that rotation. A failing student must be informed of the failure by the preceptor, Clerkship Director, or designate preferably before the end of the rotation but not later than seven working days after the rotation is complete. All results will be submitted to the undergraduate committee of the department, who, in the case of a failure will review all the evaluations and preceptor(s) pass/fail assessments to determine the overall, pass/ fail standing for the student in that department.

5.3.1.7 The Elective Periods

Method of Evaluation

Electives are evaluated in a similar manner to other clerkship rotations and students are required to obtain a completed elective evaluation form for every elective pursued. These evaluations will be reviewed by the Director, Electives, and unsatisfactory assessments will be submitted to the Clerkship Student Evaluation Committee.

5.3.1.8 Remediation during Clerkship

A student who has received a failing FITER on a non-elective clinical rotation, shall be required to meet with the Director, Remediation for a remediation assessment. Remediation during the clerkship is typically scheduled during electives or other time as determined suitable by the College. The Director, Remediation in consultation with the Clerkship Director, or designate will coordinate this remediation, which will include further clinical experience. The policy and procedures governing remediation may be found [online](#)

Clerkship Clinical Performance Remediation

The Clerkship Student Evaluation Committee will provide the student who has failed a clinical rotation an appropriate remedial period with the department in which the rotation was failed. The rotation will be an equivalent educational experience to the clerkship failed, and its goal will be to assist the student to reach the expected standard of clinical competence. A similar process of evaluation will be used. The remedial rotation will usually be taken during an elective period.

Remediation for NBME Examination Failures

Students failing any two NBME examinations (in the same subject or different subjects) will be required to meet with the Director, Remediation for remediation assessment. The policy and procedures governing remediation may be found [online](#). Where a student has failed two successive NBME examinations in the same subject, the student will be required to complete a remedial period of training from the relevant. The Director, Remediation in conjunction with the Clerkship Director, or designate, will coordinate the remediation; further clinical experience may be needed to meet that purpose. Such a remedial period will be a maximum of four weeks and will usually be taken in an elective period, and followed by a third attempt at the National Board examination.

Remediation for Failure in the CCE

The Clerkship Student Evaluation Committee will devise an appropriate remedial period which will take into account the areas of weakness demonstrated by the CCE and will usually be taken during elective time. This remediation will be evaluated by a clinical assessment and may include an oral and/or written exam.

Remediation for an MSR Clerkship Failure

The Clerkship Student Evaluation Committee will provide the student who has failed a clinical component of the MSR with a remedial period in the department in which the rotation was failed. This period is flexible but can be up to the same length as the failed rotation. Such a remedial rotation will be an equivalent educational experience to that failed and its goal will be for the student to reach the expected standard of clinical performance. A similar process of evaluation will be used and may be supplemented by a clinical oral and/ or written examination if the department deems it necessary. The remedial will usually be taken in an elective period.

Remediation for an Electives Failure

The Clerkship Student Evaluation Committee will devise a remedial period of up to four weeks which will take into account the areas of weakness revealed by the student's elective evaluation. This will be taken in the next available free time for the student. The remedial period will be evaluated by clinical assessment.

5.3.1.9 Failure of a Student in the Clerkship Program

The Clerkship Program is a continuum held over Year 3 and Year 4. A failure of the Clerkship Program is considered to be a failure of one year, see Section 3 Academic Regulations, above.

Failure of the Clerkship

The student will be determined to have failed the Clerkship Program if:

1. Failure of Clinical Assessments

The student has received failing evaluations in one or more of the following:

a) Two major clerkships in different disciplines (Internal Medicine, Internal Medicine Selective, Surgery, Surgery Selective, Paediatrics, Obstetrics/ Gynaecology, Psychiatry, and Family Medicine)

OR

b) One major clerkship and:

i) its remedial, or

ii) an ITC remedial, or

iii) an MSR remedial, or

iv) an elective remedial

OR

c) Remedials in two of the following:

i) Anesthesia

ii) Emergency Medicine

iii) Otolaryngology

iv) Ophthalmology

v) Community Health Sciences

vi) Elective

vii) ITC

2. Failure of Examinations

The student has failures in one or more of the following:

a) A single NBME subject examination three times

OR

b) A total of five NBME examinations

OR

c) The CCE after remediation

3. Remediation Related Failures

If the remediation period recommended for a student, for whatever cause, requires more than eight weeks, then the student will be deemed to have failed the Clerkship Program.

Complete information related to promotion and failure in any year of the Undergraduate Medical Education program can be found in the Undergraduate Medical Education Promotion and Failure Policy and Procedures [online](#)

5.3.1.10 Terms for the Repeat Clerkship

A student who fails the Clerkship Program, be it because of failure of clinical assessments, failure of examinations, or failure of remediation (as above), immediately ceases in the program, and will be required to repeat the Clerkship Program. The Repeat Clerkship will consist of the following, at a minimum: Six-week rotations in each of Core Internal Medicine, Core Surgery, Paediatrics, Family Medicine, Psychiatry, and Obstetrics/Gynaecology, plus 12 to 16 weeks of electives. A student in the Repeat Clerkship will also be required to complete the ACLS course (0.5 weeks), the LMCC refresher course (4.5 weeks). The student will be granted 3 weeks for CaRMs interviews and two weeks for vacation. Furthermore, if the failure occurred prior to the completion of the Medicine Selective, Surgery Selective, Multiple Specialty Rotation (MSR), or Community Health Sciences Project, then these will be required components of the Repeat Clerkship as well. The student must satisfactorily meet all clinical assessments, examinations, the CCE, as well as remedial rotations (as appropriate), regardless of whether they had been passed previously. The terms of the Repeat Clerkship will be submitted to the Progress Committee for review and final approval.

5.3.1.11 Terms for Failure of the Repeat Clerkship

The terms for failure of the Repeat Clerkship are the same as listed above in 5.3.1.9 "Failure of a Student in the Clerkship Program." A student who has failed the Repeat Clerkship will be required to withdraw from the College of Medicine program.

5.3.2 For Students beginning Clerkship on August 2013 or later:

During the clerkship years students will be evaluated on their competence and this will include assessment of their cognitive knowledge and understanding, clinical skills, problem solving and judgement, technical skills, interpersonal attributes and general professional responsibility. Evaluation will be the responsibility of the Clerkship Student Evaluation Committee (CSEC).

5.3.2.1 Methods of Summative Evaluation (General)

The policy and procedures applicable for evaluation are:

- [Examination Conduct Policy](#)

[Examination Results Policy](#)

[Deferred Examinations Policy](#)

[Examination Accommodation Procedures](#)

Various methods will be used to assess students, including the final evaluation reports (FITEs); written external NBME examinations and OSCE-type exams. Student performance for evaluation purposes during examinations may be recorded in writing, orally, by computer, by audio or by video taping. All material necessary to generate the mark such as papers, computer records and tapes will be destroyed once the student has passed that evaluation. Such material can be of help to a student needing remediation before the examination.

To achieve this quality assurance, the CSEC may use direct observation or indirect observation by audio and video monitoring. Quality assurance material is subject to the aforementioned regulations of the university and the College. Furthermore, this material, which could identify the individual student will not be released to anyone, other than the Dean and Clerkship Student Evaluation Committee, without the written consent of the student.

5.3.2.2 The Transition to Clerkship (TTC)

The goal of Transition to Clerkship (TTC) is to prepare the student for clerkship rotations. Students will be assessed for attendance and performance in learning groups. The purpose of student evaluations in TTC is to ensure that students are ready to begin the clerkship rotations.

Readiness for clerkship must be demonstrated in many areas including: basic medical knowledge and its application; clinical skills in evaluating patients; analysis of clinical data; problem identification and diagnosis; planning of investigation; planning of management and therapy; relationships to patients and staff. These attributes will be evaluated in a variety of ways throughout TTC.

Method of Evaluation

Students failing to attend mandatory sessions will be reported to the Associate Dean UGME, who will inform the Clerkship Student Evaluation Committee. Each student will receive a warning from the Associate Dean's office. If this warning is ignored the student's attendance record and performance will be considered by the Clerkship Student Evaluation Committee and the student may be failed for the sessions missed. A suitable remedial period may be provided. If the student does not perform satisfactorily in the remedial period the TTC will be failed.

The student must be informed of a recommendation for failure within seven working days of the end of the session. The pass/fail decision will be given by the departmental representative to the Clerkship Student Evaluation Committee. In the case of a failing evaluation the reasons for failure must be documented and submitted to the Clerkship Student Evaluation Committee.

5.3.2.3 TTC Remediation

Failure for inadequate attendance

The coordinator of the block of sessions missed may, with approval of the Director, Clerkship Curriculum, provide the student with a remedial course, of comparable educational experience in that subject; the student will have to attend and perform satisfactorily to pass the TTC.

5.3.2.4 The Major Clinical Clerkships

5.3.2.4.1 The Major Clinical Clerkships for students Beginning Clerkship in August 2013 are:

- Family Medicine
- Internal Medicine
- Internal Medicine Selective
- Surgery
- Surgical Specialties
- Musculoskeletal Rotation
- Obstetrics/Gynecology
- Pediatrics
- Psychiatry

5.3.2.4.2 The Major Clinical Clerkships for students Beginning Clerkship in August 2014 or later are:

- Family Medicine
- Internal Medicine
- Surgery (Surgical Specialties is a part of this rotation.)
- Obstetrics/Gynecology
- Pediatrics
- Psychiatry
- Anaesthesia
- Emergency Medicine

Method of Evaluation

The evaluation of the students during the clinical clerkship rotations may be assessed by review of clinical performance, written examinations, and projects.

Clinical Performance

The objectives of the Clerkship Program are consistent with the Undergraduate Medical Education Objectives found [online](#)

The Midpoint In-Training Report (MITER) is a formative evaluative exercise in rotations of four weeks or longer. The student uses this report to complete a self-evaluation which is then discussed with the student's preceptor. If a student's early performance is likely to lead to a failure, the Clerkship Director must advise the student of an impending failure by the midway point of the rotation. In such cases, the student must be given help to improve performance to the expected standard. The Clerkship Director, or designate, will collect preceptor assessments throughout the rotation. The Clerkship Director, or designate, will use all evaluations to make a final decision on the student's performance at the end of the rotation in that department. A Final In-Training Evaluation Report (FITER) of each student's achievement of these objectives will be completed for each rotation.

A failing student must be informed of the failure by the Clerkship Director, or designate, preferably before the end of the rotation but not later than seven working days after the rotation is complete. All results will be submitted to the undergraduate committee of the department, who, for a failure, will review all the evaluations and preceptors' pass/fail assessments and determine the overall pass/fail standing for the student during the rotation in question.

The pass/fail recommendation, with the FITER and any supporting evidence for that decision, will be submitted by the departmental representative to the CSEC. The pass/fail decision will be reviewed and affirmed if there is a majority vote of the members of CSEC present at the first meeting of the CSEC following the completed rotation. In the case of a tie, the chair of CSEC will have the deciding vote, otherwise he or she will not vote.

On occasions, Progress Committee may deem it necessary to forward feed student summative evaluation information to subsequent Clerkship Directors, or designates. In such instances, the student will be informed and the process will follow that outlined in the Forward Feeding Policy and Procedures found [online](#)

Clerkship Written Examinations

Students will take the National Board of Medical Examiners (NBME) subject examinations at the end of the following clerkship periods: obstetrics/ gynaecology, paediatrics, family medicine and psychiatry. For internal medicine, the NBME examination will take place after the internal medicine/emergency medicine block. For surgery, the NBME examination will take place after the surgery/anesthesia block. The passing standard for National Board Exams will be the 11th percentile of the entire reference group. Students failing a NBME examination will re-sit this examination as outlined in the [Supplemental Examination Policy](#)

5.3.2.5 The Comprehensive Clinical Examination (CCE)

The goal of the Comprehensive Clinical Examination (CCE) is to objectively evaluate student clinical competence in generic skills of data collection, interpersonal relationships, along with the content of the case for diagnosis, investigation, and management of common clinical problems. This examination frequently uses standardized patients to test these clinical skills. The CCE committee is a sub-committee of the CSEC and is chaired by the CCE coordinator. The CCE is marked to a standard predetermined by the CCE committee and the results of the examination are submitted to the CSEC.

5.3.2.6 The Minor Clinical Clerkships**5.3.2.6.1 The Minor Clinical Clerkships for Students beginning Clerkship in August 2013 are:**

- Emergency Medicine
- Anesthesia
- Community Health Sciences
- Electives

5.3.2.6.2 The Minor Clinical Clerkships for Students beginning Clerkship in August 2014 are:

- Internal Medicine Selective
- Musculoskeletal Rotation
- Community Health Sciences
- Electives

5.3.2.6.3 The Minor Clinical Clerkships for Students beginning Clerkship in August 2015 or later are:

- Internal Medicine Selective
- Musculoskeletal Rotation
- Any of the Scholarship in Medicine or Health Equity and Social Accountability Assignments integral to the Population Health Course
- Public Health Rotation
- Evidence-Based Medicine Practice Course
- Electives
- Transition to Residency Selectives

Method of Evaluation

The evaluation of the students during the clinical clerkship rotations may be assessed by review of clinical performance, written examinations, and projects..

Clinical Performance

The objectives of the Clerkship Program are consistent with the Undergraduate Medical Education Objectives found [online](#)

The Midpoint In-Training Report (MITER) is a formative evaluative exercise in rotations of four weeks or longer. The student uses this report to complete a self-evaluation which is then discussed with the student's preceptor. If a student's early performance is likely to lead to a failure, the Clerkship Director must advise the student of an impending failure by the midway point of the rotation. In such cases, the student must be given help to improve performance to the expected standard. The Clerkship Director, or designate, will collect preceptor assessments throughout the rotation. The Clerkship Director, or designate, will use all evaluations to make a final decision on the student's performance at the end of the rotation in that department. A Final In-Training Evaluation Report (FITER) of each student's achievement of these objectives will be completed for each rotation.

A failing student must be informed of the failure by the Clerkship Director, or designate, preferably before the end of the rotation but not later than seven working days after the rotation is complete. All results will be submitted to the undergraduate committee of the department, who, for a failure, will review all the evaluations and preceptors' pass/fail assessments and determine the overall pass/fail standing for the student during the rotation in question.

The pass/fail recommendation, with the FITER and any supporting evidence for that decision, will be submitted by the departmental representative to the CSEC. The pass/fail decision will be reviewed and affirmed if there is a majority vote of the members of CSEC present at the first meeting of the CSEC following the completed rotation. In the case of a tie, the chair of CSEC will have the deciding vote, otherwise he or she will not vote.

On occasions, Progress Committee may deem it necessary to forward feed student summative evaluation information to subsequent Clerkship Directors, or designates. In such instances, the student will be informed and the process will follow that outlined in the Forward Feeding Policy and Procedures found [online](#)

5.3.2.7 The Transition to Residency (TTR)

The goal of the Transition to Residency (TTR) is to prepare students for residency programs. Students will be assessed for performance on TTR selectives and in the Evidence-Based Medicine Practice Course. Attendance is mandatory for TTR.

Method of Evaluation

Students failing to attend mandatory sessions will be reported to the Associate Dean UGME, who will inform the CSEC. Each student will receive a warning from the Associate Dean's office. If this warning is ignored the student's attendance record and performance will be considered by the CSEC and the student may be failed for the sessions missed. A suitable remedial period may be provided if determined appropriate by the College. If the student does not perform satisfactorily in the remedial period the TTR will be failed.

The TTR selectives and Evidence-Based Medicine Practice Course will be assessed by FITER.

The student must be informed of a recommendation for failure within seven working days of the end of the session. The pass/fail decision will be given by the departmental representative to the CSEC. In the case of a failing evaluation the reasons for failure must be documented and submitted to the CSEC.

5.3.2.8 Remediation during Clerkship

A student who has received a failing FITER on a clinical rotation, shall be required to meet with the Director, Remediation for a remediation assessment. Remediation during the clerkship is typically scheduled during electives or other time as determined suitable by the College. The Director, Remediation in consultation with the Clerkship Director, or designate will coordinate this remediation which will include further clinical experience. The policy and procedures governing remediation may be found [online](#)

Clerkship Clinical Performance Remediation

The CSEC will provide the student who has failed a clinical rotation an appropriate remedial period with the department in which the rotation was failed. The rotation will be an equivalent educational experience to the clerkship failed, and its goal will be to assist the student to reach the expected standard of clinical competence. A similar process of evaluation will be used. The remedial rotation will usually be taken during an elective period.

Remediation for NBME Examination Failures

Students failing any two NBME examinations (in the same subject or different subjects) will be required to meet with the Director, Remediation for a remediation assessment. Where a student has failed two successive NBME examinations in the same subject, the student will be required to complete a remedial period of training from the relevant rotation. The Director, Remediation in conjunction with the Clerkship Director, or designate, will coordinate the remediation; further clinical experience may be needed to meet that purpose. Such a remedial period will be a maximum of four weeks and will usually be taken in an elective period, and followed by a third attempt at the National Board examination.

Remediation for Failure in the CCE

The CSEC will devise an appropriate remedial period which will take into account the areas of weakness demonstrated by the CCE and will usually be taken during elective time. This remediation will be evaluated by a clinical assessment and may include an oral and/or written exam.

5.3.2.9 Failure of a Student in the Clerkship Program

The Clerkship Program is a continuum held over Year 3 and Year 4. A failure of the Clerkship Program is considered to be a failure of one year, see Section 3 Academic Regulations, above.

Failure of the Clerkship

The student will be determined to have failed the Clerkship Program if:

1. Failure of Clinical Assessments

The student has received failing evaluations in one or more of the following:

a) Two major clerkships in different disciplines

OR

b) One major clerkship and:

i) its remedial, or

ii) a TTC remedial, or

iii) a remedial of a minor clerkship

OR

c) Remedials in two of the following:

i) A minor clerkship

ii) TTC

2. Failure of Examinations

The student has failures in one or more of the following:

a) A single NBME subject examination three times

OR

b) A total of five NBME examinations

OR

c) The CCE after remediation

3. Remediation Related Failures

If the remediation period recommended for a student, for whatever cause, requires more than ten weeks, then the student will be deemed to have failed the Clerkship Program.

Complete information related to promotion and failure in any year of the Undergraduate Medical Education program can be found in the Undergraduate Medical Education [Promotion and Failure Policy and Procedures](#)

5.3.2.10 Terms for the Repeat Clerkship

A student who fails the Clerkship Program, be it because of failure of clinical assessments, failure of examinations, or failure of remediation (as above), immediately ceases in the program, and will be required to repeat the Clerkship Program. The Repeat Clerkship will consist of the following, at a minimum: Six-week rotations in each of Internal Medicine, Surgery, Paediatrics, Family Medicine, Psychiatry, and Obstetrics/Gynaecology, plus 12 to 16 weeks of electives. A student in the Repeat Clerkship will also be required to complete the ACLS course (if not already passed) (0.5 weeks), the LMCC refresher course (if not already passed) (4.5 weeks). The student will be granted 3 weeks for CaRMs interviews and two weeks for vacation. Furthermore, if the failure occurred prior to the completion of the Medicine Selective, Musculoskeletal Rotation, Emergency Medicine Rotation, Anesthesia Rotation, Population Health course, TTR selectives, Evidence-Based Medicine Practice Course, then these will be required components of the Repeat Clerkship as well. The student must satisfactorily meet all clinical assessments, examinations, the CCE, as well as remedial rotations (as appropriate), regardless of whether they had been passed previously. The terms of the Repeat Clerkship will be submitted to the Progress Committee for review and final approval.

5.3.2.11 Terms for Failure of the Repeat Clerkship

The terms for failure of the Repeat Clerkship are the same as listed above in 5.3.2.9 “Failure of a Student in the Clerkship Program.” A student who has failed the Repeat Clerkship will be required to withdraw from the College of Medicine program.

5.4 Regulations for Students Taking Leave from the Clerkship Program

Students may, for health or personal reasons, withdraw from clinical rotations or take temporary leave. For planned leave, prior permission must be obtained from the Associate Dean, UGME and/or Associate Dean, Students or designate. For leaves due to sudden or unexpected circumstances, the Associate Dean, UGME, the Director, Clerkship Curriculum, and the Clerkship Director or designate of the rotation must be informed. Written documentation of the reason for leave will be required by the Associate Dean, UGME. The information is confidential to the Associate Dean, UGME and Associate Dean, Students or designate. Further information please refer to the [Leaves of Absence \(LOA\) Policy](#)

Students who require an extended leave from the Clerkship Program may have a delayed graduation.

If a student misses more than 25% of a rotation, the student will not receive credit for the rotation regardless of the reason. The student will be required to repeat the entire rotation.

Brief periods of leave may be taken upon notification and approval by the Director, Clerkship Curriculum. For complete details on attendance during clerkship please refer to the [Student Attendance Policy](#)

Generally, the Clerkship program is completed in 79 weeks, excluding CaRMS interview time and holiday time. When, due to leaves of absence, a student will take more than 79 weeks, including elective periods, to complete the Clerkship Program the Clerkship Student Evaluation Committee will review the student's record (clinical assessments and examinations) during the Clerkship Program to ensure that the time lost has not compromised the overall achievement of the student.

5.5 Reappraisal and Appeal of Failed Rotations and Examinations

A student who has failed or received “Unsatisfactory” on a Block examination or an OSCE-Type examination can request a reappraisal of the evaluation in accordance with the Reappraisal of Student Evaluations Policy http://umanitoba.ca/faculties/medicine/education/undergraduate/media/Reappraisal_of_Student_Evaluations_18_Oct_2012.pdf

If the student is not accepting of the decision reached by a Reappraisal Committee as outlined in the above stated policy, the student can appeal the decision to the Undergraduate Student Appeals Committee: http://umanitoba.ca/faculties/medicine/education/ed_dev/media/UGME_Student_Appeals.pdf.

A student can appeal a decision of the Undergraduate Student Appeals Committee to the College of Medicine Student Appeals Committee and a student appeal of the College of Medicine Student Appeals Committee can be brought to the Senate Committee on Student Appeals.

The College of Medicine will not accept requests for reappraisal of external examinations. The National Board of Medical Examiners (NBME) provides a Score Recheck Service, details of which are posted on the NBME website at: <http://www.nbme.org/Schools/Subject-Exams/score.html>. Students are responsible for the cost of a Score Recheck that may be requested on their behalf by the College of Medicine.

SECTION 6: ACADEMIC RESEARCH IN MEDICAL EDUCATION

6.1 Intro Medicine

Part of the educational responsibility of the College of Medicine is to perform research on innovations and effectiveness in medical education. Whenever students are the research subjects, all such research must have approval from the College of Medicine Research Ethics Board. Where students are studied individually their participation will be voluntary. Research findings will not identify individuals.

6.2 Med II Summer Research Program

The Med II Summer Research Program is offered over one summer term and gives second year medical students an opportunity to engage in original research, either in basic, translational, clinical or community health based projects, under the supervision of a member of the Medical college. The aim of the program is to provide medical students with the opportunity to:

- Develop skills at research design, hypothesis testing, critical evaluation of data and effective communication of results
- Discover whether they would further training to become a physician researcher, either through continuing in a formal graduate program during or after medical school or as a clinician researcher
- Students will have the opportunity to expand their clinical skills through an optional one-half to one full day/week clinical placement

The program consists of three components:

- Research project
- Written report
- Dissertation

The program is open to undergraduate students in the College of Medicine and in special cases; selected undergraduate students from other Canadian and international medical schools. This is a non-degree, non-credit course. This program may not be taken concurrently with any part of the medical curriculum nor may the student be enrolled in the B. Sc. (Med.) or MD/PhD program. The student must be 'in good standing' within the College of Medicine to qualify.

To enrol in the B.Sc.(Med) program the student must find a supervisor in any field within the College of Medicine. The supervisor must be a member of the College of Medicine. Together, the student and supervisor submit an application which includes a project proposal to the Undergraduate Research Committee. If the project proposal is accepted by the committee, students are accepted into the MED II Summer Research Program and can then be registered with the university for the course summer session. An examining committee comprised of college members, one from outside the department in which the research work is carried out, will be established for each student by their respective supervisor. Students will be required to produce research and present their findings acceptably in both a written report and oral presentation at the conclusion of their course in conjunction with the B. Sc. (Med.) Dissertation Event. Students will be evaluated by their Supervisor at the end of their summer term and by their examining committee following the completion of the requirements of the program. Students will be required to withdraw from the program if they make unsatisfactory progress. The program is on a Pass/Fail basis. Incompletion of the program outside of the normal voluntary withdrawal time frame will be considered a fail.

Program Fees

At this time there are no program fees (subject to change).

Stipendiary Support

Students receive stipendiary support during the thirteen week term. Presently support is in the amount of \$5000.00 for the thirteen week term.

SECTION 7: ADDITIONAL DEGREES IN MEDICINE

7.1 Bachelor of Science in Medicine (B.Sc. (Med.))

7.1.1 General Information

The Bachelor of Science in Medicine program is offered over two summer terms; following the first and second year of the undergraduate program in Medicine. The B.Sc. (Med) program is designed to provide the undergraduate medical student with an opportunity to gain firsthand experience in medical research. A large variety of basic science, translational and clinical research projects are available for the student to choose from each year.

The program consists of four components:

- Research project
- Clinical exposure
- Written report
- Dissertation

The program is open to undergraduate students in the College of Medicine and, if approved by the B.Sc. (Med) Committee, to selected undergraduate students from other Canadian and international medical schools. The work for this degree may be carried out in any department of the College of Medicine at the University of Manitoba as well as approved external facilities. This program may not be taken concurrently with any part of the medical curriculum nor by a student who is not in good standing. To enrol in the B.Sc.(Med) program the student must find a supervisor in any field within the College of Medicine. The supervisor must be a member of the College of Medicine. Together, the student and supervisor submit an application which includes a project proposal to the B.Sc.(Med) Committee. If the project proposal is accepted by the committee, students are accepted into the B.Sc. (Med) Program and can then be registered with the university for the B.Sc.(Med) summer sessions.

An examining committee comprised of college members excluding the B. Sc.(Med) program director, one from outside the department in which the research work is carried out, will be established for each student by their respective supervisor.

Students will be required to produce research and present their findings acceptably in both a written report and oral presentation at the conclusion of their second summer. Students will be evaluated by their Supervisor after the first summer and by their examining committee following the completion of the requirements for the B.Sc.(Med) degree. Students will be required to withdraw from the program if they make unsatisfactory progress, including after the first summer of research.

The B.Sc.(Med) degree will be conferred at the same time as the M.D. degree unless the student, having satisfactorily completed the requirements for the B.Sc.(Med) degree, discontinues the study of Medicine at the University of Manitoba or other approved institution. In this case, the B.Sc.(Med) degree will not be conferred.

The program is on a Pass/Fail basis. Incompletion of the program outside of the normal voluntary withdrawal time frame will be considered a fail.

7.1.2 Program Fees

The program fees will be additional to the College of Medicine tuition fees. Program fees change annually.

7.1.3 Stipendiary Support

Students receive stipendiary support during each 13 week term. Presently support is in the amount of \$5000.00 per 13 week term.

7.2 MD/PhD Program

7.2.1 Purpose

The combined-degree MD/PhD Program in the College of Medicine is designed to produce academic clinician scientists who are interested in a career that combines both research and clinical medicine, providing them advanced clinical, academic and research skills.

7.2.2 Duration

The minimum program of study is the total required by the College of Medicine for the MD program (4 years) plus the minimum requirements of the Faculty of Graduate Studies (3 years from honours undergraduate degree). Students who obtained advanced/graduate training prior to admission may be granted advanced standing. Students will be considered to be full-time graduate students (see Faculty of Graduate Studies guidelines pertaining to Full-Time Status) throughout the entire period. Typically, following completion of Med II, students undertake a 3-4 year sabbatical from MD training to undertake and complete doctoral research training. They then return to third year Medicine to begin Clerkship.

7.2.3 Eligibility

Medical Students are eligible to apply upon initial admission to Medicine and at any time during the first two years of the MD program. Semi-annual competition deadlines are posted at the program website : http://umanitoba.ca/faculties/medicine/research/grad_undergrad/6696.html

7.2.4 Application Process

Potential applicants should carefully review full details on the application process posted on the program website. Students wishing to apply should contact the Director of the Program early in the process (hayglass@cc.umanitoba.ca). Acceptance will minimally require: 1) identification of a supervisor (within a department at the University of Manitoba which has an approved PhD program) who has adequate resources for the research expenses necessary for proposed program of study and whose department recommends acceptance, 2) interview with the College MD/PhD Selection Committee and their recommendation for acceptance, and 3) acceptance by the Faculty of Graduate Studies.

7.2.5 Program Fees

The total tuition fees payable are the sum of the fees required for the MD and PhD programs of study. Continuing fees (Faculty of Graduate Studies) are also applicable. Under current tax regulations, such fees are largely refunded as tax credits to graduates who continue to reside in the province of Manitoba. In most instances, a tax free stipend (current minimum \$21,000 pa) is provided for six years to trainees who enter the program and remain in good standing. The six years of support is NOT shortened for trainees who achieve their research-based PhD in less than six years before returning to medical training.

7.2.6 Administration

After initial assessment of the complete application dossier by the MD/PhD Program Director, the program advisory and admission committee (PAAC), chaired by the MD/PhD Program Director, reviews all eligible applications and makes a recommendation to the Faculty of Graduate Studies. The Associate Deans for Research, UGME, and Students, College of Medicine and the Associate Dean, Faculty of Graduate Studies, are advisory to the Program Director, Advanced Degrees in Medicine. They will ensure: 1) adequate resources for all aspects of the delivery of the program, 2) liaison with the Trainee's host Department, the College of Medicine (including flexibility re: leaves for research) and Faculty of Graduate Studies, 3) review of advisory committee composition/function and of student progress and 4) the provision of program elements considered important to the success of the Option.

7.2.7 Coursework

The minimum course requirements of the Faculty of Graduate Studies, as defined by individual departmental supplementary regulations, are applicable in addition to the normal curriculum of undergraduate medical studies.

7.2.8 Research/Thesis Requirements

The quality and quantity of research supporting the thesis shall be consistent with that required for all other doctoral candidates in the field.

7.2.9 Additional Program Elements: Seminar Series and Research Progress Evaluations

Each student will be required to regularly attend a designated research seminar series organized by the sponsoring research discipline of the student. In addition, mandatory attendance will be required of all MD/PhD students and their supervisory college advisors to participate in a semi-annual program-wide, MD/PhD Student Research in Progress Forum. These regular research days will provide time for students to present their work to a critical audience (research proposals, work-in-progress, critical reviews in major areas of recent scientific advances, etc.), and promote networking within the program. Each student will be required to present a research update once a year, and satisfactory performance at this yearly assessment a requirement for continuation of program support.

7.2.10 Conferment of the Dual Degrees of MD/PhD

The MD and PhD degrees will usually be conferred simultaneously during convocation upon satisfactory completion of the MD and PhD programs.

SECTION 8: REGISTRATION INFORMATION

8.1 Initial Registration Access Times

Students in the College of Medicine Undergraduate Medical Education Program will be given access time to the registration system (Aurora Student) in July. For instructions on how to register online, please refer to the chapter, "Registration Information: Aurora Student". Registration must be complete prior to the first day of classes.

Each student is registering in the same course for both the Fall AND Winter sessions. Med III students will be able to register in their Summer session in mid-March. Students are asked to contact the Administrator, Enrolment via email: anna.urbanik@umanitoba.ca or via telephone: (204) 789-3627 if registering difficulties are encountered.

Courses for the Undergraduate Medical Education program are:

Program & Year	College/ School Codes	Terms	Dept. Number & Course Number	Lecture Section	Lab Section
Medicine I	05	Fall 2015 and Winter 2016	UGME 1000	L01	Not Applicable
Medicine II	05	Fall 2015 and Winter 2016	UGME 2000	L01	Not Applicable
Medicine III	05	Fall 2015, Winter 2016 and Summer 2016	UGME 3000	L01	Not Applicable
Medicine IV	05	Fall 2015 and Winter 2016	UGME 4000 UGME 4990	L01	Not Applicable

8.2 Web Registration Exceptions

Students who have a failing grade/s registered against them and/or have other outstanding academic matters (i.e. deferred or supplemental examinations, modified program, etc.) in regards to the previous academic session will not be allowed to register using the web registration system. Students who fall into this category should contact the Administrator, Enrolment at (204) 789-3627 for further information.

Bachelor Science in Medicine and Summer Early Exposure Programs

Students approved to participate in summer enrichment programs will be registered by the College.

8.3 Prior to Registration

New Students: All incoming students must complete an application to the College of Physicians and Surgeons of Manitoba, complete a Heart and Stroke certified course in BLS for Healthcare Providers (HCP-C) and submit the following documentation prior to the first day of class: Immunization records, Adult Criminal Records Check (with Vulnerable Sector search), Child Abuse Registry Self-Check, Adult Abuse Registry Check, Essential Skills and Abilities (Technical Standards) for Admission, Promotion and Graduation in the MD Program, and Accommodation for Undergraduate Medical Students with Disabilities. If you are unable to submit these documents by the first day of class please contact the Administrator, Enrolment via email: anna.urbanik@umanitoba.ca or via telephone: (204) 789-3627.

Returning Students: All returning students must re-certify their CPR in a Heart and Stroke certified course in BLS for Healthcare Providers (HCP-C) and submit a copy of their card to the College of Medicine office prior to the first day of class. Returning students must be registered with the College of Physicians and Surgeons of Manitoba by June 30 of each year and must provide current documentation on Adult Criminal Record Check (with vulnerable sector search), Adult Abuse Registry Check and Child Abuse Registry Self-Check prior to the first day of class.

SECTION 9: COURSE DESCRIPTIONS

Biochemistry & Medical Genetics Course Descriptions-3000 Level

BGEN 3020 Introduction to Human Genetics Cr.Hrs. 6

(Formerly 137.302) Principles necessary to understand and study genetically influenced malformations, diseases and variation in individuals and in populations. Two terms. Lectures, tutorials and assignments. Not to be held with the former 080.301 or 125.301.

Biochemistry & Medical Genetics Course Descriptions-4000 Level

BGEN 4010 Project Course in Human Genetics Cr.Hrs. 6

(Formerly 137.401) A research project chosen in consultation with and supervised by a faculty member. A written report is required. The course is available primarily to final year Honours students in the Honours Genetics program. Selection of project and supervision to be arranged prior to September 30 and submitted in writing to department head. Deadline for submission of first draft to supervisor by March 1. Deadline for submission of final draft to supervisor and course coordinator is March 31.

Human Anatomy & Cell Science Course Descriptions-1000 Level

ANAT 1030 Human Anatomy Cr.Hrs. 3

(Formerly 080.103) To present the essentials of the organization and structure of the human body. Surface, functional and applied anatomy will be taken into consideration. For Pharmacy students only.

Pharmacology Course Descriptions-4000 Level

PHAC 4030 Drugs in Human Disease I Cr.Hrs. 3

Foundation physiological principles underlying human disease intergrated with drug disposition and effects of important drug groups on disorders of the autonomic and central nervous systems, and the cardiovascular system. May not be held with PHAC 4020. Prerequisites: BIOL 2410 (former ZOO 2530 or 022.253) and BIOL 2420 (former ZOO 2540 or 022.254).

PHAC 4040 Drugs in Human Disease II Cr.Hrs. 3

Foundation physiological principles underlying human disease integrated with effects of important drug groups on endocrine and organ system disorders, allergy and inflammation, infection, and cancer. The course also offers an introduction to basic clinical pharmacology as well as several current specialized topics in pharmacology. May not be held with PHAC 4020. Prerequisites: BIOL 2410 (former ZOO 2530 or 022.253) and BIOL 2420 (former ZOO 2540 or 022.254).

Physiology Course Descriptions-1000 Level

PHGY 1030 Fundamentals of Medical Physiology Cr.Hrs. 6

(Formerly 090.103) The function and regulation of the systems and major organs of the human body as they relate to clinical disorders. For Pharmacy students only.

Pharmacology Course Descriptions-2000 Level

PHAC 2100 Pharmacology Cr.Hrs. 6

(Formerly 089.210) General principles of pharmacology including consideration of the pharmacodynamics of important drugs and control and modification of drug action.

COLLEGE OF NURSING

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Chapter Contents

SECTION 1: DEGREE PROGRAMS OFFERED

1.1 Programs

1.2 Available Options

1.3 Professional Designation

SECTION 2: ADMISSION REQUIREMENTS

2.1 Four-Year Baccalaureate Nursing Program

2.2 Baccalaureate Program for Registered Nurses

SECTION 3: ACADEMIC REGULATIONS

3.1 Regulations for the Four-Year Baccalaureate Nursing Program

3.2 Regulations for the Baccalaureate Program for Registered Nurses

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

4.1 Four-Year Baccalaureate Nursing Program

4.2 Baccalaureate Program for Registered Nurses

4.3 Courses Available to Students in Other Faculties

SECTION 5: COURSE DESCRIPTIONS

SECTION 1: DEGREE PROGRAMS OFFERED

1.1 Programs

Program/Degree	Years to Complete	Total Credit Hours	Maximum Years to Complete
Four-Year Baccalaureate Nursing Program/Bachelor of Nursing	4*	129	6
Baccalaureate Program for Registered Nurses**/ Bachelor of Nursing	2	45	5

*This includes one year (30 credit hours) of study in University 1.

**This program is designed specifically for active practicing Registered Nurses.

1.2 Available Options

Inter-Faculty Option in Aging

Inter-Faculty Option in Aging courses are offered by the following Colleges and Faculties: Arts; Nursing; Kinesiology and Recreation Management; and Social Work. To complete the Inter-College Option in Aging, students will complete a total of 18 credit hours including each of the following:

- Required Courses (six credits). See the Registration Guide for the current course number being offered.

a) **IDES 2650 /HMEC 2650/REC 2650/SWRK 2650** The Social Aspects of Aging (3 credit hours)

b) **NURS 2610/KIN 2610** Health and Physical Aspects of Aging (3 credit hours)

- Electives (12 credit hours).

a) At least three credits of professional/discipline-specific applied work on aging within the student’s faculty of registration; and

b) An additional nine credit hours in aging electives from the participating faculties. Students can take nine credit hours from their own faculty but are encouraged to select offerings from other faculties. Lists of eligible elective courses are available from the student advisors.

- The nursing option in aging elective is NURS 2200 Topics in Aging.

Upon completion of these requirements, the “Option in Aging” comment will be recorded on the student’s transcript. Information on the Inter-Faculty Option in Aging is available from a student advisor.

1.3 Professional Designation

A graduate of the Four-Year Baccalaureate Nursing Program must write the Registered Nurse examination to become eligible to practice nursing. Following successful completion of all courses, the College of Nursing provides the College of Registered Nurses of Manitoba (CRNM) with a letter indicating that the student has completed the program requirements and is a potential graduand. Completion of the program entitles students to apply to work as graduate nurses and to apply to write the Registered Nurse examination to obtain the designation, Registered Nurse (RN). Approval of the application to write the Registered Nurse examination will be subject to the graduate’s meeting the requirements of the CRNM. Application and registration information can be obtained from the CRNM website at: www.crnmb.ca.

SECTION 2: ADMISSION REQUIREMENTS

2.1 Bachelor of Nursing Program

Applicants must meet the general admission requirements of the University of Manitoba, as well as the admission requirements of each program in the College of Nursing. All admission requirements, as well as application deadline dates and forms, are included in an applicant information bulletin that is available from the Admissions Office website at <http://umanitoba.ca/student/admissions/>. The following are summaries of the admission requirements for each program in the College of Nursing.

Courses Completed at Recognized Universities Other Than the U of M

Non-Nursing courses must be assessed as exact equivalents in order to meet the specific course requirements for admission. It may not be possible to establish equivalency of courses completed over 10 years prior to application. In those situations, required courses may have to be repeated.

Non-Nursing courses that were completed more than 10 years prior to admission and that have been evaluated by the University of Manitoba can be used in the admission process but will not be considered for transfer credit toward the Nursing degree. Thus, only courses completed within 10 years prior to the date of admission to the College of Nursing will be considered for transfer credit.

All courses (regardless of age) within the most recent 60 credit hours of university level course work will be included in the calculation of AGPA.

The above information also applies to Nursing courses taken at universities other than the U of M; however, Nursing courses will be considered for evaluation and credit only if completed within 5 years prior to application/admission.

See also Section on "Advanced Standing/Transfer Credit".

Failures in Nursing Courses

Students who fail the same Nursing course twice, prior to applying to the College of Nursing, are ineligible for admission to the College of Nursing.

Course Requirements for Admission

Students must meet the entrance requirements and complete the University Written English requirement and the University Mathematics requirement to be eligible for admission. According to University policy, students who have a completed undergraduate degree are exempt from the Written English and math requirements (see appropriate section in Calendar for University policy on written English requirement).

The AGPA for admission will be calculated on the most recent 60 credit hours (including repeated courses) of university level course work. If an applicant has less than 60 credit hours, the AGPA will reflect all credit hours completed (i.e.: a minimum of 30 credit hours to a maximum of 60 credit hours).

An AGPA higher than the minimum is recommended as admission may be competitive.

All applicants must complete a minimum of 30 credit hours in the following identified courses (or their equivalent) with a minimum grade of "C" in each course before entering the College of Nursing.

The minimum Adjusted GPA for admission to the College of Nursing is 2.5.

BIOL 1410 Anatomy of the Human Body (see Note 1)

BIOL 1412 Physiology of the Human Body (see Note 1)

MBIO 1220 Essentials of Microbiology (see Note 1)

Science Electives- 9 credit hours (see Notes 1, 2, 3, 4 & 5)

Electives- 12 credit hours

Any combination of the following courses/subjects for a total of 12 credits.

- Social Sciences (see Notes 1 & 5)
- Humanities (see Notes 1 & 5)
- **NURS 1280 Introduction to Nursing (see Note 7)**
- **NURS 1500 Preparing for Professional Nursing Education (see Note 6)**
- **NURS 2610 or KIN 2610 Health and Physical Aspects of Aging**
- **NURS 2650 or SWRK 2650 or HMEC 2650 Social Aspects of Aging**

Note 1: All courses can be completed in University 1, or an equivalent program, if the students do not wish to extend their program of study.

Note 2: Science electives are courses taught by the Faculty of Science. With exception of Geological Sciences (GEOL 1XX0), courses under the Clayton H. Riddell Faculty of Environment, Earth, and Resources do not meet the Science elective requirement if taken 2003-2004 and later. 1000 level introductory Geological Sciences courses (GEOL 1XX0) will be accepted as Science courses if taken prior to September 1, 2006.

Note 3: The former BIOL 1110 Health and Health Professions may not be used as a Science elective.

Note 4: Science prerequisites. Students must meet the current Science prerequisites before registration for Science courses. See the Faculty of Science section in the General Calendar for the current prerequisites. It is preferred that the above prerequisite have been completed within the last five years. Math 40S is a prerequisite for Microbiology and Statistics.

Note 5: All courses must be 1000 level or higher. "0900" level courses (e.g., ENGL 0930) are not accepted for admission or transfer credit.

Note 6: NURS 1500 is available only to students in the Aboriginal Nursing Cohort Initiative.

Note 7: NURS 1280 must have been completed within five years of admission to the College of Nursing.

NOTE: NURS 1260 Growth and Development (3 cr) may not be used towards admission requirements. Students who previously completed NURS 1260 Growth and Development with a minimum of “C” and are admitted to the College of Nursing within 5 years of completing the course, up to and including the admission year 2018, will be given advance standing in the equivalent second-year course.

Applicants from Diploma and Degree Nursing Programs Category

Applicants who have attended but have not completed a nursing diploma or degree program, the completion of which would result in the graduate's eligibility to write the Canadian Registered Nurse Examination (or equivalent) in order to qualify for registration to practice as a Registered Nurse, must meet admission requirements including the competitive AGPA in the year of application, apply for admission by the application deadline, and provide supplementary information, including the name of the Dean, Director, Head, or Coordinator of the Nursing Program in which the student was previously registered, and who will be contacted by the College of Nursing.

The Advance Standing and Admissions Committee reserves the right to deny admission to the University of Manitoba Nursing program based on any of the supplementary information. Applicants who would be eligible to register in third or fourth year courses will be considered for admission only if space is available.

Appeals of decision are limited to the question of procedural regularity only. The merits of the decision are not subject to review.

Special Consideration Category

The Special Consideration Category will consider applicants who are Indigenous People of Canada only, including individuals of First Nations, Metis, and Inuit heritage. Applicants in this category must meet the minimum entrance requirements including a minimum AGPA of 2.5; however, they do not have to meet the competitive grade point average of admitted students in the admission year. Applicants must apply by the application deadline and also complete a supplementary application form that is available with the online application. The Supplementary Application and information are due no later than May 1.

Appeals of decisions are limited to the question of procedural regularity only. The merits of the decision are not subject to review.

Provisional Admission - Non-Academic Admission Requirements

All successful applicants are admitted provisionally pending compliance with the non-academic admission requirements of the College of Nursing. Failure to meet the requirements by July 15 for fall admission or November 15 for winter admission will result in the offer of admission being revoked. Contact the College of Nursing or http://umanitoba.ca/faculties/nursing/prospective/media/Non_Academic_Admission_Requirements_2015.pdf for further information about the Non-Academic Admission Requirements.

Applicants are advised to carefully check the recommended start dates in the above document before beginning the process of complying with these admission requirements. Immunization must be started prior to application in November so that the July 15 deadline can be met, or March so that the November 15 deadline can be met. Any costs associated with the non-academic admission requirements are the responsibility of the applicant.

Criminal Record Search Certificate

Following their provisional admission to the program, applicants must provide a Criminal Record Search Certificate, including Vulnerable Sector Search, by July 15 or November 15. As it can take up to 120 days to obtain these documents, it is recommended that applicants apply for the Criminal Record Search certificate and Vulnerable Sector Search between March 1 and March 15 for fall admission or July 1 and July 15 for winter admission in the year of application.

A criminal conviction will not necessarily result in denial of admission to the College of Nursing. Criminal offences will be reviewed by a sub-committee of the Nursing Advance Standing and Admissions Committee for the implications of the conviction in view of the professional mandate to protect the public. Failure to disclose any criminal record will invalidate an applicant's application and shall result in automatic expulsion from the College of Nursing if the applicant has been admitted.

The College of Registered Nurses of Manitoba (CRNM) also requires that all graduates of an approved nursing education program who wish to practice nursing in this province disclose information about any conviction for an offence under the Criminal Code (Canada). The review process by the College of Nursing is independent of the review process conducted by the CRNM.

Child Abuse Registry Check

Following provisional admission to the program, applicants must provide a Child Abuse Registry check by July 15 for fall admission or November 15 for winter admission. As it can take up to 120 days to obtain these documents, it is recommended that applicants apply for the Child Abuse Registry check between March 1 and March 15 for fall admission or July 1 and July 15 for winter admission in the year of application.

Any applicant on the Child Abuse Registry will be denied admission.

Adult Abuse Registry Check

Following provisional admission to the program, applicants must provide an Adult Abuse Registry check by July 15 for fall admission or November 15 for winter admission. As it can take up to 120 days to obtain these documents, it is recommended that applicants apply for the Adult Abuse Registry check between March 1 and March 15 for fall admission or July 1 and July 15 for winter admission in the year of application.

Immunization

A complete immunization record is an admission requirement for the program. Applicants provisionally admitted to the program must meet the July 15 deadline for fall admission or the November 15 deadline for winter admission for submission of their immunization record, or their offer of admission will be revoked. Detailed information about the Immunization admission requirement can be found in the Non-Academic Admission Requirements document found at http://umanitoba.ca/faculties/nursing/prospective/medi/Non_Academic_Admission_Requirements_2015.pdf

Because it takes a number of months to complete the immunization requirements, it is recommended that all applicants start their immunizations in November prior to application in order to meet the July 15 deadline for fall admission or March to meet the November 15 deadline for winter admission.

CPR Certification

CPR certification at the Health Care Provider Level is a requirement for admission to the College of Nursing. Certification must be valid until the end of the academic year (i.e., April); therefore, should not be obtained before April 1st by applicants for either fall or winter admission.

Respirator Mask-Fit Testing

Applicants must be fit-tested with the respirator mask that is used in the event that airborne precautions are required in clinical agencies. Official proof of the mask-fit test must be submitted to the College of Nursing by July 15 for fall admission and November 15 for winter admission.

As it can take a number of weeks to obtain an appointment for fit testing, applicants are advised to book as soon as they are offered admission or earlier in order to meet the July 15 deadline for fall admission and the November 15 deadline for winter admission.

Advanced Standing/Transfer Credit

Advanced standing will be considered for courses completed at the University of Manitoba.

Nursing courses from any university, including the University of Manitoba, will be considered for advanced standing/transfer credit only if they have been completed within five years prior to admission to the College of Nursing.

Non-Nursing courses completed at other recognized institutions will be considered if completed within the past 10 years.

See also section on "Courses Completed at Recognized Universities other than the University of Manitoba."

Advanced Placement Option: LPN

Applicants who graduated from the Licensed Practical Nursing (LPN) Program from Assiniboine Community College or the Diploma in the Practical Nursing Program at University College of the North within five years of admission to the College of Nursing may be eligible for transfer credit. Applicants must meet admission requirements.

Advanced Placement Option: RPN

Registered Psychiatric Nurses may be eligible for advanced standing in the Bachelor of Nursing Program. Applicants should inform the College of their RPN status.

2.2 Baccalaureate Program for Registered Nurses

All admission requirements for applicants who are already Registered Nurses are described in detail in an applicant information bulletin that includes application deadline dates and application forms. This material is available from the Admissions Office website at: <http://www.umanitoba.ca/student/admissions/>

Admission Requirements

- 1) Graduation from an approved diploma of nursing education program;
- 2) Current active practicing membership in a Canadian provincial or territorial association/college of registered nurses; and
- 3) A minimum of 1125 hours of nursing experience will normally be required for selection.

Applicants will be provisionally admitted pending submission, by the published deadline, of the non-academic requirements: Criminal Record Search Certificate including Vulnerable Sector Search, Child Abuse Registry Check, Adult Abuse Registry Check, Immunization, CPR Certification, Respirator Mask-Fit Testing, and PHIA training.

Failures in Nursing Courses

Students who fail the same Nursing course twice, prior to applying to the College of Nursing, are ineligible for admission to the College of Nursing.

Proof of Professional Registration

Active practicing membership must be maintained throughout the program in the Canadian jurisdiction under which the student is a practicing RN. Verification will be obtained annually from the College of Registered Nurses of Manitoba by the College for returning Manitoba students.

Students from outside of Manitoba must submit proof of registration annually from the registering body to the College of Nursing.

After admission and at any time prior to completing the program, students with any changes to their active practicing status with the College of Registered Nurses of Manitoba or other Canadian jurisdiction in which they hold membership, (e.g., conditions placed on a registration or ineligibility for active practicing status), are required to report this information to the Associate Dean, Undergraduate Programs, College of Nursing. Such changes will be reviewed on a case by case basis. Failure to report a change in status may result in disciplinary action.

Transfer of Credit

University credits earned outside of nursing diploma programs or earned as part of an incomplete degree may be considered for transfer of credit. If a required course in the baccalaureate program was earned as part of a nursing diploma program or as part of another degree, an alternative course must be substituted. Transfer of credit will be considered for university level nursing courses completed within the five years prior to admission. Credit for previous nursing courses is not given if there is a lapse of five years or more from the last date of attendance in the program or if taken more than five years prior to admission. Credit for non-nursing courses taken at other universities over 10 years prior to admission will not be granted.

Graduates of the Red River College Diploma Nursing Accelerated Program (DNAP) (est. 2000) will receive 12 credit hours of advanced standing in the Baccalaureate Program for Registered Nurses (BPRN) for the following courses, provided a minimum grade of C+ was achieved in each course for transfer: NURS 3210 Research Methods, NURS 4220 Law and Ethics, and 6 credit hours of non-nursing electives. The Nursing courses must have been completed within five years, and the non-Nursing courses completed within 10 years, prior to admission to the College of Nursing. All remaining courses for the BPRN must be completed at the University of Manitoba in order to meet the residency requirement for the BPRN, unless the electives were completed at the University of Manitoba.

Transfer of Credit for Advanced Certificate Programs

No credit will be given for these certificates in the BPRN.

SECTION 3: ACADEMIC REGULATIONS

The provisions of the chapter, General Academic Regulations and Requirements, and the chapter, University Policies, apply to all students. In addition, the College of Nursing has regulations and requirements, published below, that apply specifically to its students.

Following the regulations for all students, please see the regulations that are specific to each program.

3.1 Regulations for the Four-Year Baccalaureate Nursing Program

Students are obligated to be familiar with all regulations governing their continued progress in the program.

Security of Academic Records

The University's policies regarding the security of student academic records are found in the chapter, University Policies, of this Calendar.

Registration Status in the Program

Students admitted to the Program must complete a minimum of 3 credit hours of course work in the College of Nursing in the Fall or Winter term of their admission year.

Students are expected to maintain contact with the program by registering in at least one nursing course during each consecutive Fall and Winter term while they are enrolled in the Program.

Students who wish to interrupt their studies must apply in writing to the Associate Dean, Undergraduate Programs, for a leave of absence.

Leave of Absence

Students wishing to interrupt their studies must submit a written request for a leave of absence, normally by June 1, to the Associate Dean, Undergraduate Programs, College of Nursing. Later requests may be considered in exceptional circumstances. A leave of absence may normally be granted for a maximum period of one year. Requests for an extension to the leave of absence or for a subsequent leave of absence must be made in writing and will be subject to approval by the Associate Dean, Undergraduate Programs.

In order to return to the College of Nursing, students must submit a written request for reinstatement to the Associate Dean, Undergraduate Programs, no later than May 1 of the year of return. Requests for reinstatement will not normally be considered after May 1. Students who do not apply for reinstatement by May 1 will normally be considered as having left the Nursing program, and will be withdrawn from the College of Nursing.

Decisions made in response to requests for leaves of absence or reinstatement can be appealed to the College of Nursing Admissions Committee.

Leave of absence status does not extend the program time limit outlined in the College of Nursing regulations. To maintain leave of absence status, and not be discontinued from the College of Nursing, students may not attend any other faculty or institution during the period in which the leave of absence is in effect. Students on a leave of absence will be subject to the same criminal record, child abuse registry, and adult abuse registry policies as students taking courses. At the time of requesting a return to studies, students will be required to provide a current self-declaration of a criminal record, child abuse registry, and adult abuse registry listing.

Students who attend another faculty or institution while on leave, or who have been withdrawn from the College of Nursing because they were not granted a leave of absence and did not take at least one Nursing course in Fall or Winter term, must re-apply through Admissions should they wish to return.

Residence Requirements

See the chapter, General Academic Regulations and Requirements in this Calendar.

Coursework and Evaluation

"0900" Level Courses

Credit will not be given for "0900" courses.

University Mathematics and Written English Requirement

The Written English requirement may be satisfied by a course also chosen to meet the Humanities requirement. Students should refer to the General Academic Regulations and Requirements in this Calendar. The mathematics requirement will be met in Year 2 of Nursing by Statistics STAT 1000.

Prerequisite Deficiency

Students who enroll in courses provisionally pending satisfactory completion of pre- or co-requisites must, if unsuccessful, withdraw or amend their registration accordingly. The College of Nursing reserves the right to not send reminders of the requirement to withdraw.

Challenge for Credit

Students wishing to challenge a course for credit should contact a student advisor.

Supplemental Examinations or Tests

The College of Nursing does not permit supplemental examinations or tests.

Academic Progression

Effective September 2013 for all students:

Students are required to obtain a minimum of "C" grade in every letter grade course, a "Pass" in every Pass/Fail course, and a Program GPA of 2.5 to graduate. A final grade of "D" or "F" in a letter grade course or "Fail" in a Pass/Fail course taken to complete the degree requirement is considered a failure.

Academic assessments will be based on student performance in letter grade courses. The Term Grade Point Average (TGPA) will be calculated at the conclusion of each academic term in which the student has completed a minimum of 6 credit hours. Students who do not complete the minimum credit hours in one term will be assessed as "too few credit hours to assess." These students will be assessed over two terms or more at the end of the term in which they reach the threshold of 6 credit hours.

The final term of the Four-Year Baccalaureate Program (NURS 4290) will be excluded from assessment providing the student meets graduation requirements. Students are required to have a minimum Program GPA of 2.5 to be eligible for graduation.

****See http://umanitoba.ca/faculties/nursing/current/undergrad/policies/assessment_policy.html for details and procedures.

Good Academic Standing

A student with a TGPA of 2.5 or higher will be assessed "Faculty Minimum Met."

Academic Warning

The first time a student's TGPA drops below 2.5, the student will receive an Academic Warning.

Academic Probation

The second time that a student's TGPA drops below 2.5, the student will be placed on Academic Probation.

Academic Suspension

The third time that a student's TGPA drops below 2.5, the student will be placed on Suspension. Students who are suspended shall be ineligible to take any courses at the University of Manitoba or on a letter of permission for a minimum of eight and a maximum of 15 calendar months.

A student may apply for reinstatement on academic probation after the term of suspension has been completed.

Required to Withdraw

Students who have been permitted to return from Suspension and whose TGPA drops below 2.5 a fourth time will be Required to Withdraw. Students who are Required to Withdraw are ineligible for re-admission to the College of Nursing.

Dean's Honour List

The Dean's Honour list will be determined after each term of study. Students who achieve a minimum Term GPA of 3.75, and who are registered for a minimum of 12 credit hours will be placed on the Dean's Honour List. Students registered in a Fall/Winter term spanned course will be reconsidered for their eligibility for listing on the Fall term Dean's Honour List at the end of Winter term. Students who complete a course on a Letter of Permission may request to have these courses included in the assessment for Dean's Honour List. Students with a grade of D, F, or "Fail" in that term will not be eligible for Dean's Honour List.

Degree with Distinction

Students who achieve a Degree GPA of 3.8 and above based on the last 68 credit hours of course work, including Pass/Fail courses, will be eligible for a Degree with Distinction. Students with a grade of D, F, or "Fail" in the last 68 credit hours will not be eligible.

Voluntary Withdrawal

Students admitted in September, 2004 or later are allowed only one voluntary withdrawal per nursing course in the College of Nursing.

Students who voluntarily withdraw from a nursing course a subsequent time will have their withdrawal reversed and will be expected to complete the course. Students planning to withdraw from any course are advised to speak with a student advisor regarding the implications of this decision. Any financial implications will be the responsibility of the student.

Attendance

Regular attendance at class is expected of all students in all courses. Attendance in on-line courses will be interpreted as regular and consistent participation in the course. Attendance in the clinical practice/laboratory portions of nursing courses is mandatory to enable the student to satisfy the evaluative criteria of the theoretical and practical components of courses. Students absent from class or practice due to illness may be required to present a certificate of illness. This certificate must be signed by a recognized health care provider. Absence for compassionate reasons is considered on an individual basis. Where absence is involved, make-up time may be required.

A course leader may initiate procedures to debar a student from attending classes and from final examinations and/or from receiving credit where unexcused absences exceed those permitted by faculty regulations.

Debarment Policy

A student may be debarred from class, clinical practice, laboratories, and examinations by action of the Associate Dean, Undergraduate Programs for persistent non-attendance, unsafe clinical practice, and/or failure to produce assignments to the satisfaction of the instructor. Once the debarment process has been initiated, the student will not be able to voluntarily withdraw from the course that is presently under investigation. Students so debarred will have failed that course.

Failures in Nursing Courses

Students will be permitted to repeat a nursing course only once following a failure. Withdrawal from the program will be required following a second failure in the same nursing course or any two clinical courses. Students who fail a Nursing course twice and are required to withdraw from the College of Nursing are ineligible for re-admission to the College of Nursing.

Clinical Absence

Four-Year Baccalaureate or Bachelor of Nursing Program students returning following one year or more absence from clinical courses must complete a mandatory demonstration of psychomotor skills competency in the skills lab. Competency must be demonstrated prior to clinical attendance. Students should consult with a student advisor for instructions. Testing must be completed prior to July 1.

Failures in Clinical (Pass/Fail) Courses

Students who fail a clinical course will be required to accept a supportive learning contract prior to being given permission to register in another clinical course.

Failures in Clinical Course Rotations

Students who fail a rotation of a clinical course in which there are multiple rotations will be debarred from the course immediately following that rotation and will receive a final grade of "Fail". These students will not be permitted to voluntarily withdraw from the course following receipt of the failed grade.

Unsafe Clinical Practice Policy

The debarment policy will be invoked when the student demonstrated unsafe clinical practice. Unsafe clinical practice involves actions or behaviours which result in adverse effects or the risk of adverse effects to the health and well-being (psychological or physical) of the client, family, staff, faculty, or other students. Unsafe clinical practice is an occurrence, or a pattern of behaviour involving unacceptable risk.

Clinical Practice

Students enrolled in nursing courses with clinical practice components may not register for any other course during those designated clinical days. Nursing clinical practice may be scheduled during the morning, afternoon or evening. Weekends are also used for some sections in clinical courses.

All students must be registered in all clinical courses for both terms by the specified deadline. Failure to register by this date may prevent accommodation in a clinical course. Current deadlines are published in the Registration Information on the College of Nursing website.

Transportation costs to clinical practice settings are the responsibility of the student.

Every effort will be made to accommodate eligible students who register for clinical courses during the initial registration period. However, spaces in clinical courses are dependent upon the availability of clinical sites, which are determined by health care agencies and the availability of clinical teachers. Therefore, the College cannot guarantee that all students who registered for the course can be accommodated.

Clinical Agency Requirements

The College of Nursing has contractual arrangements with the agencies in which students are placed for clinical practice. The contracts set out specific expectations regarding the preparation of students prior to their placement in any clinical site and their fitness to practice.

ACADEMIC CALENDAR 2015-2016

The College of Nursing assists the student to complete the following requirements and further information about how these requirements are met will be provided during Year 2 orientation or during NURS 0500.

1. Personal Health Information Act (PHIA) Training

PHIA cards are required for clinical practice and will be checked at clinical sites.

2. Non-Violent Crisis Intervention Workshop

3. Electronic Patient Record Training

The following requirements are the responsibility of the student and must be completed independently, according to deadlines established by the College of Nursing. For newly admitted students, instructions about how to fulfill these requirements is set out in Section 3.1 Admission Requirements. Information set out below is for returning students only.

4. Immunizations

Once admitted to the College of Nursing, students are required to maintain an up-to-date immunization status. Deadlines for completion of required vaccines will be established for individual students as needed. Students should keep a copy of their immunization records and retrieve their immunization records from their files upon graduation.

- **Penalty for Non-Compliance with Immunization Policy**

Returning students, including Joint Baccalaureate Nursing program students from Red River College entering fourth year, who do not comply with the deadlines for completion of their immunizations, will be placed on hold status, which blocks the student from the registration system. Students on hold will be permitted to register in mid-August after all documentation has been received. Students who register in mid-August may not be able to register in some or all of the courses they had originally planned to take, and may experience a delay in completing the program. Hold status also prevents receipt of refunds or histories/transcripts from the Registrar's Office, attending clinical practice, and graduation.

5. Mandatory Annual Influenza Vaccination

All undergraduate students in the College of Nursing are required to obtain an annual influenza vaccination and submit documentation confirming the vaccination by the published deadline.

Students who do not submit documentation of flu vaccination by the published deadline may not participate in clinical practice courses in Winter Term.

6. Criminal Record Search Certificate

Some clinical practice sites require that students complete a current or additional Criminal Record Search Certificate prior to the first clinical practice day.

Students charged with or convicted of a criminal offence are required to report this information to the Associate Dean, Undergraduate Programs, College of Nursing. Failure to report a criminal offence may result in dismissal from the program. Criminal offences will be reviewed by the College of Nursing Professional Unsuitability Committee for the implications of the conviction in view of the professional mandate to protect the public.

7. Child Abuse Registry

Some clinical practice sites require that students complete a current or additional Child Abuse Registry search check prior to the first clinical practice day.

Students listed on the Child Abuse Registry are required to report this information to the Associate Dean, Undergraduate Programs, College of Nursing. A listing on the Child Abuse Registry or failure to report the listing will result in dismissal from the program.

8. Adult Abuse Registry

Some clinical practice sites require that students complete a current or additional Adult Abuse Registry search check prior to the first clinical practice day.

Students listed on the Adult Abuse Registry are required to report this information to the Associate Dean, Undergraduate Programs, College of Nursing.

9. Cardiopulmonary Resuscitation Certification (CPR)

All students are required to obtain certification in CPR at the Health Care Provider Level. Returning students, including those certified at the Instructor level, must recertify in April/May each year to ensure that their certification is valid for the entire academic year. Proof of re-certification must be submitted annually by June 1 to the Student Services Assistant or designate.

- **Penalty for Non-Compliance with CPR Policy**

Returning students, including Joint Baccalaureate Nursing program students from Red River College entering fourth year, who do not comply with the deadlines for submission of the CPR re-certification, will be placed on hold status, which blocks the student from the registration system. Students on hold will be permitted to register in mid-August after all documentation has been received. Students who register in mid-August may not be able to register in some or all of the courses they had originally planned to take, and may experience a delay in completing the program. Hold status also prevents receipt of refunds or histories/transcripts from the Registrar's Office, attending clinical practice and graduation.

10. Respirator Mask Fit Testing

Mask-fit test cards are required for clinical practice and will be checked at clinical sites.

Attire for Clinical Practice

All students are required to wear uniforms, name tags and crests during clinical courses unless given specific instructions not to do so by the agency in which they are placed for clinical practice.

Professional Unsuitability By-Law

The Senate of the University has approved a by-law granting authority to the College to require a student to withdraw for reasons of professional unsuitability. A student may be required to withdraw from the College when, at any time, the College Council, through the Professional Unsuitability By-Law, believes the student to be unsuited for the profession of nursing, on general considerations of scholarship, professional fitness or professional conduct.

Copies of this by-law may be obtained from the College of Nursing website, umanitoba.ca/nursing. See chapter, General Academic Regulations and Requirements.

Disciplinary Appeal

Until the final disposition of a disciplinary appeal, students in the Four-Year Baccalaureate or Bachelor of Nursing Program will not be permitted to attend clinical practice or the nursing skills laboratory. At the discretion of the Associate Dean, Undergraduate Programs, College of Nursing, students may be granted permission to attend the lecture component only of a nursing course(s) while awaiting a final disposition of an appeal currently in progress.

3.2 Regulations for the Baccalaureate Program for Registered Nurses

- Students are obligated to be familiar with all regulations governing their continued progress in the program.

Security of Academic Records

The University's policies regarding the security of student academic records are found in the chapter, University Policies, of this Calendar.

Registration Status in the Program

Students admitted to the BPRN must complete a minimum of 3 credit hours of course work in the Fall or Winter term following admission. Admission will be revoked for students who do not complete at least 3 credit hours in their first or second term of study following admission.

Students are expected to maintain contact with the program by registering in at least one nursing course during each consecutive Fall and Winter term while they are enrolled in the Program.

Students who wish to interrupt their studies must apply in writing to the Associate Dean, Undergraduate Programs, for a leave of absence. Refer to section on Leave of Absence for further information.

Program Planning

Students are expected to meet with a Nursing Student Advisor prior to May 15 to plan their program for the upcoming year. Students who do not meet with the Nursing Student Advisor will be placed on hold status, which blocks the student from the registration system and prevents receipt of refunds or histories/transcripts from the Registrar's Office, and graduation.

Leave of Absence

BPRN students wishing to interrupt their studies must have completed a minimum of 3 credit hours of course work in the Faculty of Nursing in the Fall or Winter term of their admission year. Students must submit a written leave of absence request to the Associate Dean, Undergraduate Programs, College of Nursing. Leave of absence status does not extend the program time limit outlined in the College of Nursing regulations. To maintain a leave of absence status at the University of Manitoba, students may not attend any other post-secondary institution during the period in which the leave of absence is in effect. See section Transfer of Credit.

Reinstatement

Students who have withdrawn from the College of Nursing (interrupted their studies without requesting a leave of absence) must submit a written request for reinstatement to the Associate Dean, Undergraduate Programs. The student advisor will inform the student of the appropriate procedure and advanced standing, if any, that the student may receive. Note: 1) the student who does not attend another faculty or institution and requests, within five years of voluntary withdrawal, to re-enter the College of Nursing will be advised to forward such a request to the Associate Dean, Undergraduate Programs; 2) the student who requests to return to the College of Nursing more than five years after withdrawal must re-apply; 3) the student who has attended another faculty or an institution following withdrawal from Nursing must re-apply. See section 2.1 Advanced Standing/Transfer of Credit. Note that the BPRN must be completed within five years, including time on a leave of absence.

Residence Requirements

Students are required to complete, with the minimum grade of "C" in each course, at least 32 credit hours of University of Manitoba courses. Of these courses, a minimum of 20 credit hours must be from among those offered by the College of Nursing.

Course Work and Evaluation**Supplemental Examinations or Tests**

The College of Nursing does not permit supplemental examinations or tests.

"0900" Level Courses

Credit will not be given for "0900" courses.

Prerequisite Deficiency

Students who enrol in courses provisionally pending satisfactory completion of pre- or co-requisites must, if unsuccessful, withdraw or amend their registration accordingly. The College of Nursing reserves the right to not send reminders of the requirement to withdraw.

Challenge for Credit

Students wishing to challenge a course for credit should contact a student advisor.

Proof of Professional Registration

Verification of registration of returning students will be obtained by the College of Nursing annually from the College of Registered Nurses of Manitoba. Students not registered with the College of Registered Nurses of Manitoba (CRNM) and continuing in the program must submit proof annually of active practicing status in the Canadian jurisdiction in which they hold membership.

After admission and at any time prior to completing the program, students with any changes to their active practicing status with the CRNM, or other Canadian jurisdiction in which they hold membership (e.g., conditions placed on a registration or ineligibility for active practicing status), are required to report this information to the Associate Dean, Undergraduate Programs, College of Nursing. Such changes will be reviewed on a case by case basis. Failure to report a change in status may result in disciplinary action.

Academic Progression

Students will be required to obtain a minimum of "C" grade (2.0) in every course, and a minimum Program GPA of 2.5 in order to graduate. A final grade of "D" in any course taken to complete the degree requirement is considered a failure and is not accepted by the faculty.

Students must have a minimum Degree GPA of 2.5 to proceed in the program. For further information, refer to: Academic Probation - Baccalaureate Nursing Program for Registered Nurses.

Dean's Honour List

Students who achieve a minimum Term GPA of 3.5, including courses taken on a Letter of Permission, and who are registered for a minimum of 12 credit hours, will be placed on the Dean's Honour list. The Dean's Honour list will be determined after each term of study.

Degree with Distinction

Students who obtain a Degree GPA of 3.8 and above in their program of studies will be eligible for a Degree with Distinction.

Academic Probation

Students will be assessed after the Winter term upon completion of a minimum of 18 credit hours. Students failing to achieve the minimum Degree GPA of 2.5 will be placed on probationary status.

Probationary students will be assessed at the end of the Winter term after completion of a minimum of 15 credit hours. Students failing to achieve the minimum Degree GPA of 2.5 will be placed on academic suspension.

Academic Suspension

A probationary student who does not achieve the minimum academic standing is required to withdraw from the College of Nursing with the status "academic suspension." While suspended indefinitely, after one year's suspension the student may apply for reinstatement on academic probation.

To request reinstatement following academic suspension, the student should submit a written request before May 1 to the Chair, Student Appeals Committee, College of Nursing.

Voluntary Withdrawal

Students are allowed only one voluntary withdrawal per nursing course in the College of Nursing.

Students who voluntarily withdraw from a nursing course a subsequent time will have their withdrawal reversed and will be expected to complete the course. Students planning to withdraw from any course are advised to speak with a student advisor regarding the implications of this decision. Any financial implications will be the responsibility of the student.

Attendance

Regular attendance at class is expected of all students in all courses. Attendance in on-line courses will be interpreted as regular and consistent participation in the course. Attendance in the clinical practice/laboratory portions of nursing courses is mandatory to enable the student to satisfy the evaluative criteria of the theoretical and practical components of courses. Students absent from class or practice due to illness may be required to present a certificate of illness. This certificate must be signed by a recognized health care provider. Absence for compassionate reasons is considered on an individual basis. Where absence is involved, make-up time may be required.

A course leader may initiate procedures to debar a student from attending classes and from final examinations and/or from receiving credit where unexcused absences exceed those permitted by college regulations.

Debarment Policy

A student may be debarred from class, clinical practice, laboratories, and examinations by action of the Associate Dean, Undergraduate Programs for persistent non-attendance, unsafe clinical practice, and/or failure to produce assignments to the satisfaction of the instructor. Once the debarment process has been initiated, the student will not be able to voluntarily withdraw from the course that is presently under investigation. Students so debarred will have failed that course.

Failures in Nursing Courses

Students will be permitted to repeat a nursing course only once following a failure. Withdrawal from the program will be required following a second failure in the same nursing course. Students who fail the same Nursing course twice and are required to withdraw from the College of Nursing are ineligible for re-admission to the College of Nursing.

Professional Unsuitability By-Law

The Senate of the University has approved a by-law granting authority to the College to require a student to withdraw for reasons of professional unsuitability. A student may be required to withdraw from the College when, at any time, the College Council, through the Professional Unsuitability By-Law, believes the student to be unsuited for the profession of nursing, on general considerations of scholarship, professional fitness or professional conduct.

Copies of this by-law may be obtained from the College of Nursing website, umanitoba.ca/nursing. See chapter, General Academic Regulations and Requirements.

Clinical Agency Requirements**Immunizations**

Immunizations are a requirement mandated by the Regional Health Authorities.

New students enrolling in the BPRN must provide proof of current immunization by July 15. Once admitted to the College of Nursing, students are required to maintain an up-to-date immunization status. See Penalty for Non-Compliance of Immunization and CPR section. Students should keep a copy of their immunization records and retrieve their immunization records from their files upon graduation.

Cardiopulmonary Resuscitation Certification (CPR)

All students must be certified at the Health Care Provider Level. Newly admitted students must submit proof of certification to the Student Services Assistant or designate by July 15. Thereafter, registered nurses are to maintain current certification at the required level.

- Penalty for Non-Compliance of Immunization and CPR

Students who do not comply with the deadlines for proof of current CPR and/or immunizations will be placed on hold status, which blocks the student from the registration system. Students on hold status will be permitted to register after all documentation has been received. Hold status also prevents receipt of refunds or histories/transcripts from the Registrar's Office, attending clinical practice and graduation. Students who register after the initial registration period may not be able to register in some or all of the courses they had originally planned to take, and may experience a delay in completing the program.

Criminal Record Search/Child Abuse Registry Check/Adult Abuse Registry Check

Students are required to hold active registration with the CRNM which further requires a yearly self-declaration of any criminal charges or convictions. In addition, at any time prior to completing the BPRN (regardless of admission date), students charged with, or convicted of, a criminal offence or listed on the Child Abuse Registry or the Adult Abuse Registry are required to report this information to the Associate Dean, Undergraduate Programs, Faculty of Nursing. Failure to report a criminal offence may result in dismissal from the program. Criminal offences will be reviewed by the College of Nursing for the implications of the conviction in view of the professional mandate to protect the public. A listing on the Child Abuse Registry or failure to report the listing will result in dismissal. In addition, please note that some clinical practice sites require that students complete a current or additional Criminal Record Search and/or a Child or Adult Abuse Registry check.

Name Tags

Students are required to wear a University of Manitoba College of Nursing name tag during clinical/project courses when meeting with patients or clients.

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

4.1 Four-Year Baccalaureate Nursing Program

4.1 A) Four-Year Baccalaureate Nursing Program - if admitted prior to 2015

The program can be done by part-time and full-time study.

All courses from any given year are to be completed before proceeding to the next year.

<i>Course No.</i>		
University 1	30 credit hours	
BIOL 1410	Anatomy of the Human Body (see Note 1)	3
BIOL 1412	Physiology of the Human Body (see Note 1)	3
NURS 1260	Human Growth and Development	3
NURS 1280	Introduction to Nursing	3
MBIO 1220	Essentials of Microbiology (see Note 1)	3
	Social Science(6 credits - see Note 1)	6
PSYC 1200	Introduction to Psychology (6)	
	or	
SOC 1200	Introduction to Sociology (6)	
	or	
ANTH 1210	Human Origins and Antiquity (3)	
	and	
ANTH 1220	Cultural Anthropology (3)	
	Science (6 credits from the Faculty of Science, see Notes 1, 3, 4 & 5)	6
	Humanities Elective (see Notes 1,2 & 6)	3
<p>Note 1: All courses can be completed in University 1, or an equivalent program, if students do not wish to extend their program of study.</p> <p>Note 2: Humanities. English, Philosophy, History, Religion, Languages, Classics, Native Studies, etc. Humanities information is found in the chapter for the Faculty of Arts, Additional Faculty Regulations and Policies section 5.1.1. WOMN 1600 Women in the Social Sciences does not meet the Humanities requirement.</p> <p>Note 3: Science Prerequisites. Students must meet the current Science prerequisites before registration for Science courses. See the chapter for the Faculty of Science for the current prerequisites. It is preferred that the above prerequisites have been completed within the last five years.</p> <p>Note 4: With the exception of Geological Sciences (GEOL 1XX0), courses under the Clayton H. Riddell Faculty of Environment, Earth, and Resources do not meet the Science elective requirement if taken in 2003-2004 and later. 1000 level introductory Geological Sciences courses (GEOL 1XX0) now offered under the Clayton H. Riddell Faculty of Environment, will be accepted as Science courses if taken prior to September 1, 2006.</p> <p>Note 5: The course, BIOL 1110 Health and Health Professions, may not be used as a Science elective. It may, however, be used as an elective from year 4, provided that the level requirements of all electives are met.</p> <p>Note 6: Six credits of the twelve credits of electives including the Native Studies and the Humanities electives, must be at the 2000 level or above. Students should check for pre-requisites for 2000 and 3000 level Native Studies courses.</p>		
Year 2	31 credit hours	
STAT 1000	Basic Statistical Analysis 1	3
NURS 2120	Nursing Health Assessment	4
NURS 2130	Nursing Skills Laboratory	2
NURS 2180	Clinical Nursing Practice 1	3
NURS 2190	Clinical Nursing Practice 2	3
NURS 2220	Pharmacology in Nursing Practice	3
NURS 2230	Health Promotion of Older Adults and Their Families	4
NURS 2240	Health Promotion of Child Bearing and Child Rearing Families	6
HNSC 1210	Nutrition for Health and Changing Lifestyles	3

Year 3	29 credit hours	
NURS 3210	Nursing Research Methods	3
NURS 3280	Nursing Skills Laboratory	2
NURS 3290	Health Restoration in Nursing	6
NURS 3300	Clinical Nursing Practice 3	3
NURS 3310	Health Maintenance in Nursing	6
NURS 3320	Clinical Nursing Practice 4	3
NURS 3450	Introduction to Legal and Ethical Foundations of Nursing Practice	3
	Elective – Department of Native Studies – selected options available (see Note 6):	3
NATV 1220	Native Peoples of Canada, Part I (3)	
	Or	
NATV 1240	Native Peoples of Canada, Part II (3)	
	Or	
NATV 2020	Metis of Canada (3)	
	Or	
NATV 2220	Native Societies and the Political Process (3)	
	Or	
NATV 2450	Images of Indian People in North American Society (3)	
	Or	
NATV 3240	Native Medicine and Health (3)	
Year 4	29 + 10 credit hours	
	TERM A (16 credit hours)	
NURS 4250	Palliative Nursing Care	3
NURS 4260	Nursing Care in Mental Health and Illness	3
NURS 4270	Clinical Nursing Practice 5	4
	Electives (see Note 6)	6
	TERM B (13 credit hours)	
NURS 4310	Nursing Leadership: Issues & Practices	4
NURS 4420	Health Promotion in the Community	3
NURS 4430	Clinical Nursing Practice 6	3
NURS 4440	Prevention of Illness	3
	TERM C (10 credit hours)	
NURS 4290	Clinical Practicum (12 weeks)	10

Reminder: It is the responsibility of the student to ensure that degree requirements are met. It is the responsibility of students to ensure all program requirements have been met before working as a graduate nurse and/or writing the qualifying exams to become a Registered Nurse. In order to be eligible to work as a graduate nurse and/or write the Canadian Registered Nurse Examinations, students must meet all program requirements and requirements of the College of Registered Nurses of Manitoba.

NURS 4290 Clinical Practicum

All other courses in the curriculum must be successfully completed and the grade posted prior to starting NURS 4290.

Any costs incurred in completing this course are the responsibility of the student. Proposals must meet the approval of the College of Nursing and must have academic merit. A student's chosen area for completion of practicum experience must be approved by the College of Nursing. The location of the practicum must meet the approval of the University of Manitoba. The location of the practicum is subject to change in the event approval is not received. There may be organizations which require contractual arrangements with the student and/or University of Manitoba prior to permitting the student to enter into the practicum experience. There is no guarantee the University of Manitoba will enter into such contractual arrangements to permit the student to carry out practice at a particular agency or site. In such cases, the student should be prepared to choose an alternate agency or site.

ACADEMIC CALENDAR 2015-2016

4.1.1 Courses Which May be Used as Electives

Electives are to be taken from Arts, Science, professional faculties or the Inter-Faculty Option in Aging (18 credit hours). (See section 1.2). Of the total credit hours of electives, at least 6 credit hours must be at the 2000 level or higher. Electives offered by the College of Nursing are:

Course No.		Credit Hours
NURS 2200	Topics in Aging	3
NURS 3330	Women and Health	3
NURS 3340	Providing Care in a Culturally Diverse Society	3
NURS 3350	Counselling Skills for Nurses	3
NURS 3400	Men's Health: Concerns, Issues and Myths	3
These "NURS" courses may be taken as electives only, and are not an alternative for a required nursing course. Note: Each course is normally offered every second year.		
Inter-Faculty Option in Aging – See Section 1.2		

4.1 B) Bachelor of Nursing Program-if admitted September 2015 and thereafter

This program can be done by part-time and full-time study.

All courses from any given year are to be completed before proceeding to the next year.

University 1 (30 credit hours)

BIOL 1410	Anatomy of the Human Body (see Note 1)	3
BIOL 1412	Physiology of the Human Body (see Note 1)	3
MBIO 1220	Essentials of Microbiology (see Note 1)	3
Science Electives	(see Notes 1, 2, 3, 4 & 5)	9
Electives	Any combination of the following courses/subjects for a total of 12 credit hours	12
	Social Sciences or Humanities (see Notes 1 & 5) (6-12 cr)	
NURS 1280	Introduction to Nursing (3 cr) (see Note 7)	
NURS 2610 or KIN 2610	Health and Physical Aspects of Aging (3 cr)	
REC 2650 or SWRK 2650 or HMEC 2650	Social Aspects in Aging (3 cr)	
NURS 1500	Preparing for Professional Nursing Education (see Note 6) (3 cr)	

Note 1: All courses can be completed in University 1, or an equivalent program, if students do not wish to extend their program of study.

Note 2: Science electives are courses that are taught by the Faculty of Science. With the exception of Geological Sciences GEOL 1XX0, courses under the Clayton H. Riddell Faculty of Environment, Earth, and Resources do not meet the Science elective requirements if taken in 2003-2004 and later. 1000 level introductory Geological Sciences (courses GEOL 1XX0) now offered under the Clayton H. Riddell Faculty of Environment, Earth, and Resources, will be accepted as Science courses if taken prior to September 1, 2006.

Note 3: The former BIOL 1110 Health and Health Professions may not be used as Science elective.

Note 4: Science Prerequisites. Students must meet the current Science prerequisites before registration for Science courses. See Faculty of Science section in the General Calendar for current prerequisites. It is preferred that the above prerequisites have been completed within the last five years. Math 40S is a prerequisite Microbiology and Statistics.

Note 5: All courses must be 1000 level or higher. "0900" level courses (e.g., ENGL 0930) are not accepted for admission or transfer credit.

Note 6: NURS 1500 is available only to students in the Aboriginal Nursing Cohort Initiative.

Note 7: NURS 1280 must have been completed within five years of admission to the College of Nursing.

Year 2 (29 credit hours)

NURS 2500	Health and Illness 1: Pathophysiology/Pharmacology/Assessment	6
NURS 2510	Client and Context 1: Human Growth and Development	2
NURS 2512	Health and Illness 2: The Older Client	2
NURS 2514	Health and Illness 3: Pathophysiology/Pharmacology/Assessment	6
NURS 2516	Client and Context 2: Human Diversity	2
NURS 2520	Professional Foundations 1: Development of Professional Identity	2
NURS 2530	Nursing Skills 1	1
NURS 2532	Nursing Skills 2	1
NURS 2540	Nursing Practice 1	2
NURS 2542	Nursing Practice 2	3
	Non Nursing required course	2

Year 3 (30 credit hours)

NURS 3510	Client and Context 3: Supportive and Palliative Care	3
NURS 3512	Health and Illness 4: Acute and Chronic Illness	5
NURS 3514	Health and Illness 5: Mental Health and Illness	3
NURS 3520	Professional Foundations 2: Health Education	2
NURS 3530	Nursing Skills 3	1
NURS 3532	Nursing Skills 4	1
NURS 3540	Nursing Practice 3	4
NURS 3542	Nursing Practice 4	4
NURS 3550	Professional Foundations 3: Evidence Informed Practice in the Health Sciences	4
NURS 3560	Professional Foundations 4: Law and Ethics in Nursing Practice	3

4.2 Baccalaureate Program for Registered Nurses (BPRN)

The College of Nursing BPRN was developed to recognize and value the knowledge and experience of practicing Registered Nurses. The learner-centred, process curriculum is designed to further the capacity of Registered Nurse practice in an ever-changing and increasingly complex health care system.

The curriculum consists of a minimum of 33 credit hours in Nursing, and 12 credit hours from Arts, Science or a professional faculty (for a total of 45 credit hours).

Students may elect full-time or part-time study. A variety of community settings are utilized for clinical experience. Courses may be offered in late afternoons or evenings, during Summer session and through distance education (correspondence) or internet-based study.

Students graduating with the minimum of 45 credit hours of coursework will be considered on an individual basis for admission to the graduate program in Nursing (Master of Nursing). For further information, contact the College of Nursing, 474-7452.

4.2.1 Special Student Status in Nursing

Students who are not admitted to the BPRN may be eligible to apply to the College of Nursing as a special student. Once admitted, students may register in University of Manitoba courses. Following are the guidelines for special student status:

- Special Students are allowed to register for a maximum of 15 credit hours.
- Special Students must obtain a minimum of "C" grade in a course in order to transfer credit into the BPRN.
- A nursing course completed as a special student may be accepted subsequently for credit in the BPRN up to five years from the date of completion.

Prior to registering for a nursing course, all special students must obtain written permission from a College of Nursing student advisor and present a photocopy of their current Active Practising Membership with the College of Registered Nurses of Manitoba or other jurisdiction.

Completion of courses as a special student does not guarantee admission into the BPRN. All students must complete the application forms and submit required information by the application deadline for the term in which students are applying, unless otherwise indicated at the time of application.

The College of Nursing will allow Registered Nurses admitted to another faculty at the University of Manitoba or another university to register for a maximum of 15 credit hours of nursing courses prior to being admitted to the College of Nursing. Written permission must be obtained from a student advisor and does not guarantee space in the course.

4.2.2 BPRN - Curriculum

Note: Nursing electives may not be offered every year.

Course No.	Core Courses:	
NURS 3430	Seminar in Professional Nursing Foundations (see Note 1)	2
STAT 1000	Basic Statistical Analysis 1	3
NURS 3210	Nursing Research Methods	3
NURS 3220	Community Health Nursing 1 (see Notes 4 and 5)	4
NURS 4200	The Teaching-Learning Process in Nursing Practice	3
NURS 4210	Independent Study in Nursing Practice	4
NURS 4220	Law and Ethics in Nursing Practice	3
NURS 4310	Nursing Leadership: Issues and Practices	4
	Nursing Electives (see Note 2)	10
	Non-Nursing Electives (see Note 3)	9

Nursing Electives

10 credit hours of acceptable Nursing electives are to be chosen from the following list – at least one course chosen must be a 4 credit hour course.

- NURS 2110 Health Assessment of Individuals (3)
- NURS 2200 Topics in Aging (3)
- NURS 3200 Nursing of Individuals and Families with Long-Term Illness and Disability (4)
- NURS 3230 Perspectives on Mental Health Nursing (4)
- NURS 3330 Women and Health (3)
- NURS 3340 Providing Care in a Culturally Diverse Society (3)
- NURS 3350 Counselling Skills for Nurses (3)
- NURS 3390 Nursing in Rural Environments (4)
- NURS 3400 Men's Health: Concerns, Issues and Myths (3)
- NURS 4160 Community Health Nursing 2 (4)
- NURS 4250 Palliative Nursing Care (BPRN specific section only) (3)

In addition, the following courses from the Inter-Faculty Option in Aging are acceptable as Nursing electives:

- NURS 2610 / KIN 2610 Health and Physical Aspects of Aging (3)
- SWRK 2650/ IDES 2650/ HMEC 2650/ REC 2650 The Social Aspects of Aging (3)

NOTES:

- 1) NURS 3430 should be taken in the first 12 credit hours of the program. Students who have credit for the previous NURS 3190 may substitute this course for NURS 3430.
- 2) Nursing electives may be used to customize a student's program. Electives may be used to expand on a number of different areas of nursing or may be used to focus on a particular area of nursing practice.
- 3) Of the 9 credit hours of non-Nursing electives, no more than 6 credit hours may be at the 1000 (introductory) level. See section 5.4 for suggestions re: Non-Nursing Electives for the BPRN. Students may not take courses for credit for which it is assumed that the content was covered in the diploma nursing program (i.e., Anatomy, Physiology, Microbiology, Pharmacology, Psychology, Sociology, etc.).
- 4) Graduates of the DNA program at Red River College are required to substitute a 4 credit hour Nursing clinical course for NURS 3220.
- 5) NURS 3360 and NURS 4300 are no longer offered. Students who have previously completed either course within 5 years prior to admission to the College of Nursing may use NURS 3360 in place of NURS 3220 and/or NURS 4300 as a nursing elective.

4.2.3 Clinical Courses and NURS 3200 (Long Term Illness) and NURS 4210 (Independent Study) for the BPRN

Review section 3.1 Regulations for All Students which contains information regarding the Personal Health Information Act (PHIA), immunization and CPR regulations, and other information specific to clinical practice.

A clinical project course (normally designated by the fact that it is a 4 credit hour project based course) involves a heavier workload and time commitment than a 3 credit hour course. For most of these courses, clinical placements/assignments will be arranged between the course leader and student at or prior to the start of a term.

For courses NURS 3200 (Long Term Illness) and NURS 4210 (Independent Study), students must contact the course leader at least three months prior to the start of classes to state their intention to register for these courses and to discuss preference of clinical sites. Placement sites will be arranged as requested by the student on a first-come, first-served basis according to the availability of the agency. Registration in these courses is restricted to students who have contacted the course leader.

NURS 4210 Independent Study in Nursing

The Independent Study in Nursing is designed to provide the learner with an opportunity to synthesize previous learning while working with a high degree of independence. Under the guidance of a faculty advisor, students explore a topic of their choosing and design learning objectives consistent with the purpose of the course. Students are required to contact the course leader at least 8 weeks prior to the start of the course to select a topic and faculty advisor. The choice of topic, the proposed plan for completion of the Independent Study, and the faculty advisor must all be approved by the College of Nursing.

Information sessions are scheduled, normally in April for the Fall session and in October for the Winter session, to familiarize students with the course. Students should check the College's web page, BPRN section, for announcements about dates and times.

If a practice setting is required as part of the student's learning objectives, the student is responsible for negotiating access to the setting and addressing agency and faculty requirements. Be advised that there may be organizations which require contractual arrangements with the student and/or the University of Manitoba prior to permitting the student to enter the practice setting. These arrangements are subject to approval by the College and require pre-planning.

Note: the prerequisite for this course is 35 credit hours of completed study in the program.

4.2.4 Courses Which May be Used as Non-Nursing Electives in the BPRN

Courses may be selected from any faculty or school of the University, subject to faculty/department regulations and subject to the student's meeting any prerequisite requirements. See Note 4 under 4.4 BPRN Curriculum. Some suggestions follow:

Faculty of Arts courses - e.g. anthropology, native studies, psychology, sociology, religion

Asper School of Business (Management) - e.g. courses in business administration, management, organizational behaviour

Faculty of Kinesiology and Recreation Management

Faculty of Science - e.g. biology, chemistry, computer science, microbiology, zoology

Faculty of Social Work - e.g. courses in social welfare policy, communication skills

4.3 Courses Available to Students in Other Faculties

Students registered in faculties other than Nursing may take the following Nursing courses without College permission:

NURS 2200 Selected Topics in Aging and Health (see note 1)

NURS 3330 Women and Health (see note 1)

NURS 3400 Men's Health: Concerns, Issues and Myths (see note 1)

NOTES:

1) These courses are not intended for first year students.

SECTION 5: NURSING COURSE DESCRIPTIONS

Nursing Course Descriptions-1000 Level

NURS 1260 Human Growth and Development Cr.Hrs. 3

(Formerly 049.126) Study of the normal growth and development across the lifespan, with consideration of current physiological and psychological knowledge.

NURS 1280 Introduction to Nursing Cr.Hrs. 3

(Formerly 049.128) The profession of nursing and basic concepts relevant to nursing practice, education, and research are described. Past, present and future roles and functions of the nurse will be explored.

NURS 1500 Preparing for Professional Nursing Education Cr.Hrs. 3

Students will develop knowledge, skills, attitudes, and approaches to learning that increases their opportunity for success in baccalaureate nursing education. Restricted to the students in the Aboriginal Cohort in Nursing program.

Nursing Course Descriptions-2000 Level

NURS 2110 Health Assessment of Individuals Cr.Hrs. 3

(Formerly 049.211) The focus is on health assessment of adults including the normal changes which occur in childhood and aging. The course will provide opportunity to learn the health history and physical examination skills essential to health assessment.

NURS 2120 Nursing Health Assessment Cr.Hrs. 4

(Formerly 049.212) This course focuses on the theory and skills necessary to collect a comprehensive health history and perform a complete physical examination. Nursing health assessment is presented as the systematic collection of data that can be used to make decisions about ways to promote, maintain or restore health.

NURS 2130 Nursing Skills Laboratory Cr.Hrs. 2

(Formerly 049.213) This is a scenario based course with an emphasis on provision of safe, competent, ethical care in the context of provision of introductory psychomotor nursing skills. Content is current and evidence based and deals with individuals across the lifespan and across cultures. Development of independent learning strategies and evaluation of learning needs are integral to the course.

NURS 2180 Clinical Nursing Practice I Cr.Hrs. 3

(Formerly 049.218) Concepts of health promotion are applied to the care of infants, children, adolescents and young adults. The focus is on health related nursing phenomena and the development of assessment, communication, teaching/facilitative skills, and basic psychomotor skills. Pre or corequisite: NURS 1280 (or 049.128); and NURS 2120 (or 049.212); and NURS 2130 (or 049.213); and NURS 2240. Course is evaluated on a pass/fail basis.

NURS 2190 Clinical Nursing Practice II Cr.Hrs. 3

(Formerly 049.219) Concepts of health promotion and illness prevention are applied to the care of healthy and at risk elderly adults. The focus is on health risk phenomena and the development of assessment, communication, teaching/facilitative, and basic psychomotor skills. Pre- or corequisite: NURS 1280 (or 049.128); and NURS 2120 (or 049.212); and NURS 2130 (or 049.213); and NURS 2230. Course is evaluated on a pass/fail basis.

NURS 2200 Selected Topics in Aging and Health Cr.Hrs. 3

(Formerly 049.220) Emphasis will be placed on theory and research related to a current topic in aging and health. Special attention will be directed to integrating concepts and processes of aging. A practicum/field work component will be an integral part of the course. Prerequisite: core courses in the Inter-faculty Option in Aging or permission from the course leader.

NURS 2210 Primary Care Skills: Comprehensive Health Assessment Cr. Hrs. 3

(Formerly 049.221) Students will engage in comprehensive data collection through obtaining a health history and performing a complete physical exam on newborn, pediatric, and adult clients.

NURS 2220 Pharmacology in Nursing Practice Cr.Hrs. 3

(Formerly 049.222) Course introduces students to basic concepts and principles related to pharmacology (pharmacokinetics, pharmacodynamics, pharmacotherapeutics) and the nurses' role in drug therapy. The major classifications of drugs will be examined along with issues arising from the use of drug therapy in contemporary society. Prerequisites: ZOOL 1320 (or 022.132) and ZOOL 1330 (or 022.133).

NURS 2230 Health Promotion of Older Adults and their Families Cr. Hrs. 4

Focuses on the aging changes that occur in older adults and the interaction between aging changes and illness and the resultant presentation of symptoms and functional consequences. Health promotion strategies, including health teaching are highlighted to encourage, maintain and enhance independence, based on the older adult's abilities. Selected teaching/learning models, barriers and motivators, and their application to older adults are discussed.

NURS 2240 Health Promotion of Child Bearing & Child Rearing Families Cr.Hrs. 6

This course provides an overview of health promotion of infants, children, adolescents, and parents within the family context. The focus is on theories, concepts, nursing research, evidence-based nursing practice, and nursing care related to children and families. Prerequisite: ZOOL 1320 (or 022.132), ZOOL 1330 (or 022.133), NURS 1260 (or 049.126) and NURS 1280 (or 049.128). Pre or corequisite: NURS 2120 (or 049.212).

NURS 2500 Health and Illness 1: Pathophysiology/ Pharmacology/Assessment Cr.Hrs. 6

This course provides students with a comprehensive survey of selected pathophysiological processes that produce alterations in human health, and the related pharmacological interventions and health assessment techniques. May not be held with: NURS 2120, NURS 2220, NURS 3290, and NURS 3310.

NURS 2510 Client and Context 1: Human Growth & Development Cr. Hrs. 2

This course provides students with knowledge of normal human growth and development across the lifespan. May not be held with NURS 1260. Registration is normally restricted to students in Year 2 of the program.

NURS 2512 Health and Illness 2: The Older Client Cr.Hrs. 2

This course provides students with knowledge of the age-related changes that occur in older adults; the interaction between age-related changes and illness; the functional consequences of these interactions; and the presentation of specific health problems commonly observed in this group. Nursing strategies to encourage, maintain and enhance independence in the older adult are discussed. May not be held with NURS 2230. Pre-or Corequisites: NURS 2500 and NURS 2510. Registration is normally restricted to students in Year 2 of the program.

NURS 2514 Health and Illness 3: Pathophysiology/Pharmacology/Assessment Cr.Hrs. 6

This course provides students with a comprehensive survey of selected pathophysiological processes that produce alterations in human health, and the related pharmacological interventions and health assessment techniques. May not be held with NURS 2120, NURS 2220, NURS 3290 and NURS 3310. Prerequisite: NURS 2500. Registration is normally restricted to students in Year 2 of the program.

NURS 2516 Client and Context 2: Human Diversity Cr.Hrs. 2

This course provides students with knowledge of the social factors that enhance or diminish the health of individuals, families and communities. Students will also analyze the concept of client-centred care and its relevance in professional nursing practice. Pre-or Corequisites: NURS 2500 and NURS 2520. Registration is normally restricted to students in Year 2 of the program.

NURS 2520 Professional Foundations 1: Development of Professional Identity Cr.Hrs. 2

This course provides the student with an introduction to the conduct, knowledge and values that characterize a professional registered nurse. Registration is normally restricted to students in Year 2 of the program.

NURS 2530 Nursing Skills 1 Cr.Hrs. 1

This course introduces students to the basic health assessment and psychomotor skills necessary to provide novice-level nursing care in the practice setting. May not be held with NURS 2120 and NURS 2130. Pre-or Corequisite: NURS 2500. Registration is normally restricted to students in Year 2 of the program. This course is graded on a Pass/Fail Basis.

NURS 2532 Nursing Skills 2 Cr.Hrs. 1

This course introduces students to the basic health assessment and psychomotor skills necessary to provide novice-level nursing care in the practice setting. May not be held with NURS 2120 and NURS 2130. Prerequisites: NURS 2530 and NURS 2540. Pre- or Corequisite: NURS 2514. Registration is normally restricted to students in Year 2 of the program. This course is graded on a Pass/Fail Basis.

NURS 2540 Nursing Practice 1 Cr.Hrs. 2

This course enables students to demonstrate clinical competence by applying the theoretical knowledge, psychomotor skills and health assessment skills covered in Year 1 Term 1 courses in the practice setting. Pre-or Corequisites: NURS 2500, NURS 2510, NURS 2512, NURS 2520 and NURS 2530. Registration is normally restricted to students in Year 2 of the program. This course is graded on a pass/fail basis.

NURS 2542 Nursing Practice 2 Cr.Hrs. 3

This course enables students to demonstrate clinical competence by applying the theoretical knowledge, psychomotor skills and health assessment skills covered in Year 1 Term 2 courses in the practice setting. May not be held with NURS 2190. Pre-or Corequisites: NURS 2514, NURS 2516, and NURS 2532. This course is graded on a pass/fail basis.

NURS 2610 Health and Physical Aspects of Aging Cr.Hrs. 3

(Formerly 049.261) An introduction to health, well-being and aging. Emphasis on health as multidimensional including physical, social and mental health. Integration of theory and research in examining selected issues related to health and physical aspects of aging. Students may not hold credit for NURS 2610 (or 049.261) and PHED 2610 (or 057.261). (A required Option in Aging course)

Nursing Course Descriptions-3000 Level**NURS 3200 Nursing of Individuals and Families with Long-Term Illness and Disability Cr.Hrs. 4**

(Formerly 049.320) Nursing of individuals and families of all age groups who require palliative nursing measures or need assistance in adapting to long-term illness. The learner will participate in planning relevant clinical experiences to meet own learning objectives.

NURS 3210 Nursing Research Methods Cr.Hrs. 3

(Formerly 049.321) This course provides an overview of research strategies in nursing with a focus on developing critical appraisal skills to support evidence-informed nursing practice. Strongly recommended that students complete STAT 1000 prior to NURS 3210.

NURS 3220 Community Health Nursing I Cr.Hrs. 4

(Formerly 049.322) An analysis of concepts of prevention of disease/dysfunction and promotion of health in community based populations. Focus is on primary and secondary prevention and the promotion of health with identified risk groups. Population groups are assessed for risks to their physical and psychosocial health and current preventive and promotive measures analyzed and critiqued. The impact of macro systems in promoting health are discussed. MNHW NURS 3360 (or 049.336).

NURS 3230 Perspectives on Mental Health Nursing Cr.Hrs. 4

(Formerly 049.323) Emphasis will be placed on the mental health needs of individuals and their families who are experiencing mental health problems and/or mental illness. Diverse perspectives on mental health and illness will be explored. A clinical practicum will provide an opportunity to apply mental health nursing principles in community settings.

NURS 3240 Adult Intensive Care Nursing 1 Cr.Hrs. 4

(Formerly 049.324) Focus is on the knowledge, integration and application of major intensive care nursing concepts and theories. Pre- or corequisite: NURS 3440 (or 049.344), formerly PHGY 3240 (or 090.324).

NURS 3250 Laboratory Practice in Adult Intensive Care Nursing Cr.Hrs. 2

(Formerly 049.325) Laboratory course focusing on the acquisition of selected skills associated with the nursing care of critically ill adult patients. Pre- or corequisite: NURS 3240 (or 049.324); NURS 3440 (or 049.344) or 090.324.

NURS 3260 Clinical Practice in Adult Intensive Care Nursing Cr.Hrs. 3

(Formerly 049.326) Selective clinical experience, in adult intensive care settings, is designed to enable the learner to apply critical care theory. Prerequisites: NURS 3240 (or 049.324), NURS 3250 (or 049.325) and NURS 3440 (or 049.344) or 090.324.

NURS 3280 Nursing Skills Laboratory Cr.Hrs. 2

(Formerly 049.328) This is a scenario based course with an emphasis on provision of safe, competent, ethical care in the context of provision of intermediate level psychomotor nursing skills. Content is current and evidence based and deals with individuals across the lifespan and across cultures. Development of independent learning strategies of learning needs are integral to the course.

NURS 3290 Health Restoration in Nursing Cr.Hrs. 6

(Formerly 049.329) This course focuses on concepts, issues and research related to nursing care of clients across the lifespan in the acute phase of disease/disorder and during the perioperative experience. The impact on the family and community will be explored.

NURS 3300 Clinical Nursing Practice III Cr.Hrs. 3

(Formerly 049.330) Students will apply concepts of health restoration to the care of ill clients of all ages and their families in the acute stage of disease/perioperative experience. The focus is on illness related phenomena, critical thinking, the development of the care provider and communicator roles, application of research findings and identification of practice issues. Pre- or corequisite: NURS 3280 (or 049.328); NURS 3290 (or 049.329). Course is evaluated on a pass/fail basis.

NURS 3310 Health Maintenance in Nursing Cr.Hrs. 6

(Formerly 049.331) This course focuses on concepts, issues and research related to nursing care of individuals across the lifespan who require health maintenance for long term illnesses. The impact on the family and community will be explored.

NURS 3320 Clinical Nursing Practice IV Cr.Hrs. 3

(Formerly 049.332) Students will apply concepts of health maintenance to clients of all ages with long term illness. The course focuses chronic illness and related phenomena, analytical thinking, development of nursing roles, application of research findings and memberships on an interdisciplinary team. Pre- or corequisite: NURS 3280 (or 049.328); NURS 3310 (or 049.331). Course is evaluated on a pass/fail basis.

NURS 3330 Women and Health Cr.Hrs. 3

(Formerly 049.333) Introduction to health concepts and issues as they relate to women from a woman's health perspective. Emphasis on enhancing self-care and prevention. Studies the relationship between a woman and the Canadian Health Care System, and appropriate methodology for self-care, vis-a-vis nutrition, reproduction, menarche, menopause, etc. Not to be held for credit with the former 049.423. Caution: This course is not intended for 1st year students.

NURS 3340 Providing Care in a Culturally Diverse Society Cr.Hrs. 3

(Formerly 049.334) This course fosters skills in recognizing and understanding the impact of culture on health related values, beliefs and practices. A culture-general approach is used to develop skills in the provision of nursing care within a culturally diverse society.

NURS 3350 Counselling Skills for Nurses Cr.Hrs. 3

(Formerly 049.335) Builds on the significance of interpersonal skills in nursing practice in health and illness. Examines theoretical basis and practical application of a counselling approach with clients. Students will have the opportunity for experiential learning.

NURS 3360 Assessing the Health of Communities Cr.Hrs. 4

(Formerly 049.336) An analysis of concepts of prevention of disease and dysfunction in aggregate and community-based populations in First Nations Communities. MNHW NURS 3220 (or 049.322).

NURS 3380 Primary Care Skills: Clinical Interventions Cr.Hrs. 6

(Formerly 049.338) Acute and chronic health conditions throughout the lifespan, and as identified in First Nations and Inuit Health Branch's "Scope of Practice" will be addressed through lectures, case studies, student presentations, internet technology and independent learning, basic trauma life support and pediatric life support courses.

NURS 3390 Nursing in Rural Environments Cr.Hrs. 4

(Formerly 049.339) Emphasis will be placed on the health needs of residents in a rural environment. The nature of nursing and issues encountered in a rural setting, whether in a health care institution or a community health nursing practice are explored. A clinical practicum is an integral part of the course.

NURS 3400 Men's Health: Concerns, Issues and Myths Cr.Hrs. 3

(Formerly 049.340) An exploration and examination of concerns, issues and myths surrounding men's health and men's health related behaviours. Students will develop a knowledge base for promoting health and preventing illness in men.

NURS 3430 Seminar in Professional Nursing Foundations Cr.Hrs. 2

(Formerly 049.343) The study and application of academic skills, nursing informatics and theoretical foundations, designed to assist diploma-prepared registered nurses to successfully transition to university and the Baccalaureate Program for Registered Nurses. MNHW NURS 3190 (or 049.319).

NURS 3440 Principles of Disease Related to Adult Intensive Care Cr. Hrs. 3

(Formerly 049.344) Course focuses on advanced physiology and pathophysiology of the following body systems: cardiovascular, respiratory, neurological, renal and endocrine. May not be held with the former 090.324.

NURS 3450 Introduction to Legal and Ethical Foundations of Nursing Practice Cr.Hrs. 3

The legal and ethical foundations that guide nursing practice are examined. The process of critical analysis and reasoning will be applied to common legal and ethical issues. Not to be held with the former 049.216.

Nursing Course Descriptions-4000 Level

NURS 4160 Community Health Nursing II Cr.Hrs. 4

(Formerly 049.416) Application, integration and synthesis of knowledge and skills in the utilization of the nursing process with families. Development of skills in the process of change with families. Orientation to the concept of prevention and health promotion as focal concepts in the practice of nursing with families in communities. Pre- or corequisite: NURS 3220 (or 049.322). MNHW NURS 4300 (or 049.430).

NURS 4170 Issues and Trends in Nursing and Health Care Cr.Hrs. 3

(Formerly 049.417) Study of the forces shaping nursing education, service and research and analysis of current issues in nursing and health care. The learner will develop awareness of professional nursing roles and responsibilities.

NURS 4190 Leadership in Nursing Practice Cr.Hrs. 3

(Formerly 049.419) Focuses on selected theories of leadership and management. Effective interpersonal behaviour in health care organizations will be examined. The learner will explore own potential to effect change in the health care system.

NURS 4200 The Teaching-Learning Process in Nursing Practice Cr.Hrs. 3

(Formerly 049.420) Focuses on theories and models of teaching and learning. Principles and strategies for assessing the health/illness learning needs of individuals, groups and communities and for planning, implementing and monitoring the process in nursing situations will be examined. The nursing research base for the process will be explored. Linkages with related nursing concepts will also be demonstrated.

NURS 4210 Independent Study in Nursing Cr.Hrs. 4

(Formerly 049.421) The learner will have an opportunity to formulate a learning contract to explore, in depth, an area of nursing. This learning contract is to include a major emphasis on the theoretical basis of the selected topic. Prerequisite: 35 credit hours of completed study in the program.

NURS 4220 Law and Ethics in Nursing Practice Cr.Hrs. 3

(Formerly 049.422) A study of the legal and philosophical bases of the nursing profession and the legal and bioethical issues confronting the professional nurse primarily in the practice setting. A major goal of the course is to draw upon material specific to the professional nurse.

NURS 4240 Health Promotion in the Community Cr.Hrs. 4

(Formerly 049.424) This course will provide the opportunity to examine concepts, theories, research and nursing roles as they apply to the promotion of health in communities. Relevant theories and research about group process will be incorporated in the analysis of community health issues.

NURS 4250 Palliative Nursing Care Cr.Hrs. 3

(Formerly 049.425) This course focuses on concepts, issues, research and skills related to the nursing care of individuals across the lifespan who are experiencing irreversible loss. The impact on the family and the community will be emphasized.

NURS 4260 Nursing Care in Mental Health and Illness Cr.Hrs. 3

(Formerly 049.426) This course focuses on the effects of alterations in mental health on the individual, the family and the community. It explores how nurses can facilitate healing and promote mental health. The student will gain a greater awareness of the therapeutic use of self in the provision of nursing care. Societal and historical issues influencing mental health in populations will be highlighted.

NURS 4270 Clinical Nursing Practice V Cr.Hrs. 4

(Formerly 049.427) This course focuses on the application of concepts, issues, research and skills related to the nursing care of individuals and families who are experiencing emotional/psychological distress. The focus is on critical thinking and relational practice skills; and the development of the professional, advocate and collaborator roles. Pre or Co-requisites: NURS 4250 (or 049.425); NURS 4260 (or 049.426). Course is evaluated on a pass/fail basis.

NURS 4280 Theories in Nursing Practice Cr.Hrs. 3

(Formerly 049.428) This course will enable the student to develop skill in the critical analysis of theories proposed by theorists in nursing and other disciplines. The utility of these theories for nursing practice, education and research will be examined.

NURS 4290 Clinical Practicum Cr.Hrs. 10

(Formerly 049.429) This course enables students to integrate and critically apply concepts, theories and relevant research to an area of practice and a client group of their choice. Care will address all levels of health, reflect application of a focused body of theory, and consider concepts of leadership, research, ethics, family and community care. Prerequisites: all courses in the program. Course is evaluated on a pass/fail basis.

NURS 4300 Promoting Health of Communities Cr.Hrs. 4

(Formerly 049.430) Theoretical and practical application regarding the promotion of health in First Nations Communities. MNHW NURS 4160 (or 049.416).

NURS 4310 Nursing Leadership: Practice and Issues Cr.Hrs. 4

(Formerly 049.431) The study of the forces shaping nursing leadership and analysis of current issues and trends in nursing and health care. Emphasis will be placed on leadership development within the context of the health care environment now and into the future. MNHW NURS 4170 (or 049.417) or NURS 4190 (or 049.419).

NURS 4420 Health Promotion in the Community Cr.Hrs. 3

This course will provide the opportunity to examine concepts, theories, research and nursing roles as they apply to the promotion of health in communities. The focus will be on promoting the health of aggregates and communities. Prerequisite: As a general principle, all courses from any given year are to be completed before proceeding to the next year.

NURS 4430 Clinical Nursing Practice 6 Cr.Hrs. 3

Students will apply relevant concepts, theories, and research in population health promotion, primary health care, and prevention of illness. The focus is on the development of nursing skills to work effectively with aggregates and communities. Prerequisites: NURS 2180 (or 049.218), NURS 2190 (or 049.219), NURS 3300 (or 049.330); and NURS 3320 (or 049.332). Corequisites: NURS 4440 and NURS 4420. Course is evaluated on a pass/fail basis.

NURS 4440 Prevention of Illness Cr.Hrs. 3

This course focuses on the concepts of risk reduction and the prevention of illness and injury as they are applied to individuals, groups, and populations. The nurse's role in prevention and the early detection of health risks is highlighted. Issues and research relevant to illness and injury prevention are incorporated. Not to be held with the former NURS 2170 (or 049.217). Prerequisites: As a general principle, all courses from any given year are to be completed before proceeding to the next year.

COLLEGE OF PHARMACY

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Intro to Pharmacy

Pharmacists are specialists in drug therapy and provision of pharmaceutical care. This not only involves the traditional function of preparing and dispensing medications but also includes designing and monitoring drug therapy plans to optimize patient care. The College of Pharmacy has been educating pharmacists for over one hundred years. It has dynamic faculty members characterized by their teaching expertise, research programs and practice partnerships in the health sciences. Members of the College are internationally recognized through their participation in research and various committees and agencies. Their research is funded through a variety of sources including, CIHR, NSERC, CRC, MHRC, various other government agencies, and the pharmaceutical industry.

The undergraduate pharmacy program is meant to prepare students for entry-level practice in the profession of pharmacy by providing them with a solid foundation in the basic, pharmaceutical and clinical sciences which is applied to the concept of pharmaceutical care. In addition, the program is designed to provide students with a broad experience in patient care through the nineteen weeks of practical experience in health orientated health care settings and hospital and community pharmacies. The experience is further enhanced with a seven week open elective program in the final year of studies.

Chapter Contents

SECTION 1: DEGREE PROGRAMS OFFERED

1.1 Programs

1.2 Professional Designation

SECTION 2: ADMISSION REQUIREMENTS

2.1 Course Requirements

2.2 Other Requirements

SECTION 3: COLLEGE ACADEMIC REGULATIONS

3.1 Scholastic Progress

3.2 Appeals Concerning Scholastic Progress

3.3 Transfer of Credit Earned Elsewhere

3.4 Residence Requirements

3.5 Attendance at Class

3.6 Voluntary Withdrawals

3.7 Deferred Final Examinations

3.8 Incompletes

3.9 Dean's Honour List

3.10 Academic Self-Declaration

3.11 Experiential Training

3.12 Academic Honesty

3.13 Professional Unsuitability By-Law

3.14 Completion of the Bachelor Program

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

4.1 Student Responsibility

4.2 Registration Assistance

4.3 Course Information by Year

SECTION 5: COURSE DESCRIPTIONS

SECTION 1: DEGREE PROGRAMS OFFERED

1.1 Programs

Program/Degree	*Years to Complete	*Total Credit Hours
B.Sc. Pharmacy	5	166

*This includes one year (30 credit hours) of study in University 1.

1.2 Professional Designation

The College of Pharmacists of Manitoba

Students who are accepted for admission to the College of Pharmacy shall file an application for registration as a student of the College of Pharmacists of Manitoba, prior to the start of classes in September of the year they are admitted. Information will be included in the admission package sent to each student, and can also be obtained from The College of Pharmacists of Manitoba, 200 Tache Ave., Winnipeg, Manitoba R2H 1A7; telephone, (204) 233-1411. Failure to complete this requirement will result in students being unable to participate in the Structured Practice Experiential Program (SPEP).

Full information on the requirements for licensure in the Province of Manitoba is available from the Registrar of The College of Pharmacists of Manitoba.

Pharmacy Examining Board of Canada

All applicants for licensure must pass the qualifying examinations of the Pharmacy Examining Board of Canada. Although PEBC does not require language proficiency tests, Provincial Regulatory Authorities do require these tests and language proficiency does affect candidates' performance in the Qualifying Examination (Part I and Part II). Effective written and verbal communication skills, at levels satisfactory for a health professional, are essential for practice and for success in taking the PEBC examinations.

SECTION 2: ADMISSION REQUIREMENTS

2.1 Course Requirements

(University of Manitoba)

Chemistry **CHEM 1300 and CHEM 1310**

Biology **BIOL 1020 and BIOL 1030**

Mathematics **MATH 1500, or MATH 1510, or MATH 1520, or MATH 1230**

6 credit hours of Faculty of Arts courses

9 credit hours of open electives (any faculty)

Electives must include a 3 credit hour course which will meet the University's Written English (W) requirement. 0900 level courses such as ENGL 0930 are NOT acceptable as electives.

All admission requirements, as well as application deadline dates and forms, are included in the Applicant Information Bulletin which is available on the University website at: <http://umanitoba.ca/student/admissions/application/programs/pharmacy-application.html>

2.2 Other Requirements

Other requirements

High school prerequisites: Biology 40S, Chemistry 40S, and Pre-Calculus Math 40S (min. 60%).

Minimum AGPA for consideration: 3.50. (Please refer to the College of Pharmacy Applicant Information Bulletin for more details.)

The admission process includes a written critical skills essay.

Selection criteria: 70% AGPA, 30% Written critical skills essay. Only students with an essay score of fifteen or more (out of a possible thirty) will be ranked for admission.

Criminal Record Check, Child Abuse Registry Check and Adult Abuse Registry Check

Many health care agencies where Pharmacy students are placed in a health care setting require a criminal record check, child abuse registry check and adult abuse registry check. As a result all successful applicants to the College of Pharmacy are required to provide a self-declaration of a Criminal Record, Child Abuse Registry and Adult Abuse Registry listing following provisional admission, and subsequently a current, official Criminal Record Search, Child Abuse Registry Check and Adult Abuse Registry Check. All documents must be submitted to the College of Pharmacy Dean's Office by the first day of classes. Any applicant on the Child Abuse Registry will be denied admission. A criminal conviction will not necessarily result in denial of admission to the College of Pharmacy. Criminal offences will be reviewed by a sub-committee of the Pharmacy Admissions Committee for the implications of the conviction in view of the professional mandate to protect the public. Failure to disclose any adult criminal record or listing on the Child Abuse or Adult Abuse Registry will invalidate an application and shall result in automatic expulsion from the College of Pharmacy if the applicant has been admitted. In addition, the College of Pharmacists of Manitoba requires that all graduates of the College of Pharmacy who wish to obtain a license to practice pharmacy in this province, must disclose information about any conviction for an offence under the Criminal Code (Canada), the Controlled Drugs and Substances Act

(Canada), or the Food and Drugs Act (Canada) in order to be considered for eligibility for registration with the College of Pharmacists of Manitoba. The review process conducted by the College of Pharmacy is independent of the review process conducted by the College of Pharmacists of Manitoba.

Immunization

All students enrolled in the College of Pharmacy must be immunized against the following diseases: diphtheria/tetanus/pertussis, polio, rubella, measles, mumps, chickenpox, Mantoux/Tuberculosis, hepatitis B and influenza. Students admitted to first year Pharmacy will be provided with an Immunization package at the time of acceptance into the program. Students have the option to complete their immunizations with their own healthcare provider or participate in the Bannatyne Immune Status Program on campus. Students will be required to complete their Immunization Record Form by the end of their first year. Students will not be able to attend clinical rotations until all immunization requirements are up-to-date. Students are responsible for updating their immunizations as needed. Completion of the immunization schedule is required for course progression in Pharmacy.

SECTION 3: COLLEGE ACADEMIC REGULATIONS

The provisions of the chapter, General Academic Regulations and Requirements, and the chapter, University Policies, apply to all students. In addition, the College of Pharmacy has regulations and requirements, published below, that apply specifically to its students.

3.1 Scholastic Progress

For course progression in the College of Pharmacy students must achieve a minimum combined fall and winter term GPA of 2.00, and attain the minimum passing grade of "C" in each course.

A student in any of the first three years of the pharmacy program who records no more than two grades of "D" during the academic year, and who achieves a minimum combined fall and winter term GPA of 2.00, may at the discretion of the dean be permitted to apply for a supplementary examination in those courses.

A student in the fourth year of the pharmacy program who records no more than one grade of "D" during the academic year, and who achieves a minimum combined fall and winter term GPA of 2.00, may at the discretion of the dean be permitted to apply for a supplementary examination in that course.

Application forms for supplementary examinations are available in the College of Pharmacy Dean's Office, and the examination is subject to a prescribed fee. Supplementary exams will normally take place in the following mid-summer examination session each year.

A student who has failed to record a minimum grade of "C" in more than two courses within years one to three of the pharmacy program, or in more than one course in the fourth year of the pharmacy program, or who records a grade of "F" during the academic year at any stage during their program may not be granted supplementary examinations unless the dean by reason of special circumstances applicable to the student's case otherwise decides.

A candidate who has been allowed to sit for a supplementary examination may not be awarded a grade higher than "C" in that course. Grade calculations for any course following supplementary examination will be inclusive of on-course assessment. Grades achieved following supplementary examination will replace those grades originally recorded on the student's academic record.

A student who fails to achieve a passing grade of "C" in one course, following supplementary examination if that option is offered, and who achieves a minimum combined fall and winter term GPA of 2.00, will be required to repeat that course and may at the discretion of the dean be required to repeat all, or a number of courses in that year.

A student whose combined fall and winter term GPA falls below 2.00, or who fails to achieve a minimum passing grade of "C" in two courses, following supplementary examination if that option is offered, and whose combined fall and winter term GPA remains above 1.75, will be considered to have failed that year, and will be required to repeat all subjects in the following academic year.

The records of all students who fail a year, and the disposition of the cases, shall be reported to College Council for information, but not for debate. Students who have cause to disagree with the disposition may file an appeal against the decision.

A student who fails more than one year in the program, or who fails the same year twice, shall be required to withdraw from the Pharmacy program.

A student who fails to achieve a passing grade in more than two courses in the academic session, or whose combined fall and winter term GPA falls below 1.75, or who fails to achieve a passing grade in a repeated year, will be required to withdraw from the Pharmacy program.

3.2 Appeals Concerning Scholastic Progress

Should a student wish to appeal against any decision concerning scholastic progress, the following procedure should be followed:

The problem should be discussed with the Associate Dean (Academic) of Pharmacy, who will supply information about the appeals procedure, academic regulations and related matters.

Students who still wish to proceed with an appeal should consult the office of [Student Advocacy](#) for advice and assistance, and a letter of appeal must be sent to the dean within 21 days of receiving notification of the decision. The letter should state the nature of the decision being appealed and the alternative that is being requested.

The Dean will respond in writing to notify the appellant of the date and time the student should attend a meeting of the College Appeals Committee.

The Appeals Committee will comprise: the Dean of the College (or designate) as chair; one senior support staff member as secretary; three members of the full-time faculty appointed by the full-time faculty; a representative of the profession appointed by the College of Pharmacists of Manitoba. The chair and senior support staff member are non-voting members.

Appellants have the right to attend the hearing of their appeal and may have a representative to assist them at the appeal hearing. This representative may be the Student Advocate or a fellow student or other full-time member of the university community not receiving payment for appearing, or working for Legal Aid. In addition, if the student wishes, one member of his or her immediate family, and also if desired a lawyer, may be present, but as observers who do not participate. The decision of the Appeals Committee will be conveyed to the student as soon as possible after the hearing.

If the appellant is still dissatisfied they may wish to discuss the issue further with [Student Advocacy](#). Student appellants should not expect a favourable decision when their appeal is based on grounds related to external factors such as employment, sports, or hobbies.

3.3 Transfer of Credit Earned Elsewhere

Pharmacy students transferring credit from any faculty or school in the University of Manitoba or from other universities or colleges will have each course acceptable for transfer noted on the student record with the course classification of "TR" (transfer). The relevance of courses completed to the student's educational objective at the University of Manitoba and the quality of academic achievement as evidenced by the student's grades will be determining factors in assessing acceptability of credits earned elsewhere. No transfer of credit will be given for courses taken ten years or more prior to the application date. No transfer of credit will be permitted for courses where a "D" grade (or its percentage equivalent) has been awarded.

3.4 Residence Requirements

A minimum of two years attendance at the university within the College is required for the Bachelor of Science in Pharmacy, except with the permission of the College.

3.5 Attendance at Class

Regular attendance is required of all students in all courses. Students who are absent from class for a period of three days or more due to illness must present a certificate from a physician to the Dean's Office upon their return. An instructor may initiate procedures to debar a student from attending classes and from final examinations where unexcused absences exceed three continuous sessions. Students must obtain prior approval from the Dean for an absence exceeding one day for reasons other than illness.

3.6 Voluntary Withdrawals

Any student seeking to withdraw from a portion of, or all of their courses must provide written notification to the Dean's Office of the reasons for this request. Re-entry to Pharmacy by students who voluntarily withdraw, will be dependent on the availability of space and external rotation facilities. Any student who has voluntarily withdrawn from a portion of, or all of their courses in Pharmacy on more than one occasion will not be permitted re-entry into the program. Withdrawals for medical or compassionate reasons will not contribute toward this maximum. Students who, for medical reasons, withdraw from the program may not re-register until they have established, through proper medical consultation, their fitness to resume studies.

3.7 Deferred Final Examinations

Students may file an application for a deferred final examination with the Dean for reasons of illness or other disability, or for compassionate reasons, setting out the reasons for the deferral. The application must normally be filed within forty-eight (48) hours of the scheduled date of the missed examination or, in a case where more than one examination was missed, within forty-eight (48) hours of the scheduled date of the last examination missed. The application must be accompanied by a medical certificate or otherwise appropriate documentation certifying the reason for the deferral, the inability of the student to write the examination at the regular scheduled time and, where possible, indicating the period of incapacity. Based on the evidence provided, the Dean shall decide whether the application is approved. Students who, for medical reasons receive deferred examination privileges for all final examination series may not re-register until they have established, through proper medical consultation, their fitness to resume studies.

Students may request a deferred examination(s) on the grounds that they are unable to write said examination(s) due to:

- (a) participation in an inter-university, provincial, inter-provincial, national or international scholastic or athletic event
- (b) religious obligations; or
- (c) a medical condition.

Students requesting a deferred examination due to a known condition as listed above must file an application normally twenty (20) working days prior to the day of the scheduled examination.

Any student requesting deferred examination(s) will be required to sign an undertaking that the student has not discussed, reviewed, had access to, or otherwise become aware of the contents of the deferred examination except as expressly authorized by the instructor or professor for the course in which the deferred examination is being undertaken.

3.8 Incompletes

A student who is unable to complete the term work prescribed in a course may apply to the instructor prior to the end of lectures for consideration of a grade classification of 'Incomplete'. Should an 'incomplete' be granted the student will still be required to write the final examination, if one is scheduled for the course, and a temporary grade of 'IF' will be submitted. In addition to the grade, the recommendation for an 'incomplete' should indicate the reason(s) for consideration being given, a description of the outstanding work to be completed, and the date by which the work must be submitted. If a final grade is not reported by the above maximum extension deadlines, the letter 'I' will be dropped and the grade of 'F' will remain as awarded, unless where specific circumstances warrant, the Associate Dean (Academic) extends the date by which an Incomplete must be cleared. Instructors must formally request such an extension prior to the elapse of the maximum deadline date. In addition, the Registrar's Office must be notified of the extension.

3.9 Dean's Honour List

Eligible students who achieve a combined fall and winter sessional GPA of 4.00 or higher will be placed on the Dean's Honour List. Eligible students must have completed a minimum of 12.5 credit hours in each of the fall and winter terms. (Exception: Fourth year students must complete a minimum of 10 credit hours during the winter term). The Dean's Honour List designation is not applied until the end of the winter term.

3.10 Academic Self-Declaration

All students accepted into the College of Pharmacy will be required to complete a Self-Declaration of Records Form which declares current or previous academic suspensions and disciplinary actions. The disclosure contained therein must be satisfactory to the College of Pharmacy.

3.11 Experiential Training (Structured Practical Experiential Program [SPEP])

Approved Placement Sites are limited, and the University cannot warrant that it will be able to find sufficient suitable placement sites in convenient locations, in a timely manner or at all. Students are responsible for all costs associated with SPEP, including travel and living expenses where placements are outside Winnipeg.

Under The Workers Compensation Act (Manitoba), students of the University of Manitoba who are engaged in a field practicum as a required part of their program are generally covered for injuries sustained in the course of and arising out of the practicum in accordance with and subject to the provisions of The Workers Compensation Act. However, where the practicum takes place outside of Manitoba, and the student is not a Manitoba resident, workers compensation coverage may not be extended, based on the provisions of The Workers Compensation Act. The Workers Compensation Board will not make advance rulings in these types of cases.

Therefore, students who are not Manitoba residents and are trying to arrange a practicum outside Manitoba may experience difficulties or be denied a placement because the University is not able to guarantee that workers compensation coverage will be extended. Alternative arrangements can sometimes be made to accommodate such practicums, but will have to be done on a case by case basis. Students are encouraged to contact the Structured Practical Experiential Program (SPEP) Coordinator at the earliest opportunity to determine if any such alternative arrangements are possible.

3.12 Academic Honesty

Many courses in the College of Pharmacy require group projects and students should be aware that these are subject to the same rules regarding academic honesty as individual projects. Because of the unique nature of group work, all members of the group should exercise special care to insure that work completed does not violate academic integrity. Should a violation occur, group members will be held jointly accountable unless the violation can be attributed to a specified individual, or group of individuals.

In the College of Pharmacy all suspected cases of academic dishonesty will be passed to the Dean's Office for evaluation.

3.13 Professional Unsuitability By-Law

The Senate has approved a by-law granting authority to the College to require a student to withdraw for reasons of professional unsuitability. Copies of this by-law may be obtained from the College of Pharmacy Dean's Office.

3.14 Completion of the Bachelor Program

The maximum time allowable for completion of the Bachelor of Science, Pharmacy degree is seven years. Students must successfully complete all of the course work associated with a year in the program prior to being allowed to register for courses in the next year. In certain cases, the dean may grant exceptions to this requirement.

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

4.1 Student Responsibility

Students are advised to carefully review the College of Pharmacy chapter of the Undergraduate Calendar to ensure compliance with degree program requirements.

It is the student's responsibility to know all relevant regulations, policies and practices.

Final completion of degree requirements is the responsibility of the student.

The University of Manitoba Registration System is not a degree audit system and the onus is on students to make sure they are selecting courses appropriate to their academic program.

4.2 Registration Assistance

If you have questions or problems with your registration you can contact the Aurora Student Help Line at (204) 474-9420, or call the College of Pharmacy Dean's Office at (204) 474-9306.

4.3 Course Information by Year

First Year Orientation

A mandatory orientation session will be held on Wednesday, September 9, 2015 for 1st Year Pharmacy students. More information on the orientation session will be provided to all students admitted to the college.

First Year Students

It is important that you register at your initial access time to guarantee that you get space in the required Science courses. All Pharmacy reserved space in Science will only be held until early August.

When registering for Chemistry & Microbiology please register in the correct lecture & lab sections that have been reserved for Pharmacy Students.

Fall Term classes commence on Thursday, September 10, 2015. Attend all lectures/laboratories scheduled for that day.

The courses in the first year of the program are as follows:

Course No.		Credit Hours
First Year		
CHEM 2210	Organic Chemistry	3
CHEM 2360	Biochemistry 1	3
CHEM 2370	Biochemistry 2	3
PHRM 1000	Introduction to Pharmacy	1
PHRM 1110	Pharmacy Skills Laboratory 1 (PSL-1)	3
PHRM 1300	Fundamentals of Pharmaceutics	2
PHRM 1430	Applied Pathophysiology for Pharmacy Students	3
PHRM 1700	Structured Practical Experiential Program 1 (SPEP-1)	1
MBIO 1010	Microbiology I	3
ANAT 1030	Human Anatomy	3
PHGY 1030	Fundamentals of Medical Physiology	6
Total Credit Hours		31

Second Year Students

It is important that you register at your initial access time to guarantee that you get space in the required Science courses. All Pharmacy reserved space in Science will only be held until early August.

When registering for Microbiology please register in the correct lecture section that has been reserved for Pharmacy Students.

Fall Term classes commence on Thursday, September 10, 2015. Attend all lectures/laboratories scheduled for that day.

PHRM 2700 (SPEP-2) – This course falls under the Spring/Summer session guidelines. The College of Pharmacy Dean's Office will register you for this course in March. Fees for **PHRM 2700** will be assessed in March 2016.

SPEP-2 will take place May 2-13, 2016 with a debriefing session to be held on May 13, 2016.

The courses in the second year of the program are as follows:

Second Year		
PHRM 2100	Pharmacy Skills Lab 2 (PSL-2)	3
PHRM 2222	Medicinal Chemistry	6
PHRM 2270	Pharmaceutics/Biopharmaceutics	6
PHRM 2280	Pharmacokinetics	3
PHRM 2320	Clinical Pharmacy 1	5
HNSC 2170	Nutrition for Health Professionals	2
PHRM 2700	Structured Practical Experiential Program 2 (SPEP-2)	2
MBIO 3010	Mechanisms of Microbial Disease	3
PHAC 2100	Pharmacology	6
Total Credit Hours		36

Third Year Students

Please register at your initial access time.

Fall Term classes commence on Thursday, September 10, 2015. Attend all lectures/laboratories scheduled for that day.

Term 2:

ACADEMIC CALENDAR 2015-2016

Classes Start:	January 5, 2016
Classes End:	March 24, 2016
Exams:	March 28- April 1, 2016
SPEP 3:	April 4 - 29, 2016

The SPEP-3 debriefing session will be held on April 29, 2016.

PHRM 3700 (SPEP-3) – This course falls under the Spring/Summer session guidelines. The College of Pharmacy Dean's Office will register you for this course in March. Fees for **PHRM 3700** will be assessed in March 2016.

The courses in the third year of the program are as follows:

Third Year		
PHRM 3110	Pharmacy Skills Lab 3 (PSL- 3)	3
PHRM 3230	Principles of Professional Practice	2
PHRM 3310	Clinical Pharmacy 2	10
PHRM 3320	Pharmaceutical Analysis Lab	3
PHRM 3430	Natural Products	3
PHRM 3520	Principles of Scientific Literature Evaluation	4
PHRM 3550	Clinical Pharmacokinetics	3
PHRM 3640	Principles of Biotechnology	3
PHRM 3700	Structured Practical Experiential Program 3 (SPEP-3)	4
Total Credit Hours		35

Fourth Year Students

Please register at your initial access time.

Fall Term classes commence on Tuesday, September 8, 2015. Attend all lectures scheduled for that day.

Classes End:	Monday, November 2, 2015
Exams:	November 4-6, 2015
SPEP:	Block 1 November 9 - December 18, 2015
	Block 2 January 4 - February 12, 2016
	Block 3 February 22 – April 1, 2016
Electives:	Block 1 November 9 - December 23, 2015
	Block 2 January 4 – February 19, 2016
	Block 3 February 22 – April 8, 2016

The courses in the fourth year of the program are as follows:

Fourth Year		
PHRM 4230	Pharmacy Practice Management	4
PHRM 4310	Clinical Pharmacy 3	4
PHRM 4450	Toxicology	3
PHRM 4470	Current Topics	3
PHRM 4700	Structured Practical Experiential Program 4 (SPEP - 4)	10
PHRM 4800	Electives Program	10
Total Credit Hours		34

Total Program Credit Hours: 136

NOTES:

Students may not obtain any grade lower than "C" in all required courses.

A decision will be made annually on whether these courses will be taught in fall or winter term, or both.

SECTION 5: COURSE DESCRIPTIONS

PHRM 1000 Introduction to Pharmacy Cr.Hrs. 1

(Formerly 046.100) This course provides an orientation to Pharmacy and to the application of medicines within the context of today's dynamic medical care system. It has been designed to highlight professionalism early in the Pharmacy curriculum and will provide the opportunity for students to interact with Pharmacy professionals "at the cutting edge" of pharmacy practice.

PHRM 1110 Pharmacy Skills Laboratory Cr.Hrs. 3

This is a multifaceted course using an integrated skills laboratory format to develop essential skills that students require for pharmacy practice. These skills primarily involve communication, problem solving and critical thinking that form the foundation for life-long learning. Exploring ethical principles and professionalism are also essential components of this course.

PHRM 1300 Fundamentals of Pharmaceutics Cr.Hrs. 2

(Formerly 046.130) In a classroom and laboratory setting, this course provides an introduction to the compounding of pharmaceutical products and the physiochemical basis of product formulation. Practical aspects of formulation and an introduction to the dispensing function are also explored.

PHRM 1430 Applied Pathophysiology for Pharmacy Students Cr.Hrs. 3

(Formerly 046.143) A comprehensive theoretical foundation of the phenomena that produce alterations in human physiology function across the lifespan. Course content will prepare the student for subsequent courses related to diagnosis and management of disease processes associated with pathophysiologic dysfunction/alterations.

PHRM 1700 Structured Practical Experiential Program 1 Cr.Hrs. 1

(Formerly 046.170) This course is a service-learning experience, providing students the opportunity to work in community-based patient/client-centred settings. This course also includes two half day job shadowing experiential rotations in a variety of pharmacy practice settings (eg. community pharmacy practice, institutional pharmacy practice) under the supervision of pharmacist preceptors consistent with the Manitoba Pharmacy Act. It serves to familiarize students with the health care setting and the pharmacist's role. Students will be graded on a pass/fail basis.

PHRM 2100 Pharmacy Skills Lab 2 Cr.Hrs. 3

(Formerly 046.210) This course develops essential skills required for pharmacy practice. Focus is on drug distribution, pharmacy law, communication with "standardized patients" and drug information.

PHRM 2222 Medicinal Chemistry Cr.Hrs. 6

This course explores the physicochemical aspects of drug structure in absorption, distribution, metabolism, and excretion and the interaction between drugs and their receptors as they relate to the biochemical, pharmacological, and therapeutic actions of medicinal compounds. Not to be held with the former PHRM 220 or PHRM 3220. Prerequisites: CHEM 2210, CHEM 2360, CHEM 2370.

PHRM 2270 Pharmaceutics/Biopharmaceutics Cr.Hrs. 6

(Formerly 046.227) This course introduces principles of formulation and good pharmaceutical manufacturing practice, including aspects of product development and assessment, stability testing, and quality control. It also explores the application of dosage forms to clinical situations.

PHRM 2280 Pharmacokinetics Cr.Hrs. 3

(Formerly 046.228) This course introduces principles of pharmacokinetics to predict how drugs will be absorbed, distributed, metabolized and excreted from the body. Practical application of concepts and calculations will be emphasized.

PHRM 2320 Clinical Pharmacy 1 Cr.Hrs. 5

This course introduces principles of drug therapy to manage self-care conditions and ambulatory ailments. There is also a component of health promotion with a focus on clinically relevant nutrition topics for pharmacists. Non-prescription and prescription treatment approaches will be covered within the course. May not be held with the former PHRM 2310.

PHRM 2700 Structured Practical Experiential Program 2 Cr.Hrs. 2

(Formerly 046.270) This course offers experiential learning in a variety of pharmacy practice settings (eg. community pharmacy practice, institutional pharmacy practice) It consists of 2 one week rotations at the end of the second year of the program. This course builds on skills learned in SPEP 1 and focuses on the practice of drug preparation and distribution, non-prescription medication counseling, and jurisprudent under the supervision of pharmacist preceptors consistent with the Manitoba Pharmacy Act. Students will be graded on a pass/fail basis.

PHRM 3110 Pharmacy Skills Laboratory III Cr.Hrs. 3

(Formerly PHRM 3100, 046.310) The course develops essential skills required for pharmacy practice. The focus is on interaction with patients and other health care professionals and the application of essential knowledge, skills and values required for the provision of pharmaceutical care. May not be held with PHRM 3100 or 046.310.

PHRM 3230 Principles of Professional Practice Cr.Hrs. 2

This course offers the opportunity to explore professionalism, ethics and socio-economic aspects of the health care system. May not be held with PHRM 3210.

PHRM 3310 Clinical Pharmacy 2 Cr.Hrs. 10

(Formerly 046.331) This course builds on principles of drug therapy introduced in Clinical Pharmacy 1. Aspects of providing direct patient care are emphasized to identify, solve and prevent actual or potential drug-related problems. The course also expands knowledge of "Over the Counter (OTC)" medications as therapeutic alternatives and introduces home diagnostic testing

PHRM 3320 Pharmaceutical Analysis Lab Cr.Hrs. 3

(Formerly 046.332) This course offers the opportunity to prepare pharmaceutical dosage forms and perform analytical testing on the products. Qualitative and quantitative instrumental assay techniques are introduced.

PHRM 3430 Natural Products Cr.Hrs. 3

(Formerly 046.343) Medicinal products of natural origin; introduction to systems of complementary medicine. Therapeutic aspects and products are emphasized

PHRM 3520 Principles of Scientific Literature Evaluation Cr.Hrs. 4

Primary literature is critically analyzed. Discussion of how study results impact on treatment strategies are emphasized. May not be held with PHRM 3510.

PHRM 3550 Clinical Pharmacokinetics Cr.Hrs. 3

This course explores the practical application of pharmacokinetic concepts, calculations, and patient factors which effect pharmacokinetics in the clinical setting. Emphasis is on selected medications that require closer monitoring to ensure efficacy and patient safety. may not be held with PHRM 3500 or 046.350.

PHRM 3640 Principles of Biotechnology Cr.Hrs. 3

(Formerly 046.364). Introduction of biotechnology in pharmaceutical science and pharmacy. Students will be introduced to concepts from molecular biology, immunology, biotechnology and pharmacogenomics.

PHRM 3700 Structural Practical Experiential Program 3 Cr.Hrs. 4

(Formerly 046.370) This course offers experiential learning in a variety of pharmacy practice settings (e.g. community pharmacy practice, institutional pharmacy practice) It consists of 2 two week rotations at the end of the third year of the program. This course builds on skills learned in SPEP 1 and SPEP 2 and focuses on the introduction of applying pharmaceutical care to patients under the supervision of pharmacist preceptors consistent with the Manitoba Pharmacy Act. Students will be graded on a pass/fail basis.

PHRM 4230 Pharmacy Practice Management Cr.Hrs. 4

(Formerly 046.460) An Introduction to administrative and behavioural sciences as they relate to planning, organization and operation of pharmacy practice and to the control of human and financial resources.

PHRM 4310 Clinical Pharmacy 3 Cr.Hrs. 4

(Formerly 046.444) A problem-based therapeutics course that builds on PHRM 3310. The emphasis is on the provision of pharmaceutical care to enhance students' ability to identify, resolve and prevent drug-related problems in given clinical scenarios.

PHRM 4450 Toxicology Cr.Hrs. 3

(Formerly 046.445) Toxicology of prescription and non-prescription medications and drugs of abuse. The emphasis is on the study of emergency treatments of the overdosed patient. Forensic aspects of common poisonings and drug overdoses are also discussed

PHRM 4470 Current Topics Cr.Hrs. 3

(Formerly 046.447) A discussion of topics of immediate interest to the profession. Subject to satisfactory completion of required projects and presentations. Attendance of 80% is mandatory. Students will be graded pass/fail.

PHRM 4700 Structural Practical Experiential Program 4 Cr.Hrs. 10

(Formerly 046.461) This course offers experiential learning in a variety of pharmacy practice settings (e.g. community pharmacy practice, institutional pharmacy practice) It consists of 2 six week rotations. This course builds on skills learned in SPEP 1, SPEP 2 and SPEP 3 and focuses on practicing advanced pharmaceutical care and further developing therapeutic and disease knowledge under the supervision of pharmacist preceptors consistent with the Manitoba Pharmacy Act. Students will be graded on a pass/fail basis.

PHRM 4800 PHARM ELECTIVES Cr.Hrs. 10

This program offers students the opportunity to explore areas in research and professional practice that are not part of the required undergraduate courses. Students have the option of applying to conduct projects at sites pre-approved by the Faculty or to propose alternative avenues for self-directed learning. All project proposals need to obtain final approval from the Faculty of Pharmacy which facilitates students' placement. Assessment will be based on written reports submitted by individual students to the Faculty of Pharmacy. Students will be graded on a pass/fail basis.

COLLEGE OF REHABILITATION SCIENCES

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Chapter Contents

SECTION 1: DEGREE PROGRAMS OFFERED

1.1 Programs

1.2 Professional Designation

SECTION 2: ADMISSION REQUIREMENTS

2.1 Course Requirements: Respiratory Therapy

SECTION 3: FACULTY ACADEMIC REGULATIONS

3.1 General

3.2 Health Requirements

3.3 Dean's Honour List

3.4 Attendance

3.5 Criminal Record and Vulnerable Persons Check, Adult Abuse Registry Check and Child Abuse Registry Check

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

4.1 Academic Education

4.2 Clinical/Fieldwork Education

SECTION 5: COURSE DESCRIPTIONS

SECTION 1: DEGREE PROGRAMS OFFERED

1.1 Programs

Program/Degree	Years to Complete	Total Credit Hours
Bachelor of Respiratory Therapy (B.R.T.) *	Regular Program: 4 years (University 1 plus 3 years)	136 **
	Degree Completion Program: 5 years	30

* The B.R.T. replaces the former B.M.R. (R.T.).

** For students admitted into the B.R.T. degree program in 2014 or later.

The College of Rehabilitation Sciences also offers Master of Occupational Therapy and Master of Physical Therapy programs. Refer to the U of M Graduate Studies Calendar for further info on these programs.

1.2 Professional Designation

Bachelor of Respiratory Therapy (B.R.T.)

Respiratory Therapists are able to work throughout Canada after graduation from a Council on Accreditation in Respiratory Therapy accredited (CoARTE) educational program and successful completion of the credentialing examination produced by the Canadian Board for Respiratory Care (CBRC). Only the Canadian Society of Respiratory Therapists (CSRT) has the right to confer the title of Registered Respiratory Therapist (RRT) by virtue of a candidate's successful completion of the national certification examinations. The examination produced by the CBRC is recognized both nationally and internationally. In order to write the CBRC examination, applicants must have graduated from a respiratory therapy educational program in Canada, which has been accredited by CoARTE. Writing of the national exam is scheduled twice a year. The University respiratory therapy department provides a list of potential program graduates to the CBRC in order to verify eligibility to write the national certification exam. Further information regarding the national certification exam can be found at <http://www.csrt.com/en/education/index.asp>.

Students admitted into the program of studies in respiratory therapy should note carefully that while the University of Manitoba, College of Rehabilitation Sciences may admit students to its course of studies, the right to practice as a respiratory therapist is granted only through the appropriate authority of the province concerned, through a process of licensure. To be eligible for employment in Manitoba, graduates must register with the Manitoba Association of Registered Respiratory Therapists (MARRT). Regulations are similar in most other provinces in that the students must pass the CBRC examination and be registered with the regulatory body in that jurisdiction. Further information regarding registration in Manitoba can be found at <http://www.marrrt.org/index.jsp?p=membership>. Students are highly encouraged to become student members of both provincial and national professional associations.

The Respiratory Therapy program maintains accreditation through the Council on Accreditation of Respiratory Therapy Education (CoARTE). The University of Manitoba Respiratory Therapy program underwent a complete accreditation process in 2013 and was awarded "accreditation" status by CoARTE until 2019.

SECTION 2: ADMISSION REQUIREMENTS

The following is a summary of the admission requirements for Respiratory Therapy. Equivalent academic courses completed at the University of Manitoba or recognized universities elsewhere will be considered. All admission requirements, as well as application deadline dates and forms, are included in applicant information packages that are available from the College of Rehabilitation Sciences website (<http://umanitoba.ca/medrehab>). Info can also be obtained from the Admissions Office, Enrolment Services, 424 University Centre. This information is also posted on the university's website.

2.1 Course Requirements: Respiratory Therapy

Regular Program

BIOL 1020 and BIOL 1030, or BIOL 1000 and BIOL 1010

SOC 1200 Introduction to Sociology, or PSYC 1200 Introduction to Psychology

STAT 1000 Introductory Statistics

3 credit hour course to satisfy the written English requirement

6 credit hours of electives to total 24 credit hours in University 1

Other requirements: Respiratory Therapy

Minimum GPA required for consideration: 3.0. Minimum GPA required in core courses: 3.0.

Respiratory Therapy does not require specific high school courses. However, the following high school courses are required to register for the required courses:

Math 40S minimum 50% required (Pre-Calculus or Applied Math recommended)

If taking BIOL 1020, Biology 40S, and one of Chemistry 40S or Physics 40S minimum 50% required

Biology 40S, Chemistry 40S, English 40S, and Physics 30S and/or 40S recommended

Selection Criteria: 67% Grades and 33% Interview.

Degree Completion Program

In addition to the regular degree program in Respiratory Therapy, the College offers a degree completion program. Generally, individuals who have attained a diploma in respiratory therapy from an accredited program of studies in Canada, who are actively involved in the practice of the profession, and who demonstrate an interest in continuing their studies in this field, will be accepted. The degree completion program requires a minimum of 30 credit hours of study to be determined by the student in consultation with the department head and/or faculty advisor.

SECTION 3: COLLEGE ACADEMIC REGULATIONS

3.1 General

The provisions of the chapter, General Academic Regulations, and the chapter, University Policies, apply to all students. In addition, the College of Rehabilitation Sciences has regulations and requirements, published below, that apply specifically to its' students.

Policies with regard to admissions, selection, academic progression of the student, compulsory attendance, examination procedures, supplemental examination procedures, and withdrawal dates are in force and are on file in the general office of the College of Rehabilitation Sciences.

3.2 Health Requirements

Students in Respiratory Therapy are required to provide a health history and immunization record. A student will not be permitted to attend fieldwork/clinical placements until all health, immunization, CPR and mask fit requirements are current.

Immunizations

Standard Health Record Form Packages are sent to new students in Respiratory Therapy upon acceptance into the program. New students in Respiratory Therapy are required to return forms to their department by the dates published yearly in the Health Record Form Packages. Returning students are required annually to review and update immunizations as necessary.

Cardiopulmonary Resuscitation Certification

All students (both new and returning) in the Department of Respiratory Therapy are required to obtain Heart and Stroke Foundation of Canada certification in cardiopulmonary resuscitation annually. Certification must be at the Basic Life Support (BLS) for Healthcare Providers. Students in year 1 and 2 of the program will be required to provide proof of certification by the first day of class. Students in year 3 of the program will be required to provide proof of certification before the first day of their fieldwork placement. For students in all years of the program, proof of certification must not have an issue date prior to the last week in June of the current year. This will ensure that the certification remains current until the end of the clinical education period for each year in the program.

Mask Fit Certification

Clinical/fieldwork education sites require Respiratory Therapy students to maintain mask fit certification. Information on acquiring this certification is provided to new students with the Health Record Form Packages. All students are required to maintain mask fit certification throughout the program.

3.3 Dean's Honour List

Students carrying a full course load, with a sessional Grade Point Average of 3.7 or higher and have not done resit or supplemental exams, are placed on the Dean's Honour List.

3.4 Attendance

Regular attendance is expected of all students in all courses. Prior permission is required for any anticipated absences. Students absent from class due to illness may be required to present a certificate from a physician. Unexcused absence from an examination may result in a grade of zero for that examination. Make-up examinations may be allowed under special circumstances.

3.5 Criminal Record and Vulnerable Persons Check, Adult Abuse Registry Check and Child Abuse Registry Check

All respiratory therapy students are required to obtain a formal Criminal Record and Vulnerable Persons Check, an Adult Abuse Registry Check, and a formal Child Abuse Registry Check by the first day of classes of each year of the program. These records must have been issued within the ninety (90) days previous to that date to ensure that they remain current until the end of the clinical education period for each year of the program. These documents are required for participation in all clinical/fieldwork education activities.

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

4.1 Academic Education

Respiratory Therapy

Course No.		Credit Hours
First Year		
ANAT 1030	Human Anatomy	3
RESP 1400	Introduction to Professional Practice	3
RESP 1410	Health Systems and Respiratory Care	3
RESP 1420	Applied Physiology for Respiratory Therapy	6
RESP 1430	Respiratory Therapeutics 1	6
RESP 1440	Pharmacology	3
RESP 1450	Principles of Mechanical Ventilation	6
RESP 1460	Basic Fieldwork 1	4
Total credit hours		34
Second Year		
REHB 2450	Research Methodology for Medical Rehabilitation	3
RESP 2200	Primary Care in Respiratory Therapy	3
RESP 2210	Pathophysiology	6
RESP 2220	Physical Examination and Health Assessment	3
RESP 2230	Respiratory Therapeutics 2	6
RESP 2240	Clinical Mechanical Ventilation	3
RESP 2250	Ventilator Instrumentation	3
RESP 2260	Cardiopulmonary Diagnostics	3
RESP 2380	Basic Fieldwork 2	4
RESP 2390	Clinical Integration and Simulation	6
Total credit hours		40
Third Year		
REHB 3460	Introduction to Health Care Administration and Management	3
RESP 3320	Clinical Education in Pediatric Respiratory Care	3
RESP 3350	Clinical Education in Pulmonary Diagnostics	3
RESP 3360	Clinical Education in Anesthesia	3
RESP 3370	Clinical Education in Community Care	4
RESP 3410	Clinical Education in Critical Care	8
RESP 3420	Clinical Education in Neonatal Care	5
RESP 3430	Clinical Education in General Therapeutics	6
RESP 3440	Current Topics in Respiratory Therapy	6
Total credit hours		41

Students may not obtain any grade lower than "C" in all required courses.

4.2 Clinical/Fieldwork Education

Sixteen hundred (1,600) full-time hours of clinical/fieldwork experience are required. Three hundred and twenty (320) hours of clinical education time is organized into blocks that occur during years one and two of the B.R.T. program. The remaining 1,280 hours of clinical education is conducted throughout year three. All placements occur in Manitoba, with the majority of these occurring within greater Winnipeg.

SECTION 5: COURSE DESCRIPTIONS

Course Descriptions-Occupational Therapy

OT 4130 Re-Entry Fieldwork Cr.Hrs. 8

(Formerly 168.413) Self-directed period of fieldwork preparation followed by a seven-week fieldwork education experience under the supervision of a licensed occupational therapist. Course evaluated on a pass/fail basis. Prerequisites: an earned degree in occupational therapy, permission of Head of Department of Occupational Therapy.

Course Descriptions-Medical Rehabilitation

REHB 2450 Research Methodology for Medical Rehabilitation Cr.Hrs. 3

(Formerly 068.245) A theory and practical course designed to provide a basic understanding of research principles and their application in Medical Rehabilitation. 45 hours.

REHB 3460 Introduction to Health Care Administration and Management Cr.Hrs. 3

(Formerly 068.346) An introduction to professional and administrative issues of current concern to respiratory and physical therapists. Topics to be covered in lecture and seminar format are health care systems, professional ethics, departmental administration, principles of supervision, and medical and legal responsibilities. 39 hours.

Course Descriptions-Respiratory Therapy

RESP 1400 Introduction to Professional Practice Cr.Hrs. 3

This course provides an introduction to the profession of Respiratory Therapy and the roles and responsibilities of a Respiratory Therapist as a member of the health care team. Emphasis is placed on professional conduct, communication and decision-making around issues affecting client-centered care. The course also introduces the safety aspects of delivering respiratory therapy according to the Canadian Standards Association, as well as workplace health and safety. This course is restricted to students in year one of the Bachelor Respiratory Therapy program.

RESP 1410 Health Systems and Respiratory Care Cr.Hrs. 3

Building on RESP 1400, Introduction to Professional Practice, this course further explores the role of the Respiratory Therapist as a regulated health care professional in Canada and the function of regulatory and professional advocacy organizations. Students will learn concepts of patient safety and quality and how human, material, and financial resource management is accomplished in the Canadian health care system. Emphasis is placed on the integration of professional practice knowledge, skills and attitudes. This course is restricted to students in year one of the Bachelor of Respiratory Therapy program.

RESP 1420 Applied Physiology for Respiratory Therapy Cr.Hrs. 6

The course is designed to provide students with a basic understanding of the function and regulation of the systems and major organs of the human body as they relate to clinical respiratory sciences. This course is restricted to students registered in year one of the Bachelor of Respiratory Therapy program.

RESP 1430 Respiratory Therapeutics 1 Cr.Hrs. 6

A lecture and laboratory course which introduces basic therapeutic concepts, technologies and techniques employed in respiratory therapy including medical gases, humidity and aerosol therapy, and bronchopulmonary hygiene. It introduces the principles of gas physics, and the physical and chemical properties of medical gases used in respiratory care. This course is restricted to students registered in year one of the Bachelor of Respiratory Therapy program.

RESP 1440 Pharmacology Cr.Hrs. 3

This course will introduce the principles of pharmacology, those factors modifying drug effects, and individual pharmacologic agents including: ANS drugs, CNS drugs, cardiovascular medications, respiratory medications, antibiotics, and other drugs relevant to Respiratory Therapy. This course is restricted to students registered in year one of the Bachelor of Respiratory Therapy program.

RESP 1450 Principles of Mechanical Ventilation Cr.Hrs. 6

The course will focus on the fundamental physical and physiologic principles involved with mechanical ventilation under normal and abnormal respiratory conditions. Various forms and application strategies of positive pressure ventilation will be introduced and explained as to their effects on the physiological systems. This course is restricted to students registered in year one of the Bachelor of Respiratory Therapy program.

RESP 1460 Basic Fieldwork 1 Cr.Hrs. 4

This course is comprised of 160 hours of clinical fieldwork experiences in respiratory therapy, provided under the supervision of registered respiratory therapists at one or more approved clinical sites. This course is restricted to students registered in year one of the Bachelor of Respiratory Therapy program.

RESP 2200 Primary Care in Respiratory Therapy Cr.Hrs. 3

This course provides an understanding of primary care in Respiratory Therapy practice as a method of supporting individuals and populations with respiratory disease. Students will learn the principles of health promotion and disease prevention, as well as chronic disease management and self-management strategies. This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all of the required courses for year one of the program.

RESP 2210 Pathophysiology Cr.Hrs. 6

This course will introduce the pathogenesis of primary diseases of the cardio-respiratory, peripheral vascular, central and peripheral nervous systems. Specific disorders of the renal, metabolic, and immune systems, as well as infectious diseases with particular relevance to respiratory therapy will be introduced. The course will also introduce the differential diagnosis and current strategies employed in the management of these diseases. This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all the required courses for year one of the program.

RESP 2220 Physical Examination and Health Assessment Cr.Hrs. 3

This course focuses on the development of the patient/client history and physical examination skills essential to health assessment. Students will apply the findings of health assessments in the determination of differential diagnoses and in the development of respiratory care plans. This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all the required courses for year one of the program.

RESP 2230 Respiratory Therapeutics 2 Cr.Hrs. 6

This lecture and laboratory based course introduces advanced respiratory therapeutics including airway management, anaesthesia, invasive hemodynamic techniques, blood sample procurement and analysis, and others commonly employed in respiratory therapy. This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all the required courses for year one of the program.

RESP 2240 Clinical Mechanical Ventilation Cr.Hrs. 3

This course will discuss the initiation and management of all types of mechanical ventilation, both conventional and advanced, with intra and inter-facility patient transport. Interpretation of detailed pulmonary mechanics will be discussed to allow for assessment of ventilated patients. This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all the required courses for year one of the program.

RESP 2250 Ventilator Instrumentation Cr.Hrs. 3

This is a comprehensive course in the function, operation, and application of specified neonatal, pediatric and adult ventilators. Illustration of the necessary skills to setup, monitor and troubleshoot the ventilator will be examined in the classroom as well as in simulated patient case scenarios. This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all the required courses for year one of the program.

RESP 2260 Cardiopulmonary Diagnostics Cr.Hrs. 3

This course will introduce the principles of cardiac and pulmonary function diagnostics including: static and dynamic measures, determination of volumes and capacities, exercise physiology. Cardiopulmonary function changes relative to common diseases and abnormal physiologic states will be evaluated. This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all the required courses for year one of the program.

RESP 2380 Basic Fieldwork 2 Cr.Hrs. 4

Building on RESP 1380 (Basic Fieldwork1) and RESP 2390 (Clinical Integration and Simulation), this course is comprised of fieldwork experiences which provide the student the opportunity to apply the integrated concepts learned in the first two years of the Respiratory Therapy program in a clinical setting. This course will prepare students for advanced clinical education coursework. Prerequisites: RESP 1380, RESP 2390.

RESP 2390 Clinical Integration and Simulation Cr.Hrs. 6

This course provides the student an opportunity to integrate concepts learned in the first two years of the Respiratory Therapy program, and to learn life support protocols prior to participation in advanced clinical education coursework. The course will be delivered through a variety of formats including classroom, seminar, and clinical simulation. Prerequisite: This course is restricted to students registered in year two of the Bachelor of Respiratory Therapy program who have completed all required courses for year one of the program.

RESP 3320 Clinical Education in Pediatric Respiratory Care Cr.Hrs. 3

(Formerly 169.332) Three weeks of clinical experience in the Pediatric Intensive Care Unit at Children's Hospital. Shiftwork and extended shifts may be required. Course evaluated on a pass/fail basis. 144 hours.

RESP 3350 Clinical Education in Pulmonary Diagnostics Cr.Hrs. 3

(Formerly 169.335) Three weeks of clinical experience in the pulmonary diagnostic laboratory of an approved clinical site. Course evaluated on a pass/fail basis. 144 hours.

RESP 3360 Clinical Education in Anesthesia Cr.Hrs. 3

(Formerly 169.336) Three weeks of clinical experience designed to acquaint the student with actual clinical techniques and procedures used in the operating and recovery room. Course evaluated on a pass/fail basis. 144 hours.

RESP 3370 Clinical Education in Community Care Cr.Hrs. 4

(Formerly 169.337) Four weeks of clinical experience in community care settings including: pre-hospital care, health and wellness promotion, interfacility transport, chronic care, home care and community outreach. Course evaluated on a pass/fail basis. 180 hours.

RESP 3410 Clinical Education in Critical Care Cr.Hrs. 8

This course enables students to critically apply skills and concepts in the care of adult patients requiring critical respiratory care. The focus is on attainment of essential Respiratory Therapy competencies for practice. This course is evaluated on a pass/fail basis. This course is restricted to students registered in year three of the Bachelor of Respiratory Therapy program who have completed all the required courses for year two of the program. May not be held with the former RESP 3310 (169.331).

RESP 3420 Clinical Education in Neonatal Care Cr.Hrs. 5

This course enables students to critically apply skills and concepts in the care of infants requiring critical respiratory care in the Labor & Delivery, and Neonatal units of the hospitals. The focus is on attainment of essential Respiratory Therapy competencies for practice. This course is evaluated on a pass/fail basis. This course is restricted to students registered in year three of the Bachelor of Respiratory Therapy program who have completed all the required courses for year two of the program. May not hold with the former RESP 3330 (169.333).

RESP 3430 Clinical Education in General Therapeutics Cr.Hrs. 6

This course enables students to critically apply skills and concepts in the care of adult patients requiring general respiratory care (non-critical care) in the hospital setting. The focus is on attainment of essential Respiratory Therapy competencies for practice. This course is evaluated on a pass/fail basis. This course is restricted to students registered in year three of the Bachelor of Respiratory Therapy program who have completed all the required courses for year two of the program. May not hold with the former RESP 3380 (169.338).

RESP 3440 Current Topics in Respiratory Therapy Cr.Hrs. 6

Focuses on current issues in health and healthcare, in particular as they relate to respiratory therapy. Students complete a thorough review of the current evidence for practice and ongoing research relating to a topic of interest, and present their findings in a professional forum. This course is restricted to students registered in year three of the Bachelor of Respiratory Therapy program who have completed all the required courses for year two of the program. Not to be held with the former RESP 3300 (169.330).

FACULTY OF HUMAN ECOLOGY

Important Information

As part of the University of Manitoba's Academic Structure Initiative, aimed at improving and simplifying the University's current academic structure, the departments within the Faculty of Human Ecology have all joined with other University of Manitoba academic units, resulting in the closure of the Faculty of Human Ecology, effective July 1, 2015.

Human Nutritional Sciences joined with the Faculty of Agricultural and Food Sciences, effective July 1, 2014; Family Social Sciences joined with the Department of Community Health Sciences in the College of Medicine, Faculty of Health Sciences, effective July 1, 2015; the Interdisciplinary Health Program is administered under Faculty of Health Sciences, effective July 1, 2015; and Textile Sciences joined with the Department of Biosystems Engineering, Faculty of Agricultural and Food Sciences, effective July 1, 2015.

Throughout its 105-year history at the University of Manitoba, the study of Human Ecology has evolved to reflect the educational and research needs of a changing society. The transition of these departments to their new homes will enrich educational experiences for students, enhance leading edge, multi-disciplinary research and forge new connections with community partners.

More information can be found at the following links:

Academic Structure Initiative (http://umanitoba.ca/admin/vp_academic/strategic_planning/3736.html)

Human Nutritional Sciences (<http://umanitoba.ca/faculties/afs/dept/hns/>)

Family Social Sciences (umanitoba.ca/medicine/units/community_health_sciences/departamental_units/fss/undergraduate/9266.html.)

Textile Sciences (<http://umanitoba.ca/faculties/engineering/departments/biosystems/>)

Interdisciplinary Health Program (Bachelor of Health Sciences and Bachelor of Health Studies) (http://umanitoba.ca/faculties/health_sciences/IHP.html)

The following programs have been relocated.

Bachelor of Human Ecology (General)

"The statement below is to be reported to Senate in the Fall of 2015 for approval:

On October 1, 2014, Senate was informed of the transfer of administration of the General Human Ecology program (B.H.Ecol.) from the Faculty of Human Ecology (HE) to the Faculty of Health Sciences (FHS). As such, effective the 2015-2016 academic year, the program will be transferred to, and administered by, the Faculty of Health Sciences.

There will be a need for flexibility in the implementation of the administrative change, which will be important as we review changes to the regulations governing the General Human Ecology program during the transition period. In the interim and until such time that a review is completed and the required approval(s) received, the program will continue to be governed by the relevant components of the Faculty of Human Ecology academic regulations and the General Human Ecology program regulations."

Bachelor of Health Sciences

"The statement below is to be reported to Senate in the Fall of 2015 for approval:

On October 1, 2014, Senate was informed of the transfer of administration of the Interdisciplinary Health Programs (B.H.Sc. and B.H.St.) from the Faculty of Human Ecology (HE) to the Faculty of Health Sciences (FHS). As

such, effective the 2015-2016 academic year, the program will be transferred to, and administered by, the Faculty of Health Sciences.

There will be a need for flexibility in the implementation of the administrative change, which will be important as we review changes to the regulations governing the Interdisciplinary Health Programs during the transition period. In the interim and until such time that a review is completed and the required approval(s) received, the Interdisciplinary Health Programs will continue to be governed by the relevant components of the Faculty of Human Ecology academic regulations and the Interdisciplinary Health Programs program regulations."

Bachelor of Health Studies

"The statement below is to be reported to Senate in the Fall of 2015 for approval:

On October 1, 2014, Senate was informed of the transfer of administration of the Interdisciplinary Health Programs (B.H.Sc. and B.H.St.) from the Faculty of Human Ecology (HE) to the Faculty of Health Sciences (FHS). As such, effective the 2015-2016 academic year, the program will be transferred to, and administered by, the Faculty of Health Sciences.

There will be a need for flexibility in the implementation of the administrative change, which will be important as we review changes to the regulations governing the Interdisciplinary Health Programs during the transition period. In the interim and until such time that a review is completed and the required approval(s) received, the Interdisciplinary Health Programs will continue to be governed by the relevant components of the Faculty of Human Ecology academic regulations and the Interdisciplinary Health Programs program regulations."

Bachelor of Science (Textile Sciences)

On March 17, 2015, the Board of Governors, on recommendation of Senate, approved the merger of the Department of Textile Sciences to the Department of Biosystems Engineering, Faculty of Agricultural and Food Sciences. Accordingly, effective the Fall 2015 academic term, all associated programs in Textile Sciences will become part of the Faculty of Agricultural and Food Sciences.

As outlined in the proposal submitted to Senate in March 2015, the implementation process will need to be flexible to best facilitate the appropriate approvals of any identified adjustments or changes, where required. In the interim and until such time that a review is completed and the required approval(s) received, the Textile Sciences programs- as listed above- will continue to be governed by current Faculty of Human Ecology academic regulations and the Textile Sciences program regulations."

Bachelor of Human Ecology (Family Social Sciences)

"On June 24, 2014, the Board of Governors, on recommendation of Senate, approved the merger of the Department of Family Social Sciences to the Department of Community Health Sciences. Accordingly, effective July 1, 2015, all associated programs in Family Social Sciences will become part of the Faculty of Health Sciences, College of Medicine, and Department of Community Health Sciences.

The proposal submitted to Senate noted the need for flexibility in the implementation of this transition, which will be important as we review changes to the regulations governing the undergraduate Family Social Sciences programs during the transition period. In the interim and until such time that a review is completed and the required approval(s) received, the Family Social Sciences programs will continue to be governed by the relevant components of the Faculty of Human Ecology academic regulations and the Family Social Sciences regulations"

FACULTY OF KINESIOLOGY AND RECREATION MANAGEMENT

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Academic Staff: Please refer to the faculty website at umanitoba.ca/faculties/kinrec/about/faculty.html

Chapter Contents

SECTION 1: DEGREE PROGRAMS OFFERED

- 1.1 Programs / Majors
- 1.2 Available Minor
- 1.3 Available Option
- 1.4 Available Areas of Emphasis

SECTION 2: ADMISSION REQUIREMENTS

- 2.1 Transfer and Second Degree Students
- 2.2 Visiting Students
- 2.3 Special Students

SECTION 3: FACULTY ACADEMIC REGULATIONS

- 3.1 Scholastic Standards: Academic Assessment
- 3.2 Policy on Repeating Faculty Required Courses
- 3.3 Dean's Honour List
- 3.4 University Gold Medal and Program Medals
- 3.5 Degree With Distinction
- 3.6 Attendance and Withdrawal
- 3.7 Leave of Absence
- 3.8 Time Limit for Completion of the Degree
- 3.9 Student Academic Appeals

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

- 4.1 Program Requirements: Bachelor of Kinesiology
- 4.2 Program Requirements: Bachelor of Kinesiology – Athletic Therapy
- 4.3 Program Requirements: Bachelor of Physical Education
- 4.4 Program Requirements: Bachelor of Recreation Management and Community Development
- 4.5 Program Requirements for Students Admitted Prior to 2013
- 4.6 Minor in Recreation Studies
- 4.7 Interfaculty Option in Aging
- 4.8 Supervised Fieldwork Experience
- 4.9 External Minors

SECTION 5: REGISTRATION INFORMATION FOR ALL STUDENTS

- 5.1 Faculty Orientation Sessions
- 5.2 Course Sequencing and Prerequisites
- 5.3 Repeating Courses
- 5.4 Experiential Learning Courses (ELCs)
- 5.5 Courses Requiring an Active Facility Use Pass
- 5.6 Course Field Work Fees
- 5.7 Challenge for Credit
- 5.8 Courses Available to Students in Other Faculties or Schools

SECTION 6: COURSE DESCRIPTIONS

SECTION 1: DEGREE PROGRAMS OFFERED

1.1 Programs/Majors

Program/Degree	*Years to Complete	Total Credit Hours
Bachelor of Physical Education	3	102
Bachelor of Kinesiology	4	120
Bachelor of Kinesiology- Athletic Therapy	4	126
Bachelor of Recreation Management and Community Development	4	120

Program Accreditation - CATA and CCUPEKA

The Faculty of Kinesiology and Recreation Management has three accredited programs. Two (Bachelor of Physical Education, Bachelor of Kinesiology) are accredited by CCUPEKA (The Canadian Council of University Physical Education and Kinesiology Administrators) and one (Bachelor of Kinesiology - Athletic Therapy) is accredited by the Canadian Athletic Therapy Association.

1.2 Available Minor

Minor in Recreation Studies (See Section 4.6 for details)

1.3 Available Option

Interfaculty Option in Aging (See Section 4.7 for details)

1.4 Available Areas Of Emphasis:

- Aging (BKin and BRMCD)
- Community Development and Wellness (BKin and BRMCD)
- Culture and Diversity (BKin and BRMCD)
- Coaching (BKin only)
- Fitness Professional (BKin only)
- Sport and Event Management (BRMCD only)
- Sustainable Tourism and Recreation (BRMCD only)

SECTION 2: ADMISSION REQUIREMENTS

The following is a summary of the admission requirements for the Faculty of Kinesiology and Recreation Management. All admission requirements, as well as application deadline dates and forms, are included in the Applicant Information Bulletin that is available from the Admissions Office, Enrolment Services, 424 University Centre; this information is also posted on the University of Manitoba [website](#) in January each year.

Direct Entry (from High School)

In the 2012-2013 academic year, the Faculty of Kinesiology and Recreation Management began accepting some students into our three degree programs (excludes Athletic Therapy) directly from High School.

In addition to the general U of M admission requirements for high school students, to be considered for direct entry into the Faculty of Kinesiology and Recreation Management you will require a minimum 85% average over the following courses, with no less than 60% in each individual course.

Kinesiology/ Physical Education Admission Requirements (Direct Entry Category 2)

English 40S

Applied Mathematics 40S or Pre-Calculus Mathematics 40S

One of Biology 40S (recommended for B.Kin.), Chemistry 40S, Physics 40S, or Computer Science 40S

Recreation Management and Community Development Admission Requirements (Direct Entry Category 3)

English 40S

Applied Mathematics 40S or Pre-Calculus Mathematics 40S

A third 40S course

Please note that due to limited space students may require a higher average than stipulated. Any student applying for Direct Entry admission to this faculty will automatically be considered for admission to University 1, should they not be granted Direct Entry admission.

Regular Admission (from U1 or another academic program)

The general admission requirement for all degrees except Bachelor of Kinesiology – Athletic Therapy is completion of any 24 credit hours of University 1 coursework. However, in order to complete the degree in the shortest time possible it is recommended that students take the required Year 1 courses before applying to the Faculty. Entering students who have not completed all of the required Year 1 courses must complete them during their program. Equivalent academic course work completed from other recognized post secondary institutions will be considered.

Minimum GPA for admission consideration is 2.0 but admission is competitive.

The Faculty of Kinesiology and Recreation Management strives for a student body within its degree programs that is representative of the rich diversity of peoples within the province and to enrich the overall teaching and learning climate. Our Indigenous Achievement and other University of Manitoba priorities are realized through an Individual Consideration admissions category for applicants who identify as the following underrepresented group: Canada Indigenous/Aboriginal Peoples, Racialized Minorities, Mature Students, ACCESS Program Students, Persons with Disabilities, and those with exceptional circumstances. Students applying under Individual Consideration must have successfully completed at least one year of study (min 24 credit hours) and a minimum AGPA of 2.0.

2.1 Transfer and Second Degree Students

Students admitted to the Faculty of Kinesiology and Recreation Management following the completion of another recognized university degree or coursework may transfer in credit that is deemed equivalent toward the course requirements of a Kinesiology and Recreation Management undergraduate degree. Students are eligible to transfer a maximum of 50 credit hours to the Bachelor of Physical Education degree and a maximum of 60 credit hours to the Bachelor of Kinesiology and Bachelor of Recreation Management and Community Development programs.

Students who hold a degree and have completed further courses at the University of Manitoba which are applicable to their second degree in the Faculty of Kinesiology and Recreation Management but which were not used for credit toward their first degree may receive additional transfer credit for that work.

Equivalent courses completed at other universities or post-secondary institutions will be considered for admission and transfer credit only if the courses have been taken within the last 10 years.

Students are encouraged to contact an [Academic Advisor](#) in the Faculty General Office for information on how to optimize their transfer credit. Course transfer equivalencies will not be processed until after an application and all necessary documents have been submitted.

2.2 Visiting Students

Students who are enrolled and pursuing a degree at another institution may apply to be a visiting student with the Faculty of Kinesiology and Recreation Management. A Letter of Permission from the home institution granting permission to register for courses from the University of Manitoba is required in order for access to be granted to those courses.

SECTION 3: FACULTY ACADEMIC REGULATIONS

All students are asked to note that some academic policies and regulations may be subject to change. Please check the Web Calendar at umanitoba.ca for updated information.

The provisions of the following chapters from the Undergraduate Calendar (University Policies, and General Academic Regulations and Requirements) apply to all students. In addition, the Faculty of Kinesiology and Recreation Management has regulations and requirements, published below, that apply specifically to its students.

The Faculty of Kinesiology and Recreation Management strictly adheres to the University of Manitoba Student Discipline By-Law and will enforce these regulations. It is the responsibility of the student to know what constitutes academic dishonesty. Plagiarism or any other form of cheating is subject to academic penalty, which could be as serious as suspension or expulsion from the Faculty or university. Students are encouraged to avoid academic misconduct by learning more about the University of Manitoba regulations at:

http://umanitoba.ca/student/resource/student_advocacy/index.html

3.1 Scholastic Standards: Academic Assessment

Scholastic Standards:

Formal academic assessments are performed following each term for all Faculty of Kinesiology and Recreation Management students who have completed 3 or more credit hours. As a result of this assessment students will be determined to be minimum met, satisfactory, on probation, suspension warning, or academic suspension for one year. All academic assessments will appear on the student's official transcript.

Minimum Met

Students must achieve a minimum DGPA of 2.0 at each point of assessment in order to have met the minimum requirements of the Faculty of Kinesiology and Recreation Management. Students who do not achieve a minimum DGPA of 2.0 will be placed on probation.

Probation

Once placed on probation, a student will be placed on hold and must meet with an academic advisor to review performance and to receive an override in order to register for another term. Students on probation who achieve a minimum term GPA of 2.0 will be assessed as satisfactory. Students who do not achieve a minimum term GPA of 2.0 will be placed on suspension warning.

Satisfactory

The assessment of satisfactory is used once a student has been placed on probation but has subsequently achieved a minimum term GPA of 2.0. Students with satisfactory standing will be able to register without restrictions. Students who do not maintain a minimum term GPA of 2.0 will be placed on suspension warning.

Suspension Warning

Once placed on suspension warning, a student must meet with an academic advisor before registering for another term. Students on suspension warning who achieve a minimum term GPA of 2.0 will be assessed as satisfactory. Students who do not achieve a minimum term GPA of 2.0 will be placed on academic suspension.

Academic Suspension

A student placed on academic suspension in the Faculty of Kinesiology and Recreation Management is not permitted to register for a period of one calendar year. The notation "Academic Suspension for 1 Year" will be recorded on the student's transcript.

Once a student has served a one year suspension, they must contact an academic advisor in order to be reinstated for future registration.

3.2 Policy on Repeating Faculty Required Courses

A minimum grade of "C" is required to pass all Faculty-required courses. Students will be permitted to repeat a failed Faculty-required course only once while in the program. Students who fail the same Faculty-required course twice will normally be required to withdraw from the program.

3.3 Dean's Honour List

Students enrolled in 12 credit hours or more who achieve a Term GPA of 3.50 or higher will be placed on the Dean's Honour List. The Dean's Honour List will be calculated after each term (i.e. Fall, Winter, and Summer).

The Dean's Honour List designation will appear on the student's transcript.

3.4 University Gold Medal and Program Medals

Gold Medal

The Faculty of Kinesiology and Recreation Management will award the University Gold Medal to the graduating student who:

- 1) has achieved the highest grade point average of all graduating students (minimum 3.75) on courses constituting the last two years of an eligible program (and including transfer courses in the applicable years); and,
- 2) has completed at least 80 percent of what is considered to be the normal full course-load in each of the last two years of the eligible program.

Program Medals

ACADEMIC CALENDAR 2015-2016

There are two program medals awarded each year in the Faculty of Kinesiology and Recreation Management to the two students with the highest standing (according to the University Gold Medal criteria) in the programs in which the winner of the University Gold Medal in Kinesiology and Recreation Management is not registered (the three programs are Kinesiology, Physical Education, and Recreation Management and Community Development).

3.5 Degree With Distinction

Awarded to students who graduate with a cumulative Degree GPA of 3.8 or higher. The notation of 'Degree with Distinction' will appear on the student's parchment and transcript.

3.6 Attendance and Withdrawal

Students absent from class for three or more days due to illness are required to present a certificate from a physician. Unexcused absence of more than three hours of class time in a theory course or experiential learning course may result in the student being required to withdraw from the course or may result in an "F" grade being assigned.

3.7 Leave of Absence

Students who have not registered for a full academic session will need to reactivate their status by contacting the Faculty General Office and must consult with an Academic Advisor. Students who have been absent from study for more than 5 years or have attended another institution since their last registration (not on a Letter of Permission) will have to re-apply for admission to the university.

3.8 Time Limit for Completion of the Degree

Students admitted to the Bachelor of Kinesiology, Bachelor of Physical Education, or Bachelor of Recreation Management and Community Development degree programs must complete all requirements to graduate within ten years of admission to the program. Students with questions relating to the time limit regulation should consult the Undergraduate Program Administrator.

3.9 Student Academic Appeals

Students who wish to appeal matters concerning their academic status should contact the Faculty of Kinesiology and Recreation Management Associate Dean (Undergraduate Studies). The Faculty has an academic appeals process for students who wish to appeal a policy or decision affecting their program of study.

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

Degree Requirements and Course Selection

It is the student's responsibility to have read the Undergraduate Academic Calendar carefully, and to know all relevant university and faculty regulations, policies and practices. Completion of degree requirements is the responsibility of the student. Returning students should contact their advisor if they have any questions concerning their curriculum.

The four degree programs have a base of shared introductory core courses, as well as shared upper level courses. Shared core courses are intended to ensure students recognize the interconnections across our Faculty and its related fields of practice, and to facilitate the professional education of students.

4.1 Program Requirements: Bachelor of Kinesiology

(Students admitted in September 2013 or later)

Program and Graduation Requirements: Bachelor of Kinesiology

To graduate with a four-year Bachelor of Kinesiology degree, a student must have passed the 120 credit hours of the program outlined below and must have achieved a Degree Grade Point Average (DGPA) of 2.00 with a minimum grade of "C" in all Faculty-required courses.

A maximum of 158 credit hours may be attempted in order to obtain the 120 credit hours required for graduation with the Bachelor of Kinesiology degree.

YEAR 1 / University 1: 30 Credit Hours		
Course No.		Cr.Hrs.
BIOL 1XXX	BIOL 1020 Biology 1: Principles and Themes and BIOL 1030 Biology 2: Biological Diversity, Function and Interaction (with a minimum grade of "C" in each) or BIOL 1000 Biology: Foundations of Life and BIOL 1010 Biological Diversity and Interaction (with a minimum grade of "C+")	3
PERS 1200	Physical Activity, Health and Wellness	3
PERS 1500	Foundations of Physical Education and Kinesiology	3
PSYC 1200	Introduction to Psychology	6
STAT 1000	Basic Statistical Analysis 1	3
1XXX W	Written English Requirement	3
	Elective	6

YEAR 2: 30 Credit Hours		
Course No.		Cr.Hrs.
BIOL 2410	Human Physiology 1	3
BIOL 2420	Human Physiology 2	3
PERS 2100	Introduction to Professional Practice	3
PERS 2200	Program Planning Principles	6
PERS 3350	Introduction to Research	3
KIN 2320	Human Anatomy	3
KIN 2330	Biomechanics	3
	Electives	9
YEAR 3: 30 Credit Hours		
Course No.		Cr.Hrs.
KIN 2540	Psychology of Sport and Physical Activity	3
KIN 3470	Exercise Physiology	3
KIN 3512	Principles of Fitness Training	3
KIN 3740	Resistance Training and Conditioning	3
PERS 3100	Inclusive Physical Activity and Leisure	3
PERS 3340	Philosophy of Physical Activity and Leisure	3
PERS 3460	Sociology of Physical Activity and Leisure	3
	Electives	9
YEAR 4: 30 Credit Hours		
Course No.		Cr.Hrs.
KIN 3450	Motor Learning	3
KIN 4500	Physical Activity and Aging	3
PERS 4100	Current Issues	3
	Electives	21*
* PERS 4630 Supervised Fieldwork Experience is strongly recommended in Year 4 (12 credit hours). * A maximum of 21 credit hours of electives may be taken from outside the Faculty following Year 1. Electives may be used towards a minor (optional). Degree Exit Requirement: Current Basic Rescuer CPR and Emergency or Standard First Aid Certification.		

4.2 Program Requirements: Bachelor of Kinesiology - Athletic Therapy

(Students admitted in September 2013 or later)

Program and Graduation Requirements: Bachelor of Kinesiology - Athletic Therapy

To graduate with a four-year Bachelor of Kinesiology – Athletic Therapy degree, a student must have passed the 126 credit hours of the program outlined below and must have achieved a Degree Grade Point Average (DGPA) of 2.00 with a minimum grade of “C” in all Faculty-required courses.

A maximum of 166 credit hours may be attempted in order to obtain the 126 credit hours required for graduation with the Bachelor of Kinesiology - Athletic Therapy.

Students are expected to progress through the Athletic Therapy program as outlined below. It is strongly recommended that courses be completed in the sequence and year indicated, otherwise an additional year may be required.

Successful completion of BIOL 1020 and BIOL 1030, with a minimum grade of “C”, or BIOL 1000 and BIOL 1010, with a minimum average grade of “C+” is a requirement for admission to the Athletic Therapy Program.

Valid Health Care Provider CPR and Standard First Aid certification are required before the beginning of each term of registration (if lapsed, students must re-certify). Each year while in the program, Athletic Therapy students must also register as members with both the Manitoba Athletic Therapists Association (MATA) and Canadian Athletic Therapists Association (CATA).

Athletic Therapy Practica (KIN 3912, KIN 3914 & KIN 4910)

Students in the Athletic Therapy Program will be required to complete several hours of clinical and field (sports team) experiences on campus and in the community during their degree. These experiences provide opportunities to apply the knowledge and skills students obtain via their educational curriculum, in a practical hands-on manner, and therefore enhance their preparation for the Canadian Athletic Therapy Association (CATA) examinations. Students must successfully complete the previous year’s courses and be registered in all of the present year’s courses in order to register in each practicum (KIN 3912, KIN 3914 & KIN 4910).

YEAR 1 / University 1: 30 Credit Hours		
Course No.		Cr.Hrs.
BIOL 1XXX	BIOL 1020 Biology 1: Principles and Themes and BIOL 1030 Biology 2: Biological Diversity, Function and Interaction (with a minimum grade of “C” in each) or BIOL 1000 Biology: Foundations of Life and BIOL 1010 Biological Diversity and Interaction (with a minimum grade of “C+”)	3
PERS 1200	Physical Activity, Health and Wellness	3
PERS 1500	Foundations of Physical Education and Kinesiology	3
PSYC 1200	Introduction to Psychology	6
STAT 1000	Basic Statistical Analysis 1	3
1XXX W	Written English Requirement	3
	Elective	6

ACADEMIC CALENDAR 2015-2016

YEAR 2: 33 Credit Hours		
Course No.		Cr.Hrs.
BIOL 2410	Human Physiology 1	3
BIOL 2420	Human Physiology 2	3
HNSC 1210	Nutrition for Health and Changing Lifestyles	3
PERS 2100	Introduction to Professional Practice	3
PERS 2200	Program Planning Principles	3
PERS 3350	Introduction to Research	3
KIN 2320	Human Anatomy	3
KIN 2330	Biomechanics	3
KIN 2750	Athletic Therapy Skills	3
KIN 3200	Basic Trauma and Life Support	3
KIN 3320	Advanced Human Anatomy	3
YEAR 3: 33 Credit Hours		
Course No.		Cr.Hrs.
KIN 3160	Pathology and Sports Medicine	3
KIN 3330	Functional Assessment and Restoration A	3
KIN 3332	Functional Assessment and Restoration B	3
KIN 3400	Therapeutic Modalities	3
KIN 3470	Exercise Physiology	3
KIN 3512	Principles of Fitness Training	3
KIN 3740	Resistance Training and Conditioning	3
KIN 3912	Athletic Therapy Practicum	4
KIN 3914	Clinical Block Placement	2
PERS 3100	Inclusive Physical Activity and Leisure	3
PERS 3340	Philosophy of Physical Activity and Leisure	3
YEAR 4: 30 Credit Hours		
Course No.		Cr.Hrs.
KIN 2540	Psychology of Physical Activity and Leisure	3
KIN 3450	Motor Learning	3
KIN 4160	Advanced Pathology and Sport Medicine	3
KIN 4330	Advanced Biomechanics	3
KIN 4400	Therapeutic Exercise Rehabilitation	3
KIN 4500	Physical Activity and Aging	3
KIN 4910	Athletic Therapy Practicum	6
PERS 4100	Current Issues	3
	Elective	3

Degree Exit Requirement: Current Basic Rescuer CPR and Emergency or Standard First Aid Certification.

4.3 Program Requirements: Bachelor of Physical Education

Students admitted in September 2011 or later)

Program and Graduation Requirements: Bachelor of Physical Education

To graduate with a three-year Bachelor of Physical Education degree, a student must have passed the 102 credit hours of the program outlined below and must have achieved a Degree Grade Point Average (DGPA) of 2.00 with a minimum grade of "C" in all Faculty-required courses.

A maximum of 132 credit hours may be attempted in order to obtain the 102 credit hours required for graduation with the Bachelor of Physical Education degree

YEAR 1 / University 1: 30 Credit Hours		
Course No.		Cr.Hrs.
BIOL 1410	Anatomy of the Human Body	3
BIOL 1412	Physiology of the Human Body	3
ENGL 1XXXW	English (1200, 1300, or 1310 & 1340)	6
PERS 1500	Foundations of Physical Education and Kinesiology	3
PSYC 1200	Introduction to Psychology	6
'M' Requirement	MATH or STAT course	3
	Electives / Teaching Minor	6
YEAR 2: 36 Credit Hours		
Course No.		Cr.Hrs.
KIN 2320	Human Anatomy	3
KIN 2330	Biomechanics	3
PERS 2100	Introduction to Professional Practice	3
PERS 2200	Program Planning Principles	3
PHED 2550	Growth and Motor Development	3
Required Experiential Learning Courses (ELCs):		
PHED 2710	Human Movement Principles (ELC)	3
PHED 2720	Developmental Games and Activities (ELC)	3
PHED 2730	Gymnastics, Dance and Rhythmic Activities (ELC)	3
PHED 2740	Fitness Theory and Practice (ELC)	3
	Electives / Teaching Minor	9

YEAR 3: 36 Credit Hours		
Course No.		Cr.Hrs.
KIN 2540	Psychology of Sport and Physical Activity	3
KIN 3450	Motor Learning	3
KIN 3470	Exercise Physiology	3
KIN 3512	Principles of Fitness Training	3
PERS 3100	Inclusive Physical Activity and Leisure	3
PERS 3460	Sociology of Physical Activity and Leisure	3
PHED 3360	Culturally Relevant Physical Education and Health	3
PHED 3710	Active Health and Human Potential	3
Faculty Electives		6
Must include 1 or 2 of the following Experiential Learning Courses (ELCs):		
PHED 2400	Coaching Theory and Practice (3)	
PHED 2402	Advanced Coaching Theory and Practice (3)	
PHED 3102	Aboriginal Song and Dance (3)	
PHED 3740	Resistance Training and Conditioning (3)	
PHED 3750	Lifestyle Activities (3)	
PHED 3760	Diverse Populations Mentorship (3)	
PHED 3770	Aboriginal Games and Activities (3)	
PHED 4710	Outdoor Education (3)	
REC 4720	Wilderness Adventures (3)	
	Electives / Teaching Minor	6

Degree Exit Requirement: Current Basic Rescuer CPR and Emergency or Standard First Aid Certification.

*Note: Students who intend to apply for admission to the Faculty of Education after completing their BPE degree should review the information in the current Undergraduate Academic Calendar and consult with the Faculty of Education to ensure they are selecting an appropriate teachable minor and courses for their choice of the Early, Middle or Senior Years stream.

4.4 Program Requirements: Bachelor of Recreation Management and Community Development

(Students admitted in September 2013 or later)

Program and Graduation Requirements: Bachelor of Recreation Management and Community Development

To graduate with a four-year Bachelor of Recreation Management and Community Development degree, a student must have passed the 120 credit hours of the program outlined below and must have achieved a Degree Grade Point Average (DGPA) of 2.00 with a minimum grade of “C” in all faculty-required courses. A maximum of 158 credit hours may be attempted in order to obtain the 120 credit hours required for graduation with the Bachelor of Recreation Management and Community Development degree.

YEAR 1 / University 1: 30 Credit Hours		
Course No.		Cr.Hrs.
PERS 1300	Introduction to Leisure Travel	3
PERS 1400	Concepts of Recreation and Leisure	3
PSYC 1200	Introduction to Psychology	6
STAT 1000	Basic Statistical Analysis 1	3
1XXXW	Written English Requirement	3
	Electives	12
YEAR 2: 30 Credit Hours		
Course No.		Cr.Hrs.
SOC 1200	Introduction to Sociology	6
PERS 2100	Introduction to Professional Practice	3
PERS 2200	Program Planning Principles	3
PERS 3350	Introduction to Research	3
REC 2400	Management and Marketing of Leisure Services	3
REC 3090	Foundations of Sustainable Nature-Based Tourism	3
	Electives	9
YEAR 3: 30 Credit Hours		
Course No.		Cr.Hrs.
PERS 3100	Inclusive Physical Activity and Leisure	3
PERS 3340	Philosophy of Physical Activity and Leisure	3
PERS 3460	Sociology of Physical Activity of Leisure	3
REC 3200	Advanced Program Planning and Research	3
REC 4070	Community Development and the Leisure Delivery System	3
REC 4XXX	Advanced Recreation Electives*	6
	Electives	9

ACADEMIC CALENDAR 2015-2016

YEAR 4: 30 Credit Hours		
Course No.		Cr.Hrs.
PERS 4100	Current Issues	3
REC 4XXX	Advanced Recreation Electives*	6
	Electives	21**
Degree Exit Requirement: Current Basic Rescuer CPR and Emergency or Standard First Aid Certification		

*Note: Advanced Recreation Electives offered change each year. Consult with an Academic Advisor for a list of approved courses that may fulfil this requirement.

** PERS 4630 Supervised Fieldwork Experience is strongly recommended in Year 4 (12 credit hours)

** A maximum of 21 credit hours of electives may be taken from outside the Faculty following Year 1. Electives may be used towards a minor (optional).

4.5 Program Requirements for Students Admitted Prior to 2013

Faculty of Kinesiology and Recreation Management Students admitted before September 2013 will notice changes to course and program requirements. Students admitted prior to 2013 should contact the Undergraduate Program Administrator or Academic Advisor at the Faculty General Office for information on their specific degree requirements and courses required for graduation.

4.6 Minor in Recreation Studies (123)

To qualify for and declare the Minor in Recreation Studies, students must achieve a grade of "C" or better in the two introductory courses PERS 1300 and PERS 1400. A student must obtain approval and declare the minor with their home faculty for access into advanced REC courses.

Required Core Courses for the Minor in Recreation Studies (12 credit hours):

- PERS 1300 Introduction to Leisure Travel (3 credit hours)
- PERS 1400 Concepts of Recreation and Leisure (3 credit hours)
- REC 2400 Management and Marketing of Leisure Services (3 credit hours)
- REC 3090 Sustainable Nature-Based Tourism (3 credit hours)

Electives (Choose 6 credit hours from the following):

- REC 4090 Sustainable Nature-Based Tourism Planning, Management and Research (3 credit hours)
- REC 4170 Sport Management (3 credit hours)
- REC 4250 Leisure and Aging (3 credit hours)
- REC 4400 The Administration of Special Events (3 credit hours)
- REC 4350 Parks and Protected Areas Planning and Management (6 credit hours) (Summer Session Travel Study – Instructor Permission Required)
- PERS 4200 Special Topics (3 credit hours)

**External students may complete up to 12 credit hours from the Recreation Studies Minor course list without declaring the minor. Students who declare the minor must take the minimum 18 credit hours but will be allowed to take up to 30 hours from the above courses.

Note: No minor in Physical Education or Kinesiology is offered.

4.7 Interfaculty Option in Aging

The Option in Aging is offered by and in the following faculties: Arts, Nursing, Kinesiology and Recreation Management, and Social Work.

Students in the Faculty of Kinesiology and Recreation Management can elect to complete the Option in Aging which consists of 18 credit hours of aging-related coursework. All Option in Aging students MUST complete the following two courses (6 credit hours):

- KIN 2610/ NURS 2610 Health and Physical Aspects of Aging (alternates between faculties)
- REC 2650/HMEC 2650/SWRK 2650 Social Aspects of Aging (alternates between faculties)

PLUS ONE OF (3 credit hours):

- REC 4250 Leisure and Aging (BRMCD students; not offered every year)

- KIN 4500 Physical Activity and Aging (BKin students)

AND ELECTIVES* (9 credit hours):

- Approved age related courses from Kinesiology and Recreation Management or other faculties. A current list of applicable courses is available at the Faculty General Office.

In order to declare the Option in Aging, students must meet with an Academic Advisor once they have successfully completed the two compulsory courses of KIN 2610/ NURS 2610 and REC 2650/HMEC 2650/SWRK 2650.

Upon graduation, a student who has met all the requirements will have the concentration added to their transcript indicating they have completed the Option in Aging.

4.8 Supervised Fieldwork Experience (PERS 4630)

The supervised fieldwork experience is a professionally supervised experience that provides the student with the opportunity to apply knowledge gained in academic courses, and gives exposure to a workplace environment in a related field.

Students in the BKin and BRMCD programs are eligible to register for the 12 credit hour course provided they will complete 90 credit hours toward the degree and achieve a minimum Degree Grade Point Average of 2.5 or higher at the end of the third year of their degree. Student placements are scheduled for 13 weeks (working full-time) during the Fall Term (September through December). Information on the application process, deadlines and course details are available on the Faculty website and at the Faculty General Office.

4.9 External Minors

Kinesiology and Recreation Management students may choose and declare an external minor offered by the Faculty of Arts, Clayton H. Riddell Faculty of Environment, Earth, and Resources, Faculty of Human Ecology, Faculty of Science, Faculty of Management, Marcel A. Desautels Faculty of Music, or School of Art. Completion of a declared minor is optional and may be achieved through the use of electives in a program. See the applicable faculty and department chapters for the requirements of each minor. Minors must be declared with an Academic Advisor at the Faculty General Office in order to be approved and appear on a student's transcript.

In order to declare the Management Minor from the I. H. Asper School of Business, Faculty of Kinesiology and Recreation Management students must achieve a 3.0 DGPA (or higher). If a student has successfully completed 18 credit hours of course work from the Faculty of Management, and a 2.0 GPA in the Management course work by the time of graduation, the Minor in Management may also be declared upon completion of the degree program.

SECTION 5: REGISTRATION INFORMATION FOR ALL STUDENTS

Faculty Academic Advisors

If you require further information after reading the Undergraduate Calendar, contact the Kinesiology and Recreation Management academic advisors, 8:30 a.m. - 4:30 p.m. Monday - Friday.

Patti Dickieson, Academic Advisor

103B Frank Kennedy Centre

Telephone: (204) 474 9748

Karen Borbridge, Advising/Office Assistant

102 Frank Kennedy Centre

Telephone: (204) 474 9747

5.1 Faculty Orientation Sessions

All new students admitted to the Faculty must attend an Orientation session in order to be unblocked from registration. Dates will be provided with the letter of acceptance (normally in early July before registration initial access) and on the Faculty website.

At this session students will receive important information regarding their program, registration, and an orientation manual. Upon acceptance into the Faculty, students from outside of the province will be sent an orientation manual and should contact an Academic Advisor to discuss registration and other matters prior to registration initial access.

5.2 Course Sequencing and Prerequisites

Planning the sequence of required courses is essential. Several Faculty courses in all degrees require successful completion of another course in order to register. Some courses may only be offered once per year. Please check current catalogue course descriptions and class schedules in your program to ensure that you achieve what is necessary for efficient course enrolment in future terms.

5.3 Repeating Courses

When a course is repeated, the most recent attempt of that course will be included in the calculation of the Degree Grade Point Average; however, both grades will appear on the student academic history and official transcript. If a student wishes to repeat a course in which a grade has previously been assigned, they should contact an Academic Advisor for the necessary registration override prior to initial access.

Students will be permitted to repeat a failed Faculty-required course only once while in the program. Students who fail the same Faculty-required course twice will normally be required to withdraw from the program.

5.4 Experiential Learning Courses (ELCs)

Experiential learning courses (ELCs) provide three credit hours of integrated theory and practice, and include applied activities that are designed to translate theoretical components to hands-on-learning in the gymnasium, dance studio, fitness studio, playing field, outdoor environment or clinic. Below is a list of Faculty of Kinesiology and Recreation Management experiential learning courses:

- **KIN 2750** Athletic Therapy Skills
- **KIN 3740** Resistance Training and Conditioning
- **PHED 2400** Coaching Theory and Practice
- **PHED 2402** Advanced Coaching Theory and Practice
- **PHED 2710** Human Movement Principles
- **PHED 2720** Developmental Games and Activities
- **PHED 2730** Gymnastics, Dance and Rhythmic Activities
- **PHED 2740** Fitness Theory and Practice
- **PHED 3102** Aboriginal Song and Dance
- **PHED 3710** Active Health and Human Potential
- **PHED 3750** Lifestyle Activities
- **PHED 3760** Diverse Populations Mentorship
- **PHED 3770** Aboriginal Games and Activities
- **PHED 4710** Outdoor Education
- **REC 4720** Wilderness Adventures

5.5 Courses Requiring an Active Facility Use Pass

In some courses students will be required to activate the student facility use pass in order to gain access into and utilize various learning environments. Students should be prepared to have their pass active within the first week of class in the applicable term. Students report to the Recreation Services Customer Service Desk in Frank Kennedy Centre.

5.6 Course Field Work Fees

The following courses will be assessed Field Work Fees upon registration. Fees are viewable in the Aurora Student Class Schedule under Detailed Class Information for each course listed:

KIN 3320 Advanced Anatomy
PERS 1500 Foundations of Physical Education and Kinesiology
PHED 2710 Human Movement Principles
PHED 2740 Fitness Theory and Practice
PHED 3102 Aboriginal Song and Dance
PHED 3710 Active Health and Human Potential
PHED 3750 Lifestyle Activities
PHED 4710 Outdoor Education
REC 3090 Sustainable Nature-Based Tourism
REC 4090 Sustainable Nature-Based Planning, Management, and Research
REC 4720 Wilderness Adventures

5.7 Challenge for Credit

PERS 1500 Foundations of Physical Education and Kinesiology is open to challenge for credit. Students must demonstrate their competence in this course before challenging (e.g., students with significant professional experience and training who may have the necessary knowledge; transfer students who may have completed several related courses at other institutions that are not directly equivalent to PERS 1500). The Academic Schedule in the front section of this Calendar contains the relevant registration deadline dates appropriate to challenge for credit.

5.8 Courses Available to Students in Other Faculties and Schools

Students from other faculties who wish to register for courses with registration restrictions may seek departmental permission by obtaining a form from the Faculty General Office (102 Frank Kennedy Centre) at the end of the initial registration access period of the applicable session.

Students who have declared the Recreation Studies Minor may register for additional Recreation Studies courses with the help of their academic advisor in their faculty – refer to requirements in Section 4.6.

SECTION 6: COURSE DESCRIPTIONS

Kinesiology Course Descriptions-2000 Level

KIN 2320 Human Anatomy Cr.Hrs. 3

(Lab Required) Structure of the skeletal, articular, and muscular systems of the human body. May not be held for credit with PHED 2320 (057.232), REHB 1480 (068.148), REHB 1490 (068.149), or REHB 1500 (068.150). Prerequisite: BIOL 1030 (C) or both BIOL 1000 (071.100) and BIOL 1010 (071.101) (C+ in each) or BIOL 1412 (ZOO 1330 or 022.133) (C).

KIN 2330 Biomechanics Cr.Hrs. 3

(Lab Required) The mechanical and anatomical analysis of human movement. May not hold for credit with PHED 2330 or PHED 2310 (057.231). Prerequisite: KIN 2320 or PHED 2320 (057.232) (C).

KIN 2540 Psychology of Sport and Physical Activity Cr.Hrs. 3

This course will provide the student with an understanding of psychological variables affecting individuals within sporting and physical activity contexts. Among the topics to be explored will be motivation, arousal/anxiety, group dynamics and youth involvement in sport. May not hold for credit with PHED 2540. Prerequisite: PSYC 1200.

KIN 2610 Health and Physical Aspects of Aging Cr.Hrs. 3

An introduction to health, well-being and aging. Emphasis on health as multidimensional including physical, social and mental health. Integration of theory and research in examining selected issues related to health and physical aspects of aging. This is an Option in Aging course and may not be held for credit with PHED 2610 (057.261) or NURS 2610 (049.261).

KIN 2750 Athletic Therapy Skills Cr.Hrs. 3

This course will focus upon the theoretical study and practical application of massage therapy (basic and advanced) and sport specific taping, splinting and bracing techniques. The intent of this course is to help prepare students for their future in the profession of Athletic Therapy. May not hold for credit with PHED 2020 (057.202) or PHED 3180 (057.318). Open to Athletic Therapy students only.

Kinesiology Course Descriptions-3000 Level

KIN 3160 Pathology and Sport Medicine Cr.Hrs. 3

(Lab required) Analysis of types of injuries and emergency procedures, and practical experience in first aid, taping and wrapping, massage, and various preventive techniques. May not be held for credit with PHED 3160 or PHED 3060 (057.306). Prerequisite: KIN 2320 or PHED 2320 (057.232)(C).

KIN 3200 Basic Trauma and Life Support Cr.Hrs. 3

(Lab required) Assessment and management of medical emergencies common to sports. Topics will include on-field primary and secondary surveys, airway management, assessment and management of head, spinal, chest, abdominal and extremity trauma. Open only to Athletic Therapy students or with permission of the instructor. May not hold for credit with PHED 3200 (057.320 or 057.319).

KIN 3320 Advanced Human Anatomy Cr.Hrs. 3

(Lab Required) This course will concentrate on the structure and function of the human body's various tissues, organs and systems with particular emphasis upon basic histology, function and gross anatomy. This course will help prepare students who are interested in pursuing careers in Athletic Therapy and Kinesiology. Note: A fieldwork fee is attached to the course. Prerequisite: [KIN 2320 or PHED 2320 (057.232) (C)]

KIN 3330 Functional Assessment and Restoration A Cr.Hrs. 3

(Lab required) General principles of assessment and restoration; assessment of acute and chronic musculo-skeletal injuries of the lower extremity; rehabilitation techniques to ensure full restoration of function. May not be held with KIN 3300 (PHED 3300 or 057.330). Prerequisite: KIN 3320 (C).

KIN 3332 Functional Assessment and Restoration B Cr.Hrs. 3

(Lab required) Assessment of acute and chronic musculo-skeletal injuries of the upper extremity and spine; rehabilitation techniques to ensure full restoration of function. May not be held with KIN 3300 (PHED 3300 or 057.330). Prerequisite: KIN 3330 (C).

KIN 3400 Therapeutic Modalities Cr.Hrs. 3

(Lab Required) This course will concentrate on the use of therapeutic modalities commonly utilized in the profession of Athletic Therapy. It will introduce the student to various thermal mechanical, and electromagnetic agents used for therapeutic purposes. May not hold for credit with PT 2720 (167.272). Prerequisite: [BIOL 2420] or ZOO 2540 (22.254).

KIN 3450 Motor Control and Learning Cr.Hrs. 3

(Lab Required). Principles underlying human motor performance and motor skill learning. May not hold for credit with PHED 3450 (057.345).

KIN 3470 Exercise Physiology Cr.Hrs. 3

(Lab required) Physiological and functional responses to acute and chronic exercise, focusing on the cardiovascular, respiratory and neuromuscular systems. May not be held for credit with PHED 3470 or PHED 3430 (057.343). Prerequisites: BIOL 2420 (ZOO 2540 or 022.254) (D) or BIOL 1412 (ZOO 1330 or 022.133) (C).

KIN 3512 Principles of Fitness Training Cr.Hrs. 3

Theoretical concepts of designing programs employing the principles of overload and adaptation for all components of fitness for all age groups. May not hold with PHED 3090 (KIN 3090 or 057.309) or PHED 3512. Prerequisite: a grade of C or better in PHED 3430 (057.343) or KIN 3470 or PHED 3470.

KIN 3520 Coaching the High Performance Athlete A Cr.Hrs. 3

The development of advanced technical and theoretical expertise in coaching, including conflict management, psychology of performance, effective leadership, making ethical decisions, and practice planning. The course prepares students to be "Trained" in the Competition - Development level of the National Coaching Certification Program (NCCP). May not hold for credit with PHED 3520. Prerequisite: Faculty permission and 45 credit hours of university-level course work. The student must demonstrate a high level of proficiency as an athlete, coach or official in their sport.

KIN 3530 Coaching the High Performance Athlete B Cr.Hrs. 3

The development of advanced technical and theoretical expertise in coaching, including prevention and recovery, leading drug free sport, developing athletic abilities, and designing a basic sport program. The course completes the fully "Trained" component in the Competition - Development level of the National Coaching Certification Program (NCCP). May not hold for credit with PHED 3530. Prerequisite: KIN 3520 or PHED 3520.

KIN 3740 Resistance Training and Conditioning Cr.Hrs. 3

Development of theoretical and practical knowledge of strength training and conditioning for programming over the entire healthy population from inactive sedentary individuals to elite athletes. May not hold for credit with PHED 2620 (057.262 or PHED 3740). Prerequisite: KIN 2320 (PHED 2320 or 057.232) (C) and KIN 3470 (PHED 3470 or PHED 3430 or 057.343) (C). Co-requisite: KIN 3512 (KIN 3090, PHED 3512, PHED 3090 or 057.309) (C). Requires a paid facility use pass.

KIN 3912 Athletic Therapy Practicum Cr.Hrs. 4

To provide clinical and on-field internship experiences on campus and in the community for prospective Athletic Therapy candidates. May not hold for credit with PHED 3910 (057.391) or KIN 3910. Evaluated on a pass/fail basis. Prerequisite KIN 2750 (PHED 2020 or 057.202 or PHED 3180 or 057.318) (C) and KIN 2320 (PHED 2320 or 057.232) (C) and KIN 3200 (PHED 3200 or 057.320 or 057.319) (C).

KIN 3914 Clinical Block Placement Cr.Hrs. 2

Clinical internship experiences on campus and in the community for prospective Athletic Therapy candidates. Evaluated on a pass/fail basis. May not be held for credit with KIN 3910 (PHED 3910 or 057.310). Prerequisites: KIN 3912.

Kinesiology Course Descriptions-4000 Level

KIN 4060 Drugs and Ergogenic Aids in Sport Cr.Hrs. 3

A multidisciplinary examination of drugs, hormones, dietary supplement and methods used by athletes in attempting to enhance athletic performance. Ethical concerns and mechanisms of action will be examined for steroids, stimulants, masking agents, blood doping, and hormonal and dietary supplements among others. May not hold for credit with PHED 4060 (057.406). Recommended prerequisite BIOL 1412 (ZOO 1330 or 022.133) or BIOL 2420 (ZOO 2540 or 022.254).

KIN 4160 Advanced Pathology and Sport Medicine Cr.Hrs. 3

Basic principles of pathology and clinical manifestations of cardiac respiratory, and neurologic disorders. Preventative measures, assessments and treatment methods employed in care of patients with these disorders will also be examined. May not be held for credit with PHED 4050 (057.405). Prerequisite: KIN 3160 (PHED 3160, PHED 3060 or 057.306) (C) and KIN 3470 (PHED 3470, PHED 3430 or 057.343) (C) and KIN 3320 (C).

KIN 4330 Advanced Biomechanics Cr.Hrs. 3

(Lab required) A biomechanical analysis of the skills and techniques of the major sports, games, and exercises. May not be held for credit with PHED 4360 (057.436). Prerequisite: KIN 2330 or PHED 2330 or PHED 2310 (057.231) (C).

KIN 4400 Therapeutic Exercise Rehabilitation Cr.Hrs. 3

This course will concentrate on therapeutic exercise for the upper and lower extremities, torso and spine. Content will focus upon using exercise and basic therapy techniques to restore function by addressing deficiencies in range of motion, flexibility, strength, power, endurance, proprioception, coordination, agility and speed. Prerequisite: KIN 3740 (PHED 3740, PHED 2620 or 057.262) (C) and KIN 3160 (PHED 3160, PHED 3060 or 057.306) (C).

KIN 4460 Fitness Appraisal and Lifestyle Counselling Cr.Hrs. 3

Theoretical knowledge and practical training related to physical activity, fitness and lifestyle appraisal and counseling. Note: This course prepares students for certification as a Certified Personal Trainer (CPT) by the Canadian Society for Exercise Physiology. B. Kin. students who wish to prepare for certification as a Certified Exercise Physiologist (CEP) by the Canadian Society for Exercise Physiology, should consult the Undergraduate Program Administrator for information. May not be held for credit with PHED 4460 (057.446). Prerequisite: KIN 3470 (PHED 3470, PHED 3430 or 057.343) (C). Pre- or Co-requisite: PERS 1200 (PHED 1200 or 057.120) (C) and KIN 3512 (PHED 3512, KIN 3090, PHED 3090 or 057.309) (C). Requires a paid facilities use pass.

KIN 4470 Advanced Exercise Physiology Cr.Hrs. 3

An advanced examination of the physiological factors that affect human performance during physical activity. This will include exposure to related research and the development of techniques for its critical assessment. May not hold for credit with PHED 4410 (057.441). Prerequisite: KIN 3470 (PHED 3470, PHED 3430 or 057.343) (C).

KIN 4500 Physical Activity and Aging Cr.Hrs. 3

The study of the aging processes and the effects of exercise and lifestyle factors on the health and fitness of the aging adult. May not be held for credit with PHED 4500 (057.450). Prerequisite: KIN 3512 (KIN 3090, PHED 3512, PHED 3090 or 057.309) (C) or permission of the instructor.

KIN 4540 Advanced Topics in Sport Psychology Cr.Hrs. 3

This course will provide the student with a deeper understanding of psychological variables affecting individuals within sport contexts, including an exploration of various research methods and theories/research related to motivation, youth, and applied work in sport psychology. May not hold for credit with PHED 4540. Prerequisite: KIN 2540 (PHED 2540).

KIN 4560 Advanced Fitness Appraisal and Lifestyle Counselling Cr.Hrs. 3

(Lab required) Advanced theoretical knowledge and experiential learning related to physical activity, fitness and lifestyle assessment, counselling, and exercise prescription for apparently healthy and clinical populations. Prepares students for certification as a Certified Exercise Physiologist (CEP) by the Canadian Society of Exercise Physiology. May not hold for credit with PHED 4350 (057.435). Prerequisite: KIN 4460 (PHED 4460 or 057.346) (C) and KIN 3512 (KIN 3090, PHED 3512, PHED 3090 or 057.309)(C). Requires a paid facility use pass.

KIN 4910 Athletic Therapy Practicum Cr.Hrs. 6

To provide clinical and on-field internship experiences on campus and in the community for prospective Athletic Therapy candidates. May not be held for credit with PHED 4910 (057.491). Evaluated pass/fail. Prerequisite: KIN 3914 (KIN 3910, PHED 3910 or 057.310) (C) and KIN 3400 (C) and KIN 3320 (C).

Phys Ed & Rec Studies General Course Descriptions-1000 Level

PERS 1200 Physical Activity, Health and Wellness Cr.Hrs. 3

An examination of the importance of physical activity for health and wellness, theories and determinants of health promoting behaviours, and strategies for promoting health behaviours. Examination of the benefits of physical activity for health and wellness, the present and recommended levels of physical activity, the factors influencing participation in physical activity, and individual organizational and national interventions for increasing physical activity. May not be held for credit with PHED 1200 (057.120)

PERS 1300 Introduction to Leisure Travel Cr.Hrs. 3

To provide an introduction to tourist behaviour and the tourism system through an overview of: why people travel; the components of tourism; the scope and organization of tourism in Canada; and the interrelationship between recreation and tourism. May not be held for credit with REC 1200 (123.120).

PERS 1400 Concepts of Recreation and Leisure Cr.Hrs. 3

The nature and scope of recreation and leisure, the past influences and implications for the future. An overview of the types and roles of various components of the leisure service delivery system. May not be held for credit with REC 1400 (123.140).

PERS 1500 Foundations of Physical Education and Kinesiology Cr.Hrs. 3

An introduction to physical education and kinesiology as a profession and a discipline, including an overview of sub-disciplines, resources, and careers; a personal physical assessment; and principles for achieving physical fitness. May not be held for credit with PHED 1500 (057.150 or 057.132). Note: A fieldwork fee is attached to the course.

Phys Ed & Rec Studies General Course Descriptions-2000 Level

PERS 2000 Special Topics (Introductory) Cr.Hrs. 3

An introductory examination of selected topics in the fields of kinesiology, physical education and recreation. Topics will vary depending on faculty expertise and student need.

PERS 2100 Introduction to Professional Practice Cr.Hrs. 3

An introduction to professional values and behaviours in the broad fields related to kinesiology, physical education, and recreation management including accountability, commitment, ethical decision making, interpersonal communication, respect for diversity, and service. Prerequisites: PERS 1200 (PHED 1200 or 057.120) (C) or PERS 1500 (PHED 1500 or 057.150) (C) and PERS 1400 (REC 1400 or 123.140) (C).

PERS 2200 Program Planning Principles Cr.Hrs. 3

While contexts in practice may vary, program planning is an essential competency for all professionals in recreation, kinesiology, and physical education. To ensure the requisite skill set is acquired, the emphasis in this course will be on principles and processes in effective program planning, implementation, and evaluation. May not hold for credit with PHED 3080 (057.308, REC 2530 or 123.253). Prerequisites: PERS 1200 (PHED 1200 or 057.120) (C) or PERS 1500 (PHED 1500 or 057.150) (C) and PERS 1400 (REC 1400 or 123.140) (C).

Phys Ed & Rec Studies General Course Descriptions-3000 Level**PERS 3100 Inclusive Physical Activity and Leisure Cr.Hrs. 3**

This course introduces the foundations of inclusive physical activity and leisure and the application of this knowledge to individuals from diverse backgrounds and experiences with a focus on people with various forms of impairment. May not hold for credit with PHED 3390 (057.339, REC 3060 or 123.306.) Prerequisite: PERS 2100 (C).

PERS 3170 Canadian Sport History Cr.Hrs. 3

This course will emphasize the rise of modern sport in Canada and will reflect on the ways in which social change has influenced sport and physical activity. This course provides an overview of issues and topics related to the development of modern sports in Canada. Using the concepts of class, gender, race and ethnic identity as interpretive tools, the course will examine: physical activities and games of First Nations; sport and recreation in new France and British North America; sports in post-Confederation Canada; and developments in the 20th and 21st centuries. May not be held for credit with KIN 3170 (PHED 3170, PHED 3070 or 057.307). Requires a paid facility use pass (day pass acceptable).

PERS 3340 Philosophy of Physical Activity and Leisure Cr.Hrs. 3

Issues in sport, physical education and recreation will be examined from a philosophical perspective. May not be held for credit with KIN 3340 (REC 3340, PHED 2340 or 057.234). Prerequisite: PERS 2100 (C).

PERS 3350 Introduction to Research Cr.Hrs. 3

Students will become familiar with the basic principles and methods of research in the biological, life and social sciences. Students will have the conceptual foundations and practical skills needed to locate, understand, and evaluate primary research publications. May not hold for credit with KIN 3350 (REC 3350, REC 2010 or 123.201). Prerequisite: STAT 1000 or STAT 1001 (005.100).

PERS 3460 Sociology of Physical Activity and Leisure Cr.Hrs. 3

This course examines sociological factors that influence and shape participation in the areas of physical activity, sport and leisure. The exploration of students' own experiences in this field is emphasized, using an analytical model examining experiences as they arise out of the interplay of social structure and individual agency. May not hold for credit with PHED 3460 (057.346).

Phys Ed & Rec Studies General Course Descriptions-4000 Level**PERS 4100 Current Issues Cr.Hrs. 3**

A capstone course examining current issues and strategies for addressing them in the broad fields related to kinesiology, recreation management, and physical education. Prerequisite: Successful completion of 90 credit hours of course work in the BKin or the BRMCD degree programs.

PERS 4200 Special Topics Cr.Hrs. 3

A theoretical and practical examination of selected topics in the fields of recreation, leisure and kinesiology. Topics will vary depending on faculty expertise and student need. Prerequisite: PERS 1400 (REC 1400 or 123.140) (C) or PERS 1500 (PHED 1500 or 057.150)(C) or PERS 1200 (PHED 1200 or 057.120) or departmental approval.

PERS 4310 Physical Activity Counselling Cr.Hrs. 3

The purpose of this course is to introduce students to physical activity counselling and the associated interpersonal and counselling skills as well as relevant theories that underpin behaviour change and counselling techniques. Through case studies, readings, research, discussions, simulations, role plays and real counselling work students will learn, reflect on and practice proven counselling skills that build motivation and facilitate behaviour change. Pre-requisites: KIN 2540 Psychology of Sport and Physical Activity (C) or PSYC 3660 Sport Psychology (C).

PERS 4320 Sport and the Body Cr.Hrs. 3

A critical analysis of current, interdisciplinary topics pertaining to sport and the body. This course tackles difficult and controversial questions related to the active body. Pre-requisite: PERS 3460 Sociology of Physical Activity and Leisure (C) or permission of the instructor. May not be held with: PERS 4200.

PERS 4340 Sport, Film and Society Cr.Hrs. 3

This seminar format course encourages students to use films as "texts" through which important sociocultural themes related to the study of sport, recreation, physical activity, dance, and physical education can be explored. It builds upon themes explored in courses such as PERS 3460 and uses film as a way to examine the intersections between the representations of key historical and sociological concepts, such as social class, gender, and race/ethnicity and the representations of sport and the moving body. The course is organized around these themes and includes a variety of film genres, primarily feature films and documentaries. Each seminar includes one or more screenings upon which class discussions are based. The course concludes with a screening of the films made by the students themselves, a key component of the course evaluation. Prerequisite: PERS 3460 or written permission of the instructor.

PERS 4600 Directed Studies Cr.Hrs. 3

Completion of an independent study or fieldwork experience, including a major written submission, approved by the department and under the direction of a faculty member.

PERS 4630 Supervised Fieldwork Experience Cr.Hrs. 12

The fieldwork practicum is a professionally supervised field experience that provides an opportunity to apply knowledge gained in academic courses, and exposure to new concepts of professional practice in the fields of physical activity, health and wellness, or leisure. Students are placed for a 13-week period of full-time work within a suitable agency. May not be held for credit with PHED 4620 (057.462, REC 3080, 123.308 or REC 4630). Prerequisite: Successful completion of 90 credit hours of course work in the BKin or BRMCD degree programs and a minimum DGPA of 2.5.

Physical Education Course Descriptions-2000 Level**PHED 2400 Coaching Theory and Practice Cr.Hrs. 3**

An introduction to theoretical and practical aspects of coaching at the community and school level, including the examination of topics of philosophical, psychological, ethical and technical significance. The course prepares students for certification from the national Coaching Certification Program (Competition A). May not hold for credit with KIN 2400, KIN 3720, PHED 3720 or PHED 3050 (057.305). Requires a paid facility use pass.

PHED 2402 Advanced Coaching Theory and Practice Cr.Hrs. 3

An analysis of the theoretical and practical aspects of coaching at elite levels, with a particular focus on topics of psychological and technical significance. An emphasis is placed on the sport psychology research literature. The course prepares students for certification from the National Coaching Certification Program (Competition B). May not be held for credit with KIN 2402 or KIN 3730 or PHED 3730. Prerequisite: KIN 2400 or PHED 2400 or PHED 3720 or KIN 3720 or PHED 3050 (057.305) (C). Requires a paid facility use pass.

PHED 2550 Growth and Motor Development Cr.Hrs. 3

Detailed study of physical growth and motor development from conception to adolescence, with implications for physical activity programs. May not be held with 057.255.

PHED 2710 Human Movement Principles Cr.Hrs. 3

An introduction to the principles of inclusive physical education through the integration of theory, practice and guided relection pertaining to the development of fundamental movement skills and strategies applied to educational games, gymnastics, and dance. May not hold for credit with PHED 1420 (057.142 or 047.141). Requires a paid facility use pass.

PHED 2720 Developmental Games and Activities Cr.Hrs. 3

Practical and theoretical aspects of designing educational game experiences applicable to early through senior years physical education, to include the design, implementation, and assessment of safe and inclusive physical activities as well as planning, organizational and teaching strategies. Introduces students to Manitoba Curriculum Student Learning Outcomes in "Movement, Safety, Personal and Social Management". May not hold for credit with PHED 2650 (057.265). Prerequisite: PHED 2710 (C). Requires a paid facility use pass.

PHED 2730 Gymnastics, Dance and Rhythmic Activities Cr.Hrs. 3

Practical and theoretical aspects of designing gymnastics, dance and rhythmic activity experiences applicable to early through senior years physical education, to include the design, implementation, and assessment of safe and inclusive physical activities as well as planning, organizational and teaching strategies. Incorporates Manitoba Curriculum Student Learning Outcomes in "Movement" and "Safety." May not hold for credit with PHED 3410 (057.341) or PHED 3140 (057.314). Prerequisite: PHED 2710 (C). Requires a paid facility use pass.

PHED 2740 Fitness Theory and Practice Cr.Hrs. 3

Integrates theory and practice necessary to design and lead safe and effective group fitness programs, following performance standards established by the National Fitness Leadership Alliance. Introduces students to Manitoba Curriculum Student Learning Outcomes in "Fitness Management," and prepares them for Manitoba Fitness Council Theory and Group Fitness Specialty exams. May not be held for credit with PHED 1640 (057.164) or PHED 2640 (057.264) or PHED 2630 (057.263) or KIN 2740. Note: A fieldwork fee is attached to the course. Prerequisite: KIN 2320 (PHED 2320 or 057.232)(C). Requires a paid facility use pass.

Physical Education Course Descriptions-3000 Level

PHED 3102 Aboriginal Song and Dance Cr.Hrs. 3

An introduction to a variety of traditional and culturally relevant Aboriginal songs and dances representative of Canada's Aboriginal peoples, including First Nations, Metis and Inuit, taught using western and traditional teaching styles with an emphasis on hands-on learning. May not be held for credit with PERS 4200. A fieldwork fee is attached to the course.

PHED 3360 Culturally Relevant Physical Education and Health Cr.Hrs. 3

An investigation of physical health and education from a critical theorist perspective, that is, one that investigates the different relations of power and privilege (based on ability, gender, race, socio-economic class, sexu-

ality) experienced within education experiences of young people from diverse backgrounds will be analyzed from a holistic perspective. May not hold for credit with PHED 3100 (057.310). Prerequisite: PHED 2720 (PHED 2650 or 057.265) (C).

PHED 3710 Active Health and Human Potential Cr.Hrs. 3

An examination of lifestyle behaviours which can enable or constrain human wellness and potential. By integrating theory with practice, current wellness models and motivational theories will guide strategies for wellness planning personal and professional practice. Introduces students to Manitoba Curriculum Student Learning Outcomes in "Personal and Social Management", and "Healthy Lifestyle Practices", as well as curricular connections for the teaching of "active health". May not be held for credit with PHED 3440 (057.344).

PHED 3750 Lifestyles Activities Cr.Hrs. 3

An introduction to the knowledge, skills, and attitudes that aid in the development of lifelong physically active and healthy lifestyles. May not hold for credit with KIN 3750 (REC 3750). Requires a paid facility use pass. Note: A fieldwork fee is attached to the course.

PHED 3760 Diverse Populations Mentorship Cr.Hrs. 3

Practical and theoretical aspects of designing physical activity experiences for students from diverse population, including on site leadership opportunities in a multicultural school context. Evaluated pass/fail.

PHED 3770 Aboriginal Games and Activities Cr.Hrs. 3

This course will provide students with a unique opportunity to explore, in theory and practice, traditional and contemporary world views related to historical, cultural, and environmental approaches to Aboriginal games and activities. Requires a paid facility use pass. Evaluated pass/fail.

Physical Education Course Descriptions-4000 Level

PHED 4710 Outdoor Education Cr.Hrs. 3

To introduce the students to the basic outdoor skills associated with summer/winter backpacking/cross-country skiing/snow shoeing trips. Students will then learn to use a variety of outdoor settings for education opportunities on a variety of topics and disciplines. May not hold for credit with KIN 4710 (REC 4710). A fieldwork fee is attached to the course.

Recreation Studies Course Descriptions-2000 Level

REC 2400 Management and Marketing of Leisure Services Cr.Hrs. 3

Basic management, and marketing principles and practices and their applicability to delivery of leisure services. Topics include financial resources, budgeting, people-centred management, and marketing. Prerequisite: PERS 1400 (REC 1400 or 123.140) (C).

REC 2650 The Social Aspects of Aging Cr.Hrs. 3

An examination of the social aspects of aging. Emphasis on understanding the aging process as a life transition involving adaptation through interaction with social and physical environments. This is an Option in Aging course and may not be held for credit with IDES 2650 (051.265, HMEC 2650, 028.265, SWRK 2650, 047.265 or 123.265).

Recreation Studies Course Descriptions-3000 Level

REC 3090 Sustainable Nature-Based Tourism Cr.Hrs. 3

Analysis of the growth and development of sustainable nature-based tourism as a global and regional phenomenon. Particular emphasis will be placed upon the fundamental principles of sustainability, natural resource and visitor management for recreation, and the role of outdoor recreation and education in Sustainable Tourism Planning and Management. May not be held for credit with 123.309. Prerequisite: PERS 1300 (REC 1200 or 123.120) (C) and PERS 1400 (REC 1400 or 123.140) (C). Note: A fieldwork fee is attached to the course.

REC 3200 Advanced Program Planning and Leadership Cr.Hrs. 3

Consideration and application of program planning principles as they relate to specialized contexts and diverse populations. Foundations of leadership and interpersonal communication for effective and successful program implementation. May not hold for credit with REC 2540 (123.254, REC 3870 or 123.387). Prerequisite: PERS 2200 (PHED 3080, 057.308, REC 2530 or 123.253)(C). Requires a paid facility use pass.

REC 3310 Cultural Tourism Cr.Hrs. 3

This course will provide students with an understanding of various stakeholder perspectives related to visiting and operating cultural tourism attractions. The following topics will be discussed: tourists' motivations and experiences, cultural resource managers' perspectives on tourism, tourism industry leaders' viewpoint on cultural resources and the relationship between cultural producers and consumers. Prerequisite: PERS 1300 (123.120) (C).

REC 3850 The Planning of Recreation Areas and Facilities Cr.Hrs. 3

The process used to plan both recreational open spaces and facilities. Special consideration is given to the role of the recreation professional in relationship to other planners. May not be held for credit with 123.385. Prerequisite: PERS 1400 (REC 1400 or 123.140) (C) and PERS 2200 (PHED 3080, 057.308, REC 2530 or 123.253) (C).

Recreation Studies Course Descriptions-4000 Level**REC 4060 Person Centred Leisure Education Cr.Hrs. 3**

A detailed examination of person-centred leisure education with an emphasis on both theoretical and practice models and their application to the recreation service delivery system. May not be held for credit with 123.406. Prerequisite: PERS 3100 (REC 3060, 123.306, PHED 3390 or 057.339) (C).

REC 4070 Community Development and the Leisure Service Delivery System Cr.Hrs. 3

The nature of community and the unique role that leisure service organizations play in the complex process of community development. May not be held for credit with 123.404 (123.407). Prerequisite: PERS 2200 (REC 2530, 123.253, PHED 3080 or 057.308) (C) and REC 2400 (C) and completion of 70 percent of the core courses in Recreation Management and Community Development.

REC 4090 Sustainable Nature-Based Tourism Planning, Management and Research Cr.Hrs. 3

Building upon the changes to REC 3090 this course examines planning and management frameworks as they relate to sustainable nature-based tourism. The course examines the expansion of tourism as a global phenomenon and considers sustainable nature-based tourism as a community development process. In addition the role and importance of research in informing the tourism planning and management decision making processes is examined. May not be held for credit with 123.409 (123.430 or 123.432). Prerequisite: REC 3090 (123.309 or 123.330) (C). Note: A fieldwork fee is attached to the course.

REC 4120 Recreational Travel and Tourism Cr.Hrs. 3

The purpose of this course is to provide students with a better understanding of the travel and tourism industry through an examination of its history, service systems and issues. May not be held for credit with 123.412. Prerequisite: PERS 1300 (REC 1200 or 123.120) (C).

REC 4140 Marketing Recreation and Park Services Cr.Hrs. 3

A review of the general principles of marketing and an introduction to strategies for their implementation in public sector and not-for-profit recreation agency programs and services. May not be held for credit with 123.414. Prerequisite: REC 2400 (REC 3860 or 123.386) (C) or both MKT 2210 (118.221) and PERS 1400 (REC 1400 or 123.140)(C).

REC 4150 Clinical Aspects of Therapeutic Recreation Cr.Hrs. 3

An examination of the current principles of therapeutic recreation in relation to their practical application to individuals in clinical settings such as nursing homes, hospitals and other long-term care facilities. May not be held for credit with 123.415. Prerequisite: PERS 3100 or REC 3060 (123.306) (C).

REC 4170 Sport Management Cr.Hrs. 3

An in-depth coverage of sport management, focusing on Canadian amateur sport systems (municipal, provincial, national) and professional sport organizations. May not be held for credit with 123.417. Prerequisite: REC 2400 (C).

REC 4250 Leisure and Aging Cr.Hrs. 3

The nature of the aging process and its impact on leisure behaviour. The factors influencing leisure among older adults, policy issues, and program and service methods and implications will be examined. May not be held for credit with REC 4130 or 123.413. Prerequisite: PERS 3100 (C) or REC/SWRK/HMEC 2650 (C) or permission of instructor.

REC 4350 Parks and Protected Areas Planning and Management: Field Studies Cr.Hrs. 6

The course is taught in two segments, an on-campus component and field study component taking place in Banff National Park. The on-campus component examines the historical development of the concept of parks and protected areas, the role of interpretation, management and research in the parks and emerging issues in the management of parks and protected areas. In addition, during the on-campus component planning for the field will take place. The field segment will focus on a wide variety of management issues with particular attention to Banff National Park. Emerging issues and trends will be examined and past management responses evaluated. There will be opportunities for students to investigate specific management issues of interest to them and to participate in current research being conducted in the park. Prerequisite: Written permission of the instructor required. Offered with GEOG 4350.

REC 4400 The Administration of Special Events Cr.Hrs. 3

Students will learn about theories and concepts that inform the study of special events and will be exposed to advanced management principles and practices and their applicability to the delivery of special events. May not be held for credit with REC 4310 (123.431). Prerequisite: REC 2400 (REC 3860 or 123.386) (C).

REC 4720 Wilderness Adventures Cr.Hrs. 3

Student will learn how to plan and participate in one or more wilderness adventure activities such as canoe tripping, sailing, kayaking, climbing, winter camping, etc. Students will also concentrate on conducting these activities safely with clients. It is hoped that this experience will positively affect future life sport and recreation activities. May not be held for credit with KIN 4720 or PHED 4720. A fieldwork fee is attached to the course.

REC 4850 Advanced Planning of Recreation Areas and Facilities Cr.Hrs. 3

Advanced planning considerations with opportunity for application of planning process theories. May not be held for credit with REC 4340 (123.434). Prerequisite: REC 3850 (123.385) (C).

FACULTY OF LAW

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Chapter Contents

SECTION 1: DEGREE PROGRAMS OFFERED

SECTION 2: THE PROFESSION AND THE FACULTY OF LAW

- 2.1 The Study of Law
- 2.2 Clinical Learning
- 2.3 Research and Publications
- 2.4 Faculty of Law Centres of Excellence
- 2.5 Student Organizations

SECTION 3: ADMISSION TO THE FACULTY OF LAW

- 3.1 Course Requirements for Admission to J.D. Program

SECTION 4: ACADEMIC REGULATIONS

- 4.1 Residence Requirements for J.D. Degree
- 4.2 Licence to Practise Law
- 4.3 Regulations of the Faculty of Law
- 4.4 Miscellaneous Registration Matters

SECTION 5: PROGRAM REQUIREMENTS

- 5.1 First Year
- 5.2 Second Year Only
- 5.3 Second Year or Third Year

SECTION 6: REGISTRATION

SECTION 7: LAW COURSE DESCRIPTIONS

SECTION 1: DEGREE PROGRAMS OFFERED

Program/Degree	*Years to Compete	Total Credit Hours
Juris Doctor (J.D.)	5	157
Master of Laws (LL.M.)	6	161-163 and Thesis

*This includes two years (60 credit hours) of study in an undergraduate program.

Equivalent academic courses completed at recognized universities elsewhere will be considered. For all admission requirements see: <http://law.robsonhall.ca/jd/admission-to-first-year>

*The Master of Laws is a thesis-based program designed for completion in one year after the completion of a three year J.D. program. The program consists of participation in the Graduate Legal Theory Seminar, two additional courses and completion of a substantial thesis. Further details are available through the LL.M. website: <http://law.robsonhall.ca/llm/> admissions Applicants should also consult the Faculty of Graduate Studies website: umanitoba.ca/graduate_studies/.

SECTION 2: THE PROFESSION AND THE FACULTY OF LAW

SECTION 2: Juris Doctor - J.D.

Robson Hall, Faculty of Law, offers a three year J.D. program that starts with the fundamental doctrinal courses that allow students to acquire a solid foundation in law. From the foundational courses, students can move into legal specialities of their choice, or choose to pursue an J.D. concentrating on Aboriginal law, business law, or human rights. Clinical legal education has been a part of the J.D. program since the early 1970s and students develop lawyering skills under faculty guidance, expanding their perspectives and ethical understanding of the role of practising lawyers. Scholarship and research is built into the J.D. program so students have an opportunity to develop a critical understanding of law and its development.

2.1 The Study of Law

Legal education in Canada is divided into two phases: the academic study of law at one of the university law schools and practical training under the auspices of a provincial law society for those who wish to be admitted to practise and called to a Bar. As there is a reciprocal recognition of university law degrees between the common law provinces (all provinces except Quebec), the academic study can be taken in any one of these provinces.

A sound education in law provides a good foundation for a great variety of careers. In the past most law graduates have entered the private practise of law to concentrate on various types of legal work: real estate transactions, commercial contracts, company law, family law, taxation, etc. Contrary to popular belief only a few lawyers concentrate on court work and even fewer specialize in criminal cases. While the tendency to specialize in the practise of law is becoming more prevalent, most lawyers continue to be general practitioners prepared to perform most types of legal work according to the needs of their clients.

Besides the private practice of law, law graduates can join the legal departments which many corporations find it expedient to maintain; others enter the employ of various government departments to serve in a variety of capacities. A few pursue nonlegal vocations in, business, journalism, social work, and law enforcement. At the University of Manitoba consideration is given to the fact that while most students take law to become practising lawyers, some are taking law as an additional discipline to enhance their opportunities in fields other than the practise of law; thus, while the emphasis is on the academic study of substantive law, the study is carried on in a practical context.

2.2 Clinical Learning

The curriculum invites critical assessment of the role of law in society as well as the development of skills relevant to the practice of law. In addition to lectures and seminars, students are given an opportunity to develop, under supervision, some of the research, writing, and forensic skills which will prove useful in the practise of law. In first year, students are acquainted with the various resource materials available in a law library, and they follow a program designed to develop legal research and writing techniques. In second and third years, students participate in moot courts, fictitious trials and appeals, which provide practise in research, examination of witnesses, and courtroom argument. This advocacy training is just one element of the program at Robson Hall that contributes to the excellent reputation of our graduates. In third year students may choose from a range of Clinical Courses, including clerkships with the Court of Queen's Bench and the Court of Appeal, Internships and national competitive moot competitions.

Throughout their legal studies students may serve actual legal clients through participation at the University Law Centre, Pro Bono Students, L. Kerry Vickar Business Law Clinic and The Legal Help Centre.

2.3 Research and Scholarly Writing

Research and scholarly writing are integral elements of the mission of the University and the law school. Professors research, write and consult with the larger legal community in their particular area of expertise and students have similar opportunities. Each year students must take a perspective course which provides an opportunity to explore a particular area of law in depth. Perspective courses have limited enrolment and students must research and write a major paper.

2.4 Faculty of Law Centres of Excellence

Robson Hall is home to two named research chairs. In 1999, the Faculty of Law established the Asper Chair of International Business and Trade Law. The Asper Chair sponsors a variety of research including bi-annual academic conferences in international business and trade law. An internship program allows up to four students a year to work with the Asper Chair and creates opportunities for students to advance their education, while gaining skills necessary to pursue careers in law or business with an international focus. Additionally, students involved in the Asper program have the opportunity to participate in international commercial dispute resolution competitions.

The Marcel Desautels Chair in Private Enterprise and the Law has a mandate to conduct research and provide education on issues of specific interest to the privately held or family owned businesses. The Desautel Centre's focus is on the needs of closely held businesses. The Faculty of Law also operates the Kerry Vickar Small Business Law Clinic which is headed by a director who is assisted by volunteer mentors from the practising bar.

2.5 Student Organizations

All Law students are members of the Manitoba Law Students' Association (MLSA), the student government. Student participation in Faculty governance takes place through the representation of elected members of the MLSA. In addition to the Manitoba Law Students Association there exists a diversity of student groups at Robson Hall. No matter what your interests, joining a student group can greatly enhance your law school experience by providing you with greater opportunities throughout the year to interact with the community and other students. Student groups include:

Advocates for Justice

- Bilingual Law Students Association
- Business Law Group
- Canada Law Games
- Christian Legal Fellowship (CLF)
- Family Law Group
- Feminist Legal Forum
- Manitoba Aboriginal Law Students Association (MALSA)
- MBA Mentorship Program
- Mediators Beyond Borders
- Outlaws
- Pro Bono Students Canada (PBSC)
- Robson Hall Bilingual Students Association

SECTION 3: ADMISSION TO THE FACULTY OF LAW

3.1 Course Requirements for Admission to J.D. Program

Robson Hall, Faculty of Law offers three First Year Admission categories:

Index Score (Regular) Category (50% GPA and 50% LSAT score)

Individual Consideration Category

Aboriginal Category

The minimum academic requirement for the Index score category is two (2) full years of university level courses including a mathematic requirement (equivalent of 60 credits). The JD. requirement fulfils the Universtiy's English requirement.

All applicants must write the Law School Admission Test (LSAT).

Please visit the Robson Hall website: <http://law.robsonhall.ca/jd/admission-to-first-year>.

SECTION 4: ACADEMIC REGULATIONS

All students are asked to note that some academic policies and regulations are under review and are subject to change. Please check the Web Calendar at www.umanitoba.ca for updated information.

The provisions of the chapter, General Academic Regulations and Requirements, and the chapter, University Policies, apply to all students. In addition, the Faculty of Law has regulations and requirements, published below, that apply specifically to its students.

4.1 Residence requirements for the J.D. Degree

To obtain the J.D. degree from the University of Manitoba, ordinarily a student must successfully complete two of the three years of the J.D. program at the University of Manitoba. The remaining year may be completed at another law school as approved by the Admissions Committee or the Dean's office.

4.2 Licence to Practise Law

Graduates who wish to practise must apply to the Law Society of the province in which they wish to practise. Law societies generally require applicants to complete a bar admission course. The Law Society must be satisfied as to the good character and repute of its applicants, as well as their academic competence and qualifications. Inquiries with regard to the Province of Manitoba should be made to the [Error! Hyperlink reference not valid.](#) Society of Manitoba.

4.3 Regulations of the Faculty of Law

Regulations of the Faculty of Law, as amended from time to time governing attendance, evaluation, prizes, and progression may be consulted at the Faculty's website (www.umanitoba.ca/faculties/law).

4.4 Miscellaneous Registration Matters

The Associate Dean's office shall, subject to appeal to the Academic Affairs Committee, consider and determine all applications from students admitted to the faculty for permission: (i) to take part of their law studies at another university under a letter of permission with conditions; (ii) to defer their law studies for a period of one or more academic years after successfully completing first or second year, and to permit such students to re-register following such an absence with conditions; (iii) to withdraw before completing the academic year for which they are registered and to permit, in the case of a student who withdraws from first year under exceptional circumstances, that student to re-register for a subsequent academic year as a supernumerary student, and in the case of a second or third year student, to permit such student to re-register for a subsequent academic year; in all cases with or without conditions; (iv) to switch from the full-time program to the half-time program and vice versa.

SECTION 5: PROGRAM REQUIREMENTS

This Section describes the program requirements that are in effect for the 2013-2014 academic year. However, prospective students should be aware that the Faculty of Law regularly reviews its curriculum to ensure that it continues to meet the current needs of our students.

5.1 First Year

Each full-time student is required to take all of the following courses:

Course No.	Doctrinal Courses (Compulsory)	Credit Hours
LAW 1100	Contracts	6
LAW 1140	Criminal Law and Procedure	5
LAW 1460	Constitutional Law	5
LAW 1480	Torts and Compensation Systems	5
LAW 1500	Property	5
	Clinical Course (Compulsory)	
LAW 1540	Legal Methods	5
	Perspective Course (Compulsory)	
LAW 1530	Legal System	2
Total credit hours		33

5.2 Second Year Only

In Second Year each student must take:

	Doctrinal Courses (Compulsory)	
LAW 2600	Evidence	4
LAW 3530	Administrative Law	3
LAW 2670	Civil Procedure	2
LAW 2690	Corporations I	3
	Clinical Courses (Compulsory)	
LAW 2650	Introduction to Advocacy	3
LAW 2680	Legal Negotiation	3
Total Credit Hours		18

5.3 Second Year or Third Year

In either Second Year or Third Year each student must take:		
	Doctrinal Courses (Compulsory)	
LAW 2490	Trusts	3
LAW 2640	Family Law	3
LAW 2700	Income Tax Law and Policy	3
Total Credit Hours		12
Perspective Courses (One is Compulsory in each of second and third year; more can be taken)		
LAW 3012	International Business Law	3
LAW 3014	International Trade Law	3
LAW 3018	Human Rights Law	3
LAW 3070	Gender and the law	3
LAW 3090	Children and the Law	3
LAW 3162	Topics in Dispute Resolution	2
LAW 3190	Law and Literature	3
LAW 3230	Aboriginal Peoples and Land Claims	3
LAW 3310	Aboriginal Peoples and the Law	3
LAW 3370	The Legislative Process	3
LAW 3380	Issues in Law and Bio Ethics	3
LAW 3410	Canadian Legal History	3
LAW 3490	Research Paper	2
LAW 3550	Crime, Law and Society	3
LAW 3620	Comparative Law	3
LAW 3740	International Law	3
LAW 3760	Jurisprudence	2
LAW 3940	Canadian Charter of Rights and Freedoms	3
LAW 3980	Current Legal Problems B	3
	Doctrinal Courses (Optional)	
LAW 2400	Wills and Succession	3
LAW 2510	Problems in Contract and Tort	2
LAW 2530	Debtors' and Creditors' Rights	2
LAW 3010	Agency	2
LAW 3016	Corporations II	3
LAW 3026	Trademarks	3
LAW 3040	Sales and Consumer Law	2

ACADEMIC CALENDAR 2015-2016

LAW 3050	Commercial Law	3
LAW 3200	Immigration and Refugee Law	2
LAW 3210	Competitions A *	2
LAW 3220	Competitions B *	3
LAW 3260	Insurance Law	4
LAW 3330	Employment Law	3
LAW 3390	Securities Law	2
LAW 3480	Restitution	2
LAW 3500	Intellectual Property	4
LAW 3590	Charter Issues in Criminal Law	3
LAW 3600	Environmental Law	3
LAW 3610	Landlord and Tenant	2
LAW 3680	Land Titles	3
LAW 3690	Real Estate Transactions	3
LAW 3770	Labour-Management Relations	3
LAW 3822	Scholarly Publication*	2
LAW 3830	Legal Aid Clinic *	2
LAW 3850	Conflict of Laws	3
LAW 3880	Municipal and Planning Law	3
LAW 3970	Current Legal Problems A	2
LAW 3980	Current Legal Problems B	3

Each student in Second Year must take a minimum of 32 credit hours. The 32 credit hours are made up of mandatory, doctrinal and clinical courses plus electives comprising 14 to 16 credit hours. The 32 credit hours must include at least one perspective course.

Each student in Third Year must take a minimum of 32 credit hours. The 32 credit hours are comprised of LPPR and any second or third year compulsory doctrinal courses that have not been taken, plus electives comprising the additional credit hours. The 32 credit hours must include at least one perspective course. Note: LAW 3490 Research Paper is excluded if it has been taken in second year.

	Compulsory Course	
LAW 3024	The Legal Profession and Professional Responsibility	3

The rest of a Third Year student's credit hours, comprising a minimum of 32 credit hours, shall be selected from additional Second or Third Year Courses, above, including at least one Perspective Course, plus any of the Doctrinal, and Clinical Courses, below:

	<u>Clinical Courses (Optional)</u>	
LAW 3140	Clinical Administrative Law	3
LAW 3250	Current Legal Problems D	
	A01 Clinical Family Law	3
LAW 3300	Clinical Criminal Law	8
LAW 3340	Advanced Advocacy	3
LAW 3862	Business Transactions: The Art of the Deal	6
	<u>Doctrinal Courses (Optional)</u>	
LAW 3240	Current Legal Problems C	2
	A01 Court of Appeal Clerkship*	
LAW 3360	Advanced Legal Research	3
LAW 3450	Remedies	3
LAW 3510	Corporate Tax	3
LAW 3520	Taxation of Trusts & Estates	3
LAW 3980	Current Legal Problems B	3
xxx.xxx	Non-Law University Elective**	3
* No more than three of these electives can be selected for credit. Note: A student is permitted to take only one moot for credit in each of second and third year. Students may take more than three of these electives but no credit will be awarded over the limit.		
**This option is available with permission of the Associate Dean. Note: Additional course fees will be assessed by the University.		

Third Year

You may only take one of: Clinical Administrative Law, Advanced Advocacy, Intensive Criminal Law, Legal Help Centre Clinical or Clinical Family. If you take Art of the Deal you may take Clinical Administrative Law, Advanced Advocacy, Intensive Criminal Law Legal Help Centre Clinical or Clinical Family. You may not take any other clinical course if you are taking Clinical Criminal Law.

SECTION 6: REGISTRATION

First year students in the Faculty of Law are registered by the faculty after the middle of August. Returning Second and Third year students should register themselves through Aurora. It is the students responsibility to check their Aurora account to confirm: their registration, to verify that they meet Faculty of Law requirements for graduation and access fee statements. In the event that a student fails to properly select courses the dean's office may reject the courses selected by the student and assign courses to that student and such assignments shall ordinarily be final.

SECTION 7: LAW COURSE DESCRIPTIONS

Law Course Descriptions-1000 Level

LAW 1100 Contracts Cr.Hrs. 6

(Formerly 045.110) This course explores the basic principles of contract law. How is a contract formed? What is an offer? What constitutes acceptance? Are all promises enforceable as a contract? When should parties be allowed to avoid obligations? What happens if one party misrepresents the quality of subject matter of the contract? What if a party makes a mistake about what they buy or sell? What should happen if one party takes advantage of another for a better deal for themselves?

LAW 1140 Criminal Law and Procedure Cr.Hrs. 5

(Formerly 045.114) A general introduction to criminal law and procedure dealing with principles of criminal liability, common defenses to criminal charges, selected specific offences, and the basic procedures to be followed in the administration of criminal justice in Canada.

LAW 1460 Constitutional Law Cr.Hrs. 5

(Formerly 045.146) An examination of the legal problems arising from the nature of the Canadian political structure and, in particular, the distribution of legislative powers between the federal parliament and the provincial legislatures and an introduction to the impact of the Canadian Charter of Rights and Freedoms.

LAW 1480 Torts and Compensation Systems Cr.Hrs. 5

(Formerly 045.148) A general introduction to the law of torts and other compensation systems such as the Workers' Compensation and Criminal Injuries Compensation schemes.

LAW 1500 Property Cr.Hrs. 5

(Formerly 045.150) A general introduction to the principles of property with special emphasis on the principles of real property, their historical development and modern application.

LAW 1530 Legal System Cr.Hrs. 2

(Formerly 045.153) An introduction to the study of law including initial analysis of various aspects of legal history, the structure of the legal system, legal reasoning, statutory interpretation, dispute resolution and the role of the judiciary.

LAW 1540 Legal Methods Cr.Hrs. 5

(Formerly 045.154) An introduction to legal research and writing skills and oral advocacy. Grading: Pass/Fail

Law Course Descriptions-2000 Level

LAW 2400 Wills and Succession Cr.Hrs. 3

(Formerly 045.240) The law of testate and intestate succession, Part IV of The Marital Property Act, and The Dependents' Relief Act.

LAW 2490 Trusts Cr.Hrs. 3

(Formerly 045.249) The nature and functions of modern inter vivos and testamentary trusts. The creation of express, private trusts, charitable trusts, resulting trusts, and constructive trusts. The administration of trusts, and real and personal remedies of beneficiaries under trusts.

LAW 2530 Debtors' and Creditors' Rights Cr.Hrs. 2

(Formerly 045.253) Remedies of the unsecured creditor, enforcement of judgments, fraudulent conveyances and preferences, general assignments and bankruptcy. Mechanics' liens and special rights arising out of builders' and workers' legislation relating to real estate transactions.

LAW 2600 Evidence Cr.Hrs. 4

(Formerly 045.260) A study of the rules relating to the admissibility and weight of evidence in judicial proceedings.

LAW 2640 Family Law Cr.Hrs. 3

(Formerly 045.264) An overview of key legal issues regarding familial relationships and family breakdown in Canadian society. Topics include co-habitation, marriage, separation, divorce, child custody and access, spousal and child support and property division.

LAW 2650 Introduction to Advocacy Cr.Hrs. 3

(Formerly 045.265) A detailed study of the conduct of a case from its inception through to trial. The course requires that students prepare and conduct a trial. Grading: Pass/Fail.

LAW 2670 Civil Procedure Cr.Hrs. 2

(Formerly 045.267) An introduction to the rules of civil procedure.

LAW 2680 Legal Negotiation Cr.Hrs. 3

(Formerly 045.268) Most legal disputes settle before trial. This course examines how lawyers assist their clients through effective interviewing, counseling, strategic planning and negotiation as well as some of the mechanisms, both judicial and non-judicial, that facilitate pre-trial dispute settlement.

LAW 2690 Corporations I Cr.Hrs. 3

(Formerly 045.269) A study of the major legal, practical and policy issues arising out of the formation and operation of business organizations in Canada, with a particular focus on business corporations. Students will examine major principles of Canadian corporate law, including corporate personality, management power, majority rule and minority protection.

LAW 2700 Income Tax Law and Policy Cr.Hrs. 3

(Formerly 045.270) The object of this course is to develop a working knowledge of the basic principles and rules of the income tax system as these apply to individuals. A parallel objective is the discovery of the major policy positions that inform the personal income tax system and the development of the ability to use tax policy analysis to evaluate advantages of, and problems with, the current system.

Law Course Descriptions-3000 Level

LAW 3012 International Business Law Cr.Hrs. 3

Explores the legal, practical and social realities of international business transactions.

LAW 3014 International Trade Law Cr.Hrs. 3

The course will deal with the doctrine, practice and policy issues in international trade and business.

LAW 3016 Corporations II Cr.Hrs. 3

An advanced study of corporations law from various theoretical and practical perspectives.

LAW 3018 Human Rights Law Cr.Hrs. 3

Critical and constructive study, at an advanced level, of a significant major subject or set of topics in Human Rights Law.

LAW 3020 Clinical Administrative Law Cr.Hrs. 3

The primary purpose of this course is to train students in lawyering skills. Students will be required to engage in classroom work and participate in simulated exercises. Emphasis will be given to the difference between board and court advocacy.

LAW 3022 Insurance Law Cr.Hrs. 3

Introduction to the basic principles of insurance law. The fundamental elements to most types of policies will be examined with particular emphasis on property and liability insurance. The terms and provisions specific insurance policies and coverages such as automobile, property, liability policies will also be covered.

LAW 3024 The Legal Profession and Professional Responsibility Cr.Hrs. 3

A general introduction to the problems of professional responsibility and the ethics of lawyers individually, as well as the legal profession collectively. Topics dealt with will include ethical problems of the lawyer in the role of the advocate and in the role of counsellor (confidentiality, conflict of interest, etc.); professional responsibility in the delivery of legal service (competency, fee determination, specialization, regulation etc) and the legal profession and the public interest (governance of profession, discipline, professional liability etc) These problems are to be studied by the critical examination of case law, codes, canons, and other published materials, by classroom discussion and debate on problems; and by workshops and panels which involve practising lawyers.

LAW 3026 Trademarks and Patents Cr.Hrs. 3

An in-depth examination of the law of Trade-marks and Patents, including underlying policy objectives.

LAW 3028 Copyright Law Cr.Hrs. 3

An in-depth examination of the law of Copyright.

LAW 3030 Research Paper B Cr.Hrs. 3

Details in each case to be worked out with the Associate Dean. 10,000 words for 3 credit hours. May not be held with LAW 3490.

LAW 3032 Court of Queen's Bench Clerkship Cr.Hrs. 3

Students will be expected to provide research assistance to the Justices, and students will be asked to provide written memoranda and other research to help the Justices prepare for trial or application hearings. Discussions of legal issues may follow from the work that students do. May not be held with LAW 3250 when titled " Court of Queen's Bench Clerkship" Grading: Pass/Fail.

LAW 3034 Court of Appeal Clerkship Cr.Hrs. 3

Students will be expected to provide research assistance to the Justices, and students will be asked to provide written memoranda to help the Justices prepare for hearings. Discussions of legal issues may follow from the other work that students do. Grading is on a Pass/Fail basis.

LAW 3050 Commercial Law Cr.Hrs. 3

(Formerly 045.305) A study of secured transactions and negotiable instruments.

LAW 3070 Gender and the Law Cr.Hrs. 3

(Formerly 045.307) An exploration of ideas about gender differentiation in law, the legal system, legal education and the legal profession. It will offer an introduction to the feminist critique of law and feminist theories about sexual equality and discrimination.

LAW 3090 Children and the Law Cr.Hrs. 3

(Formerly 045.309) Relationships between child, family, state and law are examined within an interdisciplinary context, focusing on such issues as rights theories and the public/private distinction; regulation of young offenders, child protection and state intervention; and child victims in the courts.

LAW 3120 Philanthropy and the Law Cr.Hrs. 3

This course investigates the origins of, and regulation of, charities and charity law as well as regulation of other non-profit entities. Typical topics considered in this course include the social, economic and cultural importance of an ethic of giving, the tax benefits attendant upon charitable status, dimensions of fund-raising, public and private foundations and terrorism and international charities.

LAW 3130 Poverty Law Cr.Hrs. 3

Specific topics to be covered will include: income security, homelessness and housing, legal aid, panhandling, and anti-poverty advocates' use of international and domestic law in lobbying and test case litigation. The protections afforded by human rights instruments and procedural safeguards/administrative law will also be explored as well as the intersection of poverty with race, gender, family status, age and disability. At the end of the seminar, students will have a basic understanding both of the substantive law and of the nature of legal practice involved in the topics discussed.

LAW 3170 Dispute Resolution Cr.Hrs. 3

This course offers a detailed exploration of the theory and practice of dispute resolution focusing on the various approaches, private and court-connected, currently used to resolve conflict. In critically examining selected alternative dispute resolution mechanisms, the course exposes students to issues such as rights-based and interest-based dispute resolution, power, gender and culture in ADR processes and the functions, and skills required of, third party interveners. May not be held with the former LAW 3160 (045.316) or LAW 3162.

LAW 3210 Competitions A Cr.Hrs. 2

(Formerly 045.321) Credit for selected students who satisfactorily participate in those academic competitions approved by Faculty Council. Grading: Pass/Fail.

LAW 3212 Immigration Law Cr.Hrs. 3

The refugee definition; the need for refugee protection; procedural protection for refugee claimants; a comparative study of refugee determination systems; the legality of a refugee sanctuary movement; the legal status of refugee claimants in Canada; refugee and immigrant detention; the relevance of Charter guarantees to refugees and immigrants; visa requirements and airline fines; the international system of refugee protection; racist intention and effect in immigration and refugee law; material misrepresentation as a ground of exclusion; medical inadmissibility; equivalence of Canadian and foreign criminal offenses for purposes of exclusion; the relevance of foreign laws in determining family composition of sponsored immigrants. May not be held with LAW 3200.

LAW 3220 Competitions B Cr.Hrs. 3

(Formerly 045.322) Credit for selected students who satisfactorily participate in those academic competitions approved by Faculty Council. Grading: Pass/Fail.

LAW 3230 Aboriginal Peoples and Land Claims Cr.Hrs. 3

(Formerly 045.323) The course shall provide an overview of land claims and treaty land entitlement policies in Canada and their impact upon land claims by Aboriginal communities.

LAW 3240 Current Legal Problems C Cr.Hrs. 2

(Formerly 045.324) Critical and constructive study, at an advanced level, of a significant major subject or set of topics. Grading: Pass/Fail.

LAW 3250 Current Legal Problems D Cr.Hrs. 3

(Formerly 045.325) Critical and constructive study, at an advanced level, of a significant major subject or set of topics. Grading: Pass/Fail.

LAW 3300 Clinical Criminal Law Cr.Hrs. 8

(Formerly 045.330) The primary purpose of this offering is to train students in lawyering skills in the criminal law area. To this end instruction is given on an intensive basis in small groups. Students may be required to engage in classroom work; to participate in various forms of simulation exercises and to conduct actual client based cases under the supervision of the instructor. Particular emphasis will be given to questions of professional responsibility and ethics. Grading: Pass/Fail.

LAW 3310 Aboriginal Peoples and the Law Cr.Hrs. 3

(Formerly 045.331) A study of the laws relating to Aboriginal Peoples in North America from the colonial period to the present. Special emphasis will be given to aboriginal rights, hunting and fishing rights, the legal aspects of Indian Treaties and the Indian Act. A more general treatment will be given to a study of Aboriginal Peoples' relationship to civil and criminal law in modern Canadian society.

LAW 3330 Employment Law Cr.Hrs. 3

(Formerly 045.333) A detailed study of employment law including employment principles, constructive and wrongful dismissal, just cause, human rights and remedies.

LAW 3340 Advanced Advocacy Cr.Hrs. 3

(Formerly 045.334) Advanced topics in trial presentation, procedure and evidence with concentration on jury trials.

LAW 3360 Advanced Legal Research Cr.Hrs. 3

(Formerly 045.336) This course will provide students with the wherewithal to conduct legal research across a number of jurisdictions using both print and digital formats. Students are evaluated on a number of research exercises, a midterm examination, a major research pathfinder and a presentation of research results.

LAW 3370 The Legislative Process Cr.Hrs. 3

(Formerly 045.337) A study of how statutes and regulations are made in the Province of Manitoba, and how lawyers can effectively represent their clients in the context of lawmaking by politicians, civil servants and regulators.

LAW 3380 Issues in Law and Bio Ethics Cr.Hrs. 3

(Formerly 045.338) The course deals with the legal aspects of prevention, creation, alteration, maintenance and termination of life through medical and other scientific means.

LAW 3390 Securities Law Cr.Hrs. 2

(Formerly 045.339) A study of the basic concepts and application of the securities regulatory system in Canada.

LAW 3410 Canadian Legal History Cr.Hrs. 3

(Formerly 045.341) The historical background of the Canadian legal system.

LAW 3450 Remedies Cr.Hrs. 3

(Formerly 045.345) A study of the law relating to damages, specific performance, injunctions, and other equitable remedies.

LAW 3480 Restitution Cr.Hrs. 2

(Formerly 045.348) Principles and remedies of the common law and equity capable of preventing unjust enrichment; quasi-contract and constructive trusts.

LAW 3490 Research Paper Cr.Hrs. 2

A research paper must be a minimum of 7,500 words, excluding footnotes and bibliography. May not be held with LAW 3030.

LAW 3510 Corporate Taxation Cr.Hrs. 3

(Formerly 045.351) A study of federal tax laws as they affect corporation income, as well as a discussion of the effects of income tax laws on corporate and other commercial planning.

LAW 3520 Taxation of Trusts and Estates Cr.Hrs. 3

(Formerly 045.352) A study of taxation principles as they relate to partnership and trust income and estate planning.

LAW 3530 Administrative Law Cr.Hrs. 3

(Formerly 045.353) An introduction to administrative law generally, with concentration on the judicial review of the exercise of statutory authority by administrative entities.

LAW 3590 Charter Issues in Criminal Law Cr.Hrs. 3

(Formerly 045.359) The rules of Criminal Procedure and principles underlying and unifying such rules with a particular emphasis on the effect of the Charter of Rights and Freedoms on those rules.

LAW 3600 Environmental Law Cr.Hrs. 3

(Formerly 045.360) The balance between technical development and the life-support capacity of the environment. The acquisition and nature of private rights in natural resources and their control by legislation and common law. Remedies for environmental degradation. Constitutional and international legal issues.

LAW 3620 Comparative Law Cr.Hrs. 3

(Formerly 045.362) An introduction to civil law; a brief historical survey, codification, judicial philosophy, detailed study of selected comparative law topics in tort and contract with special reference to the Civil Code of the Province of Quebec. An introduction to Soviet law, detailed study of selected topics in Soviet law.

LAW 3690 Real Estate Transactions Cr.Hrs. 3

(Formerly 045.369) The law relating to vendors and purchasers of land and to mortgages and other security on land.

LAW 3740 Public International Law Cr.Hrs. 3

Public international law has a complex history, one that lends itself to conflicting interpretations. It has also been the object of a variety of competing theoretical projects, most of which diverge radically on questions of form and substance. This course provides an historically and theoretically reinforced introduction to the basic rules, principles, and institutions of public international law.

LAW 3760 Jurisprudence Cr.Hrs. 2

(Formerly 045.376) This seminar will cover all the major "schools" of jurisprudential theory, with attention paid to particular areas of legal theory and debate, to the nature and function of law, its relation to morality, and to the analysis of rights and other legal relationships. Efforts will be made to relate these areas of debate to legal issues of current interest and practicality.

LAW 3770 Labour-Management Relations Cr.Hrs. 3

(Formerly 045.377) A survey of the development of trade unions; their present status under both federal and provincial legislation regarding the right of association, collective bargaining, and the settlement of disputes.

LAW 3820 Manitoba Law Journal Cr.Hrs. 2

(Formerly 045.382) The editor of the Manitoba Law Journal who successfully completes his/her term of office, and all other editors and journal staff who in addition to successfully completing their terms of office satisfactorily complete a written requirement, may opt for the Manitoba Law Journal credit. Grading: Pass/Fail.

LAW 3822 Scholarly Publications Cr.Hrs. 2

Senior editors of scholarly publications approved by the Academic Affairs Committee who successfully complete their terms of office and any writing requirements. Grading: Pass/Fail.

LAW 3832 Legal Aid Clinic Cr.Hrs. 3

(Formerly 045.383) Students who are selected to act as student supervisors at the University Law Centre during the summer and who continue to actively serve the University Law Centre during their third year may, by successfully completing a written assignment approved by a faculty supervisor, opt for the Legal Aid Clinic. May not be held with LAW 3830. Grading: Pass/Fail.

LAW 3852 Private International Law Cr.Hrs. 3

It has to do with choosing what place to sue, what law applies when the law of more than one place might apply, and with the enforceability of judgments through foreign courts. May not be held with LAW 3850.

LAW 3862 Business Transactions: The Art of the Deal Cr.Hrs. 6

A study, involving practical exercises of certain aspects of solicitors' work, including interviewing, negotiating, counseling and memo writing.

LAW 3880 Municipal and Planning Law Cr.Hrs. 3

(Formerly 045.388) A general course in municipal law, including important aspects of land-use control and planning law. Although the course deals generally with the nature, structure, functions, and powers of the various units comprising the local level of government, the focus is primarily on municipal corporations. Topics covered include assessment and taxation, land-use planning and control, tort liability, judicial review of bylaws, qualification and accountability of councillors, and the law relating to expropriation, as well as some discussion of contemporary urban problems.

LAW 3940 Canadian Charter of Rights and Freedoms Cr.Hrs. 3

(Formerly 045.394) An in-depth study of the legal, philosophical and historical foundations of the Canadian Charter of Rights and Freedoms. Included is a study of both the American and European experience with Charters of Rights as well as Canadian case law.

LAW 3970 Current Legal Problems A Cr.Hrs. 2

(Formerly 045.397) Critical and constructive study, at an advanced level, of a significant major subject or set of topics.

LAW 3980 Current Legal Problems B Cr.Hrs. 3

(Formerly 045.398) Critical and constructive study, at an advanced level, of a significant major subject or set of topics.

FACULTY OF MANAGEMENT/I.H. ASPER SCHOOL OF BUSINESS

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Chapter Contents**SECTION 1: DEGREE PROGRAMS OFFERED**

- 1.1 Degree Programs Offered
- 1.2 Available Majors and Option
- 1.3 Accreditation

SECTION 2: ADMISSION REQUIREMENTS

- 2.1 Admission Requirements from High School and Previous Post-Secondary Institutions
- 2.2 Admission Requirements from Joint Programs with Manitoba Colleges

SECTION 3: ACADEMIC REGULATIONS

- 3.1 Changes in Program Requirements
- 3.2 Evening Program
- 3.3 Management Minor for Non-Business Students
- 3.4 Student Responsibility
- 3.5 Prerequisite Requirements
- 3.6 Degree GPA Requirement for Graduation
- 3.7 Calculation of the Cumulative GPA
- 3.8 Residency Requirement
- 3.9 Time Limit for Completion of the Degree
- 3.10 Probation Regulations
- 3.11 Repeating, Substituting and Extra Courses
- 3.12 Completing Two Majors(Second Major)
- 3.13 Failure to Meet Requirements and the Suspension & Reinstatement Regulations
- 3.14 Withdrawal from the Bachelor of Commerce (Honours) Program for No Registration after Admission
- 3.15 Withdrawal from Individual Courses
- 3.16 Withdrawal from the Co-operative Education Option
- 3.17 Maximum Course Load/Minimum Course Load
- 3.18 Course Selection and Requirements
- 3.19 Eligibility Requirements for Awards
- 3.20 Examination Regulations
- 3.21 Letter of Permission to Take Courses at Another University for Transfer of Credit

- 3.22 Plagiarism, Cheating and Personation
- 3.23 Student Appeals of Academic Regulations
- 3.24 Security of Academic Records
- 3.25 Transcripts and Degree Parchements

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

- 4.1 Program Requirements for the Bachelor of Commerce (Honours) Program – Direct Entry, Track 1 with Guaranteed Admission, Track 1 and Track 2
- 4.2 Program Requirements for Majors
- 4.3 Program Requirements for the Co-operative Education Option
- 4.4 Program Requirements for the Asper School of Business/Red River College Joint Program
- 4.5 Program Requirements for the Asper School of Business / Assiniboine Community College Joint Program
- 4.6 Program Requirements for the Asper School of Business / University College of the North Joint Program
- 4.7 Program Requirements for the Asper School of Business / cole technique et professionnelle joint program

SECTION 5: COURSE DESCRIPTIONS

See Listing of Course Descriptions with each Department Listing

- 5.1 Accounting and Finance
Includes subjects: ACC (Accounting), FIN (Finance), MIS (Management Information Systems)
- 5.11 Warren Centre for Actuarial Studies and Research
Includes subjects: ACT (Actuarial Studies)
- 5.14 Business Administration
Includes subjects: ENTR (Entrepreneurship/Small Business), GMGT (General Management), HRIR (Human Resource Management/Industrial Relations), INTB (International Business)
- 5.26 Interdepartmental Courses
Includes subjects: IDM (Interdisciplinary Management))
- 5.29 Marketing
Includes subjects: MKT (Marketing)
- 5.32 Supply Chain Management
Includes subjects: MSCI (Management Sciences), OPM (Operations Management), SCM (Supply Chain Management)

SECTION 1: DEGREE PROGRAMS OFFERED

Degree	Years to Complete	Total Credit Hours
Bachelor of Commerce Honours	4	120
Bachelor of Commerce Honours (Co-operative Education Option)	4.33+	120

NOTE: Students admitted prior to September 2011 should refer to the 2010-2011 Undergraduate Calendar for a description of their program requirements.

1.2 Available Majors and Option

The following Majors may be used to complete the Bachelor of Commerce (Honours) program:

Aboriginal Business Studies

Accounting

Actuarial Mathematics

Entrepreneurship/Small Business

Finance

Generalist

Human Resources Management/Industrial Relations

International Business

Leadership and Organizations

Logistics and Supply Chain Management

Management Information Systems

Marketing

Operational Research/Operations Management

A detailed explanation of the requirements for each major may be found in Section 4.2.

The Co-operative Education Option is the only option that may be used to complete the Bachelor of Commerce (Honours) program. Complete details on the requirements for the Co-operative Education Option are found in Section 4.3.

1.3 Accreditation

In 2009, the Asper School of Business received re-accreditation from AACSB International - The Association to Advance Collegiate Schools of Business.

In 2009, the Asper School of Business received accreditation from the SOA – Society of Actuaries.

These prestigious recognitions affirm the faculty's commitment to the continuous improvement of its courses and programs. The mission of the Asper School of Business is to provide management education in Manitoba by creating and disseminating leading edge knowledge and developing skills relevant to current and future managers in organizations operating in a global environment.

SECTION 2: ADMISSION REQUIREMENTS

2.1 Admission Requirements from High School and Previous Post-Secondary Institutions

The following is a summary of the admission requirements for the Bachelor of Commerce (Honours.). Equivalent courses completed at other universities will be considered for admission and transfer credit only if the courses have been taken within the last 10 years. All admission requirements, as well as application deadline dates and forms, are included in the Applicant Information Bulletin that is available from the Admissions Office, 424 University Centre. This information is also posted on the University of Manitoba's website.

Direct Entry from High School

To be eligible to apply high school students must have:

1. Manitoba high school graduation, with five full credits at the Grade 12 level, in courses designated S (Specialized), G (General), or U (Dual Credit –University), with
2. A minimum 85% average over three courses: Pre-Calculus Math 40S or Applied Math 40S (Recommended Pre-Calculus 40S), English 40S, and one other 40S/U course, and
3. A minimum 60% in each of the three courses noted in point 2 above, and
4. Applicants may require a higher average than stipulated in point 2 to be successful in the annual competition for admission.

See Applicant Bulletin for complete details.

Track 1 Transfer Students

The following is a summary of the admission requirements for the Bachelor of Commerce (Honours.) for Track 1 transfer students. Equivalent courses completed at other universities will be considered for admission and transfer credit only if the courses have been taken within the last 10 years. All admission requirements, as well as application deadline dates and forms, are included in the Applicant Information Bulletin that is available from the Admissions Office, 424 University Centre. This information is also posted on the University of Manitoba's website.

Requirements (for Track 1 Transfer students)

- [ECON 1010 (3) and ECON 1020 (3)] (6)
- 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology, or Sociology (6)*
- Mathematics **MATH 1520 or MATH 1500** (3)
- Statistics **STAT 1000** (3)
- A 3 credit hour Written English ("W") course from a specific discipline (**ARTS 1110, GMGT 1010 and GMGT 2010** are not considered to be from a specific discipline) (3)
- 3 credit hours of electives (3) **

Minimum 24 credit hours completed by April 30. Although 24 credit hours is the minimum requirement for admission, a full year course load would require 30 credit hours; therefore, students only taking 24 credit hours for admission will need to pick up an extra 6 credit hours of course work once in the Asper School of Business.

If students want to complete 30 credit hours in Year 1, students are recommended to take 6 credit hours from this suggested list of recommended courses: GMGT 1010 plus one of GMGT 2060, GMGT 2070 or MKT 2210.

* Courses chosen for this requirement must be independent from courses taken to fulfill other degree requirements.

Critical Thinking (Philosophy) PHIL 1290 is a preferred elective choice

Students must achieve a minimum grade of "C" on each course listed above. Admission in this category is competitive.

See Applicant Bulletin for complete details.

Track 2 Transfer Students

Applicants who are missing one or more of the Track 1/Foundation course requirements may apply under Track 2 provided they have met the following criteria: completed a minimum of 24 credit hours; achieved a minimum admission GPA of 3.1; and achieved a minimum grade of "C" on each course comprising the 24 credit hours. Track 2 applicants are encouraged to complete all outstanding Track 1/Foundation required courses during their first year after admission to the Asper School of Business.

Minimum 24 credit hours completed by April 30. Although 24 credit hours is the minimum requirement for admission, a full year course load would require 30 credit hours; therefore, students only taking 24 credit hours for admission will need to pick up an extra 6 credit hours of course work once in the Asper School of Business.

*Students must achieve a minimum grade of "C" on each course listed above. Admission in this category is competitive.

See Applicant Bulletin for complete details.

Priority for Admission

Admission to the Asper School of Business is limited to an annual quota. The quota will be filled by selecting students from a rank-ordered list of applicants in the following order:

For September 2014:

First Priority –Direct Entry from High School applicants.

Second Priority - Track 1 applicants with an AGPA of 2.60 or greater in descending order of AGPA. Thirty spaces are reserved for the Track 2 applicants with an AGPA of 3.10 or higher in descending order of AGPA.

Third Priority - Track 2 applicants (who are not already admitted under the Second Priority) with an AGPA of 3.10 or greater in descending order of AGPA.

Fourth Priority - Track 1 applicants with an AGPA of 2.00 - 2.59 in descending order of AGPA.

Both Track 1 applicants and Track 2 applicants may require an AGPA well in excess of the minimum to be successful in the annual competition for admission.

Other requirements

High school prerequisite: Grade 12 Pre-Calculus Mathematics 40S (or equivalent, with a minimum 60 %)

The Written English and Mathematics requirements are satisfied by Track 1/Foundation courses.

Minimum AGPA for consideration: 2.0 for Track 1 applicants; 3.1 for Track 2 applicants.

Admission to the Asper School of Business is limited to an annual quota and is competitive.

The Bachelor of Commerce (Honours) program does not have a Mature Student Category for admission.

All students seeking admission to the Bachelor of Commerce (Honours) program must first complete either the Direct Entry, Track 1 or Track 2 requirements.

All students planning to enter the Bachelor of Commerce (Honours) program must obtain a minimum of 60 per cent in Grade 12 Pre-Calculus Mathematics 40S (or equivalent) in order to complete all degree requirements.

The Bachelor of Commerce also has a Special Consideration Category.

See Applicant Bulletin for complete details.

Advance Standing: Transfer and Second Degree Students

Students who do not meet the eligibility requirements for admission after their first year of University can spend another year (or more) in another faculty, complete the eligibility requirements, and then apply (or re-apply) for admission. Students who complete additional course credits beyond the Track 1/Foundation or Track 2 requirements are eligible to receive applicable advance standing upon admission to the Asper School of Business.

The following regulations apply to students who must (or choose to) take more than one year to qualify for admission to the Asper School of Business.

All transfer and second degree students will be required to:

Meet the admission requirements of Track 1 or Track 2 in the year of application.

Complete all 120 credit hours required in the Bachelor of Commerce (Honours) program, including the 24 credit hours that comprise the specific Track 1/Foundation course requirements, the Core requirements, the course requirements for one Major, Business Options, and Elective courses. After admission to the Asper School, students in Track 2 must complete all outstanding courses listed in the Track 1/Foundation course requirements and achieve a minimum grade of "C" in each course.

Students who are admitted to the Asper School of Business who have completed more than the minimum 24 credit hours requirement of Track 1/Foundation course or Track 2 may be eligible to receive transfer credit for the additional work completed, provided the additional course work is creditable toward the degree requirements of the Bachelor of Commerce (Honours).

Students who are admitted to the Asper School of Business following the completion of another degree program are eligible to receive a maximum of 60 hours of transfer credit for applicable courses completed as part of their first degree. Students who, within their first degree, have more than 60 hours of transferable credits would be required to take substitute courses for credits in excess of the 60 hour limit on transfer.

Students who have a degree and in addition have completed further courses at the University of Manitoba which are applicable to the B. Comm.(Hons.) program that were not used for credit toward their first degree may receive additional transfer credit for that work.

Equivalent courses completed at other universities will be considered for admission and transfer credit only if the courses have been taken within the last 10 years.

Students are encouraged to contact a Undergraduate Program Advisor in the Undergraduate Program Office for information on how to optimize their transfer credit and advance standing.

See Applicant Bulletin for detailed information on admission requirements.

2.2 Admission Requirements from Joint Programs with Manitoba Colleges

The Asper School of Business has established Joint Programs with Red River College, Assiniboine Community College, University College of the North, and école technique et professionnelle. Graduates of the Business Administration Diploma (University Stream) from these four colleges are eligible to apply directly to the Asper School of Business.

Successful applicants will receive block transfer credit for their courses completed in the Business Administration Diploma and are required to complete specified courses at the University of Manitoba in order to receive the Bachelor of Commerce (Honours) degree. Requirements for the Joint Programs are listed in Section 4.

Admission to each Joint Program is limited to an annual quota and is competitive. Students must achieve a minimum grade point average of 3.00 on their Business Administration Diploma (University Stream) to be eligible for admission. Students must have graduated from the Diploma program within the last 5 years to be eligible for admission. Applicants are ranked in descending order of their grade point average and are admitted until the annual quota is met.

See Applicant Bulletin for detailed information on admission requirements.

SECTION 3: ACADEMIC REGULATIONS

All students are asked to note that some academic policies and regulations are under review and are subject to change. Please check the Undergraduate Program Office for updated information.

The provisions of the chapter, General Academic Regulations and Requirements, and the chapter, University Policies, apply to all students. In addition, the Asper School of Business has regulations and requirements, published below, which apply specifically to its students and to non-business students taking business courses.

3.1 Changes in Program Requirements

Once students are admitted to the Asper School and have successfully completed any portion of the program, they will not be required to meet new course requirements subsequently stipulated for that portion of the program, whether the requirements be for the faculty or for an individual major.

NOTE: Students admitted prior to September 2011 should refer to the 2010-2011 Undergraduate Calendar for a description of their program requirements.

3.2 Evening Program

The Asper School of Business does not offer an evening program. Although a limited number of business courses may be offered in evening time slots during both the Regular and Summer Sessions, it is not possible to complete all the course requirements of the Bachelor of Commerce (Honours) program without recourse to daytime attendance.

3.3 Management Minor for Non-Business Students

The Management Minor consists of any 18 hours of credit in courses offered by the Asper School of Business. Entrance requirements and enrolment limits vary with a student's faculty of registration. Students planning to enrol in this minor should consult a student advisor in your home faculty.

3.4 Student Responsibility

The Bachelor of Commerce (Honours) program undergoes changes from time to time. As a result, some changes in program structure, content and regulations may be made for the current and upcoming academic year. Specific program information for the regular program, the co-operative education program option, Joint Programs, and 2+2 Programs may be obtained from the Undergraduate Program Office.

Student's Responsibility

It is the responsibility of all students to ensure that they follow the program of study as outlined in their chosen Major and that they meet all the requirements as specified by the University of Manitoba and the Asper School of Business.

When you are registering for courses, it is your responsibility to ensure that you have satisfied all prerequisite and concurrent course requirements.

It is your responsibility to ensure you have registered for the correct courses to satisfy the requirements of the Bachelor of Commerce (Honours) degree.

Read course descriptions carefully to make sure you are not registered for a course that "May Not Be Held With" a course you have already taken. You will not be allowed to apply both courses toward your degree requirements.

NOTE: Students admitted prior to September 2011 should refer to the 2010-2011 Undergraduate Calendar for a description of their program requirements.

3.5 Prerequisite Requirements

Prerequisite requirements must be met for entry into and continuance in the faculty.

Students must also meet all individual course prerequisites for further study in the program.

A passing grade is acceptable for prerequisite purposes for courses offered by the Asper School of Business unless a higher grade is called for in the course description.

3.6 Degree GPA Requirement for Graduation

Students Admitted in 2011 and Thereafter

Students admitted to the Asper School of Business in 2011 and thereafter must achieve a minimum degree GPA of 2.00 on all 120 credit hours required in the Bachelor of Commerce (Honours) degree program. Students must also achieve a passing grade of "D" or better in each course except for the individual courses required in the Track 1/Foundation course requirements that require a grade of "C" or better in each course.

All Track 1/Foundation courses, Core courses, Major courses, Business Options, and Electives applicable to the Bachelor of Commerce (Honours) degree requirements, as well as the grades achieved in each course, are transferred into the Asper School of Business and are included in the degree GPA.

NOTE: Students admitted prior to September 2011 should refer to the 2010-2011 Undergraduate Calendar for a description of their program requirements.

3.7 Calculation of the Cumulative GPA

The computation of the cumulative GPA is the same as that described in the chapter, General Academic Regulations and Requirements.

3.8 Residency Requirements

All Business students must complete a minimum of 60 credit hours at the University of Manitoba in order to satisfy the residence requirement of the Bachelor of Commerce (Honours) degree.

Students participating in approved International Exchange Programs may be exempt from the 60 credit hour requirement. Please consult with the Undergraduate Program Office for more details.

NOTE: Students admitted prior to September 2011 should refer to the 2010-2011 Undergraduate Calendar for a description of their program requirements.

Students considering completing course work at another university are referred to the chapter, General Academic Regulations and Policy, and the section on Letter of Permission.

3.9 Time Limit for Completion of the Degree

The maximum period of eight years for completion of degree requirements will be reduced by one year for each block of 15 credit hours of advance standing received at the point of admission. This time limit applies to all students, whether full-time or part-time.

The maximum period for completion of degree requirements for students enrolled in the co-operative education option is currently under faculty review.

A student who does not complete all degree requirements within the time limit permitted will be required to withdraw from the faculty. Students may appeal to the Undergraduate Program Committee for a one year time extension; all appeals must be accompanied by a detailed letter explaining the student's circumstances and appropriate supporting documentation.

3.10 Probation Regulations

Maximum Number of Failures

Each student in the Asper School of Business is permitted a maximum of 15 credit hours of failures. If a student has more than 15 credit hours of failed courses and a degree grade point average (DGPA) of 2.00 or higher, the student will be placed on Probation and have a formal academic assessment of "On Probation" automatically placed on their academic record. Such students will be subject to the course load and performance requirements of the Probation Program.

Details and procedures concerning the Probation Program are available from the Undergraduate Program Office or See {insert URL on Asper Website if approved}.

Probation Program

Students in academic jeopardy should carefully monitor each term's academic results. Students placed on Probation, will immediately be placed on "hold" in the Asper School of Business and have a formal academic assessment of "On Probation" added to their transcript.

Students who have been placed on Probation must process all registration through an Asper Program Advisor and will only be reinstated to regular student status in the Asper School of Business if all the specific conditions of the Probation Program have been met, including having met a minimum DGPA of 2.00.

If a student successfully completes the Probation Program, their student status is automatically reinstated to regular student status.

A student who fails the first Probation Program is permitted to enter a second Probation Program.

A student who successfully completes the Probation Program and who later fails an additional course in a subsequent term will immediately be placed on Probation again and be permitted another opportunity to enter the Probation Program.

Students are permitted a maximum of 2 consecutive attempts in the Probation Program. If a student fails the second consecutive Probation Program, the student will automatically have an academic assessment of "Required to Withdraw from Faculty" (WF) placed on their academic record. (See section 3.13 Required to Withdraw from Bachelor of Commerce (Honours) Program.)

Details and procedures concerning the Probation Program are available from the Undergraduate Program Office or See <http://umanitoba.ca/faculties/management/programs/undergraduate/academic-matters.html>

3.11 Repeating, Substituting and Extra Courses

Maximum Limit Allowed

Each student will be permitted to repeat or substitute a maximum of 12 credit hours of previously passed courses, with a maximum of 6 credit hours per course within the regulations detailed below.

After completion of the approved course repeat or substitution, only the latest of the grades achieved will be included in the computation of the degree GPA.

Required Courses

A student who withdraws from a Core course or who obtains a grade of "F" in such a course should repeat that course during the following Fall or Winter Term. If a student repeats a course for which a grade was recorded, only the latest of the grades achieved will be included in the computation of the degree GPA. Therefore, if on repeating the course, the student does not complete the course successfully, a grade of "F" will be recorded for that course on the student's history.

Students may not substitute another course for a Core course.

Major Courses

Students who achieve a grade of "F" in a Major course must either repeat that course or substitute another Major course if the Major requirements permit an alternate choice. Upon completion of the Major course, only the latest of the grades achieved will be included in the computation of the degree GPA. When a course is to be substituted, the student must seek the approval of the Undergraduate Program Office, in writing, prior to enrolling in the new course; failure to do so may result in a denial of the course substitution.

Electives and Business Options

Students who achieve a grade of "F" in an Elective or Option may either repeat that course or substitute another approved course in its place. Upon completion of the course, only the latest of the grades achieved will be included in the computation of the degree GPA.

When a course is substituted for a failed Elective or Option, a student must request approval from the Undergraduate Program Office in writing prior to enrolling in the new course; failure to do so may result in a denial of the course substitution.

Students who want to supplement their Majors may take up to 12 hours of their Business Options from that area.

Voluntary Repeats

In order to improve their degree GPA, or to meet a prerequisite requirement, students may, with prior approval from the Undergraduate Program Office, voluntarily repeat any course in which a passing grade has been received, subject to any registration restrictions that may be published on the faculty website and subject to the limits imposed at the point of admission. Students must request approval from the Undergraduate Program Office prior to enrolling in the course; failure to do so may result in a denial of the course substitution.

After completion of the approved course repeat or substitution, only the latest of the grades achieved will be included in the computation of the degree GPA.

Extra Courses

Students who would like to take courses extra to their degree are permitted providing prior approval of the Undergraduate Program Office is obtained prior to registration. When a course is extra to the degree but a student would like to substitute the course for another already in the degree, the student must seek the approval of the Undergraduate Program Office, in writing, prior to enrolling in the new course; failure to do so may result in a denial of the course substitution.

3.12 Completing Two Majors (Second Major)

Students Wishing to Complete Two Majors

Note the following Asper School of Business policy: "Students will not be given any registration priority for a second major." The Asper School of Business cannot guarantee that you will obtain space in the courses you would like for a second major.

Students who have completed all the requirements or who have all the courses in registration for a major are not permitted to formally declare a different major unless there is space in the courses needed to complete the different major. Students are not permitted to declare a different major in order to obtain space in full courses.

3.13 Required to Withdraw (WF) from the Bachelor of Commerce (Honours) Program

All students admitted in September 2015 and thereafter, in the I. H. Asper School of Business will have a formal academic assessment once they have completed 24 or more credit hours of coursework. After that point a student will have a formal academic assessment at the end of every Fall, Winter and Summer term.

At any point of formal academic assessment, if a student i) has a degree grade point average (DGPA) of less than 2.00 or ii) fails a second consecutive Probation Program, they will be required to withdraw from the Asper School of Business. A student in this situation will automatically have an academic assessment of "Required to Withdraw from Faculty" (WF) placed on their academic record.

Such a student will cease to be a student in the Asper School of Business but may apply for admission to another Faculty according to the rules of that unit. If such a student desires to gain entry back to the Asper School of Business, they must re-apply for admission and will have to meet the requirements for admission at the time of the new application.

3.14 Withdrawal from the Bachelor of Commerce (Honours) Program for No Registration after Admission

- A student who does not register for any courses in the Fall or Winter term after admission will cease to be a student in the Asper School of Business. Such students must re-apply for admission if that is desired and will have to meet the requirements for admission at the time of the new application.
- A student who registers for course work in the Fall or Winter term after admission but subsequently voluntarily withdraws from all course work may be permitted to re-register at any time thereafter, subject to all faculty policies and requirements as they existed at the time of first admission and completing a signed declaration of non-attendance at another post-secondary institution. Such students should be aware of the time limit for completion of the degree.
- A student who applies for transfer to another university program and subsequently registers for courses will cease to be a student in the Asper School of Business. Such a student must re-apply for admission if that is desired and will have to meet the requirements for admission at the time of the new application.

3.15 Withdrawal from Individual Courses

Required Courses

Students in the Asper School of Business may withdraw without academic penalty from a required Core course provided they have not previously failed or withdrawn from that course and that they have met the Voluntary Withdrawal deadlines established by the university (see Deadline for Withdrawals in the Academic Schedule).

Electives and Business Options

Students may withdraw without academic penalty from an Elective or Option provided they do so before the final date for withdrawal (see Deadline for Withdrawals in the Academic Schedule).

Authorized Withdrawals

Authorized Withdrawals from courses after the registration revision period in each term may be granted on the basis of medical and compassionate grounds. A medical certificate signed by a physician or other appropriate professional must document medical grounds. Appeals based on compassionate reasons and circumstances must be supported by appropriate documentation. Students requesting Authorized Withdrawals should contact the Undergraduate Program Office.

3.16 Withdrawal from the Co-operative Education Option

Students may be required to withdraw from the program for any of the following reasons:

- Failure to maintain the minimum academic requirements of the Asper School of Business,
- Failure to maintain the minimum credit hour requirements of the academic term in the co-op option,
- Unsatisfactory performance in the work place during a work term,
- Failure to observe the ethical standards of the Asper School and the University in place at the time; including being found guilty of academic dishonesty, or
- When, in the opinion of the Co-op Director and Faculty Advisor, the student does not exhibit sufficient qualities of ability, skills, aptitudes, attitudes, diligence or motivation to complete the program successfully.

Students who wish to withdraw voluntarily from the Co-op Program may do so by written letter to the Co-op Director at any time prior to participating in the recruitment period through applications and/or interviews and prior to accepting a position for a work term. A student who withdraws after participating in the recruitment period or after accepting a position with an employer for a work term, without written approval of the Faculty Advisor or Co-op Director, will be withdrawn from the Co-op Program and have the following notation placed on their transcript "Required to Withdraw from the Co-op Option" (other consequences may also be imposed - see link below for full details).

Details for all admission information, continuing requirements or withdrawal procedures can be found in the Co-operative Education Option/Program Academic Regulations document or may be viewed on-line at: http://umanitoba.ca/faculties/management/programs/undergraduate/cdc/media/Final_Co-op_Rules_Regulations_-_January_2015.pdf

3.17 Maximum Course Load/Minimum Course Load

Students are not permitted to take more than 18 credit hours during an academic term without permission from the the Undergraduate Program Manager.

Students enrolled in the Co-operative Education Option are not permitted to take more than 3 credit hours during a co-operative work term.

Students enrolled in the Co-operative Education Option must register in a minimum of 9 credit hours between co-op work terms.

3.18 Course Selection and Requirements

All students are limited to a maximum of six credit hours of IDM 4050 Readings in Management, IDM 4070 Management Research 1, and IDM 4080 Management Research 2. These courses are considered Business Options, rather than as part of any Major.

ACC 3050 Taxation Accounting, FIN 3270 Personal Financial Planning, FIN 3420 Security Analysis and FIN 3440 Real Estate Investments are also considered general Options. They are not part of any Major.

3.19 Eligibility Requirements for Awards

To be eligible for the Dean's Honours List a student must complete a minimum of 12 credit hours of courses at the University of Manitoba during one academic term and achieve a term GPA of at least 3.50. Students participating in approved International Exchange Programs may be eligible for the Dean's Honour List.

To be eligible for most awards, a student must complete a minimum of 24 credit hours of courses at the University of Manitoba during an academic year consisting of consecutive Fall and Winter terms. Co-operative Education students are eligible to apply for most awards; please check the Asper Undergraduate Program web site and/or with the Financial Aid and Awards Office for more information on the eligibility requirements for Co-operative Education students.

The degree "With Distinction" will be awarded to all students graduating with the Bachelor of Commerce (Honours) Degree who attain a degree GPA of 3.80 or better on the following criteria: students admitted to the Asper School of Business in 2011 and thereafter will have their degree GPA determined on the basis of all courses which form a part of the 120 credit hours required in the four-year degree program.

The University Gold Medal, Silver Medal and Bronze Medal in Business shall be awarded annually. The candidate for the one medal may be a graduate from either the Bachelor of Commerce (Honours) or the Bachelor of Commerce (Honours) [Co-operative Education Option]. Students graduating in October, February, and May are eligible for these awards in Business which shall be awarded annually at the spring convocation.

Students interested in the detailed terms of reference for the University Gold Medal in Business or who are interested in bursaries, awards and scholarships should contact the Undergraduate Program Office in Asper or the University's Financial Aid and Awards Office.

3.20 Examination Regulations

The faculty adheres to the General University Examination Regulations Policy. For particular examination regulations, including deferred examinations, pertinent to the Faculty, students are referred to the pamphlet, Examination Regulations for the Asper School of Business, available from the Undergraduate Program Office. The faculty does not offer supplemental examinations. The faculty does not offer Challenge for Credit examinations.

3.21 Letter of Permission to Take Courses at Another University for Transfer of Credit

Students wishing to complete courses at another institution for credit at the University of Manitoba will apply for written permission from the Registrar's Office prior to registering at the other institution. Students should apply for the Letter of Permission at least 4-6 weeks in advance.

To be eligible to take courses on a Letter of Permission, a Business student must:

- i) be applying to take a course not currently offered by Asper (when applying to take a course transferred as an Asper course) in the term for which they are applying and
- ii) have completed a minimum of 24 credit hours in the Asper School of Business in addition to any transfer credits received upon admission.

Students (including Asper students on an exchange program) will not be granted a Letter of Permission for capstone courses of the Bachelor of Commerce (Honours) Program or capstone courses in its majors (regardless if the course is or is not being offered in any term).

See the on-line University of Manitoba "Academic Calendar and Catalog", Faculty of Management/I.H. Asper School of Business, Program and Graduation Requirements, Program Requirements for Majors, for the defined capstone courses of the Bachelor of Commerce (Honours) program and capstone courses in its majors.

Faculty Council Amendments Approved February 1, 2013.

3.22 Plagiarism, Cheating and Personation

The Asper School of Business has adopted the Senate definition and policy on plagiarism, cheating and personation as described in the chapter, General Regulations and Requirements. A student found guilty of participating in any of these activities is subject to serious academic penalty and possible prosecution under the Canadian Criminal Code.

3.23 Student Appeals of Academic Regulations

Except as otherwise noted, student appeals should be directed to the Secretary of the Undergraduate Program Committee in the Undergraduate Program Office. The Committee considers appeals from Asper students who request special consideration in respect to rules and regulations governing their programs of study.

A certificate from an appropriate professional agency, such as the University Counselling Service or a licensed medical practitioner, should support appeals based on compassionate or medical problems.

3.24 Security of Academic Records

The Asper School of Business has adopted supplementary criteria and procedures on access to student academic records to supplement the university policy on Disclosure and Security of Student Academic Records. Copies of these policies are available in the Undergraduate Program Office. (Currently under review.)

3.25 Transcripts and Degree Parchments

Majors on Transcripts

After you graduate with your Bachelor of Commerce (Honours) degree, your formally declared major will appear on your University of Manitoba transcript. Your major will appear on your transcript once you have formally declared it on Aurora. Your major will not be listed on the Bachelor of Commerce (Honours) parchment.

If you complete the requirements of a second major within the credit hours required for the Bachelor of Commerce (Honours) degree, you may request that the second major also appear on your transcript after you graduate. See the Undergraduate Program Office in your graduating term to complete a request form.

Co-operative Education Option on Transcripts

If you have successfully completed the Co-operative Education Option, it will appear on your University of Manitoba transcript after you graduate with your Bachelor of Commerce (Honours) degree. The Co-operative Education Option will appear on your transcript once you have formally declared it on Aurora. Also, the Co-operative Education Option will appear on the Bachelor of Commerce (Honours) parchment.

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

The Bachelor of Commerce (Honours) program comprises 120 credit hours of course work. The Co-operative Education Option also comprises 120 credit hours of course work plus a minimum of three 4-month approved work terms. The degree encompasses the following components which will be listed in detail below: Track 1/Foundation courses, Program Core courses (common to all students), Major courses, Business Options and Elective courses.

Each student must declare at least one major and present a minimum Degree Grade Point Average of 2.00.

Detailed information on the degree regulations is found in Section 3, in the Undergraduate Program Office (268 Drake) or on the undergraduate web site at: umanitoba.ca/faculties/management/programs/undergraduate/

NOTE: Students admitted prior to September 2011 should refer to the 2010-2011 Undergraduate Calendar for a description of their program requirements.

4.1 Program Requirements for the Bachelor of Commerce (Honours) Program – Track 1 with Guaranteed Admission, Track 1 and Track 2

All students admitted under these tracks (including International Students and International from 2+2 Joint Programs) will complete the Bachelor of Commerce Honours Program. The Bachelor of Commerce (Honours) degree is comprised of 120 credit hours and can be divided into the following components:

- The Track 1/Foundation Course Requirements (24 credit hours)
- The Core (51 credit hours)
- The Major (12 credit hours)
- Business Options (15 credit hours)
- Electives (15 credit hours)
- Business Option or Elective (3 credit hours)

These components comprise 120 credit hours; their associated limits are defined below.

NOTE: Students admitted prior to September 2011 should refer to the 2010-2011 Undergraduate Calendar for a description of their program requirements.

Track 1/Foundation Course Requirements

All students must complete the specified Track 1/Foundation course requirements. Direct Entry students from high school will complete the Track 1/Foundation courses in their first year. Track 1 students complete these requirements prior to their admission to the Asper School of Business. Track 2 students have completed 24 credit hours of university course work but are missing one or more of the specific Track 1/Foundation courses. Track 2 students should complete all outstanding Track 1/Foundation courses during their first year after admission to the Asper School of Business and must achieve a minimum grade of "C" in each outstanding Track 1/Foundation courses.

The Core

The CORE consists of 51 credit hours of specified mandatory courses from all four departments in this faculty as well as courses taught by the departments of Economics, Environment, Global Political Economy, Political Studies, Philosophy and Sociology. All students are required to complete the Core. The Core presents the essence of a business degree program. The majority of the Core courses are taken in Years 2 and 3 of the Bachelor of Commerce Honours Program.

The Major

Each student is required to complete the course requirements of one MAJOR. Each department and the Dean's Office have developed one or more Majors. Each Major consists of a 12 credit hours of course work specified by the department. Subject to demand and faculty resources, specialized Majors are available in Aboriginal Business Studies, Accounting, Actuarial Mathematics, Entrepreneurship/Small Business, Finance, Generalist, Human Resources Management/Industrial Relations, International Business, Logistics and Supply Chain Management, Management Information Systems, Management of Organizations, Marketing, and Operational Research/Operations Management. A list of the Departments and the Majors they oversee is outlined below.

Students will normally choose a Major at the beginning of the third year of the program, following completion of many of the Core courses, which introduce the areas. Students have an opportunity to transfer from one Major to another, but this opportunity decreases as the student progresses in the program.

Business Options

This component of the program consists of a required number of Business courses freely selected by the student. These courses are referred to as Business OPTIONS. Students are required to complete 15 credit hours of Options. Some students may want to take Options which will supplement their Major, whereas other students may prefer to broaden their educational base by selecting Business courses in another or several other Majors. Students who want to supplement their Majors may take up to 12 hours of their Options from that area. Students may complete a second Major as part of their Options requirements. Such students should consult with staff in the Undergraduate Program Office.

Electives

This component of the program is the ELECTIVE requirement. An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business. Students must complete 15 credit hours of Electives that meet the following criteria; a minimum of 6 credit hours of the Electives must be at the 2000 Level or higher plus a minimum of 3 credit hours of the Electives must comprise a freely chosen course that meets the Written English “W” requirement at any level.

Business Option or Elective

This component of the program consists of 3 credit hours which may be either a Business Option or Elective and it must be at the 2000 Level or higher.

Course Requirements for Direct Entry, Track 1 and Track 2 Students

The tables below list the Core courses that all Business students must complete. The courses are listed by year in a suggested sequence. Students normally complete the Core courses in the sequence shown.

To determine which additional courses to take each year (i.e., non-Core courses) students should consult the listing of course requirements for each year of their chosen Major.

YEAR 1: Track 1/Foundation Courses	Cr. Hrs.
ANTH, HIST, MATH, PHIL, POLS, PSYC, SOC (see Note 1)	6
ECON 1010 AND ECON 1020	6
MATH 1520 OR MATH 1500	3
STAT 1000	3
Written English “W” (see Note 2)	3
Elective (see Note 3)	3
Minimum credit hours to qualify (see Note 4)	24
Year 1: Core Courses	
GMGT 1010	3
One of : GMGT 2060, GMGT 2070 or MKT 2210	3
Total credit hours (see Note 4)	30
YEAR 2	
ACC 1100	3
ACC 1110	3
FIN 2200	3
GMGT 2010	3
Two of : GMGT 2060, GMGT 2070, MKT 2210; whichever two courses not taken in Year 1 (see Note 5)	6
MIS 2000	3
MSCI 2150	3
Electives (see Note 6)	6
Total credit hours	30
YEAR 3	
HRIR 2440	3
GMGT 3300	3
SCM 2160	3
International Business Requirement (see Note 7)	3
Ethics (see Note 8)	3
Electives, Options & Major Courses (see Notes 6 and 10)	15
Total credit hours	30
YEAR 4	
GMGT 4010	3
Alternative Management Studies (see Note 9)	3
Electives, Options and Major Courses (see Notes 6 and 10)	24
Total credit hours	30
Total Credit Hours Required for Degree	120

NOTES:

1) 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology, or Sociology. Courses chosen for this requirement must be independent from courses taken to fulfill other degree requirements.

2) Students are required to select a three credit hour course to satisfy the Written English “W” requirement. The “W” course for the Foundation course requirement must be from a specific discipline (ARTS 1110, GMGT 1010 and GMGT 2010 are not considered to be from a specific discipline and therefore do not fulfil the Track 1/Foundation Written English course requirement). Courses that satisfy the Written English requirement are listed in the chapter, General Academic Regulations and Policy.

3) PHIL 1290 Critical Thinking is a preferred elective.

ACADEMIC CALENDAR 2015-2016

4) For Track 1 transfer students these 24 credit hours of specified courses are the minimum requirements for admission. Direct Entry high school admits will also be taking these Foundation courses in Year 1. All students regardless of admit type must take these courses and achieve a minimum grade of "C" (see applicant bulletin for complete details).

5) The prerequisite to GMST 2060 and GMGT 2070 is GMGT 1010 (D).

6) In addition to 51 credit hours of Core courses all students must take 12 credit hours in one Major, 15 credit hours of Business Options, 15 credit hours of Electives (which must include a minimum of 6 credit hours at the 2000 Level or higher plus 3 credit hours of Written English "W") plus 3 credit hours of either Business Options or Electives (which must be at the 2000 Level or higher).

7) International Business Requirement: One of the following courses must be chosen: ACT 4250, INTB 2200, FIN 3450, HRIR 4520, MKT 3300, MKT 3240 (Cross-Cultural Brand Management topic only) or SCM 3230.

8) Ethics requirement: One of the following courses: PHIL 2290, PHIL 2750, PHIL 2790, PHIL 2830, GMGT 3030 or GMGT 3581. If a 6 credit hour course is chosen, 3 credit hours will count as Electives.

9) Alternative Management Requirement: One of the following must be chosen: AGRI 3030 (Cooperatives in Business and Community topic only), ECON 2540, LABR 2300, NATV 3120, NATV 4220, NATV 4320, POLS 3250, POLS 3270, SOC 3838 or any one of the following Asper courses: GMGT 4210, LEAD 3030 or MKT 3240 (Sustainability Marketing topic only). Take careful note of any course prerequisites in your timetable planning. Course prerequisites will be waived for Asper students in the following courses: NATV 3120, NATV 4220 NATV 4320, and POLS 3270; students must contact an Asper Program Advisor before registration for the prerequisite waiver. May be taken in Year 3 or Year 4.

10) Students may register for Electives in any year. Registration in Options and Major courses normally begins in Year 3 of the 4-Year program.

Course Key

All Core courses are taught by the Asper School of Business except the following:

SUBJECT		Cr. Hrs.
Agriculture and Food Sciences		
AGRI 3030	Modern Topics in Agriculture 1	3
Economics		
ECON 2540	Political Economy 1: Production and Distribution	3
Labour Studies		
LABR 2300	Workers, Employer and the State	3
Global Political Economy		
NATV 3120	Exploring Aboriginal Economic Perspectives	3
NATV 4220	Environment, Economy and Aboriginal Peoples	3
NATV 4320	Aboriginal Economic Leadership	3

Political Studies		
POLS 3250	International Political Economy	3
POLS 3270	Theories of the Capitalist World Order	3
Philosophy		
PHIL 2290	Ethics and Society	6
PHIL 2750	Ethics and the Environment	3
PHIL 2790	Moral Philosophy	6
PHIL 2830	Business Ethics	3
Sociology		
SOC 3838	Ecology and Society	

4.2 Program Requirements for Majors

Students who intend to complete a second major should note that when a course is applicable to two different majors, that course may be used to satisfy only one set of major requirements.

Capstone Courses for the Faculty and its Majors: The capstone course for the Faculty is GMGT 4010. The capstone course for a major will be listed with the major details below (if none is listed then there is no course defined as a capstone course for that major).

Aboriginal Business Studies

The Major consists of **NATV 3120** and **NATV 4320** plus three credit hours from **ACC 3040, ENTR 3100, ENTR 4100, FIN 3270, FIN 3470, HRIR 4410 or LEAD 2010** plus either three more credit hours from any course not taken from the list of **ACC 3040, ENTR 3100, ENTR 4100, FIN 3270, FIN 3470, HRIR 4410 or LEAD 2010** or any 3 credit hours from **NATV 2100, NATV 2110, NATV 2220, NATV 3100, NATV 3160, NATV 3310, NATV 3360, NATV 3370, NATV 4200 OR NATV 4220**.

NOTE: Students interested in the Aboriginal Business Studies Major are encouraged to discuss course options with an Asper Program Advisor as not all courses are offered every year.

Accounting

The Major consists of: **ACC 2010, ACC 2020, ACC 3040 and ACC 4030**.

The prerequisite for **ACC 2010** is **ACC 1100 (C+)** and for **ACC 3040** is **ACC 1110 (C+)**.

Actuarial Mathematics

The Major consists of any 12 hours from **ACT 2020, ACT 2120, ACT 3130, ACT 3230, ACT 3340, ACT 3630, ACT 4630**.

Students admitted to the Asper School of Business prior to September 2011 may also use the following courses toward the 12 credit hours of the Actuarial Mathematics major, but only if the courses were taken prior to September 2011: **ACT 2210, ACT 3330, ACT 3530, ACT 4240**.

Students admitted to the Asper School of Business prior to September 2014 may use the following courses toward the 12 credit hours of the Actuarial Mathematics major: Any 12 credit hours from: **ACT 2020, ACT 2120, ACT 3130, ACT 3230** [**ACT 3630** (6 hrs) may be taken in place of **ACT 3130** (3 hrs) plus **ACT 3230** (3 hrs)], **ACT 3340, ACT 4140, ACT 4340** [**ACT 4630** (6 hrs) may be taken in place of **ACT 4140** (3 hrs) plus **ACT 4340** (3 hrs)].

Prior to registration, all students interested in or enrolled in Actuarial Mathematics should consult the Director or an Undergraduate Program Advisor for program planning advice.

Students admitted in the Fall 2006 term and thereafter are required to attain a minimum grade of "C+" in all 12 credit hours of Actuarial courses that will contribute to the Major in order to graduate with an Actuarial Mathematics Major.

Students are also advised that the following 15 credit hours of courses are required (and another 3 credit hours are recommended) to obtain the Actuarial Mathematics Major:

MATH 1300 [or **MATH 1220**] (C) and **MATH 1700(B)** [or **MATH 1232**] (C). These courses can be used to satisfy Track 1/Foundation courses or alternately as electives in Year 1. . Note: Both **MATH 1300** and **MATH 1700** are prerequisite to **MATH 2720** which is required for **ACT 2120**.

MATH 2720 [D]. Students declaring Actuarial Mathematics as their first major may take this course as either a Business Option or non-Business Elective.

STAT 2400 and **STAT 3400**. **STAT 2400** is needed for **ACT 2120**. **STAT 3400** is needed for **ACT 3130, ACT 3630** and **ACT 4630**. These courses can contribute to the 2000+ Level elective requirement of the degree.

Plus **STAT 2000** is a recommended elective. This course can contribute to the 2000+ Level elective requirement of the degree.

Prior to registration, all students interested in or enrolled in Actuarial Mathematics should consult the Director for program planning advice.

Entrepreneurship/Small Business

The Major consists of: **ENTR 3100, ENTR 4100, and FIN 3240**, plus one of the following: **ENTR 3102, ENTR 3104, or ENTR 3106**.

Finance

The major consists of 12 credit hours from: **FIN 3410***, **FIN 3480***, and **FIN 4400** plus one of **FIN 3400, FIN 3420, FIN 3450, FIN 3460***, **FIN 4240, FIN 4250, FIN 4260, or FIN 4270**.

*The prerequisites for **FIN 3410, FIN 3460** and **FIN 3480** are: **FIN 2200** (C+), **MATH 1300** (C) or **MATH 1310** (C), and **STAT 2000** (C).

Finance students are also required to take **MATH 1300** (C) or **MATH 1310** (C) and **STAT 2000** (C) as part of the electives in their program since they are part of the prerequisite for the finance courses as stated above.

Capstone Course: FIN 4400.

Generalist

The Major consists of one course from the required list of courses from four different Majors (i.e., Options that are not part of a Major's required course requirements are not eligible for the Generalist Major).

Human Resources Management/Industrial Relations

The Major consists of: **HRIR 3450** plus three of the following: **HRIR 4410, HRIR 4420, HRIR 4480, HRIR 4520 OR HRIR 3450** plus two of the following: **HRIR 4410, HRIR 4420, HRIR 4480, HRIR 4520**, plus one of the following: **HRIR 3430, LABR 3010, LABR 3060, LABR 3070, LABR 3130, and LABR 3140**.

Students entering the second year of the four-year program are advised to take **HRIR 2440** since it is a prerequisite to advanced courses in the area.

International Business

The Major consists of: **FIN 3450, INTB 2200, HRIR 4520, and MKT 3300**.

One of the above four courses may be used in the core program; therefore the major will be comprised of the remaining three courses plus one course from the following list: **MKT 3240** Special Topics in Marketing (Cross-Cultural Brand Management topic only), **ACT 4250** Managing Insurance Operations in the International Business Environment or **SCM 3230** Global Chain Management.

Students majoring in International Business are permitted to take 12 credit hours of a foreign language and/or courses with an international focus from an approved list and have these non-business courses count as Business Options. The list is available in the Undergraduate Program Office.

Leadership and Organizations

The Major consists of 12 credit hours from: **GMGT 3010, LEAD 3010, LEAD 3020, LEAD 3030, LEAD 3040, LEAD 4010 AND LEAD 4020**.

Students entering the second year of the four year program are advised to take **GMGT 2070 and GMGT 2060** as they are prerequisites to some of the advanced courses in the major.

Logistics and Supply Chain Management

The Major consists of: **SCM 2210, SCM 2230, SCM 3360** plus one of the following: **SCM 2220, SCM 2240, SCM 3230, SCM 4250** (not to be held with the former **SCM 4240**).

Recommended Business Options/Electives in this area include: **MIS 3500, MIS 3510, INTB 2200, HRIR 3450, GMGT 3160, MSCI 3400, IDM 4050, IDM 4070, IDM 4080, MKT 3220, MKT 3340, , GEOG 3800, ECON 2450, ECON 2460**.

Management Information Systems

The Major consists of **MIS 3500, MIS 3510, MIS 3520, and MIS 4500.**

Options available in this area are **ACC 3530 and MIS 4250.**

Students interested in pursuing the Management Information Systems Major are encouraged to take **MIS 2000** in the second year of the four-year program since it is a prerequisite to advanced courses in the area.

Students interested in pursuing the Management Information Systems Major are also encouraged, but not required, to complete **COMP 1020.**

Capstone Course: MIS 4500.

Management of Organizations (Discontinued/Deleted)

NOTE: Students previously pursuing the major may have to consult with the Business Administration Department Head for information and feasibility on completing the major.

Marketing

The Major consists of **MKT 3220***, **MKT 3230, MKT 4210** and 3 hours from **MKT 3240, MKT 3300, MKT 3310, MKT 3340, MKT 3390, MKTG 4270 or MKTG 4410.** In addition to the 12 credit hours required for the major, Marketing students may take up to an additional 12 credit hours from the above list.

*Marketing students are also required to take **STAT 2000** as one of their electives since it is a prerequisite for **MKT 3220.**

Capstone Course: MKT 4210.

Operational Research/Operations Management

The Major consists of any 12 hours from **MSCI 3400, OPM 3650, OPM 3660, OPM 3670, MSCI 4220, OPM 4620.**

Prior to registration, all students enrolled in Operational Research/Operations Management should consult the Department Head or a Undergraduate Program Advisor for program planning advice.

4.3 Program Requirements for the Co-operative Education Option

All students must complete all 120 credit hours of the program including the Core, one of the Majors listed above in Section 4.2, as well as the Option and Elective course components. Students who intend to complete a Co-operative Education Option must also complete a minimum of three (3) 4-month work terms. Students admitted from September 2011 and who successfully complete the minimum three 3 work terms can combine the work terms together to satisfy 3 credit hours of Business Options. Complete details for entrance and continuing requirements may be obtained from the Undergraduate Program Office.

NOTE: Students admitted prior to September 2011 should refer to the 2010-2011 Undergraduate Calendar for a description of their program requirements.

4.4 Program Requirements for the Asper School of Business/Red River College Joint Program

Prior to admission to the Asper School of Business/Red River College Joint Program, students must complete the Business Administration Diploma (University Stream) at Red River College with a minimum cumulative grade point average of 3.00. Students must have graduated from the Diploma program within the last 5 years to be eligible for admission. Admission is limited and competitive. Following admission to the Asper School of Business, students in the Joint Program will be required to complete 66 credit hours to earn the Bachelor of Commerce (Honours) degree. The 66 credit hours can be divided into the following components: the Core, the Major, Business Options, and Electives. These components and their associated limits are defined below.

NOTE: Students admitted prior to September 2011 should refer to the 2010-2011 Undergraduate Calendar for a description of their program requirements.

NOTE: The Joint Program is currently under review; transfer credit details are subject to change.

The Core

The CORE comprises 30 credit hours of the 66 required in the Joint Program. The Foundation courses (6 credit hours) should be taken in the first year at the Asper School. Students must achieve a minimum "C" grade in each Foundation course. The Program Core courses (24 credit hours) may be taken at any point in the program, but the course GMGT 4010 must be taken in the student's final term. Core courses are listed below in the Course Requirements for RRC Joint Program Students.

The Major

Each student must complete the course requirements of one MAJOR. Each Major will consist of a 12 credit hour unit of course work. Information on completing a Second Major is listed in Section 3.12. The Majors are listed in Section 4.2.

Students may begin taking courses for their major as soon as prerequisites are met. Students have an opportunity to transfer from one Major to another, but this opportunity decreases as the student progresses in the program.

Note: Students in the Asper School of Business/Red River College Joint Program who want to major in Finance will be required to take FIN 2200 as one of their Business Options. Likewise, students who want to major in Leadership and Organizations must take GMGT 2060 as one of their Business Options.

Business Options

This component of the program consists of a required number of Business courses freely selected by the student. These courses are referred to as Business OPTIONS. Students must take at least 12 credit hours of Business Options. Some students may want to take Business Options which will supplement their Major, whereas other students may prefer to broaden their educational base by selecting Business courses in another or several other Majors. Students who want to supplement their Majors may take up to 12 credit hours of their Business Options from that area. Students may complete a second Major as part of their Business Options requirements. Such students should consult with staff in the Undergraduate Program Office.

Electives

This component of the program is the ELECTIVE requirement. An elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business. Students must take at least 9 credit hours of Electives that meet the following criteria; a 3 credit hour course at the 2000 Level or higher, 3 credit hours must be a freely chosen course that meets the Written English “W” requirement at any level plus a 3 credit hour elective at any level.

Business Option or Elective

This component of the program consists of 3 credit hours which may be either a Business Option or Elective and it must be at the 2000 Level or higher.

Course Requirements for RRC Joint Program Students

The course requirements for the Asper School of Business/Red River College Joint Program are as follows.

Students should register for the Foundation courses in their first year at the University of Manitoba and must achieve a minimum “C” grade in each course.

Foundation Courses	Cr. Hrs
MATH 1520 or MATH 1500 (see Note 1)	3
Written English Course (see Note 2)	3
Program Core Requirements	
ACC 1110	3
MIS 2000	3
GMGT 1010	3
SCM 2160	3
GMGT 4010 (must be taken in final term)	3
Ethics (see Note 3)	3
Alternative Management Studies (see Note 4)	3
International Business (see Note 5)	3
Total Credit Hours	30

NOTES:

- 1) The prerequisite for MATH 1520 or MATH 1500 is a 60 per cent in Grade 12 Pre-Calculus Mathematics 40S or equivalent or a grade of “C” in the Mathematical Skills course taught by Extended Education. Students who have been admitted into the Asper School of Business/Red River College Joint Program and who successfully complete the Mathematical Skills course may be entitled to an additional three credit hour Elective from their Business Administration diploma.
- 2) Students are required to select a three credit hour course to satisfy the Written English “W” requirement. The “W” course for the Foundation course requirement must be from a specific discipline (ARTS 1110, GMGT 1010 and GMGT 2010 are not considered to be from a specific discipline and therefore do not fulfil the Track 1/Foundation Written English course requirement). Courses that satisfy the Written English requirement are listed in the chapter, General Academic Regulations and Policy.
- 3) All Management students must complete three credit hours of Ethics. Students may fulfil this requirement by completing one of the following courses: PHIL 2290 (6), PHIL 2750 (3), PHIL 2790 (6), PHIL 2830 (3), GMGT 3030 (3) or GMGT 3581 (3). If a 6 credit hour course is chosen, 3 credit hours will count toward the core Ethics requirement and 3 credit hours will count as Electives.
- 4) Alternative Management Requirement: One of the following must be chosen: AGRI 3030 (Cooperatives in Business and Community topic only), ECON 2540, LABR 2300, NATV 3120, NATV 4220, NATV 4320, POLS 3250, POLS 3270, SOC 3838 or any one of the following Asper courses: GMGT 4210, LEAD 3030 or MKT 3240 (Sustainability Marketing topic only). Take careful note of any course prerequisites in your timetable planning. Course prerequisites will be waived for Asper students in the following courses: NATV 3120, NATV 4220 NATV 4320, and POLS 3270; students must contact an Asper Program Advisor before registration for the prerequisite waiver. May be taken in Year 3 or Year 4.
- 5) International Business Requirement: One of the following courses must be chosen: ACT 4250, INTB 2200, FIN 3450, HRIR 4520, MKT 3300, MKT 3240 (Cross-Cultural Brand Management topic only) or SCM 3230.

ACADEMIC CALENDAR 2015-2016

Overall Program Requirements	Cr. Hrs.
Foundation Courses	6
Program Core Courses	24
Major Courses	12
Business Options	12
Electives	9
Business Option or Elective	3
Total Credit Hours	66

4.5 Program Requirements for the Asper School of Business /Assiniboine Community College Joint Program

Prior to admission to the Asper School of Business/Assiniboine Community College Joint Program students must complete the Business Administration Diploma (University Stream) at Assiniboine Community College with a minimum cumulative grade point average of 3.00. Students must have graduated from the Diploma program within the last 5 years to be eligible for admission. Admission is limited and competitive. Following admission to the Asper School of Business, students in the Joint Program will be required to complete 66 credit hours to earn the Bachelor of Commerce (Honours) degree. The 66 credit hours can be divided into the following components: the Core, the Major, Business Options, and Elective courses. These components and their associated limits are defined below.

NOTE: The Joint Program is currently under review; transfer credit details are subject to change.

NOTE: Students admitted prior to September 2011 should refer to the 2010-2011 Undergraduate Calendar for a description of their program requirements.

The Core

The CORE comprises 39 credit hours of the 66 required in the Joint Program. The Foundation courses (12 credit hours) should be taken in the first year in the Asper School. Students must achieve a minimum "C" grade in each Track 1/Foundation course. The Program Core courses (27 credit hours) may be taken at any point in the program, but the course GMGT 4010 must be taken in the student's final term. Core courses are listed below in Course Requirements for ACC Joint Program Students.

The Major

Each student must complete the course requirements of one MAJOR. Each Major will consist of a 12 credit hour unit of course work. Information on completing a Second Major is listed in Section 3.12. The Majors are listed Section 4.2.

Students may begin taking courses for their major as soon as prerequisites are met. Students have an opportunity to transfer from one Major to another, but this opportunity decreases as the student progresses in the program.

Note: Students in the Asper School of Business/Assiniboine Community College Joint Program who want to major in Finance will be required to take FIN 2200 as one of their Business options. Likewise, students who want to major in Marketing must take MKT 2210 as one of their Business Options.

Business Options

This component of the program consists of a required number of Business courses freely selected by the student. These courses are referred to as Business OPTIONS. Students must take 9 credit hours of Business Options. Some students may want to take Business Options which will supplement their Major, whereas other students may prefer to broaden their educational base by selecting Business courses in other Majors. Students who want to supplement their Majors may take up to 9 hours of their Business Options from that area. Students may complete a second Major as part of their Business Options requirements. Such students should consult with staff in the Undergraduate Program Office.

Electives

This component of the program is the ELECTIVE requirement. An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business. Students must 3 credit hours of Electives that is a freely chosen course that meets the Written English "W" requirement at any level.

Business Option or Elective

This component of the program consists of 3 credit hours which may be either a Business Option or Elective and it must be at the 2000 Level or higher.

Course Requirements for ACC Joint Program Students

The course requirements for the Asper School of Business/Assiniboine Community College Joint Program are as follows.

Students should register for the Track 1/Foundation courses in their first year at the University of Manitoba and must achieve a minimum "C" grade in each course.

Foundation Courses	Cr. Hrs.
6 credit hours from: ANTH, HIST, MATH, PHIL, POLS, PSYC OR SOC (See Note 1)	6
MATH 1520 or MATH 1500 (see Note 2)	3
Written English Course (see Note 3)	3
Program Core Requirements	
MIS 2000	3
GMGT 2060	3
GMGT 1010	3
MSCI 2150	3
SCM 2160	3
GMGT 4010 (must be taken in final term)	3
Ethics (see Note 4)	3
Alternative Management Studies (see Note 5)	3
International Business (see Note 6)	3
Total Credit Hours	39

NOTES:

1) 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology, or Sociology. Courses chosen for this requirement must be independent from courses taken to fulfill other degree requirements.

2) The prerequisite for **MATH 1520** or **MATH 1500** is 60 per cent in Grade 12 Pre-Calculus Mathematics 40S or equivalent or a grade of "C" in the Mathematical Skills course taught by Extended Education. Students who have been admitted into the Asper School of Business/ Assiniboine Community College Joint Program and who successfully complete the Mathematical Skills course may be entitled to an additional three credit hour Elective from their Business Administration diploma.

3) Students are required to select a three credit hour course to satisfy the Written English "W" requirement. The "W" course for the Foundation course requirement must be from a specific discipline (**ARTS 1110, GMGT 1010 and GMGT 2010** are not considered to be from a specific discipline and therefore do not fulfil the Track 1/Foundation Written English course requirement). Courses that satisfy the Written English requirement are listed in the chapter, General Academic Regulations and Policy.

4) All Business students must complete three credit hours of Ethics. Students may fulfil this requirement by completing one of the following courses: **PHIL 2290 (6), PHIL 2750 (3), PHIL 2790 (6), PHIL 2830 (3), GMGT 3030 (3) or GMGT 3581 (3)**. If a 6 credit hour course is chosen, 3 credit hours will count toward the core Ethics requirement and 3 credit hours will count as Electives.

5) Alternative Management Requirement: One of the following must be chosen: **AGRI 3030** (Cooperatives in Business and Community topic only), **ECON 2540, LABR 2300, NATV 3120, NATV 4220, NATV 4320, POLS 3250, POLS 3270, SOC 3838** or any one of the following Asper courses: **GMGT 4210, LEAD 3030 or MKT 3240** (Sustainability Marketing topic only). Take careful note of any course prerequisites in your timetable planning. Course prerequisites will be waived for Asper students in the following courses: **NATV 3120, NATV 4220, NATV 4320, and POLS 3270**; students must contact an Asper Program Advisor before registration for the prerequisite waiver. May be taken in Year 3 or Year 4.

6) International Business Requirement: One of the following courses must be chosen: **ACT 4250, INTB 2200, FIN 3450, HRIR 4520, MKT 3300, MKT 3240** (Cross-Cultural Brand Management topic only) or **SCM 3230**.

Overall Program Requirements	Cr. Hrs.
Track 1/Foundation Courses	12
Program Core Courses	27
Major Courses	12
Business Options	9
Electives	3
Business Option or Elective	3
Total credit hours	66

4.6 Program Requirements for the Asper School of Business /University College of the North Joint Program

Prior to admission to the Asper School of Business/University College of the North Joint Program students must complete the Business Administration Diploma (University Stream) at University College of the North with a minimum cumulative grade point average of 3.00. Students must have graduated from the Diploma program within the last 5 years to be eligible for admission. Admission is limited and competitive. Following admission to the Asper School of Business, students in the Joint Program will be required to complete 81 credit hours to earn the Bachelor of Commerce (Honours) degree. The 81 credit hours can be divided into the following components: the Core, the Major, Business Options, and Electives. These components and their associated limits are defined below.

NOTE: The Joint Program is currently under review; transfer credit details are subject to change.

NOTE: Students admitted prior to September 2011 should refer to the 2010-2011 Undergraduate Calendar for a description of their program requirements.

ACADEMIC CALENDAR 2015-2016

The Core

The CORE comprises 39 credit hours of the 81 required in the Joint Program. The Foundation courses (15 credit hours) should be taken in the first year in the Asper School. Students must achieve a minimum "C" grade in each Foundation course. The Program Core courses (24 credit hours) may be taken at any point in the program, but the course GMGT 4010 must be taken in the student's final term. Core courses are listed below in Course Requirements for UCN Joint Program Students

The Major

Each student must complete the course requirements of one MAJOR. Each Major will consist of a 12 credit hour unit of course work. Information on completing a Second Major is listed in Section 3.12. The Majors are listed in Section 4.2.

Students may begin taking courses for their major as soon as prerequisites are met. Students have an opportunity to transfer from one Major to another, but this opportunity decreases as the student progresses in the program.

Note: Students in the Asper School of Business/University College of the North Joint Program who want to major in Finance will be required to take **FIN 2200** as one of their Business Options. Likewise, students who want to major in Marketing must take **MKT 2210** as one of their Business Options.

Business Options

This component of the program consists of a required number of Business courses freely selected by the student. These courses are referred to as Business OPTIONS. Students must take 15 credit hours of Business Options. Some students may want to take Business Options which will supplement their Major, whereas other students may prefer to broaden their educational base by selecting Business courses in other Majors. Students who want to supplement their Major may take up to 12 hours of their Business Options from that area. Students may complete a second Major as part of their Business Options requirements. Such students should consult with staff in the Undergraduate Program Office.

Electives

This component of the program is the ELECTIVE requirement. An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business. Students must take 12 credit hours of Electives that meet the following criteria; 6 credit hours must be at the 2000 Level or higher, 3 credit hours must be a freely chosen course that meets the Written English "W" requirement at any level plus a 3 credit hour elective at any level.

Business Option or Elective

This component of the program consists of 3 credit hours which may be either a Business Option or Elective and it must be at the 2000 Level or higher.

Course Requirements for UCN Joint Program Students

The course requirements for the Asper School of Business/University College of the North Joint Program are as follows.

Students should register for the Foundation courses in their first year at the University of Manitoba and must achieve a minimum "C" grade in each course.

Foundation Courses	Cr. Hrs.
6 credit hours from: ANTH, HIST, MATH, PHIL, POLS, PSYC OR SOC (See Note 1)	6
MATH 1520 or MATH 1500 (see Note 2)	3
Written English Course (see Note 3)	3
STAT 1000	3
Program Core Requirements	
MIS 2000	3
GMGT 1010	3
MSCI 2150	3
SCM 2160	3
GMGT 4010 (must be taken in final term)	3
Ethics (see note 4)	3
Alternative Management Studies (see Note 5)	3
International Business (see Note 6)	3
Total Credit Hours	39

NOTES:

1) 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology, or Sociology. Courses chosen for this requirement must be independent from courses taken to fulfill other degree requirements.

2) The prerequisite for **MATH 1520 or MATH 1500** is a 60 per cent in Grade 12 Pre-Calculus Mathematics 40S or equivalent or a grade of "C" in the Mathematical Skills course taught by Extended Education. Students who have been admitted into the Asper School of Business/University College of the North Joint Program and who successfully complete the Mathematical Skills course may be entitled to an additional three credit hour Elective from their Business Administration diploma.

3) Students are required to select a three credit hour course to satisfy the Written English “W” requirement. The “W” course for the Foundation course requirement must be from a specific discipline (**ARTS 1110, GMGT 1010 and GMGT 2010** are not considered to be from a specific discipline and therefore do not fulfil the Track 1/Foundation Written English course requirement). Courses that satisfy the Written English requirement are listed in the chapter, General Academic Regulations and Policy.

4) All Business students must complete three credit hours of Ethics. Students may fulfil this requirement by completing one of the following courses: **PHIL 2290 (6), PHIL 2750 (3), PHIL 2790 (6), PHIL 2830 (3), GMGT 3030 or GMGT 3581 (3)**. If a 6 credit hour course is chosen, 3 credit hours will count toward the core Ethics requirement and 3 credit hours will count as Electives.

5) Alternative Management Requirement: One of the following must be chosen: **AGRI 3030** (Cooperatives in Business and Community topic only), **ECON 2540, LABR 2300, NATV 3120, NATV 4220, NATV 4320, POLS 3250, POLS 3270, SOC 3838** or any one of the following Asper courses: **GMGT 4210, LEAD 3030 or MKT 3240** (Sustainability Marketing topic only). Take careful note of any course prerequisites in your timetable planning. Course prerequisites will be waived for Asper students in the following courses: **NATV 3120, NATV 4220 NATV 4320, and POLS 3270**; students must contact an Asper Program Advisor before registration for the prerequisite waiver. May be taken in Year 3 or Year 4.

6) International Business Requirement: One of the following courses must be chosen: **ACT 4250, INTB 2200, FIN 3450, HRIR 4520, MKT 3300, MKT 3240** (Cross-Cultural Brand Management topic only) or **SCM 3230**.

Overall Program Requirements	Cr. Hrs.
Foundation Courses	15
Program Core Courses	24
Major Courses	12
Business Options	15
Electives	12
Business Option or Elective	3
Total Credit Hours	81

4.7 Program Requirements for the Asper School of Business /École technique et professionnelle joint program

Prior to admission to the Asper School of Business/École technique et professionnelle Joint Program students must complete the Business Administration Diploma (University Stream) at École technique et professionnelle with a minimum cumulative grade point average of 3.00. Students must have graduated from the Diploma program within the last 5 years to be eligible for admission. Admission is limited and competitive. Following admission to the Asper School of Business, students in the Joint Program will be required to complete 66 credit hours to earn the Bachelor of Commerce (Honours) degree. The 66 credit hours can be divided into the following components: the Core, the Major, Business Options, and Electives. These components and their associated limits are defined below.

NOTE: Students admitted prior to September 2011 should refer to the 2010-2011 Undergraduate Calendar for a description of their program requirements.

The Core

The CORE comprises 36 credit hours of the 66 required in the Joint Program. The Foundation courses (12 credit hours) should be taken in the first year in the Asper School. Students must achieve a minimum “C” grade in each Foundation course. The Program Core courses (24 credit hours) may be taken at any point in the program, but the course GMGT 4010 must be taken in the student’s final term. Core courses are listed below in Course Requirements for ETP Joint Program Students.

The Major

Each student must complete the course requirements of one MAJOR. Each Major will consist of a 12 credit hour unit of course work. Information on completing a Second Major is listed in Section 3.12. The Majors are listed in Section 4.2.

Students may begin taking courses for their major as soon as prerequisites are met. Students have an opportunity to transfer from one Major to another, but this opportunity decreases as the student progresses in the program.

Note: Students in the Asper School of Business/École technique et professionnelle joint program who want to major in Finance will be required to take FIN 2200 as one of their Business Options.

Business Options

This component of the program consists of a required number of Business courses freely selected by the student. These courses are referred to as Business OPTIONS. Students must take at least nine and not more than 9 hours of Business Options. Some students may want to take Business Options which will supplement their Major, whereas other students may prefer to broaden their educational base by selecting Business courses in other Majors. Students who want to supplement their Majors may take up to 9 hours of their Business Options from that area. Students may complete a second Major as part of their Business Options requirements. Such students should consult with staff in the Undergraduate Program Office.

Electives

This component of the program is the ELECTIVE requirement. An Elective is any three or six credit hour course freely chosen by the student from courses taught in the degree programs of other faculties and schools, excluding the Asper School of Business. Students must take at least six credit hours of Electives that meet the following criteria; 3 credit hours must be at the 2000 Level or higher and 3 credit hours must be a freely chosen course that meets the Written English “W” requirement at any level.

ACADEMIC CALENDAR 2015-2016

Business Option or Elective

This component of the program consists of 3 credit hours which may be either a Business Option or Elective but it must be at the 2000 Level or higher.

Course Requirements for ETP Joint Program Students

The course requirements for the Asper School of Business/École technique et professionnelle Joint Program are as follows.

Students should register for the Foundation courses in their first year at the University of Manitoba and must achieve a minimum "C" grade in each course.

Foundation Requirements	Cr. Hrs.
6 credit hours from: ANTH, HIST, MATH, PHIL, POLS, PSYC OR SOC (See Note 1)	6
MATH 1520 or MATH 1500 (see Note 2)	3
Written English Course/Elective (see Note 3)	3
Program Core Requirements	
MIS 2000	3
GMGT 1010	3
MSCI 2150	3
SCM 2160	3
GMGT 4010 (must be taken in final term)	3
Ethics (see note 4)	3
Alternative Management Studies (see Note 5)	3
International Business (see Note 6)	3
Total Credit Hours	36

NOTES:

1) 6 credit hours from: Anthropology, History, Mathematics, Philosophy, Political Studies, Psychology, or Sociology. Courses chosen for this requirement must be independent from courses taken to fulfill other degree requirements.

2) The prerequisite for **MATH 1520 or MATH 1500** is a 60 per cent in Grade 12 Pre-Calculus Mathematics 40S or equivalent or a grade of "C" in the Mathematical Skills course taught by Extended Education. Students who have been admitted into the Asper School of Business/École technique et professionnelle Joint Program and who successfully complete the Mathematical Skills course may be entitled to an additional three credit hour Elective from their Business Administration diploma.

3) Students are required to select a three credit hour course to satisfy the Written English "W" requirement. The "W" course for the Foundation course requirement must be from a specific discipline (**ARTS 1110, GMGT 1010 and GMGT 2010** are not considered to be from a specific discipline and therefore do not fulfil the Track 1/Foundation Written English course requirement). Courses that satisfy the Written English requirement are listed in the chapter, General Academic Regulations and Policy.

4) All Business students must complete three credit hours of Ethics. Students may fulfil this requirement by completing one of the following courses: **PHIL 2290 (6), PHIL 2750 (3), PHIL 2790 (6), PHIL 2830 (3), GMGT 3030 or GMGT 3581 (3)**. If a 6 credit hour course is chosen, 3 credit hours will count toward the core Ethics requirement and 3 credit hours will count as Electives.

5) Alternative Management Requirement: One of the following must be chosen: **AGRI 3030** (Cooperatives in Business and Community topic only), **ECON 2540, LABR 2300, NATV 3120, NATV 4220, NATV 4320, POLS 3250, POLS 3270, SOC 3838** or any one of the following Asper courses: **GMGT 4210, LEAD 3030 or MKT 3240** (Sustainability Marketing topic only). Take careful note of any course prerequisites in your timetable planning. Course prerequisites will be waived for Asper students in the following courses: **NATV 3120, NATV 4220 NATV 4320, and POLS 3270**; students must contact an Asper Program Advisor before registration for the prerequisite waiver. May be taken in Year 3 or Year 4.

6) International Business Requirement: One of the following courses must be chosen: **ACT 4250, INTB 2200, FIN 3450, HRIR 4520, MKT 3300, MKT 3240** (Cross-Cultural Brand Management topic only) or **SCM 3230**.

Overall Program Requirements	Cr. Hrs.
Foundation Courses	12
Program Core Courses	24
Major Courses	12
Business Options	9
Electives	6
Business Option or Elective	3
Total Credit Hours	66

SECTION 5: COURSE DESCRIPTIONS

SECTION 5.1 Accounting and Finance-Accounting Course Descriptions 1000 Level (ACC)

ACC 1100 Introductory Financial Accounting Cr.Hrs. 3

(Lab required) Examination of accounting postulates underlying the preparation and presentation of financial statements.

ACC 1110 Introductory Managerial Accounting Cr.Hrs. 3

(Lab required). Role of accounting in creation and application of business information used by decision-makers in the management of enterprise. Prerequisite: ACC 1100 (009.110) (D). Prerequisite or Concurrent Requirement: ECON 1010 (D) and ECON 1020 (D) or the former ECON 1200 (018.120) (D).

SECTION 5.2 Accounting and Finance-Accounting Course Descriptions-2000 Level (ACC)

ACC 2010 Intermediate Accounting - Assets Cr.Hrs. 3

(Formerly 009.201) Accounting policies and practices dealing with calculation and measurement of assets and related reporting problems. Prerequisite: ACC 1100 (or 009.110) (C+).

ACC 2020 Intermediate Accounting - Equities Cr.Hrs. 3

(Formerly 009.202) Consideration of current accounting relating to equities with attention to the accounting treatment of current and long-term liabilities, income tax allocation, share capital, and surplus. Students may not hold credit for both ACC 2020 (or 009.202) and FIN 3250 (or 009.325). Prerequisite: ACC 2010 (or 009.201) (D).

SECTION 5.3 Accounting and Finance-Accounting Course Descriptions-3000 Level (ACC)

ACC 3030 Advanced Accounting Cr.Hrs. 3

(Formerly 009.303) Topics include: partnerships, consolidations, mergers, reporting on conglomerates, and fund accounting. Not offered every year. Prerequisites: ACC 2010 (or 009.201) (D) and ACC 2020 (or 009.202)(D) or approval of department head.

ACC 3040 Cost Accounting Cr.Hrs. 3

(Formerly 009.304) Study of accounting concepts and functions as they relate to product costing, planning, control, and decision-making. Prerequisite: ACC 1110 (or 009.111) (C+).

ACC 3050 Taxation Accounting Cr.Hrs. 3

(Formerly 009.305) Structure and concepts of the Canadian tax system, emphasis on current tax practices. Prerequisite: ACC 1100 (or 009.110) (C+).

ACC 3530 Accounting Information Systems Cr.Hrs. 3

(Formerly 009.353) Role of accounting systems in total management information systems; design and installation of accounting systems. Prerequisites: ACC 1110 or ACC 1111 (or 009.111) (D) and MIS 2000 or MIS 2001 (or 009.200)(D).

SECTION 5.4 Accounting and Finance-Accounting Course Descriptions 4000 Level (ACC)

ACC 4010 Auditing Cr.Hrs. 3

(Formerly 009.401) Study of philosophy and concepts of auditing, legal and ethical responsibilities of the auditor, basic techniques of auditing including statistical sampling and flowcharting, and the operational audit. Prerequisites: [ACC 2010 (or 009.201) and ACC 2020 (or 009.202) (D)] or approval of department head.

ACC 4030 Accounting Theory Cr.Hrs. 3

(Formerly 009.403) Examination of principles and postulates of accounting theory. Coverage of selected topics will vary from year to year depending on interests of course participants. Prerequisites: ACC 2010 (or 009.201) (D) and FIN 2200 (or 9.220) (D). Prerequisite or Concurrent Requirement: ACC 2020 (or 009.202) (D).

ACC 4040 Advanced Managerial Accounting Cr.Hrs. 3

(Formerly 009.404) A critical examination of managerial accounting techniques and the controllership function. Prerequisite: ACC 3040 (or 009.304) (D).

SECTION 5.5 Accounting and Finance-Finance Course Descriptions 2000 Level (FIN)

FIN 2200 Corporation Finance Cr.Hrs. 3

An introduction to corporate finance regarding the allocation & acquisition of funds. Topics include: discounted cash flows, capital budgeting, financial instruments, cost of capital, risk-return trade-offs, market efficiency, capital structure and the use of derivatives. Prerequisite: [ACC 1100 (or 009.110) (D)] and [MATH 1500 or MATH 1520 (C)] and [STAT 1000 or STAT 1001 (C)] and [ECON 1010 (C) and ECON 1020 (C) or the former ECON 1200 (or 018.120) (C)].

SECTION 5.6 Accounting and Finance-Finance Course Descriptions 3000 Level (FIN)

FIN 3240 Entrepreneurial Finance Cr.Hrs. 3

Study of entrepreneurial finance, addressing both investment and financing decisions of new ventures, covering both in theory and in practice. May not be held for credit in any program with FIN 3470 and may not be used in place of FIN 3470. Prerequisite: FIN 2200 (or 009.220) (D).

FIN 3250 Financial Statement Analysis Cr.Hrs. 3

(Formerly 009.325) A study of the methods and techniques used for interpretation of annual financial reports and the significance of alternative accounting policies on reported income. Students may not hold credit for both FIN 3250 (or 009.325) and ACC 2020 (or 009.202). Prerequisite: ACC 1100 (or 009.110) (D).

FIN 3270 Personal Financial Planning Cr.Hrs. 3

(Formerly 009.327) An introduction to financial planning techniques used in professional practice. Topics include financial assessment, income tax planning, risk management, insurance, debt and credit management, investments, retirement planning, and estate planning. Prerequisite: FIN 2200 (or 009.220) (D).

FIN 3400 Investment Banking Cr.Hrs. 3

(Formerly 009.340) The practice and theory of investment banking including valuation, initial public offerings, mergers and acquisitions, and restructuring. Prerequisite: FIN 2200 (or 009.220) (C+).

FIN 3410 Investments Cr.Hrs. 3

An introduction to investment analysis and modern portfolio theory. Topics include equilibrium in the capital markets, fixed income securities, equities and derivative instruments. Prerequisite: [FIN 2200 (or 009.220) (C+)] and [MATH 1300 or MATH 1310 (C)] and [STAT 2000 (C)].

FIN 3420 Security Analysis Cr.Hrs. 3

This course provides a practical application of techniques to analyse a company for investment purposes and evaluate purchases of stock and fixed-income securities. Topics include financial statement analysis, ratio analysis, alternative methods for forecasting corporate profits and dividends, risk assessment, and valuation techniques. Prerequisites: FIN 2200 (or 009.220) (C+).

FIN 3440 Real Estate Investments Cr.Hrs. 3

An introduction to real estate finance. Topics include valuation, financing, transaction, tax and legal issues. Prerequisite: FIN 2200 (or 009.220) (C+).

FIN 3450 International Finance Cr.Hrs. 3

An introduction to the theory of comparative advantage, foreign exchange markets, international parity relations, international debt and equity markets, international debt operating exposures, and international capital budgeting. Prerequisite: FIN 2200 (or 009.220) (C+).

FIN 3460 Financial Markets and Institutions Cr.Hrs. 3

A study of financial systems with emphasis on Canada. Major topics include monetary policy, financial markets, financial institutions, financial regulation and risk management. Students may not hold credit for both FIN 3460 (or 009.346) and ECON 3640 (or 018.364). Prerequisite: [FIN 2200 (or 009.220) (C+)] and [MATH 1300 or MATH 1310 (C)] and [STAT 2000 (C)].

FIN 3470 Small Business Finance Cr.Hrs. 3

(Formerly 009.347) Study of the financial issues faced by small business enterprises. Prerequisite: FIN 2200 (or 009.220) (D). May not be held with FIN 3240.

FIN 3480 Corporate Finance Theory and Practice Cr.Hrs. 3

Intermediate Corporate Finance including the following topics: Capital budgeting theory and techniques, determination of relevant cost of capital, capital structure, dividend policy, leasing and other special topics. Prerequisite: [FIN 2200 (or 009.220) (C+)] and [MATH 1300 or MATH 1310 (C)] and [STAT 2000 (C)].

SECTION 5.7 Accounting and Finance-Finance Course Descriptions-4000 Level (FIN)

FIN 4230 Selected Topics in Finance Cr.Hrs. 3

(Formerly 009.423) A study of current issues in finance. Topics considered will depend on the interests and needs of the participants. Prerequisite: FIN 2200 (or 009.220) (C+).

FIN 4240 Financial Modeling Cr.Hrs. 3

Spreadsheet implementation of practitioner-oriented financial models. May not be held with FIN 4230 when titled "Financial Modeling". Prerequisite: FIN 3410 (C).

FIN 4250 Behavioral Finance Cr.Hrs. 3

Understand how human biases impact the financial decisions of market participants and the practical implications. Prerequisite: FIN 2200 (C+).

FIN 4260 Advanced Finance Theory Cr.Hrs. 3

(Formerly 009.426) Theories that provide the foundation for modern corporate finance. Empirical tests of finance theories. Implications for managers. Prerequisites: FIN 3410 (or 009.341) (D) and FIN 3480 (or 009.348) (D).

FIN 4270 Options and Futures Cr.Hrs. 3

Mechanics of futures, options and swaps markets. Topics include arbitrage, hedging, forward rate agreements, models of derivative valuation and value-at-risk. Prerequisite: FIN 3410 (or 009.341) (D).

FIN 4400 Financial Management Practices Cr.Hrs. 3

Application of theoretical models in finance to real-world problems using cases. Topics include working capital management, long-term investment and financing decisions, valuation, risk management, reorganizations and international financial management. Prerequisite: FIN 3480 (or 009.348) (D).

SECTION 5.8 Accounting and Finance-Management Info Systems Course Descriptions 2000 Level (MIS)

MIS 2000 Information Systems for Management Cr.Hrs. 3

(Lab required) Introduction to information systems in organizations, systems development/acquisition, and management issues concerning information technology in organizations.

SECTION 5.9 Accounting and Finance-Management Info Systems Course Descriptions 3000 Level (MIS)

MIS 3500 Database Management Systems Cr.Hrs. 3

(Formerly 009.350) Designing, developing and managing database systems, by using mainstream design methodologies and popular development tools. Prerequisites: [MIS 3510 (or 009.351) (D)] and [COMP 1010 (or 074.101) (C)].

MIS 3510 Systems Analysis and Design Cr.Hrs. 3

(Formerly 009.351) Analyzing business tasks, processes, information and information technology, and designing information systems by employing methodologies, techniques and popular software used by information systems professionals. Prerequisites: MIS 2000 (or 009.200) (C+).

MIS 3520 Data Communications and Networking Cr.Hrs. 3

(Formerly 009.352) A study of basic data communications topics, including communication media, protocols, network security, network topologies (local and wide area networks), Web development and network management issues. Prerequisite: MIS 2000 (or 009.200) (C+).

SECTION 5.10 Accounting and Finance-Management Info Systems Course Descriptions 4000 Level (MIS)

MIS 4250 Advanced Topics in Management Information Systems Cr.Hrs. 3

(Formerly 009.425) A study of current issues in MIS. The topics for this course will vary over time, depending on student interests, faculty interests, and student demand. Not offered every year. Prerequisite: consent of instructor.

MIS 4500 Management Information Systems Strategy Cr.Hrs. 3

(Formerly 009.450) A survey of the various issues associated with managing information as a resource. Explores MIS planning frameworks and tools, and the linkages between information systems, organizational structure and organizational strategy. Prerequisites: at least two of the following: (Formerly 009.450) A survey of the various issues associated with managing information as a resource. Explores MIS planning frameworks and tools, and the linkages between information systems, organizational structure and organizational strategy. Prerequisites: at least two of the following: ACC 3530 (or 009.353) (D), MIS 3500 (or 009.350) (D), MIS 3510 (or 009.351) (D), MIS 3520 (or 009.352) (D), MIS 4250 (or 009.425) (D).

SECTION 5.11 Warren Centre for Actuarial Studies Course Descriptions 2000 Level (ACT)

ACT 2020 Economic and Financial Applications Cr.Hrs. 3

(Formerly 010.202) A synthesis of macroeconomic issues, quantitative aspects of finance using interest theory, and insurance economics. Prerequisite: ACT 2120 (or 010.212) (C+).

ACT 2120 Interest Theory Cr.Hrs. 3

The application of calculus and probability to discrete and continuous interest functions. Key topics are the measurement of interest, present and accumulated values, and annuities. May not be held with the former 010.212 or 010.232 or ACT 3320 (or 010.332). Prerequisite: MATH 1232 (C) or MATH 1690 (C) or MATH 1700 (B) or MATH 1710 (B). Prerequisite or corequisite: [MATH 2720 or MATH 2721 (D)] or [MATH 2731 or the former MATH 2750 or MATH 2730 (D)] and STAT 2400 (D).

ACT 2210 Introduction to Risk Management Cr.Hrs. 3

(Formerly 010.221) Mathematical tools for the quantitative assessment of risk and their application to problems encountered in risk management. Prerequisite or corequisite: [MATH 2720 or MATH 2721 (D)] or MATH 2731 or the former MATH 2750 or MATH 2730 (D)] and STAT 2400 (D) or consent of instructor.

SECTION 5.12 Warren Centre for Actuarial Studies Course Descriptions 3000 Level (ACT)**ACT 3130 Actuarial Models 1 Cr.Hrs. 3**

(Formerly 010.313) Elementary concepts respecting the quantification of the financial impact of contingent payments. May not be held with the former 010.347. Prerequisite or Concurrent Requirements: ACT 2120 (or 010.212) (C+); and STAT 3400 (or the former STAT 3500 or 005.350) (D).

ACT 3230 Actuarial Models 2 Cr.Hrs. 3

(Formerly 010.323) Intermediate and advanced concepts respecting the quantification of the financial impact of contingent payments. Not to be held with the former 010.348. Prerequisite: ACT 3130 (or 010.313) (C+).

ACT 3340 Financial Derivatives for Actuarial Practice Cr.Hrs. 3

Introduction of interest rate models and rational valuation of derivative securities. Prerequisite: ACT 2020 (C+) or consent of instructor.

ACT 3530 Actuarial Models 4 Cr.Hrs. 3

(Formerly 010.353) Survival Models, Stochastic Process Models, and Simulation Models. May not be held with the former 010.447. Prerequisite: ACT 3130 (or 010.313) (C+). Prerequisite or Concurrent Requirement: ACT 3230 (or 10.323) (D).

ACT 3630 Models for Life Contingencies Cr.Hrs. 6

Knowledge of the theoretical basis of contingent payment models and the application of those models to insurance and other financial risks. Not to be held with ACT 3130 (former 010.347) and ACT 3230 (former 010.348). Prerequisite or corequisite: ACT 2120 (formerly 010.212) (C+); and STAT 3400 (formerly STAT 3500 or 005.350)(C).

SECTION 5.13 Warren Centre for Actuarial Studies Course Descriptions 4000 Level (ACT)**ACT 4000 Advanced Actuarial Topics Cr.Hrs. 3**

(Formerly 010.400) A selection of advanced topics of current actuarial interest. Prerequisite: ACT 3230 (or 010.323) (D).

ACT 4060 Actuarial Aspects of Investment Practice Cr.Hrs. 3

(Formerly 010.406) This course examines stochastic interest rates and tools and techniques for coping with general product issues in asset/liability management. May not be offered every year. Students may not hold credit for both ACT 4060 (or 010.406) and the former 010.448 Topic Asset/Liability Management. Prerequisites: FIN 2200 Corporate Finance (or 009.220) (C+)

ACT 4140 Actuarial Modeling Methods 1 Cr.Hrs. 3

Estimation and Fitting of Survival Models. May not hold credit with the former 010.448 Topic Survival Models. Prerequisite: STAT 3400 (or the former STAT 3500 or 005.350)(D).

ACT 4150 Pension Mathematics Cr.Hrs. 3

(Formerly 010.415) Actuarial applications for defined benefit pension plans. Actuarial cost methods, funding levels, operation of pension plans from an actuarial perspective. Students may not hold credit with ACT 7550 (or 010.755). May not be offered every year. Prerequisite: ACT 3230 (010.323) (D).

ACT 4160 Introduction to Property and Casualty Insurance Industry Cr.Hrs. 3

The introduction to the Property and Casualty Insurance Industry and the discussion of relevant topics. Prerequisite or corequisite: ACT 3230 (formerly 010.323) (C+) or consent of instructor.

ACT 4240 Actuarial Modeling Methods 2 Cr.Hrs. 3

(Formerly 010.424) Estimation and Fitting of Frequency and Severity Models. May not be offered every year. Prerequisite: ACT 3330 (or 010.333) (D).

ACT 4250 Managing Insurance Operations in the International Business Environment Cr.Hrs. 3

Introduction of the risks inherent in insurance products and assets, as well as the relationships between assets and liabilities across the entire operations of the global insurance enterprise. Prerequisites: FIN 2200 (C+) or consent of instructor.

ACT 4340 Actuarial Modeling Methods 3 Cr.Hrs. 3

(Formerly 010.434) Classical, Bayesian and Buhlmann Credibility Models. The connection between Credibility Theory and Experience Rating. Underlying assumptions for the different methods. Simulation in Estimating and Fitting Actuarial Models. May not hold credit with the former 010.488 Topic Credibility Theory. May not be offered every year. Prerequisite: ACT 4140 (010.424) (C+).

ACT 4630 Construction and Evaluation of Actuarial Models Cr.Hrs. 6

Advanced concepts respecting frequency and severity models and their application in insurance. Not to be held with ACT 4140 (former 010.414) and ACT 4340 (former 010.434). Prerequisite: STAT 3400 (STAT 3500 or 005.350) (C).

SECTION 5.14 Business Administration-Entrepreneurship/Small Business Course Descriptions 2000 Level (ENTR)**ENTR 2010 Managing the Smaller Business Cr.Hrs. 3**

Small firms dominated the Canadian economic scene and contribute to the nations' economic welfare in a major way but pose different managerial issues and problems for their owner/managers than larger organizations. This course will focus specifically on how to effectively manage and grow the smaller firm. Students may not hold credit for both ENTR 2010 and ENTR 3100. This course is not open to students in the Asper School of Business. This course is not for students who will pursue a major in Entrepreneurship/Small Business. U1 students may take this course.

ENTR 2020 Starting a New Business Cr.Hrs. 3

This is a course for students in all Faculties who may wish to start a business of their own at some time or assess their potential for such an option. It will cover a broad range of topics to increase your understanding of what it takes to succeed in an entrepreneurial career. Students may not hold credit for both ENTR 2020 and ENTR 4100. This course is not open to students in the Asper School of Business. This course is not for students who will pursue a major in Entrepreneurship/Small Business. U1 students may take this course.

SECTION 5.15 Business Administration-Entrepreneurship/Small Business Course Descriptions 3000 Level (ENTR)**ENTR 3100 Small Business Management Cr.Hrs. 3**

(Formerly 118.310) An appreciation of the primary issues that should be considered in starting and managing a small business within the Canadian context. Students may not hold credit for both ENTR 3100 and ENTR 2010. Prerequisites: ACC 1100 (or 009.110) (D), and MKT 2210 (or 118.221) (D), and GMGT 2060 (formerly GMGT 2080 or 027.208) (D)].

ENTR 3102 Technological Entrepreneurship Cr.Hrs. 3

An overview of the inter-relationship between technology and entrepreneurship. An appreciation of the role of technical entrepreneurship in the economy, how a technology strategy is developed, implemented and defended as well as the societal implications of technological entrepreneurship. Prerequisite: MKT 2210 (or 118.221) (D).

ENTR 3104 Selected Topics in Small Business/Entrepreneurship Cr.Hrs. 3

A study of selected areas of recent development related to small business/entrepreneurship. Topics may include innovation and creativity, venture financing, opportunity identification and recognition, franchising and entry strategies of new business, social entrepreneurship, international entrepreneurship and entrepreneurial histories (e.g. IDEA recipients). Prerequisites: none.

ENTR 3106 Family Business Management Cr.Hrs. 3

An examination of the unique challenges inherent in the management of a family business. Topics include founder relinquishment, the need for succession planning and firm regeneration, the core actors and their issues, ownership structure and estate planning. Prerequisite: GMGT 2060 (D) or GMGT 2080 (027.208) (D).

SECTION 5.16 Business Administration-Entrepreneurship/Small Business Course Descriptions 4000 Level (ENTR)

ENTR 4100 New Venture Analysis Cr.Hrs. 3

A project oriented course focusing on the identification and evaluation of viable new venture concepts and their associated risks, problems, and opportunities. Students may not hold credit for both ENTR 4100 and ENTR 2020. Students are strongly encouraged to take FIN 3240 prior to ENTR 4100. Prerequisites: MKT 2210 (or 118.221) (D) and ACC 1110 (or 009.111) (D) and [GMGT 2060 (D) (or GMGT 2080 (or 027.208) (D))] and FIN 2200 (or 009.220) (D).

SECTION 5.17 Business Administration-General Management Course Descriptions 1000 Level (GMGT)

GMGT 1010 Business and Society Cr.Hrs. 3

The course will provide over arching frameworks to examine the nature, role, and importance of business in society. Key internal operations of business organizations will be discussed (e.g. finance, marketing, operations), but the majority of the course examines the relationships that business firms must balance among key stakeholders in their external environment (i.e. government, owners, customers, communities, suppliers, future generations, etc.). Students will examine various institutional contexts (e.g. economic, political-legal, and socio-cultural) and critically think about relationships between business and society, mindfully considering alternative approaches to management. Special emphasis will be placed on contemporary social issues in business (e.g. sustainable development, corporate social responsibility).

SECTION 5.18 Business Administration-General Management Course Descriptions 2000 Level (GMGT)

GMGT 2010 Business Communications Cr.Hrs. 3

The course provides an introduction to theoretical, cultural, and ethical bases of effective communication. Another goal is to develop students' interpersonal, oral, and written communication skills at individual, group, and organizational levels. The students will also develop analytical, problem-solving, rhetorical, and critical thinking abilities required in organizational and business settings. Students are strongly recommended to take GMGT 2010 in their first 45 credit hours. Not to be held for credit with the former GMGT 2000.

GMGT 2060 Management and Organizational Theory Cr.Hrs. 3

Examination of the underlying principles concerning the formation of organizations and their internal management. Emphasis on the study and analysis of various theoretical approaches to organization theory and management. Prerequisite: GMGT 1010 (D). Students may not hold for credit with either GMGT 2080 (027.208) or GMGT 2030 (027.203).

GMGT 2070 Introduction to Organizational Behaviour Cr.Hrs. 3

(Formerly 027.207) Examination of the impact of human behaviour on the formal and informal organization. Topics include leadership, work groups, organizational conflict, and communications.

GMGT 2120 Business/Government Relations Cr.Hrs. 3

(Formerly 027.212) Analysis of the interaction between business firms and government in the creation, modification, and implementation of government policies that affect business. Study of the ways business can influence government decision-making. Prerequisite: [ECON 1010 (D) and ECON 1020 (D)] or ECON 1200 (or 018.120) (D).

GMGT 2144 Unallocated Credit Cr.Hrs. 3

Campus Manitoba course.

SECTION 5.19 Business Administration-General Management Course Descriptions 3000 Level (GMGT)

GMGT 3010 Management Decision-Making Cr.Hrs. 3

(Formerly 027.301) Introduces students to the decision-making process and factors that enter into making decisions, including the objectives and approaches to decision-making, the basic type of managerial decisions, and exemplifications of decision in operations. Decision making will be viewed as a multi-dimensional process involving values, psychology, sociology, social psychology, and politics. The course presents a variety of perspectives useful for making and evaluating decisions in all kinds of organizations. Prerequisites: GMGT 2070 (or 027.207)(D).

GMGT 3030 Contemporary Social Issues in Business Cr.Hrs. 3

Study of key issues in the relationship of business organizations and society with emphasis on the impact of management. Prerequisites: [GMGT 2060 or former GMGT 2080 (or 027.208) (D)] and GMGT 2070 (or 027.207) (D).

GMGT 3160 Managerial Economics Cr.Hrs. 3

(Formerly 027.316) An introduction to the economic foundation of managerial decision making, which includes pricing strategies, boundaries of the firm, investment in human capital and incentive contract design. Also offered as ECON 3160 Managerial Economics by the Department of Economics in the Faculty of Arts. May not be held with ECON 3160. Prerequisite:[a grade of "C" or better in both ECON 101 (or ECON 1011) and ECON 1020 (or ECON 1021), or the former ECON 1200 (018.120), or the former ECON 1201 (018.120)] and [a grade of "C" or better in MATH 1500 (or MATH 1501 or the former 136.150) or MATH 1510 (136.151) or MATH 1520 (136.152) or ECON 2530 (018.253), MATH 1520 or ECON 2530].

GMGT 3300 Commercial Law Cr.Hrs. 3

(Formerly 027.330) General history of law, the organization of courts, the Canadian Constitution, federal and provincial legislative functions. Legal concepts and problems relating to business organization, contracts, principal and agent, negotiable instruments, common torts, and bankruptcy proceedings.

SECTION 5.20 Business Administration- General Management Course Descriptions 4000 Level (GMGT)**GMGT 4010 Administrative Policy Cr.Hrs. 3**

(Formerly 027.401) Studies of policies available to business enterprise; with case studies to focus attention on problems involved in formulating and administering policies with interdisciplinary considerations. Take only in final term of program or with consent of department head. Prerequisite: prior to being admitted to GMGT 4010, students must be in Year 4, in the final term prior to graduation in the Asper School and have successfully completed (with a minimum grade of (D) in each course) all 30 credit hours of courses specified in Year 2 of the 4-Year Program. Prerequisite or Concurrent Requirement: all remaining core courses specified in Year 3 and 4 of the 4-Year Program (with a minimum grade of (D) in each course).

GMGT 4110 Commercial Law 2 Cr.Hrs. 3

(Formerly 027.411) Aspects of the law relating to business units, including a study of the law relating to proprietorships, partnerships and corporations, and secured transactions. Not taught every year. Prerequisite: GMGT 3300 (or 027.330) (D).

GMGT 4210 Seminar in Management and Capitalism Cr.Hrs. 3

This course provides students with an understanding of the institutions, developments, and debates associated with modern capitalism and their implications for management. Students will explore alternative management perspectives and bi-directional interactions within the context of larger issues. It is designed to ensure that students are introduced to a variety of different perspectives, and that no single perspective is unduly privileged over others. Prerequisite: GMGT 1010 (D) or GMGT 2120 (D).

SECTION 5.21 Business Administration-Human Resources/Industrial Relations Course Descriptions 2000 Level (HRIR)**HRIR 2440 Human Resource Management Cr.Hrs. 3**

(Formerly 027.244) Introduction to principles and procedures in the management of human resources. Topics include diversity management, conflict resolution, employment, law, planning, job analysis, performance appraisal, staffing, compensation, union-management relations, and current issues.

SECTION 5.22 Business Administration-Human Resource/Industrial Relations Course Descriptions 3000 Level (HRIR)**HRIR 3430 Selected Topics in Industrial Relations Cr.Hrs. 3**

(Formerly 027.343) Analysis of specific topics or issues in the employment relationships in an industrial society. Prerequisites: [HRIR 2440 (or 027.244) (D)] and [HRIR 3450 (or 027.345 or 027.341) (D)]. or consent of instructor.

HRIR 3450 Labour and Employment Relations Cr.Hrs. 3

(Formerly 027.345) This course is to enhance knowledge and understanding of labour and employment relations in Canada and beyond. It addresses various issues and debates about these relations; their history, structure, and functioning; management employment relations practices; the role of labour unions; collective bargaining; and contemporary developments and alternatives. May not be held with the former 027.341.

SECTION 5.23 Business Administration-Human Resources/Industrial Relations Course Descriptions 4000 Level (HRIR)**HRIR 4410 Staffing and Management Development Cr.Hrs. 3**

(Formerly 027.441) A review of: employment planning; recruitment and selection; internal placement; out placement; performance appraisal; career development. Training needs analysis, methods and evaluation. Prerequisite: HRIR 2440 (or 027.244) (D).

HRIR 4420 Compensation Cr.Hrs. 3

(Formerly 027.442) A review of the major concepts and design of compensation systems including: strategy, internal equity, external competitiveness, rewarding individual contributions, performance incentives, employee benefits, government regulations, union role in compensation; budgets and administration. Prerequisite: HRIR 2440 (or 027.244) (D).

HRIR 4480 Collective Bargaining and Administration Cr.Hrs. 3

(Formerly 027.448) Detailed examination of the elements and issues in contract negotiation and administration and of the legal framework imposed on public and private negotiations. Comparison of Canadian industrial relations system with other national systems. Prerequisite: HRIR 3450 (or 027.345 or 027.341) (D).

HRIR 4520 Comparative Industrial Relations and Human Resource Management Cr.Hrs. 3

(Formerly 027.452) To provide an international perspective on industrial relations (IR) and human resource management (HRM) through analysis and comparison of IR systems and HRM practice across selected countries and of current developments therein. Also covers theories and issues relevant to these topics. Students are encouraged, but not required, to complete HRIR 3450 (or 027.345 or 027.341) (D) prior to taking this course.

SECTION 5.24 Business Administration-International Business Course Descriptions 2000 Level (INTB)**INTB 2200 International Management Cr.Hrs. 3**

(Formerly 027.220) Analysis of the practice of management in an international setting. Examines the cultural, political, and economic environments which influence managerial decision-making in an international context

SECTION 5.25 Business Administration-Leadership Course Descriptions (LEAD)**LEAD 2010 Learning to Lead Cr.Hrs. 3**

This seminar provides students with an introduction to and understanding of effective leadership and its application to a variety of group and organizational contexts. The classes encourage interdisciplinary discussions of theoretical, philosophical, historical, and technical elements of effective leadership. The course allows students to reflect on and develop their own leadership style through interactive lectures, experiential activities, and action learning in groups and organizations in which students want to lead and be led. This seminar is intended for all students that have an interest in leadership theory and effective leadership practices. Students may not hold credit for both LEAD 2010 and ARTS 1160. Prerequisite: Students must have completed 15 credit hours of passed courses to register in LEAD 2010.

LEAD 3010 Negotiation and Conflict Management Cr.Hrs. 3

Leaders are regularly called upon to manage conflict, promote cooperation, and resolve competing interests. With a focus on negotiation as a means of conflict resolution, this course blends contemporary research and theory with practical, first-hand experience. Students' effectiveness as negotiators will be developed with readings and class discussions focused on the social and psychological underpinnings of negotiation, and applied with weekly hands-on experiences, ranging from bilateral bargaining games to complex, multi-issue, multilateral negotiation scenarios. Prerequisites: Year three standing (or by permission of instructor).

LEAD 3020 Team Building and Diversity Cr.Hrs. 3

The ability to work effectively with team members is crucial to individual functioning and promotion within organizations. This course examines the structure and dynamics of teams with an aim to understanding team-building, team dynamics, diversity, and managing team conflict. Part of working effectively in teams is understanding diversity and how to encourage collaboration in diverse teams. This course will therefore cover topics related to diversity and cross-cultural awareness. Equivalent to but students may not hold credit for LEAD 3020 and GMGT 3020 with topics Diversity Management and Team Building or Diversity Management or Team Building. Prerequisites: GMGT 2060 (D) [or GMGT 2080 (or 027.208) (D)] and GMGT 2070 (D) (027.207) (D).

LEAD 3030 Corporate, Social, and Environmental Responsibility Cr.Hrs. 3

This course examines the responsibilities of business that accompany maximizing shareholder wealth. This includes balancing the needs of a variety of stakeholders (including owners, employees, customers, suppliers, competitors, neighbours, future generations) among a variety of forms of well-being (e.g. financial, ecological, environmental, social, spiritual, physical). Students will learn theory and best practices. Students are encouraged to take this course in the final two years of their program of studies at the I.H. Asper School of Business. Prerequisites: GMGT 1010 (D) and GMGT 2060 (D) [or GMGT 2080 (or 027.208) (D)].

LEAD 3040 Special Topics in Leadership and Organization Cr.Hrs. 3

The content of this course will change from year to year based on: cutting edge topics, research innovations, and trends in leadership. Example topics might include: Organizational Health and Safety; Organizational Justice; Women and Leadership; Advanced Organizational Behaviour; Advanced Organizational Theory. Prerequisites: GMGT 2060 (D) [or GMGT 2080 (027.208) (D)] and GMGT 2070 (or 027.207) (D), or by permission of instructor.

LEAD 4010 Leading Change Cr.Hrs. 3

Organizations regularly face change due to market demands, competition, and economic pressures. The ability to lead change effectively is crucial to organizational success. This course will focus on how to: understand resistance to change, manage change processes, and support employees in times of uncertainty. Prerequisites: GMGT 2060 (D) [or GMGT 2080 (or 027.2080) (D) and GMGT 2070 (or 027.207) (D)].

LEAD 4020 Leadership, Power and Politics in Organizations Cr.Hrs. 3

This course provides students with an introduction to and understanding of effective leadership and its application to a variety of group and organizational contexts. The course will also describe and enable students to make sense of organizations as political entities and understanding the use of power and social influence. The classes encourage interdisciplinary discussions of theoretical, historical, and practical elements of effective leadership and power. Through interactive lectures and experiential activities, students will have the opportunity to reflect on and develop their own leadership style, to understand how to use and manage power, and to recognize and apply social influence tactics. Students may not hold LEAD 4020 with Lead 2010 or ARTS 1160 and the courses are not equivalent nor can they be used in place of one another. Prerequisites: GMGT 2070 (D) (or 027.207)(D).

SECTION 5.26 Interdepartmental Courses 2000 Level (IDM)

IDM 2980 Work Term 1 Cr.Hrs. 0

Work assignment in business, industry, or government for students registered in the Asper School of Business Cooperative option. Requires submissions of a written report covering the work completed during the four-month professional assignment. (Pass/Fail).

IDM 2982 Co-op Work Term 1 Cr.Hrs. 1

Work assignment in business, industry, or government for students registered in the Asper School of Business co-operative option. Prerequisite: Written permission from the Asper School of Business Co-operative Education Office. May not be held with IDM 2980.

SECTION 5.27 Interdepartmental Course Descriptions 3000 Level (IDM)

IDM 3980 Work Term 2 Cr.Hrs. 0

Work assignment in business, industry, or government for students registered in the Asper School of Business Cooperative option. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail).

IDM 3982 Co-op Work Term 2 Cr.Hrs. 1

Work assignment in business, industry, or government for students registered in the Asper School of Business co-operative option. Prerequisite: IDM 2980 with a grade of P or IDM 2982 with a grade of C and written permission from the Asper School of Business Cooperative Education Office. May not be held with IDM 3980.

SECTION 5.28 Interdepartmental Courses 4000 Level (IDM)

IDM 4050 Readings in Management Cr.Hrs. 3

(Formerly 098.405) Supervised readings in one of the areas of Management. Students are limited to a maximum of six hours of readings and research courses.

IDM 4070 Management Research 1 Cr.Hrs. 3

(Formerly 098.407) Individually supervised preparation of a detailed research proposal for an advanced study in one of the areas of Management. Students are limited to a maximum of six hours of readings and research courses.

IDM 4080 Management Research 2 Cr.Hrs. 3

(Formerly 098.408) Individually supervised research and preparation of a paper in one of the areas of Management based on the proposal developed in IDM 4070 (or 098.407). Students are limited to a maximum of six hours of readings and research courses.

IDM 4980 Work Term 3 Cr.Hrs. 0

Work assignment in business, industry, or government for students registered in the Asper School of Business Co-operative option. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail)

IDM 4982 Co-op Work Term 3 Cr.Hrs. 1

Work assignment in business, industry, or government for students registered in the Asper School of Business co-operative option. Prerequisite: IDM 3980 with a grade of P or IDM 3982 with a grade of C and written permission from the Asper School of Business Co-operative Education Office. Not to be held with IDM 4980.

SECTION 5.29 Marketing Course Descriptions 2000 Level (MKT)

MKT 2210 Fundamentals of Marketing Cr.Hrs. 3

(Formerly 118.221) Analysis of marketing problems, emphasizing various alternatives available for achieving economic efficiency in the distribution process; public policy with respect to marketing.

SECTION 5.30 Marketing Course Descriptions 3000 Level (MKT)

MKT 3220 Marketing Research Cr.Hrs. 3

Study of the planning and implementation of research required to make informed marketing decisions. Prerequisites: MKT 2210 (or 118.221) (D) and STAT 2000 (or 005.200) (D) or consent of instructor.

MKT 3230 Consumer Behaviour Cr.Hrs. 3

(Formerly 118.323) Study of buying behaviour of individuals and organizations as affected by psychological and sociological forces within society. Prerequisite: MKT 2210 (or 118.221) (D).

MKT 3240 Selected Topics in Marketing Cr.Hrs. 3

(Formerly 118.324) Analysis of marketing as it relates to specialized fields. Prerequisite: MKT 2210 (or 118.221) (D).

MKT 3300 International Marketing Cr.Hrs. 3

(Formerly 118.330) A study of international similarities and differences in marketing structures, functions and processes as related to the socio-economic and cultural environment and a consideration of the opportunities and problems of international marketing. Prerequisite: MKT 2210 (or 118.221) (D).

MKT 3310 Retail and Channel Management Cr.Hrs. 3

(Formerly 118.331) The study of the functions performed by traditional and e-commerce distributors. Topics include location and competitive analysis, promotion, merchandising, buying, design, selection and historical development. (Formerly 118.331) The study of the functions performed by traditional and e-commerce distributors. Topics include location and competitive analysis, promotion, merchandising, buying, design, selection and historical development. May not be held with the former 118.321. Prerequisite: MKT 2210 (or 118.221) (D).

MKT 3340 Services Marketing Cr.Hrs. 3

(Formerly 118.334) An examination of the differences in the marketing of goods versus services. Topics covered include service process design and management, problem identification and resolution, positioning issues, the importance of human resources, and promotional issues. Prerequisite: MKT 2210 (or 118.221) (D).

MKT 3390 Integrated Marketing Communications Cr.Hrs. 3

(Formerly 118.339) The process of using promotional tools in a unified way so that a synergistic communications is created. The course examines the roles of advertising, sales promotion, direct marketing, and the internet within this broader framework. May not hold with the former 118.329. Prerequisite: MKT 2210 (or 118.221) (D).

SECTION 5.31 Marketing Course Descriptions 4000 Level (MKT)**MKT 4210 Marketing Management Cr.Hrs. 3**

An examination of strategies and tactics marketing managers use for products and services at various stages in the product life cycle. Uses qualitative and quantitative analyses to develop critical thinking essential for making marketing decisions. Can only be taken in final year of program. Prerequisites: [MKT 3220 (118.322) (D) or MKT 3230 (118.323) (D)], and [one other 3000 or 4000 level Marketing course (D)], and [ACC 1110 (009.111) (D)]. Pre- or co-requisite: either MKT 3220 (118.322) (D) or MKT 3230 (118.323) (D), but not both.

MKT 4270 Sales Management Cr.Hrs. 3

(Formerly 118.427) The study of the management of the personal selling area including an examination of the selling function, the sales manager, and sales management. Prerequisite: MKT 2210 (or 118.221) (D).

SECTION 5.32 Supply Chain Management-Management Science Course Descriptions 2000 Level (MSCI)**MSCI 2150 Introduction to Management Sciences Cr.Hrs. 3**

An introduction to management science techniques and models. Topics include linear programming, distribution problems, decision theory and queuing models. May not hold with the former 164.215 or 027.215 or ABIZ 2520. Prerequisites: [MATH 1520 (or 136.152) (C) or MATH 1500 (or 136.150) (C) or equivalent] and [STAT 1000 (005.100) (C) or equivalent]

SECTION 5.33 Supply Chain Management-Management Science Course Descriptions 3000 Level (MSCI)**MSCI 3400 Intermediate Management Science Cr.Hrs. 3**

(Formerly 164.340) Operations research models used in the analysis of management problems. Topics include network analysis, deterministic inventory models, dynamic programming and game theory. May not hold with the former 027.340. Prerequisite: MSCI 2150 (or 164.215) (D) or consent of instructor.

SECTION 5.34 Supply Chain Management -Management Science Course Descriptions 4000 Level (MSCI)**MSCI 4200 Topics in Management Science Cr.Hrs. 3**

(Formerly 164.420) Topics of current interest in management science. May not hold with former 027.420. Prerequisite: MSCI 2150 (or 164.215) (D). Not taught every year

MSCI 4220 Management Science Models in Business and Industry Cr. Hrs. 3

(Formerly 164.422) An applied course providing practical experience in modeling and solving business and industrial problems. Emphasis to be placed upon analysis, formulation, solution and implementation. May not hold with former 027.422 or the former 164.422. Prerequisite: MSCI 3400 (or 164.340 or 027.340) (D) or MSCI 4200 (or 164.420 or 027.420) (D) or MSCI 4230 (or 164.423 or 027.423) (D) or MSCI 4200 (or 164.420 or 027.420) (D).

SECTION 5.35 Supply Chain Management-Operations Course Descriptions 3000 Level (OPM)**OPM 3630 Simulation Models for Operations Management Cr.Hrs. 3**

(Formerly 164.363) Seminar on the concept, techniques, and application of simulation for problem-solving and decision-making in operations management. Existing operational models will be studied and applied in computerized form. May not hold with former 027.363. Prerequisite: 164.260 or consent of instructor.

OPM 3640 Project Planning and Control Cr.Hrs. 3

(Formerly 164.364) Seminar on management of complex projects of various kinds with emphasis on planning and control by means of network methods. PERT and CPM methods computer applications. May not hold with former 027.364. Prerequisite 3260 or consent of instructor.

OPM 3650 Management of Quality and Reliability Cr.Hrs. 3

(Formerly 164.365) This course offers a practical introduction to modern quality assurance and reliability management concepts, methods and practices. It builds upon the relevant subject matter in basic courses in production management and prepares for positions in the field of quality and reliability management. May not hold with former 027.365. Prerequisite: SCM 2160 [or the former OPM 2600 (or 164.260) (D)] and STAT 1000 (C).

OPM 3660 Operations Management in Service Organizations Cr.Hrs. 3

(Formerly 164.366) This course explores the applications of operations management concepts to the management of service operations. The characteristics of a service operation, while generally comparable to manufacturing a product, often place a unique demand upon the service manager. These demands, along with the analysis of actual company situations through case study applications, are emphasized. May not hold with former 027.366. Prerequisite: SCM 2160 [or former OPM 2600 (or 164.260) (D)] and STAT 1000 (C).

OPM 3670 POM Project in Industry Cr.Hrs. 3

An applied course, designed to bridge the gap between theoretical concepts developed in previous POM courses and current industrial practices by means of an industrial project. May not hold with former 027.367. Prerequisites: [SCM 2160 or former OPM 2600 (or 164.260 or 027.260) (D)] and STAT 1000 (C) or consent of instructor.

SECTION 5.36 Supply Chain Management-Operations Course Descriptions 4000 Level (OPM)

OPM 4620 Production Management Seminar Cr.Hrs. 3

(Formerly 164.462) Problems, development, and application of analytical methods in production and operations management with emphasis on planning and control. May not hold with former 027.462. Prerequisite: MSCI 2150 (or 164.215) (D) and SCM 2160 or OPM 2600 (or 164.260) (D). May not hold with former 027.462.

SECTION 5.37 Supply Chain Management-Supply Chain Management Course Descriptions 2000 Level (SCM)

SCM 2160 Supply Chain and Operations Management Cr.Hrs. 3

Study of supply chain management (SCM) and operations management. Positions operations management as a critical area of study within SCM. Focuses on process approach and system design. May not hold credit for both SCM 2160 and the former OPM 2600. Prerequisites: None.

SCM 2210 Transportation Principles Cr.Hrs. 3

(Formerly 164.221) Demand forecasting, cost analysis, regulation of carriers, role of transport in economic development, project appraisal and transport planning. Also offered as ABIZ 2210 by the Department of Agribusiness and Agricultural Economics. May not be held with ABIZ 2210 (or 061.221). Prerequisite: [ECON 1010 and ECON 1020 (C)] or former ECON 1200 (or 018.120) (D).

SCM 2220 Selected Topics in Logistics and Transportation Cr.Hrs. 3

(Formerly 164.222) This course provides coverage on a number of critical topics in Supply Chain Logistics and Transportation. Areas of emphasis are based on current issues confronting managers and regulators/policy makers such as global supply chain logistics and transportation policy.

SCM 2230 Introduction to Supply Chain Management Cr.Hrs. 3

(Formerly 164.223) An examination of the management activities that are necessary to ensure an efficient flow of materials, funds, and information among the various organizations in supply chains, from the acquisition of raw materials to the delivery of the finished product to the end user.

SCM 2240 Purchasing and Supply Management Cr.Hrs. 3

Purchasing and supply management is an increasingly important element of corporate strategy as global supply chains become longer and more complex. In this course, students will learn about a major paradigm shift in purchasing, from a clerical activity to a strategic corporate function. The course covers strategic supply management, inter-organizational relationships, product and service specifications, price and cost analysis, negotiation, quality management, supply chain information technology, and other important purchasing topics, from a supply chain management perspective. Students may not hold credit for both SCM 2240 and SCM 2220 Topic: Purchasing Management.

SECTION 5.38 Supply Chain Management-Supply Chain Management Course Descriptions 3000 Level (SCM)

SCM 3230 Global Supply Chains Cr.Hrs. 3

(Formerly 164.323) The course provides a global orientation to supply chain management, with a particular emphasis on the global linkages between organizations in international supply chains. Supply chain management practices in selected countries are also examined. Prerequisite: SCM 2230 (or 164.223) (D) or SCM 3360 (or 164.336 or 118.336) (D); or consent of instructor.

SCM 3360 Supply Chain Logistics Cr.Hrs. 3

(Formerly 164.336) The course provides an international/global orientation to logistics and supply chain management. May not be held with the former 118.336 or 118.326. Prerequisite: MKT 2210 (or 118.221) (D).

SECTION 5.39 Supply Chain Management-Supply Chain Management Course Descriptions 4000 Level (SCM)

SCM 4250 Beyond Business: Advanced Issues in Supply Chain Management Cr.Hrs. 3

The material covered in this course moves beyond a business perspective and analyzes the relationship between supply chain management (SCM) and other parts of society as a whole. It examines the issues that arise as supply chain management interests with government and society. May not be held with the former SCM 4240 (or 164.424). Prerequisite: SCM 2230 (D); or the former 164.230 (D); or consent of instructor.

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Chapter Contents**SECTION 1: DEGREE AND DIPLOMA PROGRAMS OFFERED****SECTION 2: ADMISSION TO MUSIC****2.1 Course Requirements for admission from High School****SECTION 3: ACADEMIC REGULATIONS****3.1 Written English Requirement and Mathematics Requirement****3.2 Electives (non-music)****3.3 Ensembles****3.4 Scholarships****3.5 Scholastic Progress****3.6 Dean's Honour List****3.7 Attendance****SECTION 4: PROGRAM REQUIREMENTS****4.1 First Year: 1997-2012****4.1a First Year: as of September 2013****4.2 Second Year: 1997-2012****4.2a Second Year: as of September 2013****4.3 Third Year: 1997-2012****4.3a Third Year: as of September 2013****4.4 Fourth Year: 1997-2012****4.4a Fourth Year: as of September 2013****4.5 Electives: Third and Fourth Years****4.6 Core Music History Electives****4.7 Music Minors****SECTION 5: PROGRAM REQUIREMENTS-INTEGRATED BACHELOR OF MUSIC/BACHELOR OF EDUCATION YEARS 1-5****5.1 First Year: 1997-2012****5.1a First Year as of September 2013****5.2 Second Year: 1997-2012****5.2a Second Year as of September 2013****5.3 Third Year: 1997-2012****5.3a Third Year as of September 2013****5.4 Fourth Year: 1997-2012****5.5 Fifth Year: 1997-2012****5.6 Teachable Minors****SECTION 6: POST-BACCALAUREATE DIPLOMA IN PERFORMANCE****6.1 Admission Requirements****6.2 Admission Procedures****6.3 Program Requirements****6.4 Academic Standing****6.5 Maximum Time Limits****6.6 Courses Available****6.7 Credit Transfer****6.8 Completion of the Program****6.9 Assessment****SECTION 7: OFFERINGS FOR NON-MUSIC STUDENTS****7.1 Courses Offered outside the B.Mus. and B. Jazz Programs for Students in Other Faculties****SECTION 8: COURSE DESCRIPTIONS**

SECTION 1: DEGREE AND DIPLOMA PROGRAMS OFFERED

Degree	Years to Complete	Total Credit Hours
Bachelor of Music	4 *	126
Bachelor of Music (Composition)	4 *	126
Bachelor of Music (History)	4 *	126
Bachelor of Music (Performance)	4 *	126 174 - 177
Bachelor of Music/ Bachelor of Education	5 **	(currently under review)
Bachelor of Jazz Studies	4 *	126
Post-Baccalaureate Diploma in Performance	1	30

* Minimum time to graduation: Four years if admission is directly from high school and five years if admission is via University 1.

** An integrated degree that combines Music with Education; minimum time to graduation: five years in Music and Education if admission is directly from high school and six years if admission is via University 1.

SECTION 2: ADMISSION TO MUSIC

2.1 Course Requirements for Admission from High School

Admission to the Faculty is directly from high school, although admission from University 1 is an option.

Other requirements

High school prerequisites: Music 40S is strongly recommended, while a second 40S language is recommended. Private lessons in your instrument and formal instruction in music theory and keyboard study are strongly recommended. Good academic performance in subject areas other than music is also strongly recommended. Refer to: umanitoba.ca/faculties/music/prospective/Undergraduate.html <http://umanitoba.ca/faculties/music/future/210.htm> for audition information or musicadmissions@umanitoba.ca

SECTION 3: ACADEMIC REGULATIONS

The provisions of the chapter, General Academic Regulations and Requirements, and the chapter, University Policies, apply to all students. In addition, the Faculty has regulations and requirements, published below, which apply specifically to its students. Detailed information regarding regulations is available in the general office of the Faculty. The aim of the Bachelor of Music and Bachelor of Jazz Studies programs is to provide a basic framework of knowledge and ability; both theoretical and practical, from which either professional activities or graduate specialization can start. The Bachelor of Music four-year program contains concentrations in specified areas in the third and fourth years. After their first two years, students select the area in which their interests and abilities are strongest. The faculty offers four-year programs leading to the degree of either Bachelor of Music, with the following concentrations: Performance, Composition, History, and General Music and the five-year Integrated Bachelor of Music/Bachelor of Education. The four-year Bachelor of Jazz Studies is a direct entry program from high school. Practical study is offered in standard classical and jazz instruments and voice. Ensemble work is included in all years of the program. Music courses are available to students in other faculties and schools. Consult section 7.0 or the appropriate section of this Calendar for regulations.

3.1 Written English Requirement and Mathematics Requirement

The University's written requirement is met through any three credit hour course that fulfills the "W" requirement. The University's mathematics requirement is met through MUSC 3230 Acoustics of Music or a three credit hour MATH 1XXX or STAT 1XXX course. These courses are listed as requirements to complete the first year of all Bachelor of Music programs and Bachelor of Jazz Studies.

3.2 Electives (Non-Music)

Students are required to take one course in a subject other than music for each year of the Bachelor of Music and Bachelor of Jazz Studies program to a total of 21 credit hours (18 for the Integrated B.Mus./B.Ed. - currently under review). With the exception of the university's written English requirement in the first year, the student is free to choose any subject but is advised to seek the advice of faculty.

3.3 Ensembles

The Faculty offers a wide variety of opportunities for participation in ensembles such as the Women's Choir, Concert Choir, University Concert Band, University Singers, University Symphony Orchestra, University Wind Ensemble, University Jazz Orchestra, Jazz Ensembles, Opera Theatre, Chamber Ensembles, Percussion Ensemble, Musical Theatre, XIE (eXperimental Improv Ensemble), and other wind, string and keyboard combinations. Bachelor of Music students are required to participate in two ensembles each year for four years. Bachelor of Jazz Studies students are required to participate in one ensemble each year for four years. The Ensemble Committee determines placement in credit ensembles; such participation will normally be in ensembles

directly relevant to the student’s major practical study area. Students from other faculties and non-university musicians are welcome to participate as space and instrumental balance allow, but all participation is at the discretion of the conductor or coach of the ensemble. Some ensembles are offered for credit in other faculties.

3.4 Scholarships

Entrance and continuing scholarships are available for Faculty students. Details may be obtained from Financial Aid and Awards or the Marcel A. Desautels Faculty of Music.

3.5 Scholastic Progress

Within the first week of the term, students will be informed of the organization of materials, the nature and timing of testing, and the proportionate weighting of marks that contribute to the final grade in all academic courses at the Marcel A. Desautels Faculty of Music. Regulations regarding the grading of all practical courses at the Faculty are contained in the Student Handbook; special attention is called to the Concert Credit and Master Class Attendance Policy which is an integral part of the grading system for Major Practical Study in each year of the program. A grade of “C” or better is required in each Music course throughout the Bachelor of Music and Bachelor of Jazz Studies programs, except where the Faculty Student Handbook states otherwise. Students who take Music elective courses and fail to achieve a minimum grade of “C” in them should repeat these courses. Due to the system of rotating electives, this may not be possible and in such a case another approved Music elective may be substituted. Supplemental examinations are not normally given in the Faculty, with the following exception: where a jury mark of “D” has been assigned in Major Practical Study, the juried examination may be reheard prior to the next registration. A sessional (September to April) Grade Point Average of less than 2.0 (C), or failure to achieve a grade of “C” or better in two Music courses will result in a student being placed on probation. While on probation, the student remains in the program but is subject to a set of conditions that are established by the Faculty of Music. A student failing to meet these conditions may be placed on suspension. Each student is permitted a maximum 21 credit hours of failed Music courses in the Bachelor of Music and Bachelor of Jazz Studies programs. Students will not be permitted to register for a required music course more than twice without the permission of the Dean.

3.6 Dean’s Honour List

B.Mus. and B.Jazz students who achieve a sessional (September to April) Grade Point Average of 3.5 and are registered in a minimum of 80% of a full-time program in both fall and winter terms will be eligible for the Dean’s Honour List. Students who are granted incomplete or deferred status will not be eligible.

3.7 Attendance

Regular attendance is expected of all students in all courses. Any unexcused absences from ensemble or practical study courses or three unexcused absences from any other music course may result in the student being required to withdraw from the course or ensemble, or may result in a failing grade being assigned. Students absent from a class for three or more consecutive meetings due to illness may be required to present a certificate from a physician. Prior approval for extended absences from class for reasons other than illness must be obtained from the instructor and the Dean. Unexcused absence from a class test may result in a grade of zero for the test. Make-up tests may be allowed in special circumstances.

SECTION 4: PROGRAM REQUIREMENTS- BACHELOR OF MUSIC, BACHELOR OF JAZZ STUDIES, YEARS 1-4

These programs are in effect for students admitted since 1997-98. Students who entered in previous years should consult earlier calendars.

4.1 First Year : 1997-2012

Bachelor of Music		
MUSC 1070	Introduction to the History of Music	3
MUSC 1080	History of Music 2	3
MUSC 1110	Music Theory 1	3
MUSC 1120	Music Theory 2	3
MUSC 1180	Ensemble	2
MUSC 1190	Ensemble	2
MUSC 1380	Basic Musical Skills 1	2
MUSC 1390	Basic Musical Skills 2	2
MUSC 1400	Major Practical Study	6
MUSC 3230	Acoustics of Music	3
ENGL 1310	English	3
Total Credit Hours 32		

ACADEMIC CALENDAR 2015-2016

Bachelor of Jazz Studies		
MUSC 1110	Music Theory 1	3
MUSC 1120	Music Theory 2	3
MUSC 1182	Jazz Ensemble 1	2
MUSC 1192	Jazz Rhythm and Performance Techniques	2
MUSC 1280	Musical Style and Structure 1	3
MUSC 1290	Musical Style and Structure 2	3
MUSC 1380	Basic Musical Skills 1	2
MUSC 1390	Basic Musical Skills 2	2
MUSC 1400	Major Practical Study	6
MUSC 3230	Acoustics of Music	3
ENGL 1310	English	3
Total Credit Hours 32		

SECTION 4.1a First Year: as of September 2013

Bachelor of Music: General		
MUSC 1004	Introduction to Music in History 1	3
MUSC 1014	Introduction to Music in History 2	3
MUSC 1110	Music Theory 1	3
MUSC 1120	Music Theory 2	3
MUSC 1180	Ensemble	2
MUSC 1190	Ensemble	2
MUSC 1384	Musicianship 1	2
MUSC 1394	Musicianship 2	2
MUSC 1400	Major Practical Study (Composition Students take MUSC 1404 – Introduction to Composition 1 (3 credit hours) and MUSC 1414 - Introduction to Composition 2 (3 credit hours))	6
* MUSC 3230	Acoustics of Music	3
	** Written English requirement	3
Total Credit Hours		32

* a 3 credit hour MATH 1xxx or STAT 1xxx may be taken in place of MUSC 3230, Acoustics of Music

** any 3 credit hour course that meets the written English requirement; consult with an advisor before making a selection

Bachelor of Jazz Studies		
MUSC 1004	Introduction to Music in History 1	3
MUSC 1014	Introduction to Music in History 2	3
MUSC 1110	Music Theory 1	3
MUSC 1120	Music Theory 2	3
MUSC 1182	Jazz Ensemble 1	2
MUSC 1192	Jazz Rhythm and Performance Techniques	2
MUSC 1384	Musicianship 1	2
MUSC 1394	Musicianship 2	2
MUSC 1400	Major Practical Study	6
* MUSC 3230	Acoustics of Music	3
	** Written English Requirement	3
Total Credit Hours		32

* a 3 credit hour MATH 1xxx or STAT 1xxx may be taken in place of MUSC 3230, Acoustics of Music

** any 3 credit hour course that meets the written English requirement; consult with an advisor before making a selection

4.2 Second Year: 1997-2012

Bachelor of Music		
MUSC 2070	History of Music 3	3
MUSC 2080	History of Music 4	3
MUSC 2110	Music Theory 3	3
MUSC 2120	Music Theory 4	3
MUSC 2180	Ensemble	2
MUSC 2190	Ensemble	2
MUSC 2380	Basic Musical Skills 3	2
MUSC 2390	Basic Musical Skills 4	2
MUSC 2400	Major Practical Study	6
	Non-Music elective	6
Total Credit Hours 32		

Bachelor of Jazz Studies		
MUSC 2072	Jazz History 1	3
MUSC 2082	Jazz History 2	3
MUSC 2112	Jazz Theory 1	3
MUSC 2122	Jazz Theory 2	3
MUSC 2182	Jazz Ensemble 2	2
MUSC 2192	Jazz Improvisation 1	2
MUSC 2380	Basic Musical Skills 3	2
MUSC 2390	Basic Musical Skills 4	2
MUSC 2400	Major Practical Study	6
	Non-Music elective	6
Total Credit Hours 32		

SECTION 4.2a Second Year: as of September 2013

Bachelor of Music: General		
MUSC 2110	Music Theory 3	3
MUSC 2120	Music Theory 4	3
MUSC 2180	Ensemble	2
MUSC 2190	Ensemble	2
MUSC 2384	Musicianship 3	2
MUSC 2394	Musicianship 4	2
MUSC 2400	Major Practical Study	6
	* Core Music History Elective	3
	* Core Music History Elective	3
	Non-Music Electives	6
Total Credit Hours	32	

* See Section 4.6: Core Music History Electives

Bachelor of Jazz Studies		
MUSC 2072	Jazz History 1	3
MUSC 2082	Jazz History 2	3
MUSC 2112	Jazz Theory 1	3
MUSC 2122	Jazz Theory 2	3
MUSC 2182	Jazz Ensemble 2	2
MUSC 2192	Jazz Improvisation 1	2
MUSC 2384	Musicianship 3	2
MUSC 2394	Musicianship 4	2
MUSC 2400	Major Practical Study	6
	Non-Music Electives	6
Total Credit Hours	32	

4.3 Third Year: 1997-2012

Bachelor of Music - Performance		
MUSC 3180	Ensemble	2
MUSC 3190	Ensemble	2
MUSC 3470	Major Practical Study	6
MUSC 3550	Recital 1	3
MUSC 3960	Music of the 20th Century 1	3
MUSC 3970	Music of the 20th Century 2	3
	Music electives	6
	Non-Music elective	6
Total Credit Hours 31		
NOTE: A grade of "B" is required in 3550 to continue in the Performance Concentration.		

Bachelor of Music - History		
MUSC 3050	Research Methods	3
MUSC 3180	Ensemble	2
MUSC 3190	Ensemble	2
MUSC 3470	Major Practical Study	6
MUSC 3960	Music of the 20th Century 1	3
MUSC 3970	Music of the 20th Century 2	3
	Music History elective	3
	Music Theory elective	3
	Non-Music electives	6
Total Credit Hours 31		

Bachelor of Music - Composition		
MUSC 2460	Conducting	3
MUSC 3150	Orchestration	3
MUSC 3180	Ensemble	2
MUSC 3190	Ensemble	2
MUSC 3300	Composition Study	6
MUSC 3650	Electroacoustic Music	3
MUSC 3960	Music of the 20th Century 1	3
MUSC 3970	Music of the 20th Century 2	3
	Non-Music electives	6
Total Credit Hours 31		

Bachelor of Music - General		
MUSC 3180	Ensemble	2
MUSC 3190	Ensemble	2
MUSC 3470	Major Practical Study	6
MUSC 3960	Music of the 20th Century 1	3
MUSC 3970	Music of the 20th Century 2	3
	Music History elective	3
	Music Theory elective	3
	Music or non-music elective	3
	Non-Music electives	6
Total Credit Hours 31		

Bachelor of Jazz Studies		
MUSC 3112	Jazz Composition and Arranging 1	3
MUSC 3182	Jazz Ensemble 3	2
MUSC 3192	Jazz Improvisation 2	2
MUSC 3272	Jazz Performance Skills	3
MUSC 3442	Jazz Pedagogy 1	3
MUSC 3470	Major Practical Study	6
MUSC 3552	Jazz Recital 1	6
	Non-Music electives	6
Total Credit Hours 31		
NOTE: A grade of at least "B" is required in 3552 for graduation with the Bachelor of Jazz Studies.		

ACADEMIC CALENDAR 2015-2016

SECTION 4.3a Third Year: as of September 2013

Bachelor of Music: Performance		
MUSC 3180	Ensemble	2
MUSC 3190	Ensemble	2
MUSC 3470	Major Practical Study	6
MUSC 3550	Recital 1	3
MUSC 3974	Music Theory After 1900	3
	* Core Music History Elective	3
	Music Electives	6
	Non-Music Electives	6
Total Credit Hours		31
NOTE: A grade of at least "B" in MUSC 3550 is required to continue in the Performance Concentration.		

* See Section 4.6: Core Music History Electives

Bachelor of Music: History		
MUSC 3050	Research Methods	3
MUSC 3180	Ensemble	2
MUSC 3190	Ensemble	2
MUSC 3470	Major Practical Study	6
MUSC 3974	Music Theory After 1900	3
	* Core Music History Elective	3
	Music History Elective	3
	Music Theory Elective	3
	Non-Music Electives	6
Total Credit Hours		31

* See Section 4.6: Core Music History Electives

Bachelor of Music: Composition		
MUSC 2460	Conducting	3
MUSC 3180	Ensemble	2
MUSC 3190	Ensemble	2
MUSC 3470	Major Practical Study	6
MUSC 3650	Electroacoustic Music	3
MUSC 3964	History of Western Art Music After 1900	3
MUSC 3974	Music Theory After 1900	3
	Music or Non-Music Elective	3
	Non-Music Electives	6
Total Credit Hours		31

Bachelor of Music: General		
MUSC 3180	Ensemble	2
MUSC 3190	Ensemble	2
MUSC 3470	Major Practical Study	6
MUSC 3974	Music Theory After 1900	3
	* Core Music History Elective	3
	Music Theory Elective	3
	Music Elective	3
	Music or Non-Music Elective	3
	Non-Music Electives	6
Total Credit Hours		31

* See Section 4.6: Core Music History Electives

Bachelor of Jazz Studies		
MUSC 3112	Jazz Composition and Arranging 1	3
MUSC 3182	Jazz Ensemble 3	2
MUSC 3192	Jazz Improvisation 2	2
MUSC 3272	Jazz Performance Skills	3
MUSC 3442	Jazz Pedagogy 1	3
MUSC 3470	Major Practical Study	6
MUSC 3554	Jazz Recital 1	3
	Music Elective	3
	Non-Music Electives	6
Total Credit Hours		31
NOTE: A grade of at least "B" in MUSC 3554 is required to continue in the Bachelor of Jazz Studies Program		

4.4 Fourth Year: 1997-2012

Bachelor of Music - Performance		
MUSC 4180 - Ensemble		2
MUSC 4190 - Ensemble		2
MUSC 4470 - Major Practical Study		6
MUSC 4560 - Recital 2		6
Music electives		9
Non-Music elective		6
Total Credit Hours		31
NOTE: A grade of at least "B" is required in 4560 for graduation with the Performance Concentration.		

Bachelor of Music - History		
MUSC 4110 - Special Area (Paper)		3
MUSC 4180 - Ensemble		2
MUSC 4190 - Ensemble		2
MUSC 4470 - Major Practical Study		6
OR		
MUSC 4160 - Major Practical Study		3
Music History electives		6
Music electives (9 if MUSC 4160 is elected)		6
Non-Music electives		6
Total Credit Hours		31

Bachelor of Music - Composition	
MUSC 3550 - Recital 1	3
MUSC 4180 - Ensemble	2
MUSC 4190 - Ensemble	2
MUSC 4300 - Composition Study	6
MUSC 4650 - Interactive Computer Music	3
MUSC 4660 - Computer Assisted Composition	3
Music History elective	3
Music Theory elective	3
Non-Music Electives	6
Total Credit Hours 31	
Bachelor of Music - General	
MUSC 4180 - Ensemble	2
MUSC 4190 - Ensemble	2
MUSC 4470 - Major Practical Study	6
OR	
MUSC 4160 - Major Practical Study	3
Music electives (12 if MUSC 4160 is elected)	9
Music or Non-Music Electives	6
Non-Music Electives	6
Total Credit Hours 31	
Bachelor of Jazz Studies	
MUSC 4112 - Jazz Composition and Arranging 2	3
MUSC 4182 - Jazz Ensemble 4	2
MUSC 4192 - Jazz Improvisation 3	2
MUSC 4442 - Jazz Pedagogy 2	3
MUSC 4470 - Major Practical Study	6
MUSC 4562 - Recital 2	6
Music Elective	3
Non-Music Electives	6
Total Credit Hours 31	
NOTE: A grade of at least "B" is required in 4562 for graduation with the Bachelor of Jazz Studies.	

SECTION 4.4a Fourth Year: as of September 2013

Bachelor of Music: Performance		
MUSC 4180	Ensemble	2
MUSC 4190	Ensemble	2
MUSC 4470	Major Practical Study	6
MUSC 4560	Recital 2	6
	* Core Music History Elective	3
	Music Electives	6
	Non-Music Electives	6
Total Credit Hours		31
NOTE: A grade of at least "B" in MUSC 4560 is required for graduation with the Performance Concentration.		

* See Section 4.6: Core Music History Electives

Bachelor of Music: History		
MUSC 4110	Special Area (Paper)	3
MUSC 4180	Ensemble	2
MUSC 4190	Ensemble	2
MUSC 4470	Major Practical Study	6
or MUSC 4160	Major Practical Study	3
	* Core Music History Elective	3
	Music History Elective	3
	Music Electives (9 credit hours if MUSC 4160 is elected)	6
	Non-Music Electives	6
Total Credit Hours		31

* See Section 4.6: Core Music History Electives

Bachelor of Music: Composition		
MUSC 3550	Recital 1	3
MUSC 4180	Ensemble	2
MUSC 4190	Ensemble	2
MUSC 4470	Major Practical Study	6
MUSC 4650	Interactive Computer Music	3
MUSC 4660	Computer Assisted Composition	3
	* Core Music History Elective	3
	Music Theory Elective	3
	Non-Music Electives	6
Total Credit Hours		31

* See Section 4.6: Core Music History Electives

ACADEMIC CALENDAR 2015-2016

Bachelor of Music: General		
MUSC 4180	Ensemble	2
MUSC 4190	Ensemble	2
MUSC 4470	Major Practical Study	6
or MUSC 4160	Major Practical Study	3
	* Core Music History Elective	3
	Music Electives (9 credit hours if MUSC 4160 is elected)	6
	Music or Non-Music Electives	6
	Non-Music Electives	6
Total Credit Hours		31

* See Section 4.6: Core Music History Electives

Bachelor of Jazz Studies		
MUSC 4112	Jazz Composition and Arranging 2	3
MUSC 4182	Jazz Ensemble 4	2
MUSC 4192	Jazz Improvisation 3	2
MUSC 4442	Jazz Pedagogy 2	3
MUSC 4470	Major Practical Study	6
MUSC 4562	Jazz Recital 2	6
	Music Elective	3
	Non-Music Electives	6
Total Credit Hours		31
NOTE: A grade of at least "B" in MUSC 4562 is required for graduation with a Bachelor of Jazz Studies		

SECTION 4.5 Electives: Third & Fourth Years

4.5 Electives: Third and Fourth Years, All Concentrations

Course Number	Course Title	Credit Hours
MUSC 2072	Jazz History 1	3
MUSC 2082	Jazz History 2	3
MUSC 2110	Music Theory 3	3
MUSC 2112	Jazz Theory 1	3
MUSC 2120	Music Theory 4	3
MUSC 2122	Jazz Theory 2	3
MUSC 2460	Conducting	3
MUSC 3050	Research Methods (History Concentration requirement)	3
MUSC 3054	Medieval and Renaissance Music History	3
MUSC 3064	Baroque Music History	3
MUSC 3074	Classical Music History	3
MUSC 3084	Romantic Music History	3
MUSC 3090	Introduction to Musicology	3
MUSC 3100	Opera Repertoire	3
MUSC 3104	History of Opera 1: From Monteverdi to Mozart	3
MUSC 3114	History of Opera 2: From Mozart to the Modern Era	3

MUSC 3130	Music for Children 1	6
MUSC 3140	Music for Children 2	6
MUSC 3150	Orchestration (Composition Concentration requirement)	3
MUSC 3230	Acoustics of Music (fulfills University "M" requirement)	3
MUSC 3270	Performance Skills	3
MUSC 3360	Topics in Music Education	3
MUSC 3380	From Rock to Rap and Beyond: A History of Popular Music in the Later 20th Century	3
MUSC 3390	From Ragtime to Rock'n'Roll: A History of Popular Music in the 20th Century	3
MUSC 3404	From New Wave to Rave: A History of Popular Music in the Late 20th Century	3
MUSC 3480	Minor Practical Study	3
MUSC 3620	Independent Study 1	3
MUSC 3650	Electroacoustic Music	3
MUSC 3690	Percussion Techniques	3
MUSC 3730	Early Music Development	3
MUSC 3770	Vocal Techniques	3
MUSC 3780	Woodwind Techniques	3
MUSC 3790	Brass Techniques	3
MUSC 3800	String Techniques	3
MUSC 3820	Topics in Music	3
MUSC 3830	Topics in Music	3
MUSC 3840	Topics in Music	3
MUSC 3850	Topics in Music	3
MUSC 3884	Introduction to Jazz for Music Educators	3
MUSC 3894	Guitar Techniques	3
MUSC 3964	History of Western Art Music After 1900	3
MUSC 3974	Music Theory After 1900	3
MUSC 4010	French Diction and Repertoire	3
MUSC 4020	Italian Diction and Repertoire	3
MUSC 4030	German Diction and Repertoire	3
MUSC 4130	History of Women in Music	3
MUSC 4140	History of Canadian Music	3
MUSC 4154	Choral Repertoire	3
MUSC 4330	Advanced Analysis	3
MUSC 4350	Music for Children 3	6
MUSC 4360	Wind Repertoire	3
MUSC 4370	Wind Conducting Techniques	3
MUSC 4380	Piano Repertoire (Required for Piano Performance Majors)	3
MUSC 4390	Piano Chamber Music Literature Seminar	3
MUSC 4430	Pedagogy and Repertoire	3
MUSC 4440	Vocal Pedagogy (Required for Voice Majors in Performance and General Concentrations)	3
MUSC 4480	Minor Practical Study	3
MUSC 4490	Piano Pedagogy (Required for Piano and Organ Majors in Performance and General Concentrations)	3

MUSC 4520	Coaching Skills	3
MUSC 4530	Operatic Piano	3
MUSC 4630	20th to 21st Century Piano Repertoire	3
MUSC 4650	Interactive Computer Music	
MUSC 4660	Computer Assisted Composition	3
MUSC 4750	Choral Techniques 1	3
MUSC 4760	Choral Techniques 2	3
MUSC 4770	Band and Orchestral Techniques 1	3
MUSC 4780	Band and Orchestral Techniques 2	3

General Notes Regarding Electives

Most electives are not offered every year; some are offered every other year and some are offered less frequently. The listing of a subject as an elective does not guarantee that it will always be available or that it will be possible to fit it into all of the many varied timetable combinations of full- and part-time students. There may be a maximum limit set on the number of students permitted to take an elective in a particular session. Similarly, there will be a minimum limit. If registration is below the minimum, the elective will be cancelled for the session, and those registered will be required to transfer to another elective before the course change deadline date. Students are urged to discuss their elective program with members of the faculty toward the end of their second and third years to obtain advice concerning the best choice of electives for their needs.

SECTION 4.6 Core Music History Electives

CORE MUSIC HISTORY ELECTIVES -effective September 2013

In addition to the required first-year History sequence (MUSC 1004, 3 credit hours and MUSC 1014, 3 credit hours), <i>Bachelor of Music</i> students must choose four additional courses (12 credit hours) from the chart below – at least one from each column. <i>Integrated Bachelor of Music/Bachelor of Education</i> students must choose two additional courses (6 credit hours) from different columns. Note: At least one course from each column will be offered every year.		
A	B	C
MUSC 3064 Baroque Music History	MUSC 3054 Medieval and Renaissance Music History	MUSC 2072 Jazz History 1
MUSC 3074 Classical Music History	MUSC 3964 History of Western Art Music After 1900	MUSC 2082 Jazz History 2
MUSC 3084 Romantic Music History		MUSC 3090 Introduction to Ethnomusicology MUSC 3104
		History of Opera 1: From Monteverdi to Mozart MUSC 3114
		History of Opera 2: From Mozart to the Modern Era

		MUSC 3380 From Rock to Rap and Beyond: A History of Popular Music the in the Later 20 th Century
		MUSC 3390 From Ragtime to Rock'n'Roll: A History of Popular Music in the 20 th Century
		MUSC 3404 From New Wave to Rave: A History of Popular Music in the Late 20 th Century
		MUSC 4140 History of Canadian Music
		MUSC 4130 History of Women in Music
		Topics Courses in Music History

SECTION 4.7 Music Minors

Music Minor for Students in Faculties other than the Faculty of Music
 The music minor requires 18 credit hours of MUSC courses as follows:

Course Number	Course Title	Credit Hours
MUSC 1280	Musical Style & Structure 1	3
MUSC 1290	Musical Style & Structure 2	3
Music courses from List A below		12

Note: Acceptance into all MUSC courses is subject to space availability, consent of the instructor, and prerequisite requirements.

For a minor in music, it is recommended that MUSC 1280 (Musical Style & Structure 1) and MUSC 1290 (Musical Style & Structure 2) be taken before all other courses in List A.

Note: Completion of a minor in music does not satisfy the “teachable minor” required for admission to the After Degree B.Ed. Program in middle years and senior years.

List A

Course Number	Course Title	Credit Hours
MUSC 1004	Introduction to Music in History 1	3
MUSC 1014	Introduction to Music in History 2	3
MUSC 1050	The Well-Tempered Concert-Goer	3
MUSC 1110	Music Theory 1	3
MUSC 1120	Music Theory 2	3
MUSC 2072	Jazz History 1	3

ACADEMIC CALENDAR 2015-2016

MUSC 2082	Jazz History 2	3
MUSC 2110	Music Theory 3	3
MUSC 2112	Jazz Theory 1	3
MUSC 2120	Music Theory 4	3
MUSC 2122	Jazz Theory 2	3
MUSC 2460	Conducting	3
MUSC 3050	Research Methods	3
MUSC 3054	Medieval and Renaissance Music History	3
MUSC 3064	Baroque Music History	3
MUSC 3074	Classical Music History	3
MUSC 3084	Romantic Music History	3
MUSC 3090	Introduction to Ethnomusicology	3
MUSC 3104	History of Opera 1: From Monteverdi to Mozart	3
MUSC 3114	History of Opera 2: From Mozart to Modern Era	3
MUSC 3130	Music for Children 1	6
MUSC 3140	Music for Children 2	6
MUSC 3230	Acoustics of Music	3
MUSC 3380	From Rock to Rap and Beyond: A History of Popular Music in the Later 20 th Century	3
MUSC 3390	From Ragtime to Rock 'n' Roll: A History of Popular Music in the 20 th Century	3
MUSC 3404	From New Wave to Rave: A History of Popular Music in the Late 20 th Century	3
MUSC 3650	Electroacoustic Music	3
MUSC 3690	Percussion Techniques	3
MUSC 3730	Early Musical Development	3
MUSC 3770	Vocal Techniques	3
MUSC 3780	Woodwind Techniques	3
MUSC 3790	Brass Techniques	3
MUSC 3800	String Techniques	3
MUSC 3840	Topics in Music	3
MUSC 3884	Introduction to Jazz for Music Educators	3
MUSC 3894	Guitar Techniques	3
MUSC 3964	History of Western Art Music After 1900	3
MUSC 3974	Music Theory After 1900	3
MUSC 4130	History of Women in Music	3
MUSC 4140	History of Canadian Music	3
MUSC 4154	Choral Repertoire	3
MUSC 4350	Music for Children 3	6
MUSC 4650	Interactive Computer Music	3
MUSC 4660	Computer Assisted Composition	3
MUSC 4750	Choral Techniques 1	3
MUSC 4760	Choral Techniques 2	3

MUSC 4770	Band & Orchestral Techniques 1	3
MUSC 4780	Band & Orchestral Techniques 2	3
List A: Eligible Ensemble Courses		
MUSC 1180	Ensemble	2
MUSC 1182	Jazz Ensemble 1	2
MUSC 1190	Ensemble	2
MUSC 2180	Ensemble	2
MUSC 2182	Jazz Ensemble 2	2
MUSC 2190	Ensemble	2
MUSC 3180	Ensemble	2
MUSC 3182	Jazz Ensemble 3	2
MUSC 3190	Ensemble	2
MUSC 4180	Ensemble	2
MUSC 4182	Jazz Ensemble 4	2
MUSC 4190	Ensemble	2
NOTES:		
1. All Ensemble courses are 2 credit hours each.		
2. Students may take a maximum of three ensemble courses as part of a minor in music.		
3. Participation in ensembles is determined by audition.		

SECTION 5: PROGRAM REQUIREMENTS-INTEGRATED BACHELOR OF MUSIC/BACHELOR OF EDUCATION YEARS 1-5

Currently under review.

SECTION 5.1 First Year:1997-2012

Bachelor of Music		
MUSC 1070	Introduction to the History of Music	3
MUSC 1080	History of Music 2	3
MUSC 1110	Music Theory 1	3
MUSC 1120	Music Theory 2	3
MUSC 1180	Ensemble	2
MUSC 1190	Ensemble	2
MUSC 1380	Basic Musical Skills 1	2
MUSC 1390	Basic Musical Skills 2	2
MUSC 1400	Major Practical Study	6
MUSC 3230	Acoustics of Music	3
ENGL 1310	English	3
Total Credit Hours	32	

SECTION 5.1a First Year: as of September 2013

Choral Music Specialization		
MUSC 1004	Introduction to Music in History 1	3
MUSC 1014	Introduction to Music in History 2	3
MUSC 1110	Music Theory 1	3
MUSC 1120	Music Theory 2	3
MUSC 1180 or MUSC 1182 MUSC 1190 or MUSC 1192	Ensemble	2
MUSC 1384	Musicianship 1	2
MUSC 1394	Musicianship 2	2
MUSC 1400	Major Practical Study	6
OR		
MUSC 1404	Introduction to Composition 1	3
AND	And	and
MUSC 1414	Introduction to Composition 2	3
ENGL 1xxx	Students who have English as their teachable minor take 1000 Level English to fulfill the U of M written English requirement Students who have History as their teachable minor take a 1000 level non-music History to fulfill the U of M written English requirement Students who have a teachable minor other than English or History may take any 1000 level, 3 credit hour course that fulfills the U of M written English requirement: consult an advisor before making a selection	3
* MUSC 3230	Acoustics of Music (meets the U of M Mathematics Requirement)	
Total Credit Hours		32

* a 3 credit hour MATH 1xxx or STAT 1xxx may be taken in place of MUSC 3230, Acoustics of Music

In this program, a "C" or better is required in all courses. Non-music courses must be at the 1000 level or higher.

Early/Middle Years Music Specialization		
MUSC 1004	Introduction to Music in History 1	3
MUSC 1014	Introduction to Music in History 2	3
MUSC 1110	Music Theory 1	3
MUSC 1120	Music Theory 2	3
MUSC 1180 or MUSC 1182 MUSC 1190 or MUSC 1192	Ensemble	2
MUSC 1384	Musicianship 1	2

MUSC 1394	Musicianship 2	2
MUSC 1400	Major Practical Study	6
OR		
MUSC 1404	Introduction to Composition 1	3
AND	And	and
MUSC 1414	Introduction to Composition 2	3
ENGL 1xxx	Any English at the 1000 level	3
* MUSC 3230	Acoustics of Music (meets the U of M Mathematics Requirement)	
Total Credit Hours		32

* a 3 credit hour MATH 1xxx or STAT 1xxx may be taken in place of MUSC 3230, Acoustics of Music

In this program, a "C" or better is required in all courses. Non-music courses must be at the 1000 level or higher.

Instrumental Music Specialization		
MUSC 1004	Introduction to Music in History 1	3
MUSC 1014	Introduction to Music in History 2	3
MUSC 1110	Music Theory 1	3
MUSC 1120	Music Theory 2	3
MUSC 1180 or MUSC 1182 MUSC 1190 or MUSC 1192	Ensemble	2
MUSC 1384	Musicianship 1	2
MUSC 1394	Musicianship 2	2
MUSC 1400	Major Practical Study	6
OR	Or	
MUSC 1404	Introduction to Composition 1	3
AND	And	and
MUSC 1414	Introduction to Composition 2	3
ENGL 1xxx	Students who have English as their teachable minor take 1000 Level English to fulfill the U of M written English requirement Students who have History as their teachable minor take a 1000 level non-music History to fulfill the U of M written English requirement Students who have a teachable minor other than English or History may take any 1000 level, 3 credit hour course that fulfills the U of M written English requirement: consult an advisor before making a selection	3
* MUSC 3230	Acoustics of Music (meets the U of M Mathematics Requirement)	
Total Credit Hours		32

* a 3 credit hour MATH 1xxx or STAT 1xxx may be taken in place of MUSC 3230, Acoustics of Music

In this program, a "C" or better is required in all courses. Non-music courses must be at the 1000 level or higher.

ACADEMIC CALENDAR 2015-2016

SECTION 5.2 Second Year: 1997-2012

Integrated Bachelor of Music (Music Education)/ Bachelor of Education Program

MUSC 2070	History of Music 3	3
MUSC 2080	History of Music 4	3
MUSC 2110	Music Theory 3	3
MUSC 2120	Music Theory 4	3
MUSC 2180	Ensemble	2
MUSC 2190	Ensemble	2
MUSC 2380	Basic Musical Skills 3	2
MUSC 2390	Basic Musical Skills 4	2
MUSC 2400	Major Practical Study	6
MUSC 2460	Conducting	3
Teachable Minor* see(**)		6
Total Credit Hours 35		
NOTE: Apply to Integrated Program during Year 2. Deadline to apply is February 1.		

*For listing of teachable minors, see Senior Years teachable major/minor chart in the Education section of the calendar.**Only those students admitted into their 3rd year in the Faculty of Education for September 2008 and earlier are permitted a 2nd music specialization. Prior to beginning Year 5 students must have completed the Aboriginal Education Requirement and the Special Education/Diversity Requirement which is defined as 3 credit hours Aboriginal Education and 3 credit hours Special Education/Diversity.

SECTION 5.2a- Second Year as of September 2013

	2 Core Music History Electives	
	MUSC XXXX	6
MUSC 2110	Music Theory 3	3
MUSC 2120	Music Theory 4	3
MUSC 2182 or MUSC 2180	Ensemble	2
MUSC 2192 or MUSC 2190	Ensemble	2
MUSC 2384	Musicianship 3	2
MUSC 2394	Musicianship 4	2
MUSC 2400	Major Practical Study	6
MUSC 2460	Conducting	3
	*Teachable Minor (see **)	6
	Total Credit Hours	35
NOTE: Apply to Integrated Program during Year 2. Deadline to apply is February 1.		

*For listing of teachable minors, see Senior Years teachable major/minor chart in the Education section of the calendar.

**Only those students admitted into their third year in the Faculty of Education for September 2008 and earlier are permitted a 2nd music specialization. Prior to beginning Year 5, students must have completed the Aboriginal Education Requirement and the Special Education/Diversity Requirement, which is defined as 3 credit hours Aboriginal Education and 3 credit hours Special Education/Diversity.

SECTION 5.3 Third Year: 1997-2012

Integrated Bachelor of Music/Bachelor of Education Program		
MUSC 3180	Ensemble	2
MUSC 3190	Ensemble	2
MUSC 3470	Major Practical Study	6
MUSC 3960	Music of the 20th Century 1	3
MUSC XXXX	Music Specialization	6
EDUB 1200	Teaching the Arts in Senior Years	3
EDUB 1600	Teaching General Music	3
Aboriginal Education Requirement or Special Education/Diversity Requirement Teachable Minor	see Aurora calendar for current offerings	3
Total Credit Hours 34		
Intersession:		
EDUB 1940	Integrated Programs School Experience	3

SECTION 5.3a Third Year as of September 2013

This section is currently under review. Please contact the Music Advisor.

SECTION 5.4 Fourth Year: 1997-2012

Integrated Bachelor of Music/Bachelor of Education Program		
MUSC 4180 - Ensemble		2
MUSC 4190 - Ensemble		2
MUSC 4470 - Major Practical Study		6
MUSC 3970 - Music of the 20th Century 2		3
EDUB 2240 - Teaching Music in Senior Years OR EDUB 2160 - Teaching Music in Early/Middle Years EDUB 2160 - Teaching Music in Early/Middle Years		3
Aboriginal Education Requirement or Special Education/Diversity Requirement (whichever requirement was not fulfilled in Year Three) see Aurora calendar for current offerings		12
Music Specialization		6
Teachable Minor		6
Total Credit Hours		37
Intersession:		
EDUB 1950 - Integrated Programs School Experience 2		3

SECTION 5.5 Fifth Year: 1997-2012

Integrated Bachelor of Music/Bachelor of Education Program		
EDUB 2980	Senior Years School Experience	6
EDUA 1800	Psychology of Learning and Instruction 1: Theory and Practice	3
EDUA 1810	School and Society 1: The Foundations of Education	3
EDUB 1990	Teacher and Technology	3
EDUA 2800	Psychology of Learning and Instruction 2: Inclusive Special Education	3
EDUA 2810	School and Society 2: The Administrative Foundations of Education	3
EDUB 2500	Themes in Senior Years Education (for Early/Middle Years specialization, students may take a 3 credit hour Education complementary course)	3
EDUB 2510	Language and Literacy Across the Curriculum (for Early/Middle Years specialization, students may take a 3 credit hour Education complementary course)	3
EDUB 1XXX	Students with a Music teachable minor take an Education Complementary Course. (admitted to Faculty of Education September 2008 or earlier). Students admitted September 2009 and beyond take a Year 1 Curriculum & Instruction Course in their minor area.	3
Total Credit Hours		30
Further information about the integrated program is in the chapter for the Faculty of Education.		

SECTION 5.6 Teachable Minors

Currently under review.

SECTION 6: POST-BACCALAUREATE DIPLOMA IN PERFORMANCE

The Marcel A. Desautels Faculty of Music offers a Post-Baccalaureate Diploma in Performance designed for musicians who wish to further their performance skills in preparation for further study or professional activity. The unique features of the PBDP program are that students can design their own program of study and tailor it to their own areas of interest. They may take courses at the Faculty as well as in other faculties and schools at the University of Manitoba.

6.1 Admission Requirements

Applicants for Admission must submit the completed application form and fee, and must possess a Bachelor of Music degree or a Conservatory Diploma taken in residence. They must also pass an entrance audition, which requires the performance of three works of contrasting styles and/or historical periods appropriate to the audition medium. This audition would normally be held in person, but video auditions may be accepted where distance is a prohibitive factor. Application materials which misrepresent the level of performance ability will be treated as fraudulent, resulting in dismissal from the program. Admission may not be possible for all qualified applicants, as it is dependent on the number of spaces available, the major practical study area, and instructor availability. Applicants who hold the Post-Baccalaureate Diploma in Performance from the University of Manitoba (or an equivalent Post-Baccalaureate one-year program from another institution) may apply for a second PBDP if studying a different applied instrument than that of their first PBDP in their Major Practical Study, and Recital courses, and if the remaining course credits taken do not duplicate those of the first PBDP.

6.2 Admission Procedures

Applications are made through the University's "Apply Yourself" system and creation of a UMConnect profile. Application deadlines are: February 15 to begin a program in September (Fall Term), or June 15 to begin a program in January (Winter Term).

All those who complete the application and provide the required documentation are granted an audition. Audition dates are scheduled as required.

It is recommended that students be admitted for a program start in Fall Term.

6.3 Program Requirements

MUSC 5400 Major Practical Study, 1 hr. instruction/week or the equivalent, 6 credit hours

MUSC 5560 Recital, 0.5 hr. instruction/week, 6 credit hours

MUSC 5180 Ensemble, 3 credit hours

Electives: chosen from available 3000 and 4000 level courses recommended by the advisor and approved by the Faculty, 15 credit hours

Total Credit Hours: 30

ACADEMIC CALENDAR 2015-2016

Note: A minimum of 18 credit hours must be taken in the Marcel A. Desautels Faculty of Music (although all 30 may be taken within the Faculty).

Reminder: While Faculty staff and faculty are available to clarify Faculty and university regulations and degree requirements, it is the student's responsibility to ensure that diploma and program requirements are met.

6.4 Academic Standing

Regulations for the Post-Baccalaureate Diploma program regarding academic standing, scholastic progress, attendance, required GPA, probation and suspension will follow those governing the Bachelor of Music and Bachelor of Jazz Studies programs as outlined in the Faculty Student Handbook.

6.5 Maximum Time Limits

Expected time to complete program: 1 year. The maximum time allowed for completing the Post-Baccalaureate Diploma program is 3 years. Students will not be permitted to transfer for credit any course completed more than five years prior to the completion date of the diploma.

6.6 Courses Available

Undergraduate 3000 and 4000 level courses approved by the Dean may be used as electives in designing the program of study. Students will register for their courses after their program has been determined in consultation with their major practical study teacher who will act as academic advisor during the Post-Baccalaureate Diploma program. Students may not count toward the PBDP any courses that counted for credit in a previous degree.

6.7 Credit Transfer

The Faculty's Registrar will process transfer of credits into the PBDP program. A maximum of 12 credit hours of courses may be transferred into the PBDP program provided that they have not counted toward any previous degree. A minimum of 18 credit hours must be taken within the Faculty, although up to the full 30 credit hours of the diploma program may be taken within the Faculty. Transfer of credits from the PBDP program into the M.Mus. is processed through the Faculty of Graduate Studies. Courses may not be counted for more than one degree, and may be transferred from the PBDP to the M.Mus. only if they have not been counted toward the PBDP, or more than the minimum credit hours have been taken.

6.8 Completion of the Program

Minimum: 1 year, Maximum: 3 years. The Dean may grant extensions for medical or compassionate reasons. Medical: A letter from the student's physician stating the diagnosis and treatment with projected recovery. Compassionate: A letter from the student outlining the reasons for the extension showing that extenuating circumstances beyond the student's control have contributed to the need for an extension.

6.9 Assessment

Student Assessment: Type of evaluation: Academic freedom dictates that there will be variation between classes according to the professor's preferred systems, approaches, materials, readings, and assignments. However, the University of Manitoba regulations as outlined in the General Calendar state that within the first week of lectures, instructors must inform the class of the method of evaluation to be used in each course. Minimum Grade Requirements: In the Faculty students must attain a grade of "C" or higher for a course to count toward a degree, except in the case of Recital where a minimum of "B" is required. The PBDP program will be governed by these regulations, as outlined in the Student Handbook. Should the student transfer to another faculty in the university that faculty's regulations would apply relating to transfer of credit. Successful completion of the program will be achieved by receiving a "C" or higher in 30 credit hours. Teacher Assessment: The SEEQ course evaluations will be used in the PBDP program for academic courses, and the Faculty's specialized forms will be used for the performance-related courses.

SECTION 7: OFFERINGS FOR NON-MUSIC STUDENTS

Some courses are offered outside the B.Mus. and B.Jazz programs for students in other faculties. For information, contact the Faculty of Music Registrar.

Two courses are available without pre-requisites or special permission from Music, for non-music students:

MUSC 1050 - Well-Tempered Concert-Goer, 3 credit hours, may be used towards a Music Minor

MUSC 1930 - Rudiments of Music, 3 credit hours, is not applicable to a Music Minor

For information on completing a Music Minor in another faculty, please refer to Section 4.7 in the Faculty of Music calendar.

SECTION 8: MUSIC COURSE DESCRIPTIONS

Music Course Descriptions-1000 Level

MUSC 1004 Introduction to Music in History 1 Cr.Hrs. 3

A survey of Western music from early monophony to c. 1750 through an examination of genres and aesthetic foundations. The course will include comparison to non-Western musical traditions.

MUSC 1014 Introduction to Music in History 2 Cr.Hrs. 3

A continuation of MUSC 1004, covering the eras from c. 1750 to the present. A survey of Western music from c. 1750 to the present through an examination of genres and aesthetic foundations. The course will include contemporary art music and comparison to non-Western musical traditions. Prerequisite: MUSC 1004 or consent of the Faculty of Music.

MUSC 1050 The Well-Tempered Concert-Goer Cr.Hrs. 3

(Formerly 033.105) This course is an introduction to the art of music with the listening component based on attendance at live performances by Winnipeg's superior performing ensembles. Topics include instruments of the orchestra, musical materials, forms and structures, historical periods and biographical information on composers. This course may not be used for credit towards the Bachelor of Music or Bachelor of Jazz Studies degree.

MUSC 1110 Music Theory 1 Cr.Hrs. 3

(Formerly 033.111) This course is designed to develop fluency in the writing and recognition of the elements of music: melodic and harmonic intervals, modes and scales, rhythm and metre, triads and inversions, and the principles of melodic and homophonic design. Prerequisite: Knowledge of music rudiments as demonstrated by a Placement Test given during the first week of classes, or by completing MUSC 1930 (or 033.193) with a mark of "C" or better.

MUSC 1120 Music Theory 2 Cr.Hrs. 3

(Formerly 033.112) An examination of the idioms of vocal melody through the writing and analysis of duple paraphrase, duple- and syncopated-rhythm counter-point in two parts, and tonal homophony leading to the Chorale phrase and Bar form. Prerequisite: a grade of "C" or better in MUSC 1110 (or 033.111).

MUSC 1180 Ensemble Cr.Hrs. 2

(Formerly 033.118) Participation in University Symphony Orchestra, University Wind Ensemble, Women's Choir, Concert Choir, University Jazz Orchestra, University Concert Band or University Singers, as is appropriate to the student's background and/or major applied area (placement to be determined by ensemble committee).

MUSC 1182 Jazz Ensemble 1 Cr.Hrs. 2

Participation in jazz ensemble(s) as assigned by the ensemble committee.

MUSC 1190 Ensemble Cr.Hrs. 2

(Formerly 033.119) Participation in a Faculty of Music Ensemble other than the one designated in MUSC 1180 (or 033.118) (placement to be determined by the Ensemble Committee).

MUSC 1192 Jazz Rhythm Performance Techniques Cr.Hrs. 2

A practical approach to rhythmic proficiency in jazz, including emphasis on rhythmic and harmonic etudes, standard song form interpretation, interaction, call and response language for jazz performance.

MUSC 1280 Musical Style and Structure 1 Cr.Hrs. 3

(Formerly 033.128) An integrated study of the history and theory of Western music to 1750. Prerequisite: MUSC 1930 or Conservatory Canada Grade 4 Theory or RCM Advanced Rudiments or consent of the Faculty of Music. Continuation in the Music Minor requires a grade "C" or better in this course. This course may not be used as credit towards the Bachelor of Music or the bachelor of Jazz Studies degree.

MUSC 1290 Musical Style and Structure 2 Cr.Hrs. 3

(Formerly 033.129) An integrated study of the history and theory of Western music from 1750 to the present. Prerequisite: MUSC 1280 (or 033.128) or consent of the Faculty of Music. Continuation in the Music Minor requires a grade of "C" or better in this course. This course may not be used for credit towards the Bachelor of Music or the Bachelor of Jazz Studies degree.

MUSC 1384 Musicianship 1 Cr.Hrs. 2

A practical approach to the cultivation of critical aural perception, specifically, to develop the student's sight-singing, transcription and keyboard skills. Not to be held with MUSC 1380. For music students only.

MUSC 1394 Musicianship 2 Cr.Hrs. 2

A continuation of MUSC 1384. Prerequisite: MUSC 1384. Not to be held with MUSC 1390. For music students only.

MUSC 1400 Major Practical Study Cr.Hrs. 6

(Formerly 033.140) Individual instruction in one of the following: any of the standard orchestral instruments (strings, woodwinds, brasses, percussion), classical guitar, harp, harpsichord, lute, organ, piano, recorder composition or voice. An important constituent of the grading procedure for this course is performance in, and attendance at, the recitals/concerts of the Faculty of Music. For Music students only.

MUSC 1404 Introduction to Composition 1 Cr.Hrs. 3

A study of contemporary theoretical and practical approaches to rhythm, pitch, timbre, texture and form. For Music students only or with permission from the Faculty of Music.

MUSC 1414 Introduction to Composition 2 Cr.Hrs. 3

A continuation of MUSC 1404 Introduction to Composition 1. Prerequisite: MUSC 1404. For Music students only or with permission from the faculty of Music.

MUSC 1460 Minor Practical Study Cr.Hrs. 3

(Formerly 033.146) Individual instruction in an area other than that selected for MUSC 1400 (or 033.140) or in composition by special permission. Written consent of the director is required prior to registration.

MUSC 1930 Rudiments of Music Cr.Hrs. 3

(Formerly 033.193) An introduction to fundamental aspects of music such as sound generation, notation, melodic and harmonic construction, with emphasis on an aural approach. This course may not be used for credit towards the Bachelor of Music or the Bachelor of Jazz Studies degree.

Music Course Descriptions-2000 Level

MUSC 2072 Jazz History 1 Cr.Hrs. 3

A broad survey of the development of jazz and early popular styles of the 20th Century up until the early 1950s. This course is designed to reveal the origins of modern jazz and conventional jazz performance practices. Prerequisite: MUSC 1014 or consent of the Faculty of Music.

MUSC 2082 Jazz History 2 Cr.Hrs. 3

A broad survey of jazz styles from 1950 to the present, with an emphasis on the development of contemporary performance practices. Prerequisite: MUSC 2072 or consent of the Faculty of Music.

MUSC 2110 Music Theory 3 Cr.Hrs. 3

(Formerly 033.211) An examination of the idioms of instrumental melody through the writing and analysis of triple paraphrase, triple- and quadruple-rhythm counterpoint in two parts, and chromatic homophony leading to the Minuet and binary form. Prerequisite: MUSC 1120 (or 033.112) or the consent of the Faculty of Music.

MUSC 2112 Jazz Theory 1 Cr.Hrs. 3

This course is designed to develop fluency in the writing and recognition of the elements of jazz: melodic and harmonic intervals, modes and scales, rhythm and meter, harmonic structure, and the principles of melodic and homophonic design. Prerequisite: MUSC 1120 (or 033.112) or consent of the Faculty of Music.

MUSC 2120 Music Theory 4 Cr.Hrs. 3

(Formerly 033.212) An examination of the diffusion of tonality in instrumental textures through the writing and analysis of chromatic paraphrase, florid counterpoint in two parts and chromatically-extended homophony leading to the Cavatina and ternary form. Prerequisite: MUSC 2110 (or 033.211) or consent of the Faculty of Music.

MUSC 2122 Jazz Theory 2 Cr.Hrs. 3

A continuation of Jazz Theory 1. New topics will include transcription analysis, transposition of lead sheets, modal and substitute harmony. Prerequisite: MUSC 2112 or consent of the Faculty of Music.

MUSC 2180 Ensemble Cr.Hrs. 2

(Formerly 033.218) Participation in University Symphony Orchestra, University Wind Ensemble, Women's Choir, Concert Choir, University Jazz Orchestra, University Concert Band or University Singers, as is appropriate to the student's background and/or major applied area (placement to be determined by ensemble committee). Prerequisite: MUSC 1180 or consent of the Faculty of Music.

MUSC 2182 Jazz Ensemble 2 Cr.Hrs. 2

Participation in jazz ensemble(s) as assigned by the ensemble committee. Prerequisite: MUSC 1182 or consent of the Faculty of Music.

MUSC 2190 Ensemble Cr.Hrs. 2

(Formerly 033.219) Participation in a Faculty of Music Ensemble other than the one designated in MUSC 2180 (placement to be determined by Ensemble Committee). Prerequisite: MUSC 1190 or consent of the Faculty of Music.

MUSC 2192 Jazz Improvisation 1 Cr.Hrs. 2

A course designed to give the student practical application of rhythmic devices, rhythmic modes, melodic and harmonic devices, scales, chords, and substitutions in the context of song forms, song fragments, repertoire. The student will be required to keep a journal of melodic devices and original jazz compositions. Prerequisite: MUSC 1120 (or 033.112) or consent of the Faculty of Music.

MUSC 2384 Musicianship 3 Cr.Hrs. 2

A continuation of MUSC 1394. Prerequisite: MUSC 1394. Not to be held with MUSC 2380. For music students only.

MUSC 2394 Musicianship 4 Cr.Hrs. 2

A continuation of MUSC 2384. Prerequisite: MUSC 2384. Not to be held with MUSC 2390. For music students only.

MUSC 2400 Major Practical Study Cr.Hrs. 6

(Formerly 033.240) Individual instruction, normally in the area chosen in MUSC 1400 (or 033.140). An important constituent of the grading procedure for this course is performance in and attendance at the recitals/concerts of the Faculty of Music. For Music students only. Prerequisite: MUSC 1400 or MUSC 1414.

MUSC 2460 Conducting Cr.Hrs. 3

(Formerly 033.246) The principles and development of baton technique and expressive gestures. Fundamentals of vocal and instrumental score reading, preparation and interpretation. Prerequisites: MUSC 1120 (or 033.112) or equivalent, or consent of the Faculty of Music.

MUSC 2480 Minor Practical Study Cr.Hrs. 3

(Formerly 033.248) Individual instruction in an area other than that selected for MUSC 2400. Normally a continuation of MUSC 1460. Written consent of the director is required to register.

Music Course Descriptions-3000 Level

MUSC 3050 Research Methods Cr.Hrs. 3

(Formerly 033.305) Techniques of bibliography and expository writing in music. Minor research projects in selected areas; the use of primary and secondary sources.

MUSC 3054 Medieval and Renaissance Music History Cr.Hrs. 3

A study of music history with emphasis on historical and stylistic developments of the Middle Ages and Renaissance periods. Prerequisites: MUSC 1014 or consent of the Faculty of Music. Not to be held with MUSC 1070.

MUSC 3064 Baroque Music History Cr.Hrs. 3

A history of European art music from the late 16th to the early 18th centuries (the so-called Baroque period) beginning with the invention of opera and the monodic and concerted styles in Italy and their subsequent adoption in the rest of Europe and the emergence of national schools and culminating in the works of Bach and Handel. Prerequisites: MUSC 1014 or consent of the Faculty of Music. Not to be held with MUSC 1080.

MUSC 3074 Classical Music History Cr.Hrs. 3

A history of European art music from the early-18th to the early-19th centuries (the so-called Classical period) beginning with the innovations of Neapolitan opera and sinfonia their subsequent adoption in the rest of Europe, culminating in the Viennese school of Haydn, Mozart and Beethoven. Prerequisites: MUSC 1014 or consent of the faculty of Music. Not to be held with MUSC 2070.

MUSC 3084 Romantic Music History Cr.Hrs. 3

A study of the changing styles, forms and contexts of music from the late 18th century to 1915 (the Romantic Period). Prerequisites: MUSC 1014 or consent of the Faculty of Music. Not to be held with MUSC 2080.

MUSC 3090 Introduction to Ethnomusicology Cr.Hrs. 3

(Formerly 033.309) A study of style, performance methods and social role of selected non-Western and indigenous Western music, with particular emphasis on native Canadian music, through readings in field studies and methodology. Prerequisite: MUSC 1014.

MUSC 3100 Opera Repertoire Cr.Hrs. 3

(Formerly 033.310) The nature of the opera, its beginnings and development to modern times.

MUSC 3104 History of Opera 1: from Monteverdi to Mozart Cr.Hrs. 3

A history of opera from its origins to the late eighteenth century, tracing various styles, genres and composers through representative works in the central Italian, as well as the French, English and German schools. Prerequisites: MUSC 1014 or consent of the Faculty of Music.

MUSC 3112 Jazz Composition and Arranging 1 Cr.Hrs. 3

A study of the fundamentals of part writing such as instrumental range and transposition, various styles of unison writing, simple harmonic writing, melodic, harmonic and rhythmic devices along with standard and non-standard song structures. Course will culminate in a recital of student compositions and arrangements. Prerequisite: MUSC 2122 or consent of the Faculty of Music.

MUSC 3114 History of Opera II: from Mozart to the Modern Era Cr.Hrs. 3

A history of opera from the late 18th century and the masterpieces of Mozart to the present, tracing the various styles, genres and composers through representative works. Prerequisite: MUSC 1014 or consent of the faculty of Music.

MUSC 3130 Music for Children 1 Cr.Hrs. 6

(Formerly 033.313) The philosophy, techniques and materials in Orff-Schulwerk, including practical activities in the areas of Basic Orff, creative movement, recorder, aural skills and choral techniques. Applicants should have a knowledge of music rudiments. Prerequisite: a grade of "C" or better in MUSC 1930 (or 033.193) or equivalent preparation (CC grade 4 theory; RCT grade 2 theory; an introductory Orff-Schulwerk course) or consent of the Faculty of Music.

MUSC 3140 Music for Children 2 Cr.Hrs. 6

(Formerly 033.314) Further study of the Orff-Schulwerk approach to music education, including the areas of Basic Orff, creative movement, recorder, aural skills, improvisation and choral techniques. Prerequisite: a grade of "C+" or better in MUSC 3130 (or 033.313) or equivalent preparation, plus consent of the Faculty of Music.

MUSC 3150 Orchestration Cr.Hrs. 3

(Formerly 033.315) A study of the technical capabilities and tonal characteristics of orchestral instruments, as well as practical scoring and arranging for various groups, from chamber to full orchestra and band. Prerequisite: MUSC 2120 (or 033.212) or consent of the Faculty of Music. Required course for Composition majors.

MUSC 3180 Ensemble Cr.Hrs. 2

(Formerly 033.318) Participation in University Symphony Orchestra, University Wind Ensemble, Women's Choir, Concert Choir, University Jazz Orchestra, University Concert Band or University Singers, as is appropriate to the student's background and/or major applied area (placement to be determined by ensemble committee). Prerequisite: MUSC 2180 or consent of the Faculty of Music.

MUSC 3182 Jazz Ensemble 3 Cr.Hrs. 2

Participation in jazz ensemble(s) as assigned by the ensemble committee. Prerequisite: MUSC 2182 or consent of the Faculty of Music.

MUSC 3190 Ensemble Cr.Hrs. 2

(Formerly 033.319) Participation in a Faculty of Music Ensemble other than the one designated as appropriate to MUSC 3180 (or 033.318) (placement to be determined by Ensemble Committee). Prerequisite: MUSC 2190 or consent of the Faculty of Music.

MUSC 3192 Jazz Improvisation 2 Cr.Hrs. 2

A continuation of Jazz Improvisation 1. Rhythmic devices, rhythmic modes, melodic and harmonic devices, scales, chords and substitutions in the context of song form, song fragments, repertoire. The student will be required to keep a journal of melodic devices and original jazz compositions. Prerequisite MUSC 2192 or consent of the Faculty of Music.

MUSC 3230 Acoustics of Music Cr.Hrs. 3

(Formerly 033.323) A study of the physical basis of music; consideration of the nature of musical sound, tone production of typical musical instruments, scales, and temperaments, and architectural acoustics. Experiments and projects.

MUSC 3270 Performance Skills Cr.Hrs. 3

(Formerly 033.327) For performance majors in the Faculty of Music. Provides training in performance-related skills of the music profession, including such topics as acting, body awareness, self-promotion, career management, master classes, concert organizing, concert promotion and participation.

MUSC 3272 Jazz Performance Skills Cr.Hrs. 3

A course designed to equip the student with the techniques necessary to rehearse, interact and perform effectively with an ensemble in various situations.

MUSC 3360 Topics in Music Education Cr.Hrs. 3

(Formerly 033.336) This course may vary from year to year depending on the needs and interests of instructors and students.

MUSC 3380 From Rock to Rap and Beyond: A History of Popular Music in the Later 20th Century Cr.Hrs. 3

(Formerly 033.338) A survey of popular music in North America and Britain from the mid-sixties to the present, beginning with the two foremost bands of the British Invasion, the Beatles and Stones, and the development of folk rock....The nineties focuses on the continual mainstreaming of music on the edge of rap, alternative and world beat. Prerequisite: MUSC 1014 or consent of the Faculty of Music.

MUSC 3390 From Ragtime to Rock'n'Roll: A History of Popular Music in the 20th Century Cr.Hrs. 3

(Formerly 033.339) A survey of popular music in North America from the ragtime craze and Tin Pan Alley tradition, through the development of blues and country to the emergence of Rhythm and Blues and Rock'n' Roll to the beginnings of the British Invasion. Prerequisite: MUSC 1014 or consent of the Faculty of Music.

MUSC 3404 From New Wave to Rave: A History of Popular Music in the Late 20th Century Cr.Hrs. 3

A survey of popular music from the end of twentieth century, beginning with the revolutions that occurred during the late seventies and early eighties (disco and rap, punk and hardcore) that transformed pop music, setting the course for music of the two final decades of the century. Prerequisite: MUSC 1014 or consent of the Faculty of Music.

MUSC 3442 Jazz Pedagogy 1 Cr.Hrs. 3

A course designed to instruct jazz musicians on procedure and methodology for teaching jazz song form, rhythmic concepts, repertoire and history to K-8 students. Class members will teach and perform with students from the Faculty of Music Preparatory Division.

MUSC 3470 Major Practical Study Cr.Hrs. 6

(Formerly 033.347) Individual instruction, normally in the area chosen in MUSC 2400 (or 033.240). An important constituent of the grading procedure for this course is performance in and attendance at the recitals/concerts of the Faculty of Music. Prerequisite: MUSC 1014, MUSC 1120, MUSC 1394, MUSC 2400 and MUSC 3230. For Music students only.

MUSC 3480 Minor Practical Study Cr.Hrs. 3

(Formerly 033.348) Individual instruction in an area other than that selected for Major Practical Study. Normally a continuation of MUSC 2480. Written consent from the Faculty of Music is required prior to registration.

MUSC 3550 Recital 1 Cr.Hrs. 3

(Formerly 033.355) The program must be approved by the applied instructor and the jury members. Prerequisite: MUSC 1014, MUSC 1120, MUSC 1394, MUSC 2400 and MUSC 3230, or consent of the Faculty of Music. For Music students only.

MUSC 3554 Jazz Recital 1 Cr.Hrs. 3

Preparation and performance of a public recital. The program must be approved by the applied instructor and jury members. Prerequisite: MUSC 1014, MUSC 1120, MUSC 1394, MUSC 3230 and MUSC 2400 or consent of the Faculty of Music. For Music students only.

MUSC 3620 Independent Study 1 Cr.Hrs. 3

(Formerly 033.362) Individual project designed by the student and a supervising faculty member. This study may be in an academic or applied area. Approval from the Faculty of Music is required.

MUSC 3650 Electroacoustic Music Cr.Hrs. 3

An introduction to electroacoustic music composition with the focus on acousmatic music. The course covers sound aesthetics, historical perspective of electro-acoustic music, repertoire and basic studio techniques such as sound editing, digital signal processing, multi channel techniques and sound mixing.

MUSC 3690 Percussion Techniques Cr.Hrs. 3

(Formerly 033.369) Class instruction in percussion instruments. Development of basic playing techniques and examination of materials and procedures for individual and group instruction. Prerequisite: MUSC 2460 or consent of the Faculty of Music.

MUSC 3730 Early Music Development Cr.Hrs. 3

(Formerly 033.373) Procedures and materials for the development of musicality in children through listening activities, movement, creativity, singing and classroom instruments. Prerequisite: MUSC 2460 and MUSC 3770 or consent of the Faculty of Music.

MUSC 3770 Vocal Techniques Cr.Hrs. 3

(Formerly 033.377) Class instruction in vocal technique. Development of good vocal and choral sound and examination of materials and procedures for individual and group instruction. Prerequisite or Corequisite: MUSC 2460 or the consent of Faculty of Music.

MUSC 3780 Woodwind Techniques Cr.Hrs. 3

(Formerly 033.378) Class instruction in woodwind instruments. Development of music playing techniques and examination of materials and procedures for individual and group instruction. Prerequisite: MUSC 2460 or consent of the Faculty of Music.

MUSC 3790 Brass Techniques Cr.Hrs. 3

(Formerly 033.379) Class instruction in brass instruments. Development of basic playing techniques and examination of materials and procedures for individual and group instruction. Prerequisite: MUSC 2460 or consent of the faculty of Music.

MUSC 3800 String Techniques Cr.Hrs. 3

(Formerly 033.380) Class instruction in string instruments. Development of basic playing techniques and examination of materials and procedures for individual and group instruction. Prerequisite: MUSC 2460 or consent of the Faculty of Music.

MUSC 3820 Topics in Music Cr.Hrs. 3

(Formerly 033.382) This course may vary from year to year depending on the needs and interests of instructors and students.

MUSC 3830 Topics in Music Cr.Hrs. 3

(Formerly 033.383) This course may vary from year to year depending on the needs and interests of instructors and students.

MUSC 3884 Introduction to Jazz for Music Educators Cr.Hrs. 3

Procedures for organizing, rehearsing, and directing small and large group jazz ensembles. Study of repertoire and performance materials, with emphasis on personal understanding of jazz improvisation and style. Prerequisites: MUSC 2460 or consent of the Faculty of Music. Not to be held with MUSC 3880.

MUSC 3894 Guitar Techniques Cr.Hrs. 3

Class instruction in guitar technique. Development of basic techniques and examination of materials and procedures for individual and group instruction. Prerequisite: MUSC 2460 or consent of the Faculty of Music.

MUSC 3964 History of Western Art Music After 1900 Cr.Hrs. 3

A survey of the processes, contexts and conceptual constructs of Western art music from 1900 to present. Prerequisites: MUSC 1014 or consent of the Faculty of Music.

MUSC 3974 Music Theory After 1900 Cr.Hrs. 3

A survey of music theoretical approaches, analytical techniques and compositional trends in Western art music from 1900 to the present. Prerequisite: MUSC 2120 or consent of the Faculty of Music.

Music Course Descriptions-4000 Level

MUSC 4010 French Diction and Repertoire Cr.Hrs. 3

(Formerly 033.401) Specialized instruction in French diction, translation and transcription using the International Phonetic Alphabet, with direct application to performance activities in French vocal repertoire. This course will be rotated on a three-year cycle with MUSC 4020 (or 033.402) and MUSC 4030 (or 033.403).

MUSC 4020 Italian Diction and Repertoire Cr.Hrs. 3

(Formerly 033.402) Specialized instruction in Italian diction, translation and transcription using the International Phonetic Alphabet, with direct application to performance activities in Italian vocal repertoire. This course will be rotated on a three-year cycle with MUSC 4010 (or 033.401) and MUSC 4030 (or 033.403).

MUSC 4030 German Diction and Repertoire Cr.Hrs. 3

(Formerly 033.403) Specialized instruction in German diction, translation and transcription using the International Phonetic Alphabet, with direct application to performance activities in German vocal repertoire. This course will be rotated on a three-year cycle with MUSC 4010 (or 033.401) and MUSC 4020 (or 033.402).

MUSC 4110 Special Area Paper Cr.Hrs. 3

(Formerly 033.411) The student will select a particular area of special interest or significance, work under supervision of a faculty member, and present results in an extended paper. Prerequisites: MUSC 2120 (or 033.212) and MUSC 2070 (or 033.207), or consent of the Faculty of Music.

MUSC 4112 Jazz Composition and Arranging 2 Cr.Hrs. 3

A continuation of Jazz Composition and Arranging 1. The student will write for larger ensembles, including jazz orchestra. Course will culminate in a recital of student compositions and arrangements. Prerequisite: MUSC 3112 or consent of the Faculty of Music.

MUSC 4130 History of Women in Music Cr.Hrs. 3

(Formerly 033.413) A study of the female contribution to the art of music from the Middle Ages to the present; emphasis on the changing roles of, and attitudes towards, women as composers and performers. Prerequisite: MUSC 1014 or consent of the Faculty of Music.

MUSC 4140 History of Canadian Music Cr.Hrs. 3

A survey of music in Canada from Colonial times to the present, encompassing both folk, popular and classical traditions.

MUSC 4154 Choral Repertoire Cr.Hrs. 3

A study and examination of choral repertoire for various types of choral ensembles. Prerequisites: MUSC 2460 or consent of the Faculty of Music. Not to be held with MUSC 4150.

MUSC 4160 Major Practical Study Cr.Hrs. 3

(Formerly 033.416) Individual instruction, normally in the area chosen in MUSC 3470 (or 033.347). An important constituent of the grading procedure for this course is performance in and attendance at the recitals/concerts of the Faculty of Music. For Music students only.

MUSC 4180 Ensemble Cr.Hrs. 2

(Formerly 033.418) Participation in University Symphony Orchestra, University Wind Ensemble, Women's Choir, Concert Choir, University Jazz Orchestra, University Concert Band or University Singers, as is appropriate to the student's background and/or major applied area (placement to be determined by ensemble committee). Prerequisite: MUSC 3180 or consent of the Faculty of Music.

MUSC 4182 Jazz Ensemble 4 Cr.Hrs. 2

Participation in jazz ensemble(s) as assigned by the ensemble committee. Prerequisite: MUSC 3182 or consent of the Faculty of Music.

MUSC 4190 Ensemble Cr.Hrs. 2

(Formerly 033.419) Participation in a Faculty of Music Ensemble other than the one designated in MUSC 4180 (or 033.418) (placement to be determined by Ensemble Committee). Prerequisite: MUSC 3190 or consent of the Faculty of Music.

MUSC 4192 Jazz Improvisation 3 Cr.Hrs. 2

A continuation of Jazz Improvisation 1 and 2. Rhythmic devices, rhythmic modes, melodic and harmonic devices, scales, intervallic devices, chords, and substitutions in the context of song forms, song fragments, repertoire. The student will be required to keep a journal of melodic devices and original jazz compositions. Prerequisite: MUSC 3192 or consent of the Faculty of Music.

MUSC 4330 Advanced Analysis Cr.Hrs. 3

A survey of analytical approaches to tonal and post-tonal music. Aspects of musical structure, perception and performance will be explored through readings and the analysis of major works from the core repertoire. Prerequisite: MUSC 2120 or consent of the Faculty of Music.

MUSC 4350 Music for Children 3 Cr.Hrs. 6

(Formerly 033.435) Advanced study of the Orff-Schulwerk approach to music education. Prerequisite: a grade of "B" or better in MUSC 3140 (or 033.314), plus consent of the instructor.

MUSC 4360 Wind Repertoire Cr.Hrs. 3

(Formerly 033.436) A selected survey of wind literature from 1500 to the present. Prerequisite: MUSC 4770 (033.477) and MUSC 4780 (033.478), or consent of the Faculty of Music.

MUSC 4370 Wind Conducting Techniques Cr.Hrs. 3

(Formerly 033.437) A study of the psychological, philosophical and practical aspects of conducting wind ensembles at all levels. (entry to professional). Prerequisite: MUSC 4770 (033.477) and MUSC 4780 (033.478), or consent of the Faculty of Music.

MUSC 4380 Piano Repertoire Cr.Hrs. 3

(Formerly 033.438) A comprehensive survey of major composers and their compositions for solo Piano. (Required course for piano Performance majors)

MUSC 4390 Piano Chamber Music Literature Seminar Cr.Hrs. 3

(Formerly 033.439) A selected survey of piano chamber music.

MUSC 4430 Pedagogy and Repertoire Cr.Hrs. 3

(Formerly 033.443) A consideration of approaches to the teaching of style and technique, through an examination of the repertoire for the student's major practical study.

MUSC 4440 Vocal Pedagogy Cr.Hrs. 3

(Formerly 033.444) An exploration of the foundations of the singer's art and craft, including the physical nature of the singing voice, stages of development, and various national, historical and individual pedagogical approaches to the teaching of singing. Required course for voice majors in Performance and General concentrations.

MUSC 4442 Jazz Pedagogy 2 Cr.Hrs. 3

A continuation of Jazz Pedagogy 1, with a focus on high school students. Class members will teach and perform with students from the Faculty of Music Preparatory Division. Prerequisite: MUSC 3442 or consent of the Faculty of Music.

MUSC 4470 Major Practical Study Cr.Hrs. 6

(Formerly 033.447) Individual instruction, normally in the area chosen in MUSC 3470. An important constituent of the grading procedure for this course is performance in and attendance at the recitals/concerts of the Faculty of Music. Prerequisites: MUSC 2120, MUSC 2394 and MUSC 3550. For Music students only.

MUSC 4480 Minor Practical Study Cr.Hrs. 3

(Formerly 033.448) Individual instruction in an area other than that selected for Major Practical Study. Normally a continuation of MUSC 3480. Written consent of the director is required prior to registration.

MUSC 4490 Piano Pedagogy Cr.Hrs. 3

(Formerly 033.449) An introduction to teaching of styles and techniques through an examination of piano repertoire. (Required course for piano and organ majors in Performance and General Concentrations.)

MUSC 4520 Coaching Skills Cr.Hrs. 3

(Formerly 033.452) Introduction to and training in philosophies and techniques of vocal coaching including both song and operatic repertoire.

MUSC 4530 Operatic Piano Cr.Hrs. 3

(Formerly 033.453) Development of skills required of an operatic pianist, including standard arias, operatic scores, working with conductors and developing an orchestral sound. May include participation in community opera events. (by audition only)

MUSC 4560 Recital 2 Cr.Hrs. 6

(Formerly 033.456) Preparation and performance of a public graduation recital. The program, which must be approved by the applied instructor and jury members. Prerequisite: MUSC 2120, MUSC 2394 and MUSC 3550 or consent of the Faculty of Music. For Music Students only.

MUSC 4562 Jazz Recital 2 Cr.Hrs. 6

Preparation and performance of a public graduation recital. The program must be approved by the applied instructor and the jury members. Prerequisite: MUSC 2082, MUSC 2122, MUSC 22394 and MUSC 3554 or consent of the Faculty of Music. For Music Students only.

MUSC 4630 20th to 21st Century Piano Repertoire Cr.Hrs. 3

(Formerly 033.463) Piano repertoire from 1900 to the present.

MUSC 4650 Interactive Computer Music Cr.Hrs. 3

An introduction to interactive computer music composition. The course covers different techniques for interaction between performers and a computer. Experiments will be done using major software for live MIDI and audio processing. The course also covers sound synthesis. Possibilities are given to write with either projects involving performers or multi-disciplinary projects (e.g., installation including visual elements). Prerequisite: MUSC 3650 or consent of the Faculty of Music.

MUSC 4660 Computer Assisted Composition Cr.Hrs. 3

An introduction to Computer Assisted Composition. The course covers a variety of mathematical models for structuring musical parameters, such as probability, iterative functions, spectral pitch organization, rule-based systems and morphological models. Different environments using the Lisp language are used as a base for experiments. Prerequisite: MUSC 1414 or consent of the Faculty of Music.

MUSC 4750 Choral Techniques 1 Cr.Hrs. 3

(Formerly 033.475) Procedures for organizing, rehearsing and conducting various types of choral ensembles. Examination of performance materials. Prerequisite: MUSC 2460 and MUSC 3770 or consent of the Faculty of Music.

ACADEMIC CALENDAR 2015-2016

MUSC 4760 Choral Techniques 2 Cr.Hrs. 3

(Formerly 033.476) Continued study in rehearsing and conducting standard choral ensembles. Study of repertoire and related literature. Prerequisite: MUSC 4750 (or 033.475).

MUSC 4770 Band and Orchestral Techniques 1 Cr.Hrs. 3

(Formerly 033.477) The historical development and present instrumentation of standard instrumental ensembles. Procedures for organizing, rehearsing and conducting bands and orchestras. Examination of performance and instructional materials. Prerequisite: MUSC 2460, MUSC 3790, MUSC 3780 and MUSC 3690 or MUSC 3800 or MUSC 3894 or consent of the faculty of Music.

MUSC 4780 Band and Orchestral Techniques 2 Cr.Hrs. 3

(Formerly 033.478) Continued study in rehearsing and conducting standard instrumental ensembles. Study of repertoire and related literature. Prerequisite: MUSC 4770 (or 033.477).

Post-Baccalaureate Course Descriptions-5000 Level

MUSC 5180 Ensemble Cr.Hrs. 3

(Formerly 033.518) Participation in a Faculty of Music ensemble as is appropriate to the student's background and/or major applied area. (To be decided by the Major Practical Study Teacher in consultation with the ensemble committee).

MUSC 5400 Major Practical Study Cr.Hrs. 6

(Formerly 033.540) Individual instruction in the instrument area of study at the Post-Baccalaureate level.

MUSC 5560 Recital Cr.Hrs. 6

(Formerly 033.556) Preparation and performance of a public, full-length recital at the Post-Baccalaureate level. The program, must be approved by the applied instructor and the jury committee judging the recital. It should include an appropriate balance of solo and chamber repertoire.

FACULTY OF SCIENCE

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Website: umanitoba.ca/science

Academic Staff: For complete listings of the Faculty of Science Academic Staff, please refer to departmental websites.

- 4.7 **Interdisciplinary Courses in Forensic Science**
- 4.8 **Genetics Program**
- 4.9 **Department of Mathematics**
- 4.10 **Department of Microbiology**
- 4.11 **Department of Physics and Astronomy**
- 4.12 **Psychology Program**
- 4.13 **Department of Statistics**
- 4.14 **Courses offered in other Faculties and Schools**
- 4.15 **Resources for students interested in related fields of study / occupations**

Chapter Content

SECTION 1: DEGREES AND PROGRAMS OFFERED BY THE FACULTY OF SCIENCE

- 1.1 **Degree Offerings**
- 1.2 **Program Offerings**

SECTION 2: ADMISSION TO THE FACULTY OF SCIENCE

- 2.1 **Direct Entry Admissions Requirements**
- 2.2 **Entrance to Science From University 1: Transiting**
- 2.3 **Transfer Students**
- 2.4 **Second Degree Students**
- 2.5 **Special / Visiting Students**
- 2.6 **Auditing Students**
- 2.7 **Returning to Science from an Extended Leave**

SECTION 3: ACADEMIC REGULATIONS

- 3.1 **Regulations Applicable to all Programs**
- 3.2 **B.Sc. (General) Degree Academic Regulations**
- 3.3 **B.Sc. (Major) Degree Academic Regulations**
- 3.4 **B.Sc. (Major) Cooperative Option Academic Regulations**
- 3.5 **Honours Academic Regulations**
- 3.6 **Honours Cooperative Option Academic Regulations**
- 3.7 **Minors: Academic Regulations for Science Students**
- 3.8 **Dean's Honour List, Degree with Distinction, First Class Honours**
- 3.9 **Faculty of Science Awards**
- 3.10 **Academic Advising**

SECTION 4: PROGRAM CHARTS AND COURSE DESCRIPTIONS

- 4.1 **Actuarial Mathematics**
- 4.2 **Biochemistry**
- 4.3 **Department of Biological Sciences**
- 4.4 **Biotechnology**
- 4.5 **Department of Chemistry**
- 4.6 **Department of Computer Science**

SECTION 1: DEGREES AND PROGRAMS OFFERED BY THE FACULTY OF SCIENCE

1.1 Degree Offerings

Degree Offering Name	Minimum Years to Complete ¹	Minimum Required Credit Hours
Bachelor of Science General Degree - B.Sc. General	3	90
Bachelor of Science Major Degree – B.Sc. Major	4	120
B.Sc. Major Degree – Co-operative Option	5 ²	120
Bachelor of Science Double Major Degree	4	120 ¹
Bachelor of Science Honours Degree – B.Sc. Honours	4	120 - 129
B.Sc. Honours Degree – Co-operative Option	5 ²	120
Bachelor of Computer Science Honours – B.C.Sc. Honours	4	120
B.C.Sc. Honours Degree – Co-operative Option	5 ²	120
Bachelor of Science Double Honours Degree	4	120 ¹

NOTES:

- 1. The actual number of credit hours required to complete the Double Major and Double Honours programs may exceed 120 credit hours and will depend on each specific program, designed in consultation with the departments involved.
- 2. This number includes a minimum of 12 months paid employment.

1.2 Program Offerings

Program	Theme / Focus / Concentration / Option	Honours	Major	Co-op	Minor
Actuarial Mathematics		.			
Biochemistry		.	.	.	
Biological Sciences		.	.	.	.
Theme Areas	Cell, Molecular and Developmental Biology	.	.	.	
	Ecology and Environmental Biology	.	.	.	
	Environmental and Integrative Physiology	.	.	.	
	Evolution and Biodiversity	.	.	.	
	Integrative Biology	.	.	.	
Biotechnology		.	.	.	
Program Streams	Analytical Biotechnology	.	.	.	
	Molecular Biotechnology	.	.	.	
Chemistry		.	.	.	.
Focus Areas	Bioanalytical Chemistry	.	.	.	
	Biopharmaceutical Chemistry	.	.	.	
	Biophysical Chemistry	.	.	.	
	Environmental Chemistry	.	.	.	
	Inorganic Chemistry	.	.	.	
	Materials Science	.	.	.	
	Organic Chemistry	.	.	.	
	Physical Chemistry	.	.	.	
Quantum / Computational Chemistry	.	.	.		
Computer Science		.	.	.	.
Areas of Specialization	Theoretical Computer Science	.	.	.	
	Networks and Security	.	.	.	
	Artificial Intelligence	.	.	.	
	Human-Computer Interaction	.	.	.	
	Databases	.	.	.	
	Software Engineering	.	.	.	
	Computer Systems	.	.	.	
	Web-Based Systems	.	.	.	
Computer Science – Mathematics Joint Program		.	.	.	
Computer Science – Physics and Astronomy Joint Program		.	.	.	
Computer Science – Statistics Joint Program		.	.	.	
Genetics		.	.	.	
Mathematics		.	.		.
Applied Mathematics			.		
Options	Computer Science Option		.		
	Economics Option		.		
	Statistics Option		.		
Mathematics – Physics and Astronomy Joint Program		.			
Mathematics – Economics Joint Program		.			
Microbiology		.	.	.	.
Physics and Astronomy		.	.		.
Options	Astronomy (Option A)	.			
	Physics (Option B)	.			
	Medical and Biological (Option C)	.			
Psychology		.	.		.
Statistics		.	.	.	.
Statistics – Actuarial Mathematics Joint Program		.			
Statistics – Mathematics Joint Program		.			
Statistics – Economics Joint Program		.			

SECTION 2: ADMISSION TO THE FACULTY OF SCIENCE

2.1 Direct Entry Admissions Requirements

To enter the Faculty of Science directly from high school, a student must have:

1. Manitoba high school graduation with five full credits at the Grade 12 level in courses designate S, G, or U.
2. A minimum 85% average over the following, with no less than 60% in each course:
 - a. English 40S
 - b. Pre-Calculus Mathematics 40S (recommended) or Applied Mathematics 40S; AND,
 - c. One of Biology 40S, Chemistry 40S, Computer Science 40S, or Physics 40S

2.2 Entrance to Science from University 1: Transiting

To transit from University 1 to the Faculty of Science a student must have completed a minimum of 24 credit hours of courses. If a student has satisfied the minimum requirements for entry to Science, they simply perform the transit function on AURORA Student to enter the Faculty of Science. There are no fees for transiting and there is no application form required. Students who require assistance with transiting to Science from University 1, should contact the Faculty of Science office.

When a student transits from University 1 to the Faculty of Science, they may choose to transit to a 4-year Major program for which they qualify, or they may choose to transit to the General Degree. If a student wishes to enter an Honours program in the Faculty of Science they should contact the Faculty of Science office for assistance. Students intending to enter a four year Major or Honours program should refer to the program charts in Section 4, Programs and Courses Offered by the Faculty of Science, for courses required for entry into each program. Completion of these courses in University 1 will prepare a student to complete a four year Major or Honours program in four calendar years.

For further information please contact a Faculty of Science Academic Advisor and/or refer to the Faculty of Science applicant information brochure and the University Admissions website: www.umanitoba.ca/admissions.

Note: Students who have exceeded 36 credit hours of "F" grades will not normally be admissible until a suspension has been served. Students may contact the Faculty of Science for further information or advice.

2.3 Transfer Students

Students who wish to transfer to the Faculty of Science must have completed a minimum of 24 credit hours of post-secondary courses and have achieved a minimum cumulative grade point average of at least 2.00 to be eligible for consideration. Students who do not meet this minimum may appeal to be considered for admission on the recommendation of the Dean. Please see a Science Academic Advisor for information. External transfer students with 24 credit hours or more of transfer credit are assessed upon admission to the Faculty of Science.

Students on academic suspension as a result of work completed at another post-secondary institution will not normally be considered for admission to the University of Manitoba until the suspension has been served.

Transfer of Credit

External: Please refer to the Admissions website at umanitoba.ca/admissions or the Admissions section at the front of this Calendar. Courses completed at an external institution ten years prior to registration in the Faculty of Science are not considered for transfer credit. Students should contact a Science Academic Advisor regarding departmental transfer credit policies. All courses acceptable to the Faculty of Science must be transferred.

2.4 Second Degree Students

Students possessing a first degree from a recognized university program and who have a minimum Cumulative Grade Point Average of 2.00 (or a 2.30 adjusted grade point average – see applicant information bulletin for details on AGPA) on all previous university work are eligible for admission as Second Degree students.

Second degree requirements may be shortened by up to 60 credit hours, and once admitted to a Second Degree Program, students will be expected to conform to all continuation, residency and graduation requirements as described in Section 3.

Specific information on requirements for a Bachelor of Science degree following the completion of a degree in another faculty or school, or at another university, is available in the general office.

2.5 Special/ Visiting Students

After Degree Special Students

Students who have successfully completed a first degree from a recognized university program with a Cumulative Grade Point Average of 2.00 or better are eligible for admission as Special Students.

2.6 Auditing Students

Students who wish to audit courses must have written permission from the instructor of the desired course before they can register. Auditing students must register in person in the Faculty of Science general office. The Faculty of Arts will prohibit auditors from registering in their courses until after the initial access period for registration.

2.7 Returning to Science after an Extended Leave

Students who have been away from Science for more than a year are blocked from using AURORA STUDENT. They must consult with a Science Academic Advisor. If the student has not attended another post-secondary institution, they are eligible to return. The advisor will determine academic progress, registration date and time, and discuss degree plans. Students planning a return to studies are strongly urged to contact an Advisor well in advance of the start of registration. Students who have attended elsewhere since their last registration in Science must normally re-apply for admission and be academically competitive for admission on all of their previous academic work. July 1 is the application deadline for Fall term.

Students who have graduated must re-apply (July 1 for Fall Term – Other deadlines may be found at umanitoba.ca/admissions) and be academically competitive for admission.

SECTION 3: ACADEMIC REGULATIONS

3.1 Regulations Applicable to All Programs

The provisions of the chapters: “General Academic Regulations and Requirements” and “University Policies” apply to all students. In addition, the Faculty of Science has regulations and requirements published below that apply specifically to its students.

Repeating a Course

Science students are subject to the University of Manitoba regulations (see General Academic Regulations and Policy, Repeating a Course) and the Faculty of Science degree regulations regarding eligibility to repeat a course.

Repeating a course will not result in the removal of the first attempt and grade in that course from the student’s record. The course will appear on the transcript as many times as it has been repeated. Only the grade from the last attempt will be included in the GPA calculations relating to a student’s program of study.

There is a limit on the number of ‘F’ grades permitted in any degree.

Students who wish to repeat a course must obtain permission to repeat the course from the Faculty of Science prior to registration.

NOTE: In most cases, professional Faculties and Schools have specific rules governing the way repeated courses are treated in their admission process. Check the applicant information bulletin of the appropriate Faculty or School, or with the Admissions Office (424 University Centre), or with a Science Academic Advisor for information regarding how different professional programs treat repeated courses in determining admission.

Voluntary Withdrawals

The responsibility for initiating withdrawals rests solely with the student. When eligible to do so, Voluntary Withdrawals must be done through Aurora Student, otherwise withdrawals must be authorized first by the Science general office and then through the Registrar’s Office. No withdrawals will be permitted after the deadlines posted in the Academic Schedule.

There is no longer a limit on the number of Voluntary Withdrawal hours a student can accumulate (effective September 2006).

In exceptional circumstances, Authorized Withdrawals may be permitted on presentation of appropriate documentation. See the chapter, General Academic Regulations and Policy, section Voluntary Withdrawal from Programs and Courses or consult a Science Academic Advisor for information.

Attendance at other Institutions

Students who attend other post-secondary institutions without a Letter of Permission must reapply for admission to the Faculty of Science before the application deadline and be academically competitive for admission. Similarly, students registered in Science here may not be registered at another academic institution at the same time unless they are registered elsewhere on a Letter of Permission. The penalty for unauthorized or undisclosed attendance may be disciplinary withdrawal or academic suspension.

For more information on Letters of Permission, refer to the Registration Information section of this calendar or to the Registrar’s Office website at: umanitoba.ca/registrar.

Academic Dishonesty

Academic dishonesty is intentional cheating, fabrication, impersonation, or plagiarism. It is also knowingly or inadvertently helping or attempting to help others to be dishonest. Academic dishonesty lowers scholastic quality and defrauds others who will eventually depend on their own knowledge and integrity.

Plagiarism or any other form of cheating on examinations, term tests, or assignments is subject to academic penalty as serious as suspension or expulsion from the faculty or university.

Students who are unsure of what constitutes academic dishonesty should refer to the regulations in General Academic Regulations and Policy, Plagiarism and Cheating, and consult with a Science Academic Advisor or a faculty member. Information about academic penalties for academic dishonesty is available on the Faculty of Science website.

Academic Assessment

Effective September 2013, each student in the Faculty of Science will be placed on academic suspension for one year, regardless if there has been evidence of improved performance, if they have more than 36 credit hours of “F” grades.

Following a one year suspension, the student may return upon application to the Faculty of Science by selecting one of the following irreversible options:

(a) to continue with no possibility of further “F” grades. Any further “F” grades will result in academic suspension for two years. (Following the two year suspension, the student may apply to the Faculty of Science to return to start afresh.)

Or

(b) start afresh, with their previous work not counting towards satisfying degree requirements. Students may appeal to transfer in up to 30 credit hours of previously completed coursework with a grade of “C” or better.

(In either case this does not mean that the previous coursework will be removed from the student history or transcript.)

Required to Withdraw from Major or Honours

If your last assessment was “Required to Withdraw from the Honours or the Major program,” you must consult a Science Academic Advisor prior to registration. An advisor will review new degree plans, determine eligibility for a desired program, and update any affected university records.

Students on “Hold”

If a student is on “Hold”, they are prevented from any registration transaction (including Voluntary Withdrawals) until they have cleared this status. Contact a Science Academic Advisor if you wish to drop a course while on “Hold”.

Term work and Debarment

A student is responsible for the completion of laboratory work, assignments, tests and other class work as prescribed by departments. A student who does not meet term work requirements to the satisfaction of a department may receive a warning to this effect from the department or the general office. If this warning is ignored, a student may be debarred from the course. Any student debarred from a course receives an automatic grade of “F” in that course.

Deferred Examinations

Students unable to write a final examination because of illness, disability, or for compassionate reasons, must file an application in the faculty general office for a deferred examination. The application must be filed within 48 hours of the examination. Appropriate documentation must be provided that verifies that the incapacity existed at the time the examination was to be written.

A deferred examination is offered in a manner prescribed by the head of the department concerned. This would normally be written within 30 working days of the last examination in that series. Any other consideration would be determined by the department head.

Students requesting deferred examinations on the grounds that the examinations conflict with vacation or holiday plans shall not be granted deferrals.

A deferred examination is not granted to a student who has written the final examination.

Deferred examinations that need to be re-deferred, and/or requests where a student is seeking a deferral in a third examination series (i.e. Fall 2008, Winter 2009, Winter 2010 – any course) must be approved by the Faculty of Science Committee on Student Standing. Students must appeal, in writing, to the Committee on Student Standing and provide precise documentation that outlines why a deferral request should be granted in their case.

Appeals Involving Academic Regulations

The Committee on Student Standing in Science considers appeals from students who request special consideration in respect of rules and regulations governing their programs of study and qualification for graduation.

Appeals should be addressed to: The Secretary, Committee on Student Standing, General Office, Faculty of Science, 239 Machray Hall.

Appeal for Authorized Withdrawal

Students who have valid and documented reasons for withdrawal, such as medical illness or compassionate circumstances, may be authorized to withdraw without penalty. Requests for authorized withdrawals must be submitted in writing to a Faculty of Science Academic Advisor. The Office of Student Advocacy located at 519 University Centre (474-7423, student_advocacy@umanitoba.ca) is available to provide information and assistance.

Appeal for other Academic Concessions

Students who believe they have grounds for academic concessions based on their personal circumstances should consult with a Science Academic Advisor. The Office of Student Advocacy located at 519 University Centre (474-7423, student_advocacy@umanitoba.ca) is available to provide information and assistance.

Laboratory Registration

If a course requires registration in both a lecture and a separate appropriate laboratory section, AURORA STUDENT will not permit you to register in that course unless you register for both.

Laboratory Exemptions

If you think you are eligible for a laboratory exemption, you must check with the department offering the course to obtain formal consent of this. Once received, deliver the written permission to your faculty or school office, as an override may be required on your academic record. You must register for the laboratory exempt section.

It is your responsibility to ensure that you are eligible for a laboratory exemption. If you register for one of these courses and it is subsequently determined that you are not entitled to exemption, you will be required to register for a laboratory section. If no space remains available in the laboratory, you will be required to withdraw from the course.

Laboratory release

Certain Chemistry and Microbiology courses require that you check out of the laboratory before you withdraw or change lab sections. It is your responsibility to check with the departmental office prior to making any changes to your laboratory registration. Failure to check out of your laboratory may result in your academic records being placed on HOLD.

3.2 B.Sc. (General) Degree Academic Regulations

B.Sc. (General) – Three Year Degree

The three year General program is intended to provide diversified training in Science. The design of the program is such that a student is exposed to several areas of science at an introductory level together with a requirement for more advanced study in at least two Science areas. These requirements will ensure that a student's program of study will have elements of breadth and depth.

This program is not intended for students who desire to practise in some field of specialization in the Sciences. Students with that intent are recommended to pursue the Honours or the four year Major program. However, the three year General program is flexible enough in most departments to allow a student to choose courses that would facilitate transferring to the four year Major program should that become desirable.

B.Sc. General Academic Regulations

A student must complete 90 credit hours with passing grades ("D" or better) in each course. A student must obtain a minimum grade point average of 2.00 on the 90 credit hours which constitute the degree to qualify for the degree of Bachelor of Science (General).

Students may not exceed 36 credit hours of failures.

Introductory Level Science courses (24 credit hours): Students must select 6 credit hours from each of 3 areas listed below (18 credit hours) in Group A. Additionally, students must select 6 credit hours from any courses listed in Group A and/or Group B.

NOTE: No more than 6 credit hours may be selected from any single subject area for use toward the 24 credit hours of introductory course requirements.

Group A:

Astronomy: six credit hours chosen from **PHYS 1810, PHYS 1820, PHYS 1830**

Biology: **BIOL 1020 and BIOL 1030**

Chemistry: **CHEM 1300 and CHEM 1310**

Computer Science: **COMP 1010 (or COMP 1012²) and COMP 1020**

Mathematics: six credit hours chosen from:

- **MATH 1200 (or MATH 1210¹), MATH 1240,**
- 3 credit hours from **MATH 1220 or MATH 1300** (or equivalent),
- 3 credit hours from **MATH 1230 or MATH 1500** (or equivalent),
- 3 credit hours from **MATH 1232 or MATH 1700** (or equivalent).

Microbiology: **MBIO 1010 and MBIO 2020**

Physics: **PHYS 1020 or PHYS 1050; and PHYS 1030 or PHYS 1070**

Statistics: **STAT 1000 (or STAT 2220³) and STAT 2000**

Group B:

BIOL 1410, FORS 2000.

Notes:

1. **MATH 1210** is intended for Engineering students and may not be held for credit with **MATH 1200, MATH 1220 or MATH 1300.**
2. **COMP 1012** is intended for Engineering students and may not be held for credit with **COMP 1010.**
3. **STAT 2220** is intended for Engineering students and may not be held for credit with **STAT 1000**

Advanced Level Science Courses (36 credit hours): Effective for students entering Science September 2008 or later², to satisfy the advanced level requirements of the 3-year General Degree program, eighteen (18) credit hours at the 2000, 3000, and (or) 4000 level must be chosen from each of two of the following Science departments: Biological Sciences, Chemistry, Computer Science, Mathematics, Microbiology, Physics and Astronomy, and (or) Statistics.

Of the 36 credit hours (total) from the advanced areas of study, at least 6 credit hours must be chosen from 3000 or 4000 level courses. Students should note prerequisite requirements for upper level courses when planning their program. Appropriate courses and combinations of courses are detailed in each departmental section. Substitute courses from a department may be taken by obtaining written authorization from the chosen department.

Other Faculty Courses (12 credit hours): a minimum of 12 credit hours must be taken from outside the Faculty of Science, of which at least six credit hours must be from the Faculty of Arts. A maximum of 30 credit hours may be taken from outside the Faculty of Science for use in the General Degree program.

Elective Courses (18 credit hours): 18 credit hours of the B.Sc. General Degree are open electives.

Biological Sciences Option - Effective Fall Term 2009: Effective September 2009, students may elect to choose all 36 credit hours of advanced level course requirements from the Department of Biological Sciences (formerly Botany and Zoology) provided they follow the specified course selections prescribed in the Biological Sciences Focus Chart - B.Sc.General.

Chemistry Option - Effective Fall Term 2010: Effective September 2010 students may elect to choose a specific set of introductory courses, plus all 36 credit hours of the advanced level course requirements from the Department of Chemistry provided they follow the specified course selections (introductory and advanced levels) prescribed in Chemistry Focus Chart - B.Sc. General.

NOTES:

1. Students having difficulty with the interpretation of these regulations or the way in which they are applied, are urged to contact a Science Academic Advisor in the general office. Students are responsible for their own degree progress and completion.
2. Students admitted to the Faculty of Science prior to September 2008 should consult with a Science Academic Advisor about degree requirements.

B.Sc. General Degree Minimum Performance Requirements

Effective September 2013, each student in the Faculty of Science will be placed on academic suspension for one year, regardless if there has been evidence of improved performance, if they have more than 36 credit hours of "F" grades.

Following a one year suspension, the student may return upon application to the Faculty of Science by selecting one of the following irreversible options:

(a) to continue with no possibility of further "F" grades. Any further "F" grades will result in academic suspension for two years. (Following the two year suspension, the student may apply to the Faculty of Science to return to start afresh.)

Or

(b) start afresh, with their previous work not counting towards satisfying degree requirements. Students may appeal to transfer in up to 30 credit hours of coursework previously completed with a grade of "C" or better.

(In either case this does not mean that the previous coursework will be removed from the student history or transcript.)

B.Sc. General Degree Residence Requirements

There are two ways in which students may fulfill the minimum requirement of credit hours that must be taken at the University of Manitoba: by taking at least 48 credit hours at the University of Manitoba; or by taking at least the final 30 credit hours at the University of Manitoba. The courses used to satisfy the residence requirement must be acceptable for credit in the Faculty of Science. Residency requirements apply to both first and second degree students.

3.3 B.Sc. (Major) Degree Academic Regulations

B.Sc. (Major) – Four-Year Degree

The four year Major programs provide in-depth study and enable graduates to function competently in a career in their chosen subject area.

While this program is not intended for students pursuing graduate studies, most programs allow students to do so with a minimum of difficulty.

The four year Major program may be pursued on a part-time basis, although it must be recognized that under those conditions students would require more than four years to complete degree requirements.

B.Sc. (Major): Academic Regulations

To qualify for the degree Bachelor of Science (Major), a student must complete 120 credit hours or more, with minimum grades of "C" on Major Program Specific courses (as specified by the department), passing grades ("D" or better) on the remaining courses, and a minimum grade point average of 2.00 on the 120 credit hours which contribute to the degree.

Program Specific courses are those identified by the department as being core to the given degree. See the Calendar entry for these departments for clarification.

At least six credit hours must be taken from outside the Faculty of Science. As of the 1999-2000 regular session, students admitted to a Major program must complete six credit hours of courses from the Faculty of Arts. Students in the Major degree programs may take a maximum of 36 credit hours from outside the Faculty of Science.

B.Sc. (Major): Entrance Requirements

To enter a four year Major program, a student must normally have achieved a minimum grade of "C+" in at least one introductory course designated by the department(s). In addition, to enter a four year Major program a student shall normally have completed at least 30 credit hours, although a student may enter on the recommendation of the department with only 24 credit hours completed.

Any student who, prior to being admitted to a four year Major program that has completed more than 30 credit hours will be allowed to apply those excess credit hours which meet the specifications of the program to the four year Major program.

Students must attain a Degree Grade Point Average of at least 2.00 regardless of the point of entry, and must meet continuation requirements as outlined below.

B.Sc. (Major): Continuation Requirements

To continue in the program, a student must maintain a Degree Grade Point Average of 2.00 at each point of assessment. Students who do not meet this minimum will be required to withdraw from the Major program.

There is no minimum term course load requirement for the Major program.

Failed courses: Any student that exceeds 18 credit hours of failing grades after entering a Major program will be required to withdraw from that program. Students are also subject to the academic assessment policy found in 3.1 Regulations Applicable to all Students.

A student will be required to repeat those failed courses specified as required courses for the program; however, with the approval of the department the student may be allowed to substitute a new course for any elective course failed.

Program Approval: The department must approve a student's Major program prior to registration for courses in each session. Students must also obtain departmental approval for any and all revisions to their program.

Major students reverting to the General program must fulfil all academic requirements of that degree.

B.Sc. (Major): Residence Requirement

To satisfy the Faculty of Science residency requirements, a student must successfully complete at least 60 credit hours at the University of Manitoba. The courses used to satisfy the requirement must be acceptable for credit in the Faculty of Science. Residency requirements apply to both first and second degree students.

B.Sc. Double Major Programs

Students may wish to pursue a Double-Major program in the Faculty of Science. Consultation with, in addition to specific course selection and approval from, the departments involved must occur prior to the commencement of any Double-Major program. Students must also consult with a Faculty of Science Academic Advisor prior to the start of any Double-Major program.

3.4 B.Sc. (Major) Cooperative Option Academic Regulations

The Major programs that offer a Cooperative Option are: Biochemistry, Biological Sciences, Biotechnology, Chemistry, Computer Science, Genetics, Microbiology, and Statistics.

A cooperative education program is an arrangement whereby a student spends alternating periods in university and employment. There are several advantages to cooperative education programs for students. One benefit is that students are able to acquire both theoretical knowledge and practical experience. This experience assists them in selecting areas of specialization for their senior courses. During an employment period students can also typically earn enough to defray the cost of their university education. The contacts developed with potential employers are also valuable to graduating students.

All regulations governing regular Major programs apply to the Cooperative Option. In addition, the following variations apply:

Entrance

To enter the Cooperative Option a student must be eligible to enter the Major program offered by the department.

The normal point of entry to a Major Cooperative Option is following the completion of second year in the Faculty of Science.

Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Option in those departments where the demand for places exceeds the number of places available. In such situations the department reserves the right to determine and select the best qualified applicants.

Structure and Sequencing

The Cooperative Option consists of both academic terms and employment terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Major department.

Each employment term can be either four months in duration or eight months in duration, as designated by the Major department.

Each academic term and each employment term will commence in January, May or September.

The sequence of academic terms and employment terms is variable to suit the needs of each department, and is designated by each department.

Students are expected to follow the academic/employment term sequence defined by their department from admission through to graduation.

Employment Term Requirements

All Cooperative Options will include at least 12 months spent in employment terms with a department-approved employer. Normally, each employment term will be completed with one employer.

Students are required to register in the appropriate employment term course and pay the fee prior to starting their employment term. Cooperative Option students are required to submit three written employment reports on their employment term activities. These reports are due at times designated by the Major department. Each Major department will provide students with instructions regarding the content and format requirements of the employment reports.

Indications of unsatisfactory performance by a student on an employment term will be thoroughly investigated by the Major department. As a result of the investigation, if benefits from further professional training are questionable, the student may be required to withdraw from the Cooperative Option. The student would then be eligible to enter the regular four year Major program or the General program.

While on an employment term, a Cooperative Option student is not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

Academic Term Requirements

Coursework requirements of the Cooperative Option are equivalent to the coursework requirements of the four year Major program.

Cooperative Option students are expected (but are not required) to maintain a full-time course load while registered for an academic term. The “normal full load” per four-month term is three half courses (9 credit hours).

To continue in a four year Major Cooperative Option a student must attain a minimum Degree Grade Point Average of 2.00 at each point of assessment. Departments may designate courses within the four year Major Cooperative Option in which students are required to attain a grade above ‘C’. Continuation in a four year Major Cooperative Option is also contingent upon satisfactory performance in employment terms.

A student who does not meet the academic requirements for continuation in a four year Major Cooperative Option will be required to withdraw from it.

A student who receives failing grades in more than 18 credit hours following admission to the four year Major program will be required to withdraw from the Major program. Students are also subject to the academic assessment policy found in 3.1 Regulations Applicable to all Students.

Four year Major Cooperative Option students who are required to withdraw, or voluntarily revert to an alternative degree program must fulfil all academic requirements of that degree.

3.5 Honours Academic Regulations**B.Sc. (Honours) and B.C.Sc. (Honours) – Four Year Degrees**

The Honours programs in the Faculty of Science are the most heavily concentrated programs offered. These programs lead most directly to graduate study and are in most cases prescribed extensively by the departments. A student is required to pursue this degree full-time and may be required to achieve higher grade standards than in other degree programs. The programs are regarded as professional training.

Students graduating from the Honours program in Computer Science receive the degree designation Bachelor of Computer Science (Honours), also noted as B.C.Sc. (Honours).

A student electing an Honours program will normally begin Honours work in second year and must meet the entrance requirements set out below. Honours work will consist of three years of study in prescribed courses beyond the first year and will lead to the B.Sc. (Honours) or the B.C.Sc. (Honours).

Students must complete the university written English and Mathematics requirements as described in the chapter, General Academic Regulations and Policy, of this Calendar.

Students admitted to Honours programs must complete six credit hours from the Faculty of Arts. Because many Honours programs in the Faculty of Science do not have room for electives in Years 2, 3 and 4, these six credit hours, including the three credit hours of written English, should be completed in Year 1.

Honours Entrance Requirements

To enter an Honours degree program, a student must have completed at least 24 credit hours, have a minimum DGPA of 3.00, and a grade of “B” or better in at least one introductory course designated by the department(s).

Another way to gain entry to the many Faculty of Science Honours programs is through the Second Year Entry Route. If a student finds himself/herself ineligible to enter a desired Honours program following the completion of 24 or more credit hours, eligibility to enter Honours via the second year entry route can be established by taking a minimum of 18 credit hours over consecutive Fall and Winter Terms (formerly called a Regular Session) with a minimum of 9 credit hours in each term. The 18 credit hours chosen must be applicable to the program the student wishes to enter, and the student must achieve at least a “B” average on those 18 credit hours. If a student chooses to attempt more than 18 credit hours over the consecutive Fall and Winter terms, the best applicable 18 credit hours will be used to calculate whether or not the “B” average has been achieved for the purpose of assessing eligibility for entrance to the Honours program of choice. Note: Students wishing to enter an Honours program using the Second Year Entry Route must also have an overall DGPA of at least 3.00.

Program Approval: The department must approve a student’s Honours program prior to registration for each session. Students must also obtain departmental approval for any and all revisions to their program.

Honours Continuation Requirements

A minimum Degree Grade Point Average of 3.00 is required at each point of assessment. Certain departments may have more rigorous continuation requirements. Check the specific departmental section for further information.

Students must complete a minimum of 9 credit hours in each Fall and Winter Term (or equivalent for students in the Co-operative option) to remain in Good Academic standing in the Honours program. Students failing to do so will be required to withdraw from the Honours program and may be eligible to pursue the B. Sc. Major program or the B. Sc. General degree program.

Students who do not meet the minimum requirement will be required to withdraw from the Honours program.

Students who accumulate more than 15 credit hours of failed courses after entering the Honours degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the program. Students required to withdraw from the Honours program may be eligible to pursue the B. Sc. Major program or the B. Sc. General degree program. Students are also subject to the academic assessment policy found in 3.1 Regulations Applicable to all Students.

Honours Graduation Requirements

To qualify for the degree, Bachelor of Science (Honours), a student must complete a minimum of 120 credit hours or more with a minimum grade of C on all courses contributing to the 120 credit hours that satisfy the program requirements. Additionally, students must have a minimum degree grade point average of 3.00.

Honours Residence Requirement

A student must successfully complete a minimum of 60 credit hours at the University of Manitoba. The courses used to satisfy the requirement must be acceptable for credit in the Faculty of Science. Residency requirements apply to both first and second degree students.

Withdrawal from Honours

Honours students reverting to an alternate degree program must fulfil all academic requirements of that degree.

Double Honours Programs

Double Honours programs may be available as specified under departmental headings. Other programs may be arranged in consultation with the departments concerned.

3.6 Honours Cooperative Option Academic Regulations

The Honours programs offering a Cooperative Option are: Biochemistry, Biological Sciences, Biotechnology, Chemistry, Computer Science, Genetics, Microbiology, Statistics, Joint Computer Science - Mathematics, Joint Computer Science – Physics and Astronomy, and the Joint Computer Science – Statistics program.

A cooperative education program is an arrangement whereby a student spends alternating periods in university and employment. There are several advantages to cooperative education programs for students. One benefit is that students are able to acquire both theoretical knowledge and practical experience. This experience assists them in selecting areas of specialization for their senior courses. During an employment period students can also typically earn enough to defray the cost of their university education. The contacts developed with potential employers are also valuable to graduating students. The Honours Cooperative Option therefore offers valuable work experience and simultaneously ensures an academic program of Honours calibre.

All regulations governing regular Honours programs apply to the Cooperative Option. In addition, the following variations apply:

Entrance

To enter the Cooperative Option a student must be eligible to enter the Honours program offered by the department.

The normal point of entry to an Honours Cooperative Option is following the completion of second year in the Faculty of Science. Following that point of entry all requirements of the Cooperative Option must normally be completed in no more than four years (48 months).

Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Option in those departments where the demand for placements exceeds the number of places available. In such situations the department reserves the right to determine and select the best qualified applicants.

Structure and Sequencing

The Cooperative Option consists of both academic terms and employment terms.

Each academic term can be either four months in duration or eight months in duration, as designated by the Honours department.

Each employment term can be either four months in duration or eight months in duration, as designated by the Honours department.

Each academic term and each employment term will commence in January, May or September.

The sequence of academic terms and employment terms is variable to suit the needs of each department, and is designated by each department.

Students are expected to follow the academic/employment term sequence defined by their department from admission through to graduation.

Employment Term Requirements

All Cooperative Options will include at least 12 months spent in employment terms with a department-approved employer. Normally, each employment term will be completed with one employer.

Cooperative Option students are required to submit at least three written employment reports on their employment term activities. These reports are due at times designated by the Honours department. Each Honours department will provide students with instructions regarding the content and format requirements of the employment reports.

Indications of unsatisfactory performance by a student on an employment term will be thoroughly investigated by the Honours department. As a result of the investigation, if benefits from further professional training are questionable, the student may be required to withdraw from the Cooperative Option. The student would then be eligible to enter the regular Honours program, the four year Major program or the General program.

While on an employment term, a Cooperative Option student is not permitted to take more than six hours of academic credit, and may not take more than one course at a time.

Academic Term Requirements

Coursework requirements of the Cooperative Option are equivalent to the coursework requirements of the Honours program with the exception of the Biochemistry, Biotechnology, Genetics and Microbiology programs.

Cooperative Option students must maintain a full-time course load while registered for an academic term. The “normal full load” per four-month term is three half courses (9 credit hours).

To continue in an Honours Cooperative Option a student must attain a Degree Grade Point Average of 3.00 or higher at each point of assessment. A student’s performance will be evaluated following each academic term. In addition, the student must meet all individual course prerequisites for further study and departmental continuation and graduation requirements.

Students who accumulate more than 15 credit hours of failed courses after entering the Honours Co-op degree program (regardless of the origin of the grade or if the course has been repeated) will be required to withdraw from the program. Students required to withdraw from the Honours program may be eligible to pursue the B. Sc. Major program or the B. Sc. General degree program. Students are also subject to the academic assessment policy found in 3.1 Regulations Applicable to all Students.

Continuation in an Honours Cooperative Option is contingent upon satisfactory performance on Employment Terms.

Honours Cooperative Option students who are required to withdraw or voluntarily revert to an alternative degree program must fulfill all academic requirements of that degree.

3.7 Minors: Academic Regulations for Science Students

Students in B.Sc. Major and Honours programs may, if they wish, declare and complete a Minor from any department or interdisciplinary program at the University of Manitoba which offers a listed Minor. In the Faculty of Science Minors are listed in the program charts for each department and interdisciplinary program. Other available Minor requirements can be found within the appropriate sections of the departmental/school/faculty offerings. Completion of a Minor in a B.Sc. Major or Honours program is entirely optional. Students may not, however, declare both their Major and Minor from the same department/interdisciplinary program. It should be noted that for Honours students any consideration of completing a Minor should be made early on, due to restricted opportunities in later years of their programs. Completion of a Minor may require that a student take more than the minimum number of credit hours required for graduation. If they wish, students may choose to complete and declare multiple Minors in the four year Major and Honours degree programs.

The Minor is not available to students in the B.Sc. General Degree program.

A Minor will normally consist of a minimum of 18 credit hours specified by the department(s) offering the Minor. Courses required in a student’s specific Honours or Major degree program are acceptable for use in a chosen Minor, subject to the Faculty of Science regulation stating that students may not declare both their Major and Minor from the same department or interdisciplinary program.

Minors not offered by the Faculty of Science can be selected from the following list. For further information about courses required for the completion of a specific Minor, please refer to the section of the calendar that relates to the chosen area.

Animal Systems, Entomology, Food Science, Plant Biotechnology, Soil Science, Art History, Anthropology, Asian Studies, Canadian Studies, Catholic Studies, Central and East European Studies, Classics, Greek, Latin, Economics, English, Film Studies, Theatre, French, Spanish, Italian, German, Russian, Ukrainian, Polish, History, Icelandic, Labour Studies, Linguistics, Medieval Studies, Native Studies, Native Languages, Near Eastern and Judaic Studies, Philosophy, Political Studies, Psychology, Religion, Sociology, Ukrainian Canadian Heritage Studies, Women’s and Gender Studies, Geography, Geological Sciences, Physical Geography, Environmental Science, Environmental Studies, Human Nutrition and Metabolism, Family Social Sciences, Management*, and Music.

*Faculty of Management/Asper School of Business: For entry to the Minor, the prerequisite is a grade of “C” or better in the first 6 hours of Business courses. The Management Minor will consist of any 18 hours of credit in courses offered by the Asper School of Business. Enrolment in this program will be limited to 20 students annually. Students planning to enrol in this minor must consult a Faculty of Science Academic Advisor.

3.8 Dean’s Honour List, Degree with Distinction, First Class Honours**Dean’s Honour List (all programs)**

Students enrolled in 12 credit hours or more who achieve a Term Grade Point Average of 3.75 or higher will be placed on the Dean’s Honour List. The Dean’s Honour List will be calculated after each term.

Degree with Distinction (4-Year Major Degree and 3-Year General Degree)

To obtain a Degree with Distinction a student must achieve a final minimum Degree Grade Point Average of 3.80. The term “Degree with Distinction” will appear on the student’s parchment and the student’s transcript of marks.

First Class Honours (Honours Degree Only)

To graduate with First Class Honours the student must achieve a final minimum Degree Grade Point Average of 3.80. The term “First Class Honours” will appear on the student’s parchment and on the student’s transcript of marks.

3.9 Faculty of Science Academic Awards

Refer to the Faculty of Science Website for information regarding awards available to Faculty of Science Students:

<http://umanitoba.ca/faculties/science/about/awards.html>

To be eligible for any award granted exclusively on the basis of academic performance, a student must be enrolled in 100% of a full program as defined by the department.

3.10 Academic Advising

Contact Information

Science General Office: 239 Machray Hall

Telephone: (204) 474 8256

Toll-Free: 1 800 432 1960, extension 8256

E-mail: science_advisor@umanitoba.ca

Website: www.umanitoba.ca/science

Science Advisor Availability: umanitoba.ca/faculties/science/undergrad/resources/adviser_availability.html

Student Responsibility

You must ensure that you are selecting the correct courses that will enable you to satisfy your degree requirements. Specific degree requirements are listed in the program charts found in the departmental/program sections of this chapter. Final completion of specific degree requirements is the student's responsibility. Academic Advisors are available to answer any questions regarding a student's academic progress.

AURORA STUDENT will not check degree requirements. You are responsible for knowing the requirements of your degree. Consult with a Science Academic Advisor for advice and assistance if you are uncertain about your degree requirements.

AURORA Student will not prevent a student from registering in two (or more) courses that are designated as not to be held for credit with one another. It is the student's responsibility to ensure that they are not registered for courses that are ineligible to be held for credit with one another. Read the course descriptions carefully. If you are unsure about a course you have selected, check with a Science Academic Advisor prior to the revision deadline. No academic concessions will be granted in this regard.

You cannot add or change a course classification through AURORA STUDENT. Therefore, if you are an undergraduate student and wish to take a course as a Special Student in your degree, as an Auditor, or as a Challenge for Credit, you must add this course in person in the Science General Office within the normal deadlines for such activity.

General Degree Program

Students in the General program are not required to contact a Science Academic Advisor before registration; however, they are strongly advised to do so. A Science Academic Advisor can answer any questions about degree progress and entry to professional faculties that may affect registration.

Students reverting from a Major or Honours program to the General program must consult a Science Academic Advisor prior to registration, so that their university records may be changed.

Science Academic Advisors may check your degree progress periodically. These checks are completed after registration. Reminder: It is the student's responsibility to know and satisfy all degree requirements.

Honours, Major, and Cooperative Options

Honours students are required to register in a minimum of 9 credit hours during each Fall and Winter Term. Prior to declaring graduation, Honours, Major, and Co-op students are encouraged to have their programs checked by Science Academic Advisors on a regular basis. However, at the minimum, students must have their program checked and approved by a Science Academic Advisor prior to the start of the term they enter their program and again prior to the term they plan on completing their degree.

Students entering or changing a program must see a Science Academic Advisor so that eligibility can be checked and university records updated.

SECTION 4: PROGRAMS AND COURSES OFFERED BY THE FACULTY OF SCIENCE

Course Selection

The courses required to complete the specific Honours, Major, General and Minor programs in Science are listed in the program charts found below.

Not all courses included in the course description sections below are currently offered. The course schedule for the current academic year is available through [AURORA Student](#). Students should note that space in Honours and Major specific courses may be reserved for students in those programs.

All Honours and Major Degree Programs (4-year degrees) offered by the Faculty of Science satisfy the University "M" (Mathematics) requirement.

Students registered in the 3-Year General Degree programs are responsible for ensuring that they successfully complete a course that will satisfy the University's "M" (Mathematics) requirement.

Students in all programs are responsible for ensuring that they successfully complete a course that will satisfy the University's "W" (Written English) requirement.

For a complete listing of courses that satisfy the University's "W" and "M" requirements refer to appendix A of the General Academic Regulations and Requirements section of this Calendar.

In the Faculty of Science, unless otherwise noted, a minimum grade of "C" is required in any course listed as a prerequisite.

NOTE: Course prerequisites may be waived with written consent of the department

4.1 Actuarial Mathematics

Campus Address & General Office: 640 Drake Centre

Telephone: 204 474 6412

Email Address: jpai@ms.umanitoba.ca

Website: www.umanitoba.ca/actuarial

4.1.1 Program Information

This is an interdisciplinary program leading to a Bachelor of Science (Honours) degree in Actuarial Mathematics offered in collaboration with the Warren Centre for Actuarial Studies and Research of the I.H. Asper School of Business. The program covers mathematical, statistical, financial and economic concepts required to develop skills in the modelling and management of financial risk and contingent events. In the Faculty of Science the program has a greater emphasis on the mathematical and statistical courses than does the Actuarial Mathematics program offered by the I.H Asper School of Business.

The Warren Centre, with the department of Statistics, offers a joint Honours program (see Section 4.13.3).

To enter the program, a student must have completed a minimum of 24 credit hours with a minimum GPA of 3.00, and also obtained a minimum grade of "B" in one of the courses listed in Year 1 of the program chart. All of the courses listed in Year 1 of the program chart are program requirements and students are strongly urged to take them in the first year.

To continue in the Actuarial Mathematics Honours program, students must maintain a minimum DGPA of 3.00 and complete a minimum of 9 credit hours during each Fall and Winter Term.

To graduate with the B. Sc. Honours degree, a student must achieve a minimum DGPA of 3.00, a minimum grade of "C+" in each of the Honours Program Specific courses (see below), and a minimum grade of "C" on all remaining courses that contribute to the 120 credit hours of the degree.

Honours Program Specific Courses

Students must achieve a minimum grade of "C+" in each of the following for both prerequisite purposes and graduation requirements:

ACT 2020, ACT 2120, ACT 2210, ACT 3130, ACT 3230, ACT 3340, ACT 3630, ACT 4060, ACT 4160, ACT 4630

The following courses with a "B" or better may be used for Society of Actuaries (SoA) VEE credits: **ECON 1010, ECON 1020, FIN 2200, STAT 3470, and STAT 3490.** Contact the Warren Centre for Actuarial Studies and Research for further information.

4.1.2 Actuarial Mathematics Program Chart

YEAR 1	YEAR 2	YEAR 3	YEAR 4
HONOURS ACTUARIAL 120 CREDIT HOURS			
ECON 1010 ⁴ , ECON 1020 ⁴ MATH 1220 ¹ , MATH 1230 ¹ , MATH 1232 ¹ , MATH 1240 STAT 1000, STAT 2000	ACT 2020, ACT 2120, ACT 2210 STAT 2400, STAT 3400 ACC 1100 ² , FIN 2200 ^{2,4} , MATH 2720 GMGT 2010 ⁵	ACT 3630 (or both ACT 3130 and ACT 3230), ACT 3340, ACT 4630 ³ STAT 3050, STAT 3800	ACT 4060, ACT 4160 STAT 3470 ^{3,4} , STAT 3490 ^{3,4} MSCI 2150
6 credit hours of electives ²	3 credit hours of electives ²	9 credit hours of approved electives ⁶	15 credit hours of approved electives ⁶
30 Hours	30 Hours	30 Hours	30 Hours
JOINT STATISTICS - ACTUARIAL MATHEMATICS HONOURS: See Section 4.13.3			

NOTES:

¹ The following substitutions are allowed: MATH 1300 (C) or MATH 1310 in place of MATH 1220 (C), MATH 1500 (B) or MATH 1510 (B) in place of MATH 1230 (C), MATH 1700 (B) or MATH 1710 (B) in place of MATH 1232 (C).

² Students are strongly urged to complete ACC 1100 in Year 1 when possible. FIN 2200 may be taken in Year 2,3 or 4; however, it is strongly recommended that it be completed in Year 2. Note that ACC 1100 is a prerequisite for FIN 2200.

³ STAT 3470, STAT 3490 and ACT 4630 may be taken in Year 3 or 4.

⁴ These courses may be used for SoA VEE credits if a grade of B or better is achieved. Contact the Warren Centre for Actuarial Studies and Research for further information.

⁵ GMGT 2010 fulfills the written English requirement.

⁶ Recommended Electives

The electives in Year 3 and Year 4 are to be chosen from Actuarial Mathematics, approved Business courses, Computer Science, Economics, Mathematics (3000 or 4000 level) and Statistics (4000 level courses). Other electives may be selected through consultation with the program director.

Year 3: FIN 3270, FIN 3410, STAT 3480

Year 4: ACT 4000, STAT 4100, STAT 4200, STAT 4520, STAT 4530, STAT 4630.

4.2 Biochemistry

Head: Deborah Court-Department of Microbiology; Peter Budzelaar- Department of Chemistry

Campus Address & General Office: 418 Buller Building / 360 Parker Building

Telephone: 204 474 9372 / 204 474 9321

Email Address: dcourt@cc.umanitoba.ca and Chemistry_Dept@umanitoba.ca

Website: <http://umanitoba.ca/faculties/science/departments/microbiology/> OR <http://www.umanitoba.ca/chemistry>

4.2.1 Program Information

The program coordinators must approve a student's Honours or Major program each session. Students must also obtain approval for any and all revisions to their program.

Biochemistry Honours Degree Requirements

To enter the joint Honours program in Biochemistry, a student must have completed at least 24 credit hours with a minimum DGPA of 3.00 and also obtained a minimum grade of "B" in **CHEM 1310** and a minimum grade of "C+" in **BIOL 1020**. **BIOL 1030, PHYS 1020 (or PHYS 1050), PHYS 1030 (or PHYS 1070), MATH 1500 and MATH 1700** are required courses in the program and students are strongly encouraged to complete them in first year.

To continue in the Biochemistry Joint Honours program, students must maintain a minimum DGPA of 3.00, and complete a minimum of 9 credit hours during each Fall and Winter Term.

To graduate with the Biochemistry Joint Honours degree, a student must achieve a minimum GPA of 3.00 and obtain a minimum grade of "C" on the courses that make up the 120 credit hours of the degree.

Chemistry and Microbiology Option Courses for Biochemistry Honours Students:

CHEM: 2290, 3360, 3370, 3390, 3400, 3490, 3580, 3590, 4370, 4570, 4580, 4590, 4610 (6), 4640, 4650, 4670, 4680, 4690, 4710 (6)

MBIO: 3000, 3010, 3030, 3280, 3430, 3470, 4010, 4020, 4410, 4440, 4480, 4520, 4530, 4570, 4580, 4600, 4610, 4670 (or 4672)

Option courses no longer offered that may be used if taken prior to their deletion: **CHEM 3380, CHEM 4600, MBIO 2280, MBIO 3440, MBIO 3480, MBIO 4320, MBIO 4470, and MBIO 4510**. **NOTE:** Several of these courses may not be held with current course offerings found on the above option lists. Please refer to the calendar descriptions for more information about specific course restrictions.

Other options may be considered and approved by the program advisor.

Biochemistry Honours Cooperative Option

Students interested in alternating academic terms and terms of paid employment as part of their Honours Biochemistry program may enter the Cooperative Option in April of their second year. The five year program provides students with minimum 12 months of paid employment by the time they graduate. It enables them to obtain work experience in research and industry with participating firms, government agencies and University units.

The course and grade requirements for entry and continuation in the Cooperative Option are the same as that for regular Honours program. Each academic term in the third and subsequent years must comprise a minimum of nine (9) credit hours. Students are required to complete the first and second year requirements of the program and MBIO 3410 before they begin their first employment term. Students should refer to the general faculty regulations for B. Sc. (Honours) Cooperative Options in Section 3.6.

To graduate with the B. Sc. Honours (Cooperative Option) degree, a student must achieve a minimum GPA of 3.00 and a minimum grade of "C" on all courses that contribute to the 120 credit hours of the degree.

In addition to the program specific courses, in years 3 and 4 students will select 21 credit hours from the list of optional Microbiology and Chemistry courses found below. Additionally, students will select 12 credit hours of Science electives (see note 5).

Chemistry and Microbiology Option Courses for Biochemistry Honours Students:

CHEM: 2290, 3360, 3370, 3390, 3400, 3490, 3580, 3590, 4370, 4570, 4580, 4590, 4610 (6), 4640, 4650, 4670, 4680, 4690, 4710 (6)

MBIO: 3000, 3010, 3030, 3280, 3430, 3470, 4010, 4020, 4410, 4440, 4480, 4520, 4530, 4570, 4580, 4600, 4610, 4670 (or 4672)

Option courses no longer offered that may be used if taken prior to their deletion: **CHEM 3380, CHEM 4600, MBIO 2280, MBIO 3440, MBIO 3480, MBIO 4320, MBIO 4470, and MBIO 4510.** NOTE: Several of these courses may not be held with current course offerings found on the above option lists. Please refer to the calendar descriptions for more information about specific course restrictions.

Other options may be considered and approved by the program advisor.

Students must check with the Co-op office for the April application deadline information. Students will be notified of their provisional acceptance in the program by September. Acceptance into the program is dependent upon the student receiving an employment placement. Employment term positions available to the students will be approved by the department, and the employers will select the students they wish to employ. Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Option if the demand for places exceeds the number of places available. The department reserves the right to determine and select the best qualified applicants.

Students are required to register in and pay fees for each employment term prior to the commencement of each employment term. Students will be required to submit an employment report upon the completion of each employment term.

Biochemistry Four Year Major Degree Requirements

To enter the joint four year Major program, a student must have completed a minimum of 24 credit hours with a minimum GPA of 2.00, and also obtained a minimum grade of "C+" in **CHEM 1310**, and a minimum grade of "C" in **BIOL 1020**. **BIOL 1030, PHYS 1020 (or PHYS 1050), PHYS 1030 (or PHYS 1070), MATH 1500, and MATH 1700** are required courses in the program and students are strongly encouraged to complete these courses in first year.

To continue in the Bachelor of Science Major degree program, students must maintain a minimum GPA of 2.00.

To graduate with the Bachelor of Science Major in Biochemistry, a student must complete 120 credit hours or more, with minimum grades of "C" on all Major Program Specific courses (see below), passing grades ("D" or better) on the remaining courses, and a minimum grade point average of 2.00 on the 120 credit hours that contribute to the degree.

Major Program Specific Courses:

CHEM: 2210, 2220, 2280, 2360 (MBIO 2360), 2370 (MBIO 2370), 2400 (2380), 2470, 3570, 4630 and whichever one of 4620, 4360, 4370 is selected

MBIO: 1010, 2020, 3410, and whichever one of 3450, 3460 or 4540 is selected.

Students in this program should note the following:

Students must satisfy any course prerequisites and corequisites for courses selected. Care should be taken to select courses in their proper sequence, e.g. **CHEM 2370 (MBIO 2370) and MBIO 2020** should be taken in Year 2 as they are prerequisite to a number of subsequent required or optional courses.

Normally 4000 level courses are available only to students in their fourth year. **MBIO 4530 and MBIO 4672** are not available to Major students.

Students are encouraged to elect other courses pertinent to the study of biochemistry although this is not required for completion of the degree. The departments of Microbiology and Chemistry will be glad to suggest such supplementary courses upon request.

Students who may wish to transfer to the Honours program in Biochemistry following Year 2 should be sure to complete all courses recommended in Year 2 (see chart below).

Biochemistry Major Cooperative Option

Students interested in alternating academic terms and terms of paid employment as part of their program may enter the Biochemistry Major Cooperative Option in April of their second year. The five year program provides students with a minimum 12 months of paid employment by the time they graduate. It enables them to obtain work experience in research and industry with participating firms, government agencies and University units.

The course and grade requirements for entry and continuation in the Cooperative Option are the same as those required for the regular Major program. Students are encouraged, but not required, to take 15 credit hours in each academic term in the third and subsequent years. Students are required to complete the first and second year requirements of the program and **MBIO 3410** before they begin their first employment term. Students should refer to the general faculty regulations for B. Sc. (Major) Cooperative Options in Section 3.4.

To graduate with the degree Bachelor of Science Major (Cooperative Option), a student must complete the equivalent of 120 credit hours or more, with minimum grades of "C" on Major Program Specific courses (see below), passing grades ("D" or better) on the remaining courses, and a minimum grade point average of 2.00 on the 120 credit hours that contribute to the degree.

ACADEMIC CALENDAR 2015-2016

Major Program Specific Courses

CHEM 2210, 2220, 2280, 2360 (MBIO 2360), 2370 (MBIO 2370), 2400 (2380), 2470, 3570, 4630 and whichever of **4620, 4360, 4370** is selected
MBIO 1010, 2020, 3410, and whichever one of 3450, 3460 or 4540 selected.

Students must check with the Co-op office for the April application deadline information. Students will be notified of their provisional acceptance in the program by September. Acceptance into the program is dependent upon the student receiving an employment placement. Employment term positions available to the students will be approved by the department and the employers will select the students they wish to employ. Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Option if the demand for places exceeds the number of places available. The department reserves the right to determine and select the best qualified applicants.

Students are required to register in and pay fees for each employment term prior to the commencement of each employment term. Students will be required to submit an employment report upon the completion of each employment term.

4.2.2 Biochemistry Programs

4.2.2 Biochemistry Programs (offered jointly by the Departments of Chemistry and Microbiology)			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
JOINT HONOURS 120 CREDIT HOURS			
CHEM 1300, CHEM 1310 BIOL 1020, BIOL 1030 PHYS 1050 (or PHYS 1020), PHYS 1070 (or PHYS 1030) MATH 1500 ¹ , MATH 1700 ¹	CHEM 2210, CHEM 2220, CHEM 2280, CHEM 2360, CHEM 2370, CHEM 2400, CHEM 2470 MBIO 1010, MBIO 2020	CHEM 3570 MBIO 3410, MBIO 3450, MBIO 3460	CHEM 4360, CHEM 4620, CHEM 4630, CHEM 4700 MBIO 4540
In Year 1 or Year 2 the following must be completed: 6 credit hours from the Faculty of Arts including the University Written English "W" requirement ² 3 credit hours chosen from COMP, MATH, or STAT ⁵		21 credit hours selected from the list of Microbiology and Chemistry optional courses (listed above). 12 credit hours selected from the Faculty of Science ⁵	
30 Hours	30 Hours	30 Hours	30 Hours
JOINT HONOURS COOPERATIVE OPTION³ 120 CREDIT HOURS			
CHEM 1300, CHEM 1310 BIOL 1020, BIOL 1030 PHYS 1050 (or PHYS 1020), PHYS 1070 (or PHYS 1030) MATH 1500 ¹ , MATH 1700 ¹	CHEM 2210, CHEM 2220, CHEM 2280, CHEM 2360, CHEM 2370, CHEM 2400, CHEM 2470 MBIO 1010, MBIO 2020	CHEM 3570 MBIO 3410, MBIO 3450, MBIO 3460	CHEM 4360, CHEM 4620, CHEM 4630 MBIO 4540
In Year 1 or Year 2 the following must be completed: 6 credit hours from the Faculty of Arts including the University Written English "W" requirement ² 3 credit hours chosen from COMP, MATH, or STAT ⁵		24 credit hours selected from the list of Microbiology and Chemistry Optional courses listed above. 12 credit hours selected from the Faculty of Science ⁵ Work Terms: MBIO 3980, MBIO 3990, MBIO 4980 and/or MBIO 4990	
30 Hours	30 Hours	30 Hours	30 Hours
JOINT FOUR YEAR MAJOR (Including Cooperative Option)^{3,4} 120 CREDIT HOURS			
CHEM 1300, CHEM 1310 BIOL 1020, BIOL 1030 PHYS 1050 (or PHYS 1020), PHYS 1070 (or PHYS 1030) MATH 1500 ¹ , MATH 1700 ¹	CHEM 2210, CHEM 2220, CHEM 2280, CHEM 2360, CHEM 2370, CHEM 2400, CHEM 2470 MBIO 1010, MBIO 2020	CHEM 3570 MBIO 3410 One of: MBIO 3450, MBIO 3460, MBIO 4540	CHEM 4630 One of: CHEM 4620, CHEM 4360, CHEM 4370

<p>In Year 1 or Year 2 the following must be completed:</p> <p>6 credit hours from the Faculty of Arts including the University Written English "W" requirement²</p> <p>3 credit hours chosen from COMP, MATH, or STAT⁵</p>	<p>24 credit hours of Microbiology and Chemistry (minimum 6 credit hours from each dept.). Of these 24 credit hours, at least 12 hours must be 4000 level courses.</p> <p>21 credit hours of approved electives⁵</p> <p>Work Terms (if Co-op Selected):</p> <p>MBIO 3980, MBIO 3990, MBIO 4980 and / or MBIO 4990</p>
<p>NOTES:</p> <p>¹ MATH 1230 or MATH 1510 or MATH 1520 may be taken in place of MATH 1500; MATH 1232 or MATH 1710 may be taken in place of MATH 1700; MATH 1690 may be taken in place of MATH 1500 and MATH 1700.</p> <p>² As there are no open electives in Year 2 of the program, students should complete the university written English requirement in Year 1. If not completed in Year 1, a "W" course must be completed prior to Year 3 in addition to the required Year 2 courses.</p> <p>³ IMPORTANT: Students in the cooperative programs must ensure that they are able to satisfy the prerequisites for all 3000 and 4000 level courses they plan to take.</p> <p>⁴ The four year Major program need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.</p> <p>⁵ MATH 1010, MATH 1020, MATH 1190, COMP 1260, COMP 1270 may not be chosen to satisfy this requirement</p> <p>(Letters in brackets indicate minimum prerequisite standing for further study.)</p>	

4.3 Department of Biological Sciences

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4.3.1 Biological Sciences

Biology is one of the most rapidly evolving and diverse sciences in the modern world, exploring all aspects of life from biomolecules to ecosystems. The Department of Biological Sciences is committed to advancing our understanding of biological structure and function, and developing new tools and technologies to address current and emerging problems facing all living organisms. Connections will be forged between molecules, cells, tissues, organs, organisms, populations, communities, and ecosystems, highlighting the need to explore all levels of biological interactions. Programs emphasize the organism as the key element in studies of the development and evolution of form and function, and the role in adaptations to the environment. Based on a core of fundamental biological principles, our programs explore diverse areas such as organismal biology, environmental biology, genetics, cell biology and development, physiology, ecology, behaviour, and systematics and evolution. The Department focuses on the integration of research and teaching expertise to create opportunities for growth and novel synergisms in the training of future leaders in the field.

4.3.2 B.Sc. Honours: Biological Sciences

The Honours program is designed for students planning a professional career in Biological Sciences at the graduate level. Such students are strongly advised to enter the Honours program at the beginning of second year.

Appropriate courses will be arranged in consultation with the Theme Advisor who may be contacted through the Biological Sciences Office (212 Biological Sciences Building). Students must select a specific theme area of study as part of their Biological Sciences program. See the information below outlining the different theme areas offered by the Department of Biological Sciences.

To enter the Biological Sciences Honours program a student must have completed at least 24 credit hours with a minimum GPA of 3.00, and obtained a minimum grade of "B" in **BIOL 1030, CHEM 1300, CHEM 1310, STAT 1000** and the 3 credit hours of specified Mathematics, Physics or Statistics are program requirements and students are strongly urged to complete these courses in first year.

To continue in the Biological Sciences Honours program, students must maintain a minimum GPA of 3.00, and complete a minimum of 9 credit hours during each Fall and Winter Term.

To graduate with the B. Sc. Honours degree, a student must achieve a minimum GPA of 3.00, and obtain a minimum grade of "C" on the courses that make up the 120 credit hours of the degree.

Four Year Honours Cooperative Option

Students interested in alternating academic terms and work terms of paid employment as part of their Honours Biological Sciences program may apply to enter the Cooperative Option in April of their second year in Honours Biological Sciences. This program provides students with 12 months of paid employment by the time they graduate. It enables them to obtain work experience with participating firms, government agencies and University units.

There are several themes offered within the Biological Sciences Program and the Cooperative Option can be completed within any of these areas of study. See below for a description of the different themes and the course requirements of those themes offered by the Department of Biological Sciences.

Students may apply for openings in the Biological Sciences Honours Cooperative Option after completing at least two years (60 credit hours) in the Honours program, usually in April of their second year. Before the first employment term begins, the prerequisite courses listed below must be completed. Acceptance and continuation in the program is dependent upon the student receiving employment placements. Students are encouraged to check with the Co-op office (214 Buller Building) for application deadlines.

Prerequisite courses to be completed before employment terms begin: **BIOL 1020, BIOL 1030, CHEM 1300, CHEM 1310, STAT 1000**, 3 credit hours of specified Mathematics or Physics, **BIOL 2300, BIOL 2500, BIOL 2520 and BIOL 3100***. In addition, students must complete 9 credit hours from program core courses as follows: students must select one course from Group A (**BIOL 2200, BIOL 2210**), plus one course from Group B (**BIOL 2240, BIOL 2242, BIOL 2260**), plus one additional course from either Group A or Group B. [*A Pre-Coop Workshop may be substituted for **BIOL 3100** only to permit an employment term in September of Year 3, but **BIOL 3100** must still be taken.]

Students should note that the course and grade requirements for the Biological Sciences Honours Cooperative Option are the same as those for the regular Honours program, with the addition of the Work Term courses (see above). To continue in the Biological Sciences Honours Cooperative program a student must maintain a minimum DGPA of 3.00, and successfully complete all work term courses.

Students should refer to the general faculty regulations for B. Sc. (Honours) Cooperative Options in Section 3.6.

Work term positions available to the students will be approved by the department and may include positions within Biological Sciences, other University departments or positions with employers outside the University. Employers will select the students they wish to employ. The first employment term will preferably be taken in January or May of the third year, but may under exceptional circumstances begin in the preceding September. Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Option if the demand for places exceeds the number of places available. The department reserves the right to determine and select the best qualified applicants.

The program will include three employment terms, each of 4-months duration, two of which may be consecutive. A fourth work term is optional. Students are required to register in and pay tuition for each employment term prior to its commencement. Students will be required to submit an employment report upon the completion of each employment term. In order to stay in the Cooperative program, a student must obtain a grade of "pass" for each work term report.

4.3.3 B.Sc. (Major): Biological Sciences

The four year Major program is also designed for students planning a professional career in the Biological Sciences, but who may not be considering graduate training. It will provide intensive training in all areas of Biology comparable to that of the Honours program, but has less demanding performance requirements. Additionally, students may complete the Major degree requirements on a part-time basis if they so choose. Students who so wish, and have appropriate standing and course selection, may transfer to the Honours program at any time up to the commencement of Year 4.

Appropriate courses will be arranged in consultation with the Theme Advisor who may be contacted through the Biological Sciences Office, 212 Biological Sciences Building. Students must select a specific theme area of study as part of their Biological Sciences program. See the information below outlining the different theme areas offered by the Department of Biological Sciences.

Course **BIOL 4100** is not available to students in this program.

To enter the Biological Sciences four year Major program a student must have completed a minimum of 24 credit hours with a minimum DGPA of 2.00, and obtained a minimum grade of "C+" in **BIOL 1030, CHEM 1300, CHEM 1310, STAT 1000** and the 3 credit hours of specified Mathematics, Physics or Statistics are program requirements and students are strongly encouraged to complete these courses in first year.

To continue in the Bachelor of Science Major degree, a student must maintain a minimum DGPA of 2.00.

To graduate with the Bachelor of Science (Major) in Biological Sciences, a student must obtain a minimum GPA of 2.00 on the 120 credit hours that contribute to the degree, and a minimum grade of "C" or better in all required courses and required option courses.

Four Year Major Cooperative Option

Students interested in alternating academic terms and work terms as part of their Major Biological Sciences program may apply to enter the Cooperative Option in April of their second year in the Biological Sciences Major. This program provides students with 12 months of paid employment by the time they graduate. It enables them to obtain work experience with participating firms, government agencies and University units.

Students may apply for openings in the Biological Sciences Major Cooperative Option after completing at least two years (60 credit hours) in the Major program, usually in April of their second year. Before the first employment term begins, the prerequisite courses listed below must be completed. Acceptance and continuation in the program is dependent upon the student receiving employment placements. Students are encouraged to check application deadlines with the Co-op program office (214 Buller Building).

Prerequisite courses to be completed before employment terms begin: **BIOL 1020, BIOL 1030, CHEM 1300, CHEM 1310, STAT 1000**, 3 credit hours of specified Mathematics or Physics, **BIOL 2300, BIOL 2500, and BIOL 2520**. In addition, students must complete 9 credit hours from program core courses as follows: students must select one course from Group A (**BIOL 2200, BIOL 2210**), plus one course from Group B (**BIOL 2240, BIOL 2242, BIOL 2260**), plus one additional course from either Group A or Group B.

Students should note that the course and grade requirements for the Biological Sciences Major Cooperative Option are the same as those for the regular Major program (see above), with the addition of the Work Term courses. To continue in the Biological Sciences Major Cooperative program, a student must have a Cumulative Grade Point Average of 2.00, and a pass on all work term courses.

Students should also refer to the general faculty regulations for B. Sc. (Major) Cooperative Options in Section 3.4.

Work term positions available to the students will be approved by the department and may include positions within Biological Sciences, other University departments or positions with employers outside the University. Employers will select the students they wish to employ. The first employment term will preferably be taken in January or May of the third year, but may under exceptional circumstances begin in the preceding September. Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Option if the demand for places exceeds the number of places available. The department reserves the right to determine and select the best qualified applicants.

The program will include three employment terms, each of 4-months duration, two of which may be consecutive. A fourth work term is optional. Students are required to register in and pay fees for each employment term prior to its commencement. Students will be required to submit an employment report upon the completion of each employment term. In order to stay in the Cooperative program, a student must obtain a grade of "pass" for each work term report.

4.3.4 Biological Sciences Theme Areas

I. Cell, Molecular and Developmental Biology: Students in the Department of Biological Sciences with an interest in the exciting field of cell and developmental biology can select the Cell, Molecular, and Developmental Biology theme for focus. This theme will provide students a selection of courses that highlight fundamental principles and many important advances in this rapidly growing area of contemporary biology. Students can concentrate on aspects that deal with the molecular structures and processes of cellular life and their roles in the function, reproduction, and development of living organisms. The theme is structured such that students can choose from a broad range of disciplines, including biochemistry, molecular biology, morphology, genetics, cell biology, and developmental biology. The organisms under study in this theme are equally diverse, ranging from microbes through to invertebrates, vertebrates, plants, and fungi. The Department collaborates with many other life sciences departments and this theme allows student to develop a highly flexibly course portfolio that includes courses from the Departments of Biological Sciences, Chemistry, Microbiology, or Plant Science.

Specific courses required for the Cell, Molecular, and Developmental Biology Theme in addition to the core course requirements: **BIOL 3542 (3)**; Plus a minimum of 6 Credit hours of Biochemistry: **CHEM 2770 (MBIO 2770) and CHEM 2780 (MBIO 2780); or CHEM 2210 and CHEM 2360 (MBIO 2360) and CHEM 2370 (MBIO 2370)**.

II. Ecology and Environmental Biology: Ecology is the study of interactions between organisms and their environment, both in natural settings and human-influenced habitats. In our society ecology and environmental biology provides a scientific link to the living world. Ecologists study the lives of many organisms including animals, plants, fungi, protists, and bacteria. Interactions among these organisms are investigated at many scales ranging from the microscopic to the global. At the individual level, ecology investigates the impact of environmental factors on organisms through their physiology and behaviour. Ultimately, ecologists link these factors to survival and reproduction in variable environments. At the population level, ecology examines the causes of fluctuations in numbers and changes in distribution of a single species. This work is often the focus of agencies concerned with exploitation, extinction, and rehabilitation of both commercially and esthetically important species. At the community and ecosystem level, ecology considers many coexisting species. It examines the interactions between species within the communities (competition, predation, parasitism, mutualism, etc.) as well as broader investigations of community structure and composition. Ultimately, the skills developed within this theme prepare students for future careers in academia, government agencies, private consulting companies, or NGOs whose mandates encompass ecological and environmental concerns.

Specific courses required for the Ecology and Environmental Biology Theme in addition to the core course requirements: **BIOL 3310 (3); BIOL 3312 (3); BIOL 3314 (3); STAT 2000 (3)**.

III. Environmental and Integrative Physiology: The Environmental and Integrative Physiology theme will be of interest to a wide array of students interested in pursuing employment opportunities in the Environmental, Consulting, Pharmaceutical, Healthcare, and Professional job markets. Based on the suggested courses and sub themes within this program students will be able to graduate with an all inclusive degree or specialize in particular disciplines ranging from molecular physiology to whole organism physiology and eco/environmental physiology, a subject area that is at the interface between ecology and physiology. Students will be exposed to modern research techniques in lab classes and will be taught by instructors and faculty with active research programs within the Department of Biological Sciences.

Specific courses required for the Environmental and Integrative Physiology Theme in addition to the core course requirements: 6 Credit hours of Biochemistry **CHEM 2770 (MBIO 2770) and CHEM 2780 (MBIO 2780); or CHEM 2210 and CHEM 2360 (MBIO 2360) and CHEM 2370 (MBIO 2370)**; Plus: two of the following courses (one of which is already required in the four-year Biological Sciences Degree programs): **BIOL 3470 (3), BIOL 3472 (3), BIOL 3400 (the former BIOL 3450) (3), BIOL 3452 (3)**.

IV. Evolution and Biodiversity: Evolution is broadly defined as "descent with modification" and is the process that generates the earth's biodiversity. The theory of evolution provides a unifying framework for biology because all organisms are descended from a common ancestor. As a result, evolutionary principles permeate research and teaching throughout biology.

Evolutionary biology addresses two overarching questions. (1) What was the history of life? (2) What processes account for adaptation and diversification? Systematics reconstructs the history of life by studying relationships among species, and involves comparisons of physical appearance, devel-

opment, biochemistry, genetics, behaviour, ecology and biogeography. Evolutionary Genetics investigates how processes such as natural selection, mutation, and migration interact to cause evolutionary change within populations. Evolutionary history, genetics, and ecological context are required to fully understand the evolution of traits, for example body size, wing shape or leaf structure. Thus evolution integrates knowledge from a wide spectrum of sub-disciplines within biology.

Evolutionary biology has wide-ranging practical applications. Principles of evolution are required to understand: the evolution of pathogens such as HIV and avian influenza; domestication of wild species and consequences of genetic modifications; the identification of natural products; long-term responses to environmental change; and human biology. Courses from this theme will prepare students for academia, medicine, and government agencies or NGO's that emphasize the cataloguing and conservation of biological diversity.

Specific courses required for the Evolution and Biodiversity Theme in addition to the core course requirements:

List A: One of the following: **BIOL 3360, BIOL 4300, BIOL 4362**

List B: One of the following: **BIOL 3200, BIOL 3242, BIOL 3250, BIOL 3270, BIOL 4212, BIOL 4214, BIOL 4216, BIOL 4218.**

V.Integrative Biology: The Integrative Biology theme will be of interest to students planning to pursue careers in the various biology sub disciplines and who wish an undergraduate degree that is "interdisciplinary" within the life science departments that cuts across the traditional boundaries. This program will suit students who are interested in the "after degree" program in Education or who are intending to apply to a professional program (e.g. Medicine, Dentistry, Pharmacy, Medical Rehabilitation) and who would like a broad background in the Life Sciences. With the appropriate choice of Biological Science courses it would be possible to indicate the Integrative Biology theme along with a second theme from the department.

Specific courses required for the Integrative Biology Theme in addition to the core course requirements: All five of the following (three of which are already designated as core courses in the four-year Biological Sciences Degree programs): **BIOL 2200 (3), BIOL 2210 (3), BIOL 2240 (3), BIOL 2242 (3), MBIO 1010 (3)**; One of the following (one of which is already required in the four-year Biological Sciences Degree programs): **BIOL 3400 (the former BIOL 3450) (3), BIOL 3470 or BIOL 3172**; Plus: 24 credit hours in Biological Sciences (3000/4000 level courses) and 6 credit hours in Microbiology (3000/4000 level courses).

4.3.5 B. Sc. General Degree: Biological Sciences

Courses taken as part of a General degree program provide an introduction to the major fields of study in the Biological Sciences. Commencing in Fall Term 2009, students will have two options for the General Degree under the Department of Biological Sciences.

Option A: 18 credit hours of 2000, 3000, and (or) 4000 level Biological Sciences courses (subject to the Faculty requirement that of the 36 credit hours in the two chosen advanced level Science areas, at least 6 credit hours must be at the 3000/4000 level);

Option B: Students may choose 36 credit hours from the Biological Sciences provided they select the following courses: each of BIOL 2300, BIOL 2500, BIOL 2520; one of BIOL 2200 or BIOL 2210; one of BIOL 2240, BIOL 2242, or BIOL 2260; plus 21 additional credit hours (2000 level or higher) from the Biological Sciences including at least a minimum of 6 credit hours at the 3000 or 4000 level.

Students anticipating a transfer to either the four year Major or Honours program at the end of their second or third year should consult with the Departmental Program Advisor before registering.

4.3.6.1 Biological Science - Cell, Molecular and Developmental Biology Theme Charts

4.3.6.1 Biological Sciences – Program Charts

YEAR 1	YEAR 2	YEAR 3	YEAR 4
HONOURS: Cell, Molecular and Developmental Biology Theme (incl. Co-op) 120 CREDIT HOURS (Courses listed in chart below and electives)			
BIOL 1020, BIOL 1030 CHEM 1300, CHEM 1310 STAT 1000	BIOL 2300, BIOL 2500, BIOL 2520 Choose one course from each of: Group A: BIOL 2200, BIOL 2210 Group B: BIOL 2240, BIOL 2242, BIOL 2260 One additional course from either Group A or Group B Either both of CHEM 2770 and CHEM 2780; or all three of CHEM 2210, CHEM 2360, and CHEM 2370 (theme courses)	BIOL 3100, BIOL 3300 BIOL 3542 ⁴ (theme course) Choose one of the following: BIOL 3400 (the former BIOL 3450), BIOL 3470, BIOL 3472	BIOL 4100 (6)
In Year 1 or Year 2 the following must be completed: 3 credit hours of Mathematics or Physics chosen from: MATH 1200 ¹ , MATH 1300 ¹ , MATH 1500 ¹ , PHYS 1020 or PHYS 1050 6 credit hours from the Faculty of Arts, including a required "W" course		Work Terms (if Co-op Selected): BIOL 3980, BIOL 3990	Work Terms (if Co-op Selected): BIOL 4980, BIOL 4990 (if necessary)
30 Hours	30 Hours	30 Hours	30 Hours

YEAR 1	YEAR 2	YEAR 3	YEAR 4
4-YEAR MAJOR: Cell, Molecular and Developmental Biology Theme (incl. Co-op) ² 120 CREDIT HOURS (Courses listed in chart below and electives)			
BIOL 1020, BIOL 1030 CHEM 1300, CHEM 1310 STAT 1000	BIOL 2300, BIOL 2500, BIOL 2520 Choose one course from each of: Group A: BIOL 2200, BIOL 2210 Group B: BIOL 2240, BIOL 2242, BIOL 2260 One additional course from either Group A or Group B Either both of CHEM 2770 and CHEM 2780; or all three of CHEM 2210, CHEM 2360, and CHEM 2370 (theme courses)	BIOL 3300 BIOL 3542 ⁴ (theme course) Choose one of the following: BIOL 3400 (the former BIOL 3450), BIOL 3470, BIOL 3472 30 credit hours of 3000 or 4000 level Biology courses ³ (courses from outside Biology may be approved by the theme advisor). Enough elective credit hours required to total 120 credit hours for the program.	
In Year 1 or Year 2 the following must be completed: 3 credit hours of Mathematics or Physics chosen from: MATH 1200 ¹ , MATH 1300 ¹ , MATH 1500 ¹ , PHYS 1020 or PHYS 1050 6 credit hours from the Faculty of Arts, including a required "W" course		Cooperative Option Requirements (if selected): BIOL 3980, BIOL 3990	Cooperative Option Requirements (if selected): BIOL 4980, BIOL 4990 (if necessary)
30 Hours	30 Hours	30 Hours	30 Hours

NOTES:

1. MATH 1230, MATH 1510, MATH 1520, or MATH 1690 may be taken in place of MATH 1500; MATH 1220 or MATH 1310 may be taken in place of MATH 1300; MATH 1240 may be taken in place of MATH 1200.
2. IMPORTANT: The programs need not be completed in the manner prescribed in the chart above. The charts indicate one possible arrangement of the 120 credit hours that make up the degree and are meant to be a guide around which students can plan their programs with a view to satisfying the prerequisites of the required courses. These 120 credit hours are a combination of the courses outlined in the charts above and elective courses chosen by the student in consultation with the program advisors.
3. Courses from other departments or faculties may be acceptable for use towards the 30 credit hours of 3000/4000 level Biological Sciences courses required in the Honours and Major Degree programs. Please consult with the department for permission to use alternate courses.
4. The former BIOL 2540 may be used in place of BIOL 3542.
(The number 6 in brackets indicates a six credit hour course.)

4.3.6.2 Biological Sciences - Ecology and Environmental Biology Theme Charts

4.3.6.2 Biological Sciences – Program Charts

HONOURS: Ecology and Environmental Biology Theme (incl. Co-operative Option) 120 CREDIT HOURS			
BIOL 1020, BIOL 1030 CHEM 1300, CHEM 1310 STAT 1000, STAT 2000 (theme course)	BIOL 2300, BIOL 2500, BIOL 2520 Choose one course from each of: Group A: BIOL 2200, BIOL 2210 Group B: BIOL 2240, BIOL 2242, BIOL 2260 One additional course from either Group A or Group B	BIOL 3100, BIOL 3300 BIOL 3310, BIOL 3312, BIOL 3314 (theme courses) Choose one of the following: BIOL 3400 (the former BIOL 3450), BIOL 3470, BIOL 3472	BIOL 4100 (6)
In Year 1 or Year 2 the following must be completed: 3 credit hours of Mathematics or Physics chosen from: MATH 1200 ¹ , MATH 1300 ¹ , MATH 1500 ¹ , PHYS 1020 or PHYS 1050 6 credit hours from the Faculty of Arts, including a required "W" course 15 credit hours of approved electives		Work Terms (if Co-op Selected): BIOL 3980, BIOL 3990	Work Terms (if Co-op Selected): BIOL 4980, BIOL 4990 (if necessary)
30 Hours	30 Hours	30 Hours	30 Hours

YEAR 1	YEAR 2	YEAR 3	YEAR 4
4-YEAR MAJOR: Ecology and Environmental Biology Theme (incl. Co-op)² 120 CREDIT HOURS (Courses listed in chart below and electives)			
BIOL 1020, BIOL 1030 CHEM 1300, CHEM 1310 STAT 1000, STAT 2000 (theme course)	BIOL 2300, BIOL 2500, BIOL 2520 Choose one course from each of: Group A: BIOL 2200, BIOL 2210 Group B: BIOL 2240, BIOL 2242, BIOL 2260 One additional course from either Group A or Group B	BIOL 3300 BIOL 3310, BIOL 3312, BIOL 3314 (theme courses). Choose one of the following: BIOL 3400 (the former BIOL 3450), BIOL 3470, BIOL 3472 21 credit hours of 3000 or 4000 level Biology courses ³ (courses from outside Biology may be approved by the theme advisor). Enough elective credit hours required to total 120 credit hours for the program.	
In Year 1 or Year 2 the following must be completed: 3 credit hours of Mathematics or Physics chosen from: MATH 1200 ¹ , MATH 1300 ¹ , MATH 1500 ¹ , PHYS 1020 or PHYS 1050 6 credit hours from the Faculty of Arts, including a required "W" course		Cooperative Option Requirements (if selected): BIOL 3980, BIOL 3990	Cooperative Option Requirements (if selected): BIOL 4980, BIOL 4990 (if necessary)
30 Hours	30 Hours	30 Hours	30 Hour

NOTES:

1. **MATH 1230, MATH 1510, MATH 1520, or MATH 1690** may be taken in place of **MATH 1500**; **MATH 1220 or MATH 1310** may be taken in place of **MATH 1300**; **MATH 1240** may be taken in place of **MATH 1200**.

2. IMPORTANT: The programs need not be completed in the manner prescribed in the chart above. The charts indicate one possible arrangement of the 120 credit hours that make up the degree and are meant to be a guide around which students can plan their programs with a view to satisfying the prerequisites of the required courses. These 120 credit hours are a combination of the courses outlined in the charts above and elective courses chosen by the student in consultation with the program advisors.

3. Courses from other departments or faculties may be acceptable for use towards the 21 credit hours of 3000/4000 level Biological Sciences courses required in the Honours and Major Degree programs. Please consult with the department for permission to use alternate courses.

(The number 6 in brackets indicates a six credit hour course.)

4.3.6.3 Biological Sciences - Environmental and Integrative Physiology Theme Charts

4.3.6.3 Biological Sciences – Program Charts

HONOURS: Environmental and Integrative Physiology Theme (incl. Co-op) 120 CREDIT HOURS (Courses listed in chart below and electives)			
BIOL 1020, BIOL 1030 CHEM 1300, CHEM 1310 STAT 1000	BIOL 2300, BIOL 2500, BIOL 2520 Choose one course from each of: Group A: BIOL 2200, BIOL 2210 Group B: BIOL 2240, BIOL 2242, BIOL 2260 Plus one additional course from either Group A or Group B Either both of CHEM 2770 and CHEM 2780; or all three of CHEM 2210, CHEM 2360, and CHEM 2370 (theme courses).	BIOL 3100, BIOL 3300 Choose one of the following: BIOL 3400 (the former BIOL 3450), BIOL 3470, BIOL 3472 Choose two of: BIOL 3470, BIOL 3472, BIOL 3400 (the former BIOL 3450) (if not already taken), or BIOL 3452 (theme courses).	BIOL 4100 (6) 24 credit hours of 3000 or 4000 level Biology courses ³ (courses from outside Biology may be approved by the theme advisor). Enough elective credit hours required to total 120 credit hours for the program.
In Year 1 or Year 2 the following must be completed: 3 credit hours of Mathematics or Physics chosen from: MATH 1200 ¹ , MATH 1300 ¹ , MATH 1500 ¹ , PHYS 1020 or PHYS 1050 6 credit hours from the Faculty of Arts, including a required "W" course		Work Terms (if Co-op Selected): BIOL 3980, BIOL 3990	Work Terms (if Co-op Selected): BIOL 4980, BIOL 4990 (if necessary)
30 Hours	30 Hours	30 Hours	30 Hours

4-YEAR MAJOR: Environmental and Integrative Physiology Theme (incl. Co-op)² 120 CREDIT HOURS (Courses listed in chart below and electives)			
BIOL 1020, BIOL 1030 CHEM 1300, CHEM 1310 STAT 1000	BIOL 2300, BIOL 2500, BIOL 2520 Choose one course from each of: Group A: BIOL 2200, BIOL 2210 Group B: BIOL 2240, BIOL 2242, BIOL 2260 Plus one additional course from either Group A or Group B. Either both of CHEM 2770 and CHEM 2780; or all three of CHEM 2210, CHEM 2360, and CHEM 2370 (theme courses).	BIOL 3300 Choose one of the following: BIOL 3400 (the former BIOL 3450), BIOL 3470, BIOL 3472 Choose two of: BIOL 3470, BIOL 3472, BIOL 3450 (if not already taken), or BIOL 3452 (theme courses).	24 credit hours of 3000 or 4000 level Biology courses ³ (courses from outside Biology may be approved by the theme advisor). Enough elective credit hours required to total 120 credit hours for the program.
In Year 1 or Year 2 the following must be completed: 3 credit hours of Mathematics or Physics chosen from: MATH 1200 ¹ , MATH 1300 ¹ , MATH 1500 ¹ , PHYS 1020 or PHYS 1050 6 credit hours from the Faculty of Arts, including a required "W" course		Cooperative Option Requirements (if selected): BIOL 3980, BIOL 3990	Cooperative Option Requirements (if selected): BIOL 4980, BIOL 4990 (if necessary)
30 Hours	30 Hours	30 Hours	30 Hours

NOTES:

1. **MATH 1230, MATH 1510, MATH 1520, or MATH 1690** may be taken in place of **MATH 1500**; **MATH 1220 or MATH 1310** may be taken in place of **MATH 1300**; **MATH 1240** may be taken in place of **MATH 1200**.

2. IMPORTANT: The programs need not be completed in the manner prescribed in the chart above. The charts indicate one possible arrangement of the 120 credit hours that make up the degree and are meant to be a guide around which students can plan their programs with a view to satisfying the prerequisites of the required courses. These 120 credit hours are a combination of the courses outlined in the charts above and elective courses chosen by the student in consultation with the program advisors.

3. Courses from other departments or faculties may be acceptable for use towards the 24 credit hours of 3000/4000 level Biological Sciences courses required in the Honours and Major Degree programs. Please consult with the department for permission to use alternate courses.

(The number 6 in brackets indicates a six credit hour course.)

ACADEMIC CALENDAR 2015-2016

4.3.6.4 Biological Sciences - Evolution and Biodiversity Theme Charts

4.3.6.4 Biological Sciences – Program Charts

HONOURS: Evolution and Biodiversity Theme (incl. Co-operative Option) 120 CREDIT HOURS			
BIOL 1020, BIOL 1030 CHEM 1300, CHEM 1310 STAT 1000	BIOL 2300, BIOL 2500, BIOL 2520 Choose one course from each of: Group A: BIOL 2200, BIOL 2210 Group B: BIOL 2240, BIOL 2242, BIOL 2260 Plus one additional course from either Group A or Group B	BIOL 3100, BIOL 3300 Choose one of the following: BIOL 3400 (the former BIOL 3450), BIOL 3470, BIOL 3472 3 credit hours chosen from the Evolutionary Processes List (A) above. 3 credit hours chosen from the Biodiversity course List (B) above. 24 credit hours of 3000 or 4000 level Biology courses ³ (courses from outside Biology may be approved by the theme advisor). 15 credit hours of approved electives	BIOL 4100 (6)
In Year 1 or Year 2 the following must be completed: 3 credit hours of Mathematics or Physics chosen from: MATH 1200 ¹ , MATH 1300 ¹ , MATH 1500 ¹ , PHYS 1020 or PHYS 1050 6 credit hours from the Faculty of Arts, including a required "W" course 18 credit hours of approved electives		Cooperative Option Requirements (if Selected): BIOL 3980, BIOL 3990	Cooperative Option Requirements (if Selected): BIOL 4980, BIOL 4990 (if necessary)
30 Hours	30 Hours	30 Hours	30 Hours

4-YEAR MAJOR: Evolution and Biodiversity Theme (incl. Co-op)² 120 CREDIT HOURS (Courses listed in chart below and electives)			
BIOL 1020, BIOL 1030 CHEM 1300, CHEM 1310 STAT 1000	BIOL 2300, BIOL 2500, BIOL 2520 Choose one course from each of: Group A: BIOL 2200, BIOL 2210 Group B: BIOL 2240, BIOL 2242, BIOL 2260 Plus one additional course from either Group A or Group B	BIOL 3300 Choose one of the following: BIOL 3400 (the former BIOL 3450), BIOL 3470, BIOL 3472 3 credit hours chosen from the Evolutionary Processes List (A) above. 3 credit hours chosen from the Biodiversity course List (B) above. 24 credit hours of 3000 or 4000 level Biology courses ³ (courses from outside Biology may be approved by the theme advisor). Enough elective credit hours required to total 120 credit hours for the program.	
In Year 1 or Year 2 the following must be completed: 3 credit hours of Mathematics or Physics chosen from: MATH 1200 ¹ , MATH 1300 ¹ , MATH 1500 ¹ , PHYS 1020 or PHYS 1050 6 credit hours from the Faculty of Arts, including a required "W" course		Cooperative Option Requirements (if selected): BIOL 3980, BIOL 3990	Cooperative Option Requirements (if selected): BIOL 4980, BIOL 4990 (if necessary)
30 Hours	30 Hours	30 Hours	30 Hours

NOTES:

1. **MATH 1230, MATH 1510, MATH 1520, or MATH 1690** may be taken in place of **MATH 1500**; **MATH 1220** or **MATH 1310** may be taken in place of **MATH 1300**; **MATH 1240** may be taken in place of **MATH 1200**.

2. **IMPORTANT:** The programs need not be completed in the manner prescribed in the chart above. The charts indicate one possible arrangement of the 120 credit hours that make up the degree and are meant to be a guide around which students can plan their programs with a view to satisfying the prerequisites of the required courses. These 120 credit hours are a combination of the courses outlined in the charts above and elective courses chosen by the student in consultation with the program advisors.

3. Courses from other departments or faculties may be acceptable for use towards the 24 credit hours of 3000/4000 level Biological Sciences courses required in the Honours and Major Degree programs. Please consult with the department for permission to use alternate courses.

(The number 6 in brackets indicates a six credit hour course.)

4.3.6.5 Biological Sciences - Integrative Biology Theme Charts

4.3.6.5 Biological Sciences – Program Charts

HONOURS: Integrative Biology Theme (incl. Co-operative Option) 120 CREDIT HOURS			
BIOL 1020, BIOL 1030 CHEM 1300, CHEM 1310 STAT 1000	BIOL 2300, BIOL 2500, BIOL 2520 Required Theme courses: BIOL 2200, BIOL 2210, BIOL 2240, BIOL 2242 MBIO 1010 CHEM 2770 and CHEM 2780 or CHEM 2210, CHEM 2360, CHEM 2370	BIOL 3100, BIOL 3300 Choose one of the following: BIOL 3400 (the former BIOL 3450), BIOL 3470, BIOL 3472	BIOL 4100 (6)
In Year 1 or Year 2 the following must be completed: 3 credit hours of Mathematics or Physics chosen from: MATH 1200 ¹ , MATH 1300 ¹ , MATH 1500 ¹ , PHYS 1020 or PHYS 1050 6 credit hours from the Faculty of Arts, including a required "W" course 12 credit hours of approved electives		Work Terms (if Co-op Selected): BIOL 3980, BIOL 3990	Work Terms (if Co-op Selected): BIOL 4980, BIOL 4990 (if necessary)
30 Hours	30 Hours	30 Hours	30 Hours

4-YEAR MAJOR: Integrative Biology Theme (incl. Co-op) 120 CREDIT HOURS (Courses listed in chart below and electives)			
BIOL 1020, BIOL 1030 CHEM 1300, CHEM 1310 STAT 1000	BIOL 2300, BIOL 2500, BIOL 2520 Required Theme course: BIOL 2200, BIOL 2210, BIOL 2240, BIOL 2242 MBIO 1010 CHEM 2770 and CHEM 2780; or CHEM 2210, CHEM 2360, CHEM 2370	BIOL 3300 Choose one of the following: BIOL 3400 (the former BIOL 3450), BIOL 3470, BIOL 3472 24 credit hours of 3000 or 4000 level Biology courses ³ 6 credit hours of 3000 or 4000 level Microbiology courses Enough elective credit hours required to total 120 credit hours for the program.	
In Year 1 or Year 2 the following must be completed: 3 credit hours of Mathematics or Physics chosen from: MATH 1200 ¹ , MATH 1300 ¹ , MATH 1500 ¹ , PHYS 1020 or PHYS 1050 6 credit hours from the Faculty of Arts, including a required "W" course		Cooperative Option Requirements (if selected): BIOL 3980, BIOL 3990	Cooperative Option Requirements (if selected): BIOL 4980, BIOL 4990 (if necessary)
30 Hours	30 Hours	30 Hours	30 Hours

NOTES:

1. **MATH 1230, MATH 1510, MATH 1520, or MATH 1690** may be taken in place of **MATH 1500**; **MATH 1220 or MATH 1310** may be taken in place of **MATH 1300**; **MATH 1240** may be taken in place of **MATH 1200**.

2. IMPORTANT: The programs need not be completed in the manner prescribed in the chart above. The charts indicate one possible arrangement of the 120 credit hours that make up the degree and are meant to be a guide around which students can plan their programs with a view to satisfying the prerequisites of the required courses. These 120 credit hours are a combination of the courses outlined in the charts above and elective courses chosen by the student in consultation with the program advisors.

3. Courses from other departments or faculties may be acceptable for use towards the 24 credit hours of 3000/4000 level Biological Sciences courses required in the Honours and Major Degree programs. Please consult with the department for permission to use alternate courses.

(The number 6 in brackets indicates a six credit hour course.)

4.3.6.6 Biological Sciences - General Degree and Minor Requirements Charts

ACADEMIC CALENDAR 2015-2016

4.3.6.6 Biological Sciences – Program Charts

GENERAL DEGREE (90 credit hours)	
BIOL 1020, BIOL 1030	18 credit hours of 2000, 3000, and (or) 4000 level Biological Sciences courses (subject to the Faculty requirement that of the 36 credit hours in the two advanced level Science areas, at least 6 credit hours must be at the 3000/4000 level.); or Students may choose all 36 credit hours of advanced level courses from the Department of Biological Sciences as long as courses are selected following the provisions outlined below: Each of BIOL 2300, BIOL 2500, BIOL 2520; one of BIOL 2200 or BIOL 2210; one of BIOL 2240, BIOL 2242 or BIOL 2260; plus 21 additional credit hours from the Biological Sciences including at least 6 credit hours at the 3000 or 4000 level!.
MINOR	
BIOL 1020 and BIOL 1030	12 credit hours from 2000, 3000, and/or 4000 level Biology courses.

NOTES:

1. Students should confirm the new regulations of the B.Sc. General Degree with a Faculty of Science Academic Advisor if they wish to choose 36 hours of advanced level study from the Department of Biological Sciences.

(The number 6 in brackets indicates a 6 credit hour course.)

4.3.6.7 Translation Chart for Former BOTN and ZOOL Course Numbers

Translation of former BOTN and ZOOL course number to the BIOL Prefix			
Note: BIOL courses introduced since Fall 2009 will not be found in this chart. Refer to the course description section			
2008-2009 Course Number	Course Title		New Number – Effective Fall Term 2009
BIOL 1000		Foundations of Life	BIOL 1000
BIOL 1010		Biological Diversity and Interaction	BIOL 1010
BIOL 1020		Biology 1 - Principles & Themes	BIOL 1020
BIOL 1030		Biology 2 - Biological Diversity, Function & Interactions	BIOL 1030
BIOL 1110		Health & Health Professions	BIOL 1110
BIOL 1340		State of the Earth's Environment	BIOL 1340
	ZOOL 1320	Anatomy of the Human Body	BIOL 1410
	ZOOL 1330	Physiology of the Human Body	BIOL 1412
BOTN 1010		Economic Plants	BIOL 1300
	ZOOL 2600	The Invertebrates	BIOL 2200
	ZOOL 2320	The Chordates	BIOL 2210
BOTN 2110		The Non-Flowering Plants	BIOL 2240
BOTN 2010		The Flowering Plants	BIOL 2242
BOTN 2210		Biology of Fungi & Lichens	BIOL 2260
BOTN 2370	ZOOL 2370	Principles of Ecology	BIOL 2300
BOTN 2180	ZOOL 2180	Introductory Toxicology	BIOL 2380
BOTN 2280	ZOOL 2290	Introductory Ecology	BIOL 2390
	ZOOL 2530	Human Physiology 1	BIOL 2410
	ZOOL 2540	Human Physiology 2	BIOL 2420
	ZOOL 2140	Human Reproductive Biology	BIOL 2440
BOTN 2460		Genetics 1	BIOL 2500
	ZOOL 2280	Cell Biology	BIOL 2520
	ZOOL 2150	Developmental Biology	BIOL 2540
BOTN 3570	ZOOL 3750	Skills in Biological Sciences	BIOL 3100
	ZOOL 3610	Advanced Invertebrate Biology	BIOL 3200
BOTN 3070		Vascular Flora of Manitoba	BIOL 3242
	ZOOL 3460	Introductory Parasitology	BIOL 3270
BOTN 3270		Forest Botany	BIOL 3280
BOTN 3280		Medicinal & Hallucinogenic Plants	BIOL 3290
BOTN 3000	ZOOL 3000	Evolutionary Biology	BIOL 3300
	ZOOL 3680	Foundations of Population Ecology	BIOL 3310
BOTN 3540		Community Ecology	BIOL 3312
BOTN 3420	ZOOL 3450	Field Ecology	BIOL 3314
	ZOOL 3380	Boreal Ecology	BIOL 3318
	ZOOL 3100	Animal Behaviour	BIOL 3360
	ZOOL 3500	Limnology	BIOL 3370

BOTN 3580	ZOOL 3580	Wetland Ecology	BIOL 3372
BOTN 2020		Plant Physiology	BIOL 3450
BOTN 3010		Environmental Plant Physiology	BIOL 3452
BOTN 3460		Genetics 2	BIOL 3500
	ZOOL 3070	Advanced Developmental & Cellular Biology	BIOL 3540
BOTN 3190		Plant Anatomy	BIOL 3550
	ZOOL 3060	Comparative Animal Histology	BIOL 3560
BOTN 3980	ZOOL 3980	Work Term 1	BIOL 3980
BOTN 3990	ZOOL 3990	Work Term 2	BIOL 3990
BOTN 4600	ZOOL 4110	Honours Thesis	BIOL 4100
	ZOOL 4170	Biology of Fishes	BIOL 4210
	ZOOL 4220	Systematics & Biogeography of Fishes	BIOL 4212
	ZOOL 4230	Biology of Amphibians & Reptiles	BIOL 4214
	ZOOL 4240	Biology of Birds	BIOL 4216
	ZOOL 4250	Biology of Mammals	BIOL 4218
	ZOOL 4260	Marine Biodiversity	BIOL 4220
BOTN 4040		Advanced Plant Systematics	BIOL 4240
BOTN 4130		Evolution of Plant Structure and Systems	BIOL 4242
BOTN 4210		Principles of Plant Pathology	BIOL 4250
	ZOOL 4730	Experimental Parasitology	BIOL 4260
	ZOOL 4720	Wildlife & Fisheries Parasitology	BIOL 4262
		Applications of Population Ecology in Fisheries & Wildlife	
	ZOOL 4850		BIOL 4310
BOTN 4650		Analysis of Biological Communities	BIOL 4312
	ZOOL 4820	Aquaculture	BIOL 4340
BOTN 4150		Plant Interactions	BIOL 4330
	ZOOL 4280	Behavioural Ecology and Cognitive Ethology	BIOL 4362
BOTN 4010		Aquatic Botany	BIOL 4374
	ZOOL 4840	Environmental Toxicology	BIOL 4380
	ZOOL 4710	Principles of Wildlife Management	BIOL 4390
BOTN 4120		Advanced Plant Stress Physiology	BIOL 4430
	ZOOL 4830	Comparative Animal Energetics	BIOL 4460
	ZOOL 4160	Sensory-Motor Physiology	BIOL 4470
	ZOOL 4600	Comparative Endocrinology	BIOL 4480
BOTN 4180		Molecular Genetics of Plant Development	BIOL 4500
	ZOOL 4150	Developmental Molecular Biology	BIOL 4540
	ZOOL 4270	Genes & Development	BIOL 4542
	ZOOL 4140	Microtechnique	BIOL 4560
BOTN 4800	ZOOL 4800	Special Topics in Field Biology	BIOL 4800
BOTN 4890	ZOOL 4890	Special Topics in Biology	BIOL 4890
BOTN 4980	ZOOL 4980	Work Term 1	BIOL 4980
BOTN 4990	ZOOL 4990	Work Term 2	BIOL 4990
		Courses no longer offered	
BOTN 2190	ZOOL 2190	Toxicological Principles	BIOL 2382
BOTN 3250		Fungal Ecology	BIOL 3330
	ZOOL 3530	Environmental Physiology of Animals 1	BIOL 3460
	ZOOL 3540	Environmental Physiology of Animals 2	BIOL 3462
	ZOOL 4200	Ecological Methods	BIOL 4320
	ZOOL 4210	Models for Behavioural Ecology	BIOL 4360
BOTN 4880	ZOOL 4880	Analysis of Ecological Problems	BIOL 4880

4.3.7 Biological Sciences Course Descriptions

Biological Sciences Course Descriptions-1000 Level

BIOL 1000 Biology: Foundations of Life Cr.Hrs. 3

(Formerly 071.100) A course in unifying principles of biology including cell biology, bioenergetics, cell division, genetics and evolution. May not be used for credit in a Major or Honours program in the Biological Sciences. Not to be held with BIOL 1001, BIOL 1020, BIOL 1021, the former 071.125, or 071.201. Prerequisite: Any grade 12 or 40S Mathematics course (50%), or equivalent.

BIOL 1010 Biology: Biological Diversity and Interaction Cr.Hrs. 3

(Formerly 071.101) An introduction to biological diversity including prokaryotes, protists, fungi, plants and animals; the form and function of plants and animals and basic concepts of ecology. May not be used for credit in a Major or Honours program in the Biological Sciences. Not to be held with BIOL 1011, BIOL 1030, BIOL 1031, the former 071.125, or 071.201. Prerequisite: Any grade 12 or 40S Mathematics course (50%), or equivalent.

BIOL 1020 Biology 1: Principles and Themes Cr.Hrs. 3

(Lab Required) A laboratory-based course in unifying principles of biology including cell biology, bioenergetics, cell division, genetics and evolution. This course is intended for major and honours students in the Biological Sciences. Not to be held with BIOL 1021, BIOL 1000, BIOL 1001 (071.100), BIOE 2590 (034.259), or the former 071.125, 071.123 or 071.201. Prerequisite: Biology 40S (or equivalent) and any 40S Mathematics (or equivalent) and one of 40S Chemistry or 40S Physics (or equivalent); or BIOL 1000 (C). Students who complete BIOL 1000 as the prerequisite for BIOL 1020 will not be allowed to use both BIOL 1000 and BIOL 1020 towards their degree program as the two courses may not be held for credit with one another.

BIOL 1030 Biology 2: Biological Diversity, Function and Interactions Cr. Hrs. 3

(Lab Required) A laboratory-based course introducing biological diversity including prokaryotes, protists, fungi, plants and animals; the form and function of plants and animals and basic concepts of ecology. This course is intended for major and honours students in the Biological Sciences. Not to be held with BIOL 1031, BIOL 1010 or BIOL 1011 (071.101), BIOE 2590 (034.259), or the former 071.125, 071.123 or 071.201. Prerequisite: BIOL 1020 or BIOL 1021 (C). NOTE: BIOL 1030 is a prerequisite to further courses in Microbiology and to most courses in Biological Sciences. It is also intended for students proceeding to Agricultural and Food Sciences, Dentistry, Human Ecology, Medicine, Optometry, Pharmacy, Veterinary Science, Physical Education and Science.

BIOL 1300 Economic Plants Cr.Hrs. 3

(Formerly BOTN 1010, 001.101) A survey of economically important plants and their products. The history of plant use, plants in folklore and medicine, fermentation and viticulture, domestication of plants, and forestry are the major topics covered. Chemical, structural, and nutritional aspects of plant products are also discussed. Not to be held with the former 001.206 or 001.233.

BIOL 1340 The State of the Earth's Environment: Contemporary Issues Cr.Hrs. 3

(Formerly 071.134) A presentation of contemporary environmental issues focusing on the scientific basis of problems caused by the growth of human population, use and depletion of resources, pollution, and damage to the environment. The current state of our knowledge bases will be discussed, along with improvements in them that may be necessary. The course will consider needs for action, priorities, and opportunities. May not be used to meet a program requirement of an Honours or Major program in the Biological Sciences. Not to be held with ENVR 1000 (128.100).

BIOL 1410 Anatomy of the Human Body Cr.Hrs. 3

(Lab Required) (Formerly ZOOL 1320, 022.132) Microanatomy and gross anatomy discussed including changes occurring from conception to old age. Although this course may be used as an elective in an Arts or Science program, it may not be used to meet a program requirement of an Honours or Major program in the Biological Sciences. May not be held with BIOL 1411. No prerequisite. High school Biology strongly recommended.

BIOL 1412 Physiology of the Human Body Cr.Hrs. 3

(Lab Required) Function of all systems discussed with homeostatic regulatory mechanisms as foundation themes. Although this course may be used as an elective in an Arts or Science program, it may not be used to meet a program requirement of an Honours or Major program in the Biological Sciences. Not available to students who have previously obtained credit in, or are currently registered in both of BIOL 2410 (ZOOL 2530, BIOL 2411, ZOOL 2531, 022.253) and BIOL 2420 (ZOOL 2540, BIOL 2421, ZOOL 2541, 022.254) or BIOL 1413. Prerequisite: BIOL 1410 or BIOL 1411 (ZOOL 1320, 022.132) (C); or one of BIOL 1030, BIOL 1031, or the former 071.125 (C). This prerequisite is waived for students in the Baccalaureate Program for Registered Nurses.

Biological Sciences Course Descriptions-2000 Level

BIOL 2200 The Invertebrates Cr.Hrs. 3

(Lab Required) (Formerly ZOOL 2600, 022.260) Biology and phylogeny of invertebrates. Emphasis on common taxa and on those groups of particular phylogenetic significance. Not to be held with BIOL 2201 (ZOOL 2601). Prerequisite: one of BIOL 1030, BIOL 1031, or the former 071.125 (C).

BIOL 2210 The Chordates Cr.Hrs. 3

(Lab Required) (Formerly ZOOL 2320, 022.232) A study of the origin, evolutionary history and structure of the major groups of Chordates. Provides the foundation for more specialized courses such as Biology of Fishes, Ornithology, and Systematics and Biogeography of Fishes. Not to be held with BIOL 2231 (ZOOL 2501, 022.250). Prerequisite: one of BIOL 1030, BIOL 1031, or the former 071.125 (C).

BIOL 2240 The Non-Flowering Plants Cr.Hrs. 3

(Lab Required) (Formerly BOTN 2110, 001.211) An introduction to the mosses and liverworts, ferns and their allies, and conifers, specifically treating their structure, reproduction, identification and ecological significance. Not to be held with the former BOTN 2110, 001.211. Prerequisite: one of BIOL 1030, BIOL 1031, or the former 071.125 (C).

BIOL 2242 The Flowering Plants Cr.Hrs. 3

(Lab Required) (Formerly BOTN 2010, 001.201) A study of the structure and function of the flowering plants. Lecture topics are supplemented by laboratory exercises that focus on the anatomy and morphology of roots, stems, leaves and reproductive organs. Not to be held with the former 001.230. Prerequisite: one of BIOL 1010 (071.101) (B), BIOL 1011 (B), BIOL 1030 (C), BIOL 1031 (C), or the former 071.125 (C).

BIOL 2260 Biology of Fungi and Lichens Cr.Hrs. 3

(Lab Required)(Formerly BOTN 2210, 001.221) An introduction to the fungi, both free living and lichenized, with emphasis on the major taxonomic groupings, their organization and structure, their life histories, identification and general economic significance. Not to be held with BIOL 2261 or the former 001.321. Prerequisite: one of BIOL 1010 (071.101) (B), BIOL 1011 (B), the former 071.123 (B), BIOL 1030 (C), BIOL 1031 (C), or the former 071.125 (C).

BIOL 2262 Biology of Algae Cr.Hrs. 3

(Lab Required) (Formerly BOTN 2290, 001.229, BIOL 3260) Lectures and laboratories dealing with the cellular features of major groups of algae and their phylogenetic and adaptive significance. The basics of algal taxonomy are also covered. Not to be held with the former courses BIOL 3260, 001.323, or 001.341. Prerequisite: One of BIOL 1030, BIOL 1031, or the former 071.125 (C).

BIOL 2300 Principles of Ecology Cr.Hrs. 3

(Lab Required) (Formerly BOTN 2370, 001.237, ZOOL 2370, 022.237) Principles of ecology at the individual, population, community, and ecosystems levels. This course is also offered as AGECE 2370. It is the normal prerequisite to other courses in ecology. Not to be held with BIOL 2301 (BOTN 2371, ZOOL 2371), BIOL 2390 (BOTN 2280, 001.228, ZOOL 2290, 022.229), AGECE 2370 (065.237). Prerequisite: one of BIOL 1030, BIOL 1031, or the former 071.125 (C). Prerequisite or concurrent requirement: STAT 1000 or STAT 1001 (005.100) (D).

BIOL 2380 Introductory Toxicology Cr.Hrs. 3

(Formerly BOTN 2180, 001.218, ZOOL 2180, 022.218) A survey of general principles underlying the effects of toxic substances on biological systems, including consideration of the history, scope and applications of toxicology, the mechanisms of toxic action, and some major types of toxicants. This course is also taught in Environmental Science as ENVR 2180 (128.218), and in Agriculture as AGRI 2180 (065.218). Not to be held with BIOL 2381, BIOL 2382 (BOTN 2190, ZOOL 2190, 001.219, 022.219), ENVR 2190 (128.219), or AGRI 2190 (065.219). Prerequisites: one of BIOL 1030, BIOL 1031, or the former 071.125 (C); and one of CHEM 1310, CHEM 1311 (002.131), or CHEM 1320 (002.132) (C).

BIOL 2390 Introductory Ecology Cr.Hrs. 3

(Formerly BOTN 2280, 001.228, ZOOL 2290, 022.229) The course involves a study of the interrelationships of living organisms (including human) with each other and with their environment. It is not normally acceptable as a prerequisite to other courses in ecology. Not to be held with BIOL 2300 (BOTN 2370, ZOOL 2370, 001.237, 022.237), BIOL 2301 (BOTN 2371, ZOOL 2371), or AGECE 2370 (065.237). Prerequisite: one of BIOL 1010, BIOL 1030, BIOL 1031, or the former 071.125 (C).

BIOL 2410 Human Physiology 1 Cr.Hrs. 3

(Formerly ZOOL 2530, 022.253) The mechanisms of action of the body's major control systems (nervous and endocrine) and of the muscular and reproductive systems are examined. Not to be held with BIOL 2411 (ZOOL 2531) or BIOL 3460 (ZOOL 3530, 022.353). Prerequisite: a "C" or better in one of BIOL 1030, BIOL 1031, the former 071.125, or BIOL 1412 (ZOOL 1330, 022.133); or a "C+" or better in both BIOL 1000 (or equivalent - BIOL 1001, 071.100) and BIOL 1010 (or equivalent - BIOL 1011, 071.101).

BIOL 2420 Human Physiology 2 Cr.Hrs. 3

(Formerly ZOOL 2540, 022.254) An examination of homeostatic regulation by the body's major effector organ systems (cardiovascular, respiratory, digestive, renal, and immune).

BIOL 2440 Human Reproductive Physiology Cr.Hrs. 3

(Formerly ZOOL 2140, 022.214) This course provides an in-depth understanding of human reproduction with particular emphasis on intrinsic control mechanisms and extrinsic methods of regulation of reproduction. This course also provides the basis for the understanding of alterations from normal mechanisms of reproductive processes. Prerequisites: BIOL 1410 (ZOOL 1320, 022.132) (C) and BIOL 1412 (ZOOL 1330, 022.133) (C); or consent of department. Check with the Department of Biological Sciences for course availability.

BIOL 2500 Genetics 1 Cr.Hrs. 3

(Lab Required) (Formerly BOTN 2460, 001.246) Principles of heredity, gametogenesis and the cytological basis of inheritance in plants and animals. The concepts of dominance and genetic interaction, sex and inheritance, linkage, chromosomal variations, quantitative and population genetics, the genetic code. Not to be held with BIOL 2501 (BOTN 2461), or PLNT 2520 (039.252). Prerequisite: one of BIOL 1030, BIOL 1031, or the former 071.125 (C).

BIOL 2520 Cell Biology Cr.Hrs. 3

(Formerly ZOOL 2280, 022.228) The microscopic and submicroscopic aspects of cellular structure and function are considered with emphasis on the living cell as a dynamic system. Not to be held with BIOL 2521 (ZOOL 2281). Prerequisite: one of BIOL 1030, BIOL 1031, or the former 071.125 (C).

Biological Sciences Course Descriptions-3000 Level**BIOL 3100 Skills in Biological Sciences Cr.Hrs. 3**

This course will introduce students to the concepts and skills necessary to succeed in a research directed Biology-based career, including: communication skills (scientific writing and oral presentations), critical thinking, strategies for employment and graduate training, familiarization with the range of biological research, and exposure to a variety of Biology-based careers. This course may not be held with the former BOTN 3570 (001.357) or ZOOL 3750 (022.375). Prerequisite: This course is restricted to Honours students in the Biological Sciences or departmental permission.

BIOL 3200 Advanced Invertebrate Biology Cr.Hrs. 3

(Lab Required) (Formerly ZOOL 3610, 022.361) Topics of current interest to be presented in lecture series given by staff. Students may undertake approved projects and may present reports and seminars. Prerequisite: BIOL 2200 (ZOOL 2600, 022.260) or BIOL 2201 (ZOOL 2601) (C).

BIOL 3242 Vascular Flora of Manitoba Cr.Hrs. 3

(Lab Required) (Formerly BOTN 3070, 001.307) A survey of the vascular plants of Manitoba emphasizing identification, nomenclature and classification, and including brief accounts of the distribution and post-glacial history of the main floristic associations within the province. Students must submit a collection of at least 20 different vascular plants identified to species. A guide to the collection should be obtained from the Department of Biological Sciences office in the Spring/Summer prior to commencing the course. Prerequisite: BIOL 1010 (or equivalent - BIOL 1011, 071.101) (B); or one of BIOL 1030, BIOL 1031 or the former 071.125 (C).

BIOL 3250 Lichens and Bryophytes Cr.Hrs. 3

(Lab Required) The biology, evolution, and ecology of lichens and bryophytes. Emphasis is placed on the role of lichens and bryophytes in the ecosystem, gene flow, animal interactions, co-evolution, secondary compounds, and species identification. Not to be held with BIOL 3240 (BOTN 3260, 001.326) or BIOL 4246 (BOTN 4050, 001.405). Prerequisite: BIOL 1030 or BIOL 1031 or the former 071.125 (C).

BIOL 3270 Introductory Parasitology Cr.Hrs. 3

(Lab Required) (Formerly ZOOL 3460, 022.346) General course covering major parasitic phyla: namely, Protozoa, Platyhelminthes, Aschelminthes, Acanthocephala, and Arthropoda. Emphasis will be on principles of parasitology. Prerequisite or concurrent requirement: BIOL 2200 (ZOOL 2600, 022.260) (C), or BIOL 2201 (ZOOL 2601), or consent of department.

BIOL 3280 Forest Botany Cr.Hrs. 3

(Formerly BOTN 3270, 001.327) An examination of the structure and dynamics of plant communities in forested ecosystems. Topics include forest type classification, physiological and anatomical responses of representative forest species, decomposition and nutrient cycling, disturbance and forest succession. Not to be held with the former 001.402. Prerequisites: BIOL 2242 (BOTN 2010, 001.201) (C); and one of BIOL 2300 (BOTN 2370, 001.237, ZOOL 2370, 022.237), BIOL 2301 (BOTN 2371, ZOOL 2371) or AGECE 2370 (065.237) (C); or consent of the department.

BIOL 3290 Medicinal and Hallucinogenic Plants Cr.Hrs. 3

(Formerly BOTN 3280, 001.328) A botanical and historical survey of medicinal, hallucinogenic and poisonous plants used in various cultures. Not to be held with BIOL 3291. Prerequisite: a minimum of 30 hours of university credit, or consent of department.

BIOL 3300 Evolutionary Biology Cr.Hrs. 3

(Lab Required) (Formerly BOTN 3000, ZOO 3000) Evolution is the ultimate cause of biological diversity. This course introduces the major questions and research methods in evolutionary biology. Topics include evolutionary genetics, adaptation, speciation, and the reconstruction of evolutionary history. Not to be held with the former 022.400. Prerequisites: a "C" or better in one of BIOL 2500 (BOTN 2460, 001.246), BIOL 2501 (BOTN 2461), or PLNT 2520 (039.252); and any one of the following with a minimum grade of "C": BIOL 2200 (ZOO 2600, 022.260), BIOL 2210 (ZOO 2320, 022.232), BIOL 2231 (ZOO 2501, 022.250F), BIOL 2240 (BOTN 2110, 001.211), BIOL 2260 (BOTN 2210, 001.221), BIOL 2261, BIOL 3260 (BOTN 2290, 001.229); or consent of department.

BIOL 3310 Foundations of Population Ecology Cr.Hrs. 3

(Lab Required) (Formerly ZOO 3680) The study of living populations, through experimentation and theory, will be examined. Topics investigated will include population regulation, competition, predation, disease, harvest, nonlinear and spatial dynamics and individual based models. Concepts and methods are reinforced through tutorials and evaluated by assignments and examinations. Not to be held with the former 022.348. Prerequisites: a "C" or better in one of BIOL 2300 (BOTN 2370, ZOO 2370, 001.237, 022.237), BIOL 2301 (BOTN 2371, ZOO 2371) or AGE 2370 (065.237); and STAT 2000 or STAT 2001 (005.200) (C); or consent of department.

BIOL 3312 Community Ecology Cr.Hrs. 3

(Formerly BOTN 3540, 001.354) Lectures and laboratories emphasizing the structure and function of terrestrial biotic communities with emphasis upon selected Manitoba situations. Prerequisite: a C or better in one of BIOL 2300 (BOTN 2370, ZOO 2370, 001.237, 022.237), BIOL 2301 (BOTN 2371, ZOO 2371) or AGE 2370 (065.237); or consent of department.

BIOL 3314 Field Ecology Cr.Hrs. 3

(Formerly BOTN 3420, 001.342, ZOO 3450, 022.345) Problems, techniques and assumptions involved in measuring parameters of biological populations and environmental variables. A field trip will be held prior to the start of classes. Students must register in the department office by August 5. Prerequisites: a "C" or better in one of one of BIOL 2300 (BOTN 2370, ZOO 2370, 001.237, 022.237), BIOL 2301 (BOTN 2371, ZOO 2371) or AGE 2370 (065.237); and STAT 2000 or STAT 2001 (005.200) (D).

BIOL 3318 Boreal Ecology Cr.Hrs. 3

(Formerly ZOO 3380, 022.338) A survey of ecological factors in the formation, evolution, and survival of northern biota including northern peoples. There will be optional weekend field trips. Prerequisite: a "C" or better in one of BIOL 2300 (BOTN 2370, ZOO 2370, 001.237, 022.237), BIOL 2301 (BOTN 2371, ZOO 2371) or AGE 2370 (065.237); or BIOL 2390 (ZOO 2290, 022.229, BOTN 2280, 001.228) (C); or consent of department.

BIOL 3340 Biology of Primitive Fungi and Allies Cr.Hrs. 3

Studies on the evolution of ancestral fungi, relevant Chromista and slime molds within the broader context of evolution of derived fungi and ancient groups basal to fungi and animals. The course also encompasses cogent life histories, development, structure, taxonomy, and fundamental biochemistry. General methods for environmental collection, isolation and study of these organisms will be presented in lectures. Prerequisite: BIOL 1010 or BIOL 1011 (OR 071.101 or 071.123) (B); or BIOL 1030 or BIOL 1031 (or 071.125) (C+); or consent of the department.

BIOL 3350 Methods of Data Collection and Analysis in Ecology Cr.Hrs. 3

This course will consider methods of collection and analysis of ecological data, emphasizing experimental design of ecological studies, sampling, analysis of ecological data sets, and presentation techniques. This course may not be held for credit with BIOL 4320 (ZOO 4200, 022.420). Prerequisites: BIOL 2300 (C) and STAT 2000 or STAT 2001 (D); or consent of department.

BIOL 3360 Animal Behaviour Cr.Hrs. 3

(Lab Required) (Formerly ZOO 3100, 022.310) An introduction to the study of animal behaviour including key concepts from the parent disciplines of ethology and comparative psychology, the genetic and physiological bases of behaviours, and evolutionary aspects introducing optimality and game theoretical models characteristic of modern behavioural ecology. Laboratory work involves the design and execution of a behavioural project at the Assiniboine Park Zoo. Not to be held with the former 022.343. Prerequisites: a "C" or better in one of BIOL 2300 (BOTN 2370, ZOO 2370, 001.237, 022.237), BIOL 2301 (BOTN 2371, ZOO 2371) or AGE 2370 (065.237); and BIOL 2210 (ZOO 2320, 022.232) (C); or consent of department.

BIOL 3370 Limnology Cr.Hrs. 3

(Lab Required) (Formerly ZOO 3500, 022.350) Lectures and laboratories providing an introduction to the physics, chemistry and biology of lakes. Prerequisite: a "C" or better in one of BIOL 2300 (BOTN 2370, ZOO 2370, 001.237, 022.237), BIOL 2301 (BOTN 2371, ZOO 2371) or AGE 2370 (065.237).

BIOL 3372 Wetland Ecology Cr.Hrs. 3

Lectures and field exercises examine the biotic (algae, macrophytes, invertebrates, and vertebrates) and abiotic (hydrology, nutrient cycling) properties of Manitoba's wetlands. Various wetland types, including prairie potholes, peatlands, and coastal marshes will be considered in lectures and field work. The course is offered in Summer Session. May not be held with the former BOTN 3580, 001.358, ZOO 3580, 022.358. Prerequisite: a C or better in one of BIOL 2300 (BOTN 2370, ZOO 2370, 001.237, 022.237), BIOL 2301 (BOTN 2371, ZOO 2371) or AGE 2370 (065.237); or consent of department.

BIOL 3400 Plant Physiology Cr.Hrs. 3

(Lab Required) (Formerly BOTN 2020, 001.202, BIOL 3450, PLNT 3500) An integrative view of major physiological processes in plants, spanning the biochemical, cellular, tissue, organ and whole plant levels of organization. The focus will be on photosynthesis, respiration, plant water relations, plant mineral nutrition, and the role of hormonal and extrinsic factors in the regulation of plant growth. This course is taught together with PLNT 3400. Students may not hold credit for both BIOL 3400 and PLNT 3400. Not to be held with the former BIOL 3450 or BOTN 2020 or PLNT 3500. Prerequisites: BIOL 1030 (C); and BIOL 2242 (or equivalent)(C); and a grade of "C" or better in one of CHEM 2360, MBIO 2360, CHEM 2770 or MBIO 2770; or consent of the department.

BIOL 3452 Environmental Plant Physiology Cr.Hrs. 3

(Lab Required) (Formerly BOTN 3010) An integrated study of the major physiological processes in higher plants, and how these processes influence growth and development of plants in natural ecosystems. Stress responses of plants to water, temperature, light and nutrients will be emphasized. Not to be held with PLNT 3500 (039.350), 001.317, or 001.467. Prerequisite: one of BIOL 3400 (formerly BIOL 3450), PLNT 3400, or equivalent (C); and one of CHEM 1310 or CHEM 1311 (C).

BIOL 3470 Environmental Physiology of Animals 1 Cr.Hrs. 3

(Lab required) This course is intended to acquaint students with some of the major environmental challenges encountered by animals and stresses the diversity of physiological solutions to these problems in aquatic and terrestrial organisms. Areas covered may include thermal biology, circulation, gas exchange and buoyancy regulation. Laboratories explore related subjects in various animals. This course may not be held for credit with the former BIOL 3462, ZOO 3540 (022.354). Prerequisite: BIOL 2200 (C) or BIOL 2210 (C); or consent of department.

BIOL 3472 Environmental Physiology of Animals 2 Cr.Hrs. 3

(Lab Required) This course is intended to acquaint students with the control and integration of organ systems and body functions of animals, and their biochemical and physiological adaptations to environmental perturbations. Areas covered may include neuroendocrinology, excretion, and water, salt, and acid-base balance. Laboratories explore related subjects in various animals. This course may not be held for credit with BIOL 3460, or the former ZOO 3530, or the former 022.353. Prerequisites: BIOL 2200 (C) or BIOL 2210 (C) or consent of department.

BIOL 3500 Genetics 2 Cr.Hrs. 3

(Lab Required) (Formerly BOTN 3460, 001.346) The course complements Genetics I (BIOL 2500, BOTN 2460, 001.246, BIOL 2501, BOTN 2461) and deals with various aspects of linkage and crossing over, gene function, allelism, mutation and repair, the use of bacteria and viruses as genetic tools, basics of developmental genetics and extra-nuclear inheritance. Not to be held with BIOL 3501. Prerequisite: BIOL 2500 (BOTN 2460, 001.246) (C), or BIOL 2501 (BOTN 2461) or PLNT 2520 (039.252 or 039.209) (C). Prerequisite or concurrent requirement: One of CHEM 2370, CHEM 2371 (002.237), MBIO 2370, MBIO 2371 (060.237), CHEM 2780 (002.278), or MBIO 2780 (060.278); or consent of department.

BIOL 3542 Developmental Biology Cr.Hrs. 3

Principles and concepts of developmental biology will be presented including early embryo development, tissue patterning, morphogenesis, germ cell formation, stem cell biology, organ and nervous system development, growth and regeneration. Fundamental developmental concepts as well as the cellular, genetic and molecular mechanisms behind development will be covered utilizing invertebrate, vertebrate and plant examples. Not to be held with the former BIOL 2540. Prerequisites: BIOL 2500 or BIOL 2501 (C+) or better and BIOL 2520 or BIOL 2521 (C+) or better, or consent of the department.

BIOL 3550 Plant Anatomy Cr.Hrs. 3

(Lab Required) (Formerly BOTN 3190, 001.319) A study of the anatomical aspects of the growth and development of plants cells, tissues and organs. Laboratory exercises will complement material. Not to be held with the former 001.316 or 001.403. Prerequisite: BIOL 2242 (BOTN 2010, 001.201) (C).

BIOL 3560 Comparative Animal Histology Cr.Hrs. 3

(Lab Required) (Formerly ZOO 3060, 022.306) This course focuses on the cell and tissue organization of animals. Cell morphology and specialization, tissue types and a survey of the cellular and tissue organization of all organ systems are covered. The primary focus is on mammals but comparative aspects of other animal groups are also included. Not to be held with BIOL 3561 (ZOO 3061, 022.347). Prerequisite: One of BIOL 1030, BIOL 1031, or the former 071.125 (C). Recommended prerequisite: one of BIOL 2210 (ZOO 2320, 022.232), BIOL 2231 (ZOO 2501, 022.250), BIOL 2520 (ZOO 2280, 022.228), or BIOL 2521 (ZOO 2281).

BIOL 3600 Biological Diversity and Sustainability Cr.Hrs. 3

Anthropogenic drivers of change of many components of biological diversity; the resulting impacts on ecosystem capacity to provide on-going goods and services that are essential constituents of well-being and ultimately sustainability. Prerequisites: BIOL 2300 (C); or BIOL 1030 (C) and BIOL 2390 (C).

BIOL 3980 Work Term 1 Cr.Hrs. 0

(Formerly ZOO 3980, 022.398, BOTN 3980, 001.398) Work assignment in business, industry, or government for students registered in the Biological Sciences Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

BIOL 3990 Work Term 2 Cr.Hrs. 0

(Formerly ZOO 3990, 022.399, BOTN 3990, 001.399) Work assignment in business, industry, or government for students registered in the Biological Sciences Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

Biological Sciences Course Descriptions-4000 Level**BIOL 4100 Honours Thesis Cr.Hrs. 6**

(Formerly BOTN 4600, 001.460, ZOO 4110, 022.411) The student will conduct a research project, chosen in consultation with a Biological Sciences faculty member acting as an advisor, and produce a thesis in which the project, the results and conclusions are presented. The student will defend the thesis at an oral examination held on completion of the thesis. This course is restricted to final year Honours Biological Science students. Not to be taken concurrently with BIOL 4880 (ZOO 4880, 022.488, BOTN 4880, 001.488).

BIOL 4210 Biology of Fishes Cr.Hrs. 3

(Lab Required) (Formerly ZOO 4170, 022.417) Lectures survey organ systems, life history, and the population biology of fishes. The ecological analysis of fish communities is addressed through a field trip and a series of workshops on the analysis of field data. Evaluation is based upon work related to the field trip and examinations based upon the lecture material. Not to be held with the former 022.467. Prerequisite: BIOL 2210 (ZOO 2320, 022.232) (C) or BIOL 2231 (ZOO 2501, 022.250) (C).

BIOL 4212 Systematics and Biogeography of Fishes Cr.Hrs. 3

(Lab Required) (Formerly ZOO 4220, 022.422) A study of the evolutionary history, interrelationships and distribution patterns of the fish-like vertebrates. Laboratories will cover the identification of the major groups of fish-like vertebrates. Not to be held with the former 022.418 or 022.467. Prerequisite: BIOL 2210 (ZOO 2320, 022.232) (C) or BIOL 2231 (ZOO 2501, 022.250) (C); or consent of department.

BIOL 4214 Biology of Amphibians and Reptiles Cr.Hrs. 3

(Lab Required) (Formerly ZOO 4230, 022.423) Lectures consider the evolution, biology and adaptations of amphibians and reptiles. Laboratories and student presentations will deal with classification, structure, identification, and methods of field and laboratory study of these animals. Not to be held with the former 022.476. Prerequisite: BIOL 2210 (ZOO 2320, 022.232) (C) or BIOL 2231 (ZOO 2501, 022.250) (C); or consent of department.

BIOL 4216 Biology of Birds Cr.Hrs. 3

(Lab Required) (Formerly ZOO 4240, 022.424) Biology of birds including: morphology, systematics, evolution, life histories and breeding biology, ecology, migration, and distribution of birds. Not to be held with the former 022.468. Prerequisite: BIOL 2210 (ZOO 2320, 022.232) (C) or BIOL 2231 (ZOO 2501, 022.250) (C). Prerequisite or concurrent requirement: BIOL 3360 (ZOO 3100).

BIOL 4218 Biology of Mammals Cr.Hrs. 3

(Lab Required) (Formerly ZOO 4250, 022.425) Structure, classification, evolution, life histories and distribution of mammals and their relation to human cultures. Techniques of studying mammals. Identification of the mammals of Manitoba. Offered in 2009-2010 and alternate years thereafter. Prerequisites: BIOL 2210 (ZOO 2320, 022.232) (C) or BIOL 2231 (ZOO 2501, 022.250) (C); and one of BIOL 2300 (BOTN 2370, ZOO 2370, 001.237, 022.237), BIOL 2301 (BOTN 2371, ZOO 2371) or AGE 2370 (065.237) (C); or consent of department.

BIOL 4220 Marine Biodiversity Cr.Hrs. 3

(Lab Required) (Formerly ZOO 4260) Examines key ecological principles governing the maintenance of marine biodiversity, particularly in northern ecosystems. Topics include the definitions and global patterns of biodiversity and the ecological mechanisms influencing changes in these patterns in the context of applied population, community and ecosystem ecology. The course will also emphasize practical solutions, including fisheries' harvest models and marine protected areas. Prerequisites: a "C" or better in one of BIOL 2300 (BOTN 2370, ZOO 2370, 022.237, 001.237), BIOL 2301 (BOTN 2371, ZOO 2371) AGEC 2370 (065.237), or BIOL 2390 (BOTN 2280, ZOO 2290, 001.228, 022.229); or consent of department.

BIOL 4250 Principles of Plant Pathology Cr.Hrs. 3

(Lab Required) (Formerly BOTN 4210) A study of the interactions of causal agents, environment, and host plants in the development of disease. Special attention will be given to diseases of local and regional significance. Laboratory exercises will illustrate the basic techniques of plant pathology. Prerequisites: one of BIOL 3400 (formerly BIOL 3450) or PLNT 3400 (C); and one of BIOL 2260 (BOTN 2210) (C) or BIOL 2261; or consent of department.

BIOL 4260 Experimental Parasitology Cr.Hrs. 3

(Lab Required) (Formerly ZOO 4730, 022.473) Principles of parasitology including immunology, ecology, biochemistry, and physiology. Students must carry out an experimental study. Prerequisite: BIOL 3270 (ZOO 3460, 022.346) (C).

BIOL 4262 Wildlife and Fisheries Parasitology Cr.Hrs. 3

(Lab Required) (Formerly ZOO 4720, 022.472) Parasites of major vertebrate groups of economic importance in temperate regions. Emphasis on: identification, means of control, and how to evaluate the impact of parasites on animal populations. A major project is required. Prerequisite: BIOL 3270 (ZOO 3460, 022.346) (C).

BIOL 4300 Evolution and Adaptation Cr.Hrs. 3

Lectures and discussion on advances in evolutionary research. Topics will include systematics, evolutionary genetics, evolution and development, co-evolution, mating systems, species ranges, eco-evolutionary dynamics, and evolution in society. This course may not be held for credit with either of BIOL 4240 or BIOL 4242. Prerequisite: BIOL 3300.

BIOL 4310 Applications of Population Ecology in Fisheries and Wildlife Cr.Hrs. 3

(Lab Required) (Formerly ZOO 4850) The material introduced in BIOL 3310 (ZOO 3680, 022.348) is developed into the quantitative analyses of field data to form a basis for conservation and management. Topics covered include: surplus harvest models, virtual population analysis, spatial population modeling, bioeconomics, and quantitative adaptive management. Concepts are reinforced through tutorials. Prerequisite: BIOL 3310 (ZOO 3680, 022.348).

BIOL 4312 Analysis of Biological Communities Cr.Hrs. 3

(Formerly BOTN 4650, 001.465) A survey of methods and approaches to the analysis of biological and environmental data containing many variables. Offered in alternate years. Not to be held with BIOL 7440 (BOTN 7440). Prerequisites: a "C" or better in one of BIOL 2300 (BOTN 2370, ZOO 2370, 001.237, 022.237), BIOL 2301 (BOTN 2371, ZOO 2371) or AGEC 2370 (065.237); and STAT 2000 or STAT 2001 (005.200) (C).

BIOL 4330 Plant Interactions Cr.Hrs. 3

(Formerly BOTN 4150, 001.415) This course examines the ecology of interactions between plants and their biotic environment - other plants, animals and soil microbes. This is a reading course. Students will participate in discussions of key papers, examine recent and historic literature, and write a term paper examining a selected topic. Prerequisite: a "C" or better in BIOL 2300; or consent of department.

BIOL 4340 Aquaculture Cr.Hrs. 3

(Lab Required) (Formerly ZOO 4820, 022.482) Biology and methods of commercial culture of fish and other aquatic animals. Emphasis on: physiological, nutritional, genetic, pathological and economic aspects and on current and new technologies. Prerequisite: STAT 2000 or STAT 2001 (005.200) (D); and consent of instructor.

BIOL 4362 Behavioural Ecology and Cognitive Ethology Cr.Hrs. 3

(Lab Required) (Formerly ZOO 4280, 022.428) Examines proximate and ultimate questions relating to mating and parental behaviour, communication, social parasitism and animal intellect to provide insight into the intimate relationship between behavioural evolution and the environment. Laboratory and field exercises complement major topics considered in lectures. Not to be held with the former 022.448. Prerequisite: BIOL 3360 (ZOO 3100, 022.310), or the former 022.343 (C); or consent of department.

BIOL 4374 Aquatic Botany Cr.Hrs. 3

(Formerly BOTN 4010, 001.401) This course examines the relationship between algae, fungi and macrophytes, and the physical, chemical and biological properties of the aquatic environment. Specific adaptations to life in water, and patterns of distribution and succession in rivers, lakes and wetlands will be covered. Prerequisite: a "C" or better in one of BIOL 2300 (BOTN 2370, ZOO 2370, 001.237, 022.237), BIOL 2301 (BOTN 2371, ZOO 2371) or AGEC 2370 (065.237); or consent of department.

BIOL 4380 Environmental Toxicology Cr.Hrs. 3

(Lab Required) (Formerly ZOO 4840, 022.484) A survey of the principles governing the dynamics of chemicals in the environment, with emphasis on the biological systems, using case histories of known pollution problems. Prerequisites: a "C" or better in one of CHEM 2370, CHEM 2371 (002.237), MBIO 2370, MBIO 2371 (060.237), CHEM 2780 (002.278), or MBIO 2780 (060.278); plus a "C" or better in one of BIOL 2300 (BOTN 2370, ZOO 2370, 001.237, 022.237), BIOL 2301 (BOTN 2371, ZOO 2371) or AGEC 2370 (065.237); plus a "C" or better in one of BIOL 2410 (ZOO 2530, 22.253), BIOL 2411 (ZOO 2531) or BIOL 3460 (ZOO 3530, 022.353); and BIOL 3462 (ZOO 3540, 022.354, or 22.352) (C); or consent of department.

BIOL 4390 Principles of Wildlife Management Cr.Hrs. 3

(Lab Required) (Formerly ZOO 4710, 022.471) Introduction to the biological and socioeconomic goals of wildlife management and to the basic techniques of wildlife management in terms of these goals. There will be four or five field trips. Some weekend field trips may be required. Prerequisite: BIOL 3310 (ZOO 3680, 022.348) (C); or consent of department.

BIOL 4460 Comparative Animal Energetics Cr.Hrs. 3

(Formerly ZOO 4830, 022.483) Energetic strategies of animals living in ecologically diverse environments. Integration of physiological, morphological and behavioural adaptations with an emphasis on vertebrate species. Prerequisites: BIOL 2210 (ZOO 2320, 022.232) (C) or BIOL 2231 (ZOO 2501, 022.250) (C); and one of BIOL 2410 (ZOO 2530, 022.253) (C), BIOL 2411 (ZOO 2531), BIOL 3470 (BIOL 3462, ZOO 3530, 022.353) (C), or BIOL 3472 (BIOL 3460, ZOO 3540, 022.354) (C); or consent of department.

BIOL 4470 Sensory-Motor Physiology Cr.Hrs. 3

(Formerly ZOO 4160, 022.416) Information flow in the nervous system and the control of behaviour. The diverse roles that ion channels and synaptic circuitry play in sensory reception, neuronal integration and motor control are emphasized. Prerequisite: a "C" or better in BIOL 2410 and BIOL 2420 (the former ZOO 2530 and ZOO 2540) or BIOL 2411 and BIOL 2421 or BIOL 3470 and BIOL 3472 (the former BIOL 3460 and BIOL 3462) or consent of department. This course is restricted to students in year 3 or 4 of a Major or Honours degree program in Biological Sciences or in Chemistry (Biopharmaceutical Focus Area), or in the B.Sc. in Biosystems Engineering.

BIOL 4480 Comparative Endocrinology Cr.Hrs. 3

(Lab Required) (Formerly ZOO 4600, 022.460) The structure, control, and function of vertebrate endocrine systems. BIOL 2520 (or equivalent - ZOO 2280, 022.228, BIOL 2521, ZOO 2281), and one of BIOL 2410 (or equivalent - ZOO 2530, 022.253, BIOL 2411, ZOO 2531), BIOL 3460 (ZOO 3530, 022.353) or the former 022.245 or 022.352, and a course in biochemistry are strongly recommended as prerequisites. Prerequisite: one of BIOL 1030, BIOL 1031, or the former 071.125 (C).

BIOL 4500 Molecular Genetics of Plant Development Cr.Hrs. 3

(Formerly BOTN 4180, 001.418) Analysis of plant development at the molecular level. Recent advances in model system genetics will be highlighted including seedling, root, shoot, and flower development as well as environmental responses. Prerequisite: BIOL 2500 (BOTN 2460, 001.246) or BIOL 2501 (BOTN 2461) (C).

BIOL 4540 Developmental Molecular Biology Cr.Hrs. 3

(Lab Required) (Formerly ZOO 4150, 022.415) An examination of early development with emphasis on the molecular events. Sex determination, gametogenesis and early embryogenesis will be discussed. Prerequisite: BIOL 2540 (ZOO 2150, 022.215) (C); or consent of department.

BIOL 4542 Genes and Development Cr.Hrs. 3

(Formerly ZOO 4270) An in depth examination of selected topics in embryonic development, emphasizing the genetic control of the cell and molecular mechanisms that direct embryogenesis. The course emphasizes hypothesis testing and the evolution of development, including studies of both animal and plant development. Prerequisites: BIOL 2520 (or the former ZOO 2280, 022.228) or BIOL 2521 (or the former ZOO 2281)(C); and BIOL 3542 (or the former BIOL 2540, ZOO 2150, 022.215) (C); or consent of department.

BIOL 4544 Advanced Developmental and Cellular Biology Cr.Hrs. 3

(Lab required) The course focuses on contemporary concepts and approaches in developmental biology, including theoretical and practical aspects. The emphasis is on the laboratory component. May not be held with the former BIOL 3540. Prerequisites: BIOL 2520 or BIOL 2521 and BIOL 3542 (C) or the former BIOL 2540; or consent of the department.

BIOL 4554 Molecular Biology Techniques for Eukaryotes - DNA Cr.Hrs. 3

(lab required) A techniques intensive course focusing on the understanding of molecular biology techniques, troubleshooting problems, writing reproducible laboratory experiments for publications, accurate recording of procedures in lab journals, and bioinformatics exercises from a DNA perspective. This course is designed for 4th year undergraduate and graduate students interested in understanding the theory and application of molecular methods specifically focusing on eukaryotic DNA. Students will learn essential and cutting-edge molecular biology techniques involved in gene structure, amplification, transformation, and sequencing among others. This course may not be held for credit with BIOL 4552. Prerequisite: BIOL 2520

BIOL 4556 Molecular Biology Techniques for Eukaryotes - RNA Cr.Hrs. 3

(lab required) This is a "hands-on" techniques course designed for the 3rd and 4th year undergraduate level. The purpose of this course is to train students in the current molecular biology techniques dealing with highly sensitive RNA molecules. The students will learn all essential steps involved to identify the messenger RNA expression of a particular target protein in plant or animal (invertebrates) systems. This course may not be held for credit with BIOL 4552. Prerequisite: BIOL 2520.

BIOL 4560 Microtechnique Cr.Hrs. 3

(Lab Required) This intensive course covers a spectrum of animal tissue and cell preparation techniques for microscopy and a survey of the variety of types of microscopy. These span all types of microscopy; live cell techniques, fixation and tissue processing methods for both paraffin embedding media and plastic media, sectioning and staining imaging and image processing, introduction to histochemistry and immunocytochemistry and electron microscopy. This is a practical course with a major hands-on laboratory emphasis. Prerequisites: BIOL 1030 or BIOL 1031 (C+); or consent of department. This course is restricted to students in year 3 or 4 of a Major or Honours degree program.

BIOL 4800 Special Topics in Field Biology Cr.Hrs. 3

(Formerly BOTN 4800, 001.480, ZOO 4800, 022.480) Lectures, field studies and research projects on a selected topic. Course content to vary from year to year depending on instructor. Usually offered during the summer months. Prerequisite: consent of department.

BIOL 4890 Special Topics in Biology Cr.Hrs. 3

(Formerly BOTN 4890, 001.489, ZOO 4890, 022.489) Biology encompasses a broad array of ideas and special topic areas. In this course, students can pursue a specific topic in detail through lectures, seminars and research projects. Normally restricted to third and fourth year Honours and Major students. Prerequisite: Consent of department.

BIOL 4980 Work Term 3 Cr.Hrs. 0

(Formerly BOTN 4980, 001.498, ZOO 4980, 022.498) Work assignment in business, industry, or government for students registered in the Biological Sciences Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only)

BIOL 4990 Work Term 4 Cr.Hrs. 0

(Formerly BOTN 4990, 001.499, ZOO 4990, 022.499) Work assignment in business, industry, or government for students registered in the Biological Sciences Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only)

4.4 Biotechnology

Campus Address & General Office: 418 Buller Building / 360 Parker Building

Telephone: 204 474 9372 / 204 474 9321

Email Address: dcourt@cc.umanitoba.ca, Chemistry_Dept@umanitoba.ca

Website: <http://umanitoba.ca/faculties/science/departments/microbiology/>, <http://umanitoba.ca/chemistry>

4.4.1 Program Information

Biotechnology Honours Degree Requirements

To enter the Biotechnology Joint Honours program a student must have completed at least 24 credit hours with a minimum GPA of 3.00, and also obtained a minimum grade of "B" in **CHEM 1310** and a minimum grade of "C+" in **BIOL 1020**. **CHEM 1300**, **BIOL 1030**, **MATH 1500¹**, **PHYS 1020 (or PHYS 1050)**, and **STAT 1000** are required courses in the program and students are strongly encouraged to complete these courses in first year. Six credit hours of Arts electives, including the written English course should also be taken in Year 1.

Students will select one stream (Analytical or Molecular Biotechnology). Students are also encouraged to select a Minor in a complementary area. There are enough free electives to cover the 18 credit hours required for a Minor. All students must complete a Common Core of required courses plus required Stream Specific courses. The remaining courses can be selected from the list of Recommended Electives. This list is meant to give students some idea of appropriate electives; however, students have the option to choose courses not on the list in consultation with the Program Advisors.

To continue in the Biotechnology Joint Honours program, students must maintain a minimum GPA of 3.00 and complete a minimum of 9 credit hours during each Fall and Winter Term. No more than 15 credit hours of F grades may be accumulated, regardless of whether any course has been repeated and a higher grade achieved. Research Project in Biotechnology (BTEC 4000) must be taken in the final year of the program.

To graduate from the Biotechnology Joint Honours program students must achieve a minimum GPA of 3.00 and obtain minimum grade of "C" on the courses that contribute to the 120 credit hours that make up the degree.

Students who do not meet these minimum requirements will be required to withdraw from the program and may be eligible to enter the 4-Year Major degree program in Biotechnology. Depending on course selection students may also be eligible to enter other Major Programs (e.g. Biochemistry, Biological Sciences, Chemistry, or Microbiology) and/or the 3-year B.Sc. General Degree program.

Biotechnology Honours Cooperative Option

Students interested in alternating academic terms and terms of paid employment as part of their Honours Biotechnology program may enter the Cooperative Option in April of their second year in Honours Biotechnology. This program provides students with a minimum of 12 months of paid employment by the time they graduate. It enables them to obtain work experience in research and industry with participating firms, government agencies and university units.

The course and grade requirements for entry to this option are the same as those required for entry to the regular Honours program, as indicated in the chart. Students are required to complete the first and second year requirements of the program; and **MBIO 3410** before they begin their first employment term. Students should refer to the general faculty regulations for B.Sc. (Honours) Cooperative Options in Section 3.6.

To continue in the Honours Cooperative program a student must maintain a minimum GPA of 3.00, successfully complete each work term, and complete a minimum of 9 credit hours during each academic term. Students should note that the grade requirements for the Cooperative Option are the same as that for the regular Honours program (see above).

Students must check with the Co-op office for the April application deadline information. They will normally be notified of their provisional acceptance in the program by September. Acceptance into the program is dependent upon the student receiving an employment placement. Employment term positions available to the students will be approved by the department, and the employers will select the students they wish to employ. Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Option if the demand for places exceeds the number of places available. The department reserves the right to determine and select the best qualified applicants.

Students are required to register in and pay fees for each employment term prior to the commencement of each employment term. Students will be required to submit an employment report upon the completion of each employment term.

Biotechnology 4-Year Major Degree Requirements

To enter the Biotechnology Joint Major program a student must have completed at least 24 credit hours with a minimum GPA of 2.00 and also obtained a minimum grade of "C+" in **CHEM 1310** and a minimum grade of "C" in **BIOL 1020**. **BIOL 1030**, **CHEM 1300**, **MATH 1500¹**, **PHYS 1020 or 1050**, and **STAT 1000** are required courses in the program and students are strongly urged to complete these courses in first year. Six credit hours of Arts electives, including the written English course should also be taken in Year 1.

Students will select one stream (Analytical or Molecular Biotechnology). Students are also encouraged to select a Minor in a complementary area. There are enough free electives to cover the 18 credit hours required for a Minor. All students must complete a Common Core of required courses plus required Stream Specific courses. The remaining courses can be selected from the list of Recommended Electives. This list is meant to give students some idea of appropriate electives; however, students have the option to choose courses not on the list in consultation with the Program Advisors.

To continue in the Major program a student must maintain a minimum GPA of 2.00. No more than 18 credit hours of F grades can be accumulated regardless of whether any course has been repeated and a higher grade achieved.

To graduate from the Biotechnology Joint Major degree, students must maintain a minimum GPA of 2.00 on the 120 credit hours that contribute to the degree. Students must also obtain a minimum grade of "C" on all common core and stream specific courses outlined below. There is no term registration load requirement in the Major degree.

Students who do not meet these minimum requirements will be required to withdraw from the program and will normally be eligible to enter the 3-Year B.Sc. General degree program.

Biotechnology 4 Year Major Cooperative Option

Students interested in alternating academic terms and terms of paid employment as part of their Major program in Biotechnology may enter the Cooperative Option in April of their second year in Biotechnology. This program provides students with a minimum of 12 months of paid employment by the time they graduate. It enables them to obtain work experience in research and industry with participating firms, government agencies and university units.

The course and grade requirements for entry to this option are the same as those required for entry to the regular Major program. **MBIO 3410** is required in Year 3. Students are required to complete the first and second year requirements of the program and **MBIO 3410** before they begin their first employment term. Students should refer to the general faculty regulations for B.Sc. (Major) Cooperative Options in Section 3.4.

Students must check with the Co-op office for the April application deadline information. They will normally be notified of their provisional acceptance in the program by September. Acceptance into the program is dependent upon the student receiving an employment placement. Employment term positions available to the students will be approved by the department, and the employers will select the students they wish to employ. Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Option if the demand for places exceeds the number of places available. The department reserves the right to determine and select the best qualified applicants.

Students are required to register in and pay fees for each employment term prior to the commencement of each employment term. Students will be required to submit an employment report upon the completion of each employment term.

Common Core Courses:

BIOL 2500, BIOL 2520, BIOL 4560, CHEM 2210, CHEM 2220, CHEM/MBIO 2360, CHEM /MBIO 2370, CHEM 2470, CHEM 3590, CHEM 4630, MBIO 1010, MBIO 2020, MBIO 3000, MBIO 3030, MBIO 3410, MBIO 4520, PLNT 2530, PLNT 4610

Optional Courses:

Appropriate prerequisites must be taken for all Optional courses.

CHEM 3570, CHEM 4360, CHEM 4670, MBIO 3430, MBIO 4010, MBIO 4410, MBIO 4440, BIOL 3300, BIOL 4554/4556⁶, BIOL 4540, BIOL 4560, PLNT 2530, PLNT 4610, COMP 3820

Program Stream Courses:

Analytical Biotechnology: **MATH 1700¹, CHEM 4370, CHEM 4590, CHEM 4670, CHEM 4700**

Molecular Biotechnology: **BIOL 4544 or BIOL 4556, MBIO 4600, MBIO 4610, MBIO 4672**

Note: In some instances pre-requisites will be waived upon approval by the appropriate department.

Complementary Existing Minors that could satisfy the Recommended Electives (Minors require 18 cr hrs of prescribed courses):

Management, Animal Systems, Food Science, Plant Biotechnology, or Human Nutrition and Metabolism

Recommended General Electives if not required in Program stream:

All courses in above described Minors.

Appropriate pre-requisites must also be taken for all Electives.

BIOE 3200, BIOE 3530, BIOE 4510, BIOL 1300 (BOTN 1010), BIOL 2242 (BOTN 2010), BIOL 2380 (BOTN/ZOOL 2180), BIOL 2260 (BOTN 2210), BIOL 2300 (BOTN/ZOOL 2370), BIOL 3550 (BOTN 3190), BIOL 3290 (BOTN 3280), BIOL 3500 (BOTN 3460), BIOL 4500 (BOTN 4180), BIOL 3542 (BIOL 2540), BIOL 4540 (ZOOL 4150), BIOL 4544 (BIOL 3540); CHEM 4360, CHEM 4370, CHEM 4590, CHEM 4620, CHEM 4670, CHEM 4700; COMP 1010, COMP 1020, COMP 1260, COMP 1270; ENG 1420; ENTR 2020; MATH 1700¹; MBIO 3280 (MBIO 2280), MBIO 3010, MBIO 3430, MBIO 4440 (MBIO 3440), MBIO 3450, MBIO 3460, MBIO 3470, MBIO 4480 (MBIO 3480), MBIO 4010, MBIO 4410, MBIO 4470, MBIO 4600, MBIO 4610, MBIO 4672; PHAC 4030, PHAC 4040; PHIL 2740, PHIL 2830; PLNT 3140, PLNT 3500, PLNT 3520, PLNT 3570, PLNT 4310, PLNT 4330, PLNT 4550, PLNT 4560, PLNT 4570, PLNT 4580, PLNT 4590, PLNT 4600; STAT 2000

Other suitable courses may be selected through consultation with the department heads.

ACADEMIC CALENDAR 2015-2016

4.4.2 Biotechnology Programs (incl. Co-operative Option if selected)

4.4.2 Biotechnology Programs (incl. Co-operative Option if selected) - Offered Jointly by the Departments of Chemistry and Microbiology			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
JOINT HONOURS (incl. Co-operative Option if selected) 120 credit hours			
BIOL 1020, BIOL 1030 CHEM 1300, CHEM 1310 PHYS 1020 (or PHYS 1050) MATH 1500 ¹ STAT 1000	CHEM 2210, CHEM 2220, CHEM 2360 (MBIO 2360), CHEM 2370 (MBIO 2370), CHEM 2470 MBIO 1010, MBIO 2020 BIOL 2500, BIOL 2520	CHEM 3590 MBIO 3000, MBIO 3030, MBIO 3410	CHEM 4630 MBIO 4520 BTEC 4000 (6) ⁴
The requirements listed below can be completed in Year 1 or Year 2: 6 credit hours from the Faculty of Arts including the required "W" course 6 credit hours of Required Program Stream ² courses or electives ³		The requirements listed below can be completed in 3rd or 4th year: 9 credit hours of Optional Courses ² 27 credit hours of Required Program Stream courses ² and electives ³ .	
30 Hours		30 Hours	30 Hours
JOINT 4-YEAR MAJOR (incl. Co-operative Option if selected) 120 credit hours			
BIOL 1020, BIOL 1030 CHEM 1300, CHEM 1310 PHYS 1020 (or PHYS 1050) MATH 1500 ¹ STAT 1000	CHEM 2210, CHEM 2220, CHEM 2360 (MBIO 2360), CHEM 2370 (MBIO 2370), CHEM 2470 MBIO 1010, MBIO 2020 BIOL 2500, BIOL 2520	CHEM 3590 MBIO 3000, MBIO 3030, MBIO 3410	CHEM 4630 MBIO 4520
The requirements listed below can be completed in Year 1 or Year 2: 6 credit hours from the Faculty of Arts including the required "W" course 6 credit hours of Required Program Stream Courses ² and / or approved electives ³		The requirements listed below can be completed during 3rd and 4th year: 9 credit hours of Optional Courses ² 33 credit hours of Required Program Stream Courses ² and approved electives ³ .	
30 Hours		30 Hours	30 Hours
Work Terms (if Co-op Selected): BTEC 3980, BTEC 3990		Work Terms (if Co-op Selected): BTEC 4980 and /or BTEC 4990	
NOTES:			
1. MATH 1230, MATH 1510 or 1520 may be used in place of MATH 1500; MATH 1232 or MATH 1710 may be used in place of MATH 1700. 2. Optional courses and program stream courses requirements can be found above the Biotechnology program charts in section 4.4.1. 3. Refer to list of recommended elective courses and complementary Minor programs (listed above charts) prior to registration in your electives. 4. BTEC 4000 is required for students in the Honours program only. Students in the Honours Co-operative program will require 6 credit hours of approved electives. 5. Choice of BIOL 4554 or BIOL 4556 not already chosen for stream. (The number 6 in brackets indicates a 6 credit hour course.)			

4.4.3 Biotechnology Course Descriptions

BTEC 3980 Work Term 1 Cr.Hrs. 0

Work assignments in business, industry or government for students registered in the Biotechnology Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

BTEC 3990 Work Term 2 Cr.Hrs. 0

Work assignments in business, industry or government for students registered in the Biotechnology Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

BTEC 4000 Research Project in Biotechnology Cr.Hrs. 6

(Lab Required) Students can carry out independent biotechnology based research in their area of interest under the supervision of a faculty member or an approved external biotechnology professional. Results will be presented as an interim oral report and a written journal style paper. Registration restricted to Year 4 Honours Biotechnology students. Not to be held with any other Research Project courses such as MBIO 4530 or CHEM 4710.

BTEC 4980 Work Term 3 Cr.Hrs. 0

Work assignments in business, industry or government for students registered in the Biotechnology Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

BTEC 4990 Work Term 4 Cr.Hrs. 0

Work assignments in business, industry or government for students registered in the Biotechnology Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

4.5 Department of Chemistry

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4.5.1 Department of Chemistry Program Information

Chemistry is the science concerned with the properties of atoms and molecules, of which all matter is composed. Chemistry is important for all aspects of the material world - food production; the manufacture of medicines, textiles, and plastics; energy production; identifying environmental problems and remedies; and understanding the workings of living organisms. The department offers study in analytical, inorganic, organic and physical chemistry, and in biochemistry.

Chemistry Club: The Chemistry Club is the University of Manitoba Student Chapter of the Chemical Institute of Canada. The aim of the organization is to advance interest in chemistry. All students engaged in chemical studies are eligible for membership in the chapter and are encouraged to apply. Regular meetings, tours, publications, etc., are planned by each year's membership.

Scholarships and Awards: Several scholarships and awards are granted each year to Honours and Major students in Chemistry, Biochemistry, and Biotechnology on the basis of outstanding academic performance. To be eligible for these awards for any regular session, students are normally required to have completed a full program with a minimum of 18 credit hours of Chemistry in that session. They must also be registered for a full program with a minimum of 18 credit hours of Chemistry in the next regular session. Additional information is available from the Chemistry general office.

The department must approve a student's Honour or Major program each session. Students must also obtain departmental approval for any and all revisions to their program.

Honours Requirements

To enter the Honours program in Chemistry, a student must have completed at least 24 credit hours with a minimum DGPA of 3.00, and also obtained a minimum grade of "B" in **CHEM 1310**, **CHEM 1300**, **MATH 1500**, **MATH 1700**, **PHYS 1020 (1050)**, and **PHYS 1070** are required courses in this program and students are strongly encouraged to complete these courses in first year.

To continue in the Chemistry Honours program, students must maintain a minimum DGPA of 3.00 and complete a minimum of 9 credit hours during each Fall and Winter Term.

To graduate from the Chemistry Honours program students must achieve a minimum GPA of 3.00 and obtain a minimum grade of "C" on the courses that make up the 120 credit hours of the degree.

Honours Cooperative Option

Students interested in alternating academic terms and terms of paid employment as part of their Honours Chemistry program may enter the Cooperative Option in April of their second year in Honours Chemistry. This program provides students with a minimum of 12 months of paid employment by the time they graduate. It enables them to obtain work experience in research and industry with participating firms, government agencies and university units.

The course and grade requirements for entry to this option are the same as those required for entry to the regular Honours program, as indicated in the chart. Students are required to complete 24 credit hours of Chemistry (including **CHEM 2470** and either **CHEM 2280** or **CHEM 2290**) before they begin their first employment term. Students should refer to the general faculty regulations for B.Sc. (Honours) Cooperative Options in Section 3.6.

Students should note that the grade requirements for the Cooperative Option are the same as that for the regular Honours program. To continue in and graduate from the Honours Cooperative program a student must have a Degree Grade Point Average of 3.00. Each academic term while registered in Honours must comprise a minimum of 9 credit hours. To graduate with the Honours degree (Cooperative Option), a student must also have a minimum grade of "C" in all courses that contribute to the degree.

Students must apply for and be accepted into the Co-op program. The April application deadline information can be obtained by contacting the Co-op office. Students will be notified of their provisional acceptance in the program by September. Acceptance into the program is dependent upon the student receiving an employment placement. Employment term positions available to the students will be approved by the department, and the employers will select the students they wish to employ. Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Option if the demand for places exceeds the number of places available. The department reserves the right to determine and select the best qualified applicants.

Students are required to register in and pay fees for each employment term prior to the commencement of each employment term. Students will be required to submit an employment report upon the completion of each employment term.

Four Year Major Requirements

To enter the Chemistry Major program a student must have completed at least 24 credit hours with a minimum DGPA of 2.00 and also obtained a minimum grade of "C+" in **CHEM 1310**, **CHEM 1300**, **MATH 1500**, **MATH 1700**, **PHYS 1020 (1050)**, and **PHYS 1070** are required courses in this program and students are strongly encouraged to complete these courses in first year.

To continue in the Major program, a student must have a DGPA of 2.00 at each point of assessment.

To graduate with the Bachelor of Science (Major) in Chemistry, a student must obtain a minimum GPA of 2.00 on the 120 credit hours that contribute to the degree, and a minimum grade of "C" or better in all required Chemistry and Focus Area courses.

Students who, at the end of Year 1, are undecided between the four year Major and Honours programs should note that the prescription for Honours Year 2 satisfies both the Honours and Major program requirements.

Major Cooperative Option

Students interested in alternating employment terms and academic terms as part of their Major Chemistry program may enter the Cooperative Option in April of their second year in Chemistry. This program provides students with a minimum of 12 months of paid employment by the time they graduate. It enables them to obtain work experience in research and industry with participating firms, government agencies and University units.

The course and grade requirements for entry to this option are the same as those required for entry to the Chemistry Major program. Students are required to complete 24 credit hours of Chemistry (including **CHEM 2470** and either **CHEM 2280** or **CHEM 2290**) before they begin their first work term. To continue in the Major program, a student must have a DGPA of 2.00 at each point of assessment. To graduate with the Bachelor of Science (Major Cooperative Option) in Chemistry, a student must obtain a minimum GPA of 2.00 on the 120 credit hours that contribute to the degree and a minimum grade of "C" or better in all required Chemistry and Focus Area courses.

Students will apply for openings in the Cooperative Option in April of their second year in the Major program. They will be notified of their provisional acceptance in the program by September. Acceptance into the program is dependent upon the student receiving an employment placement. Employment term positions available to the students will be approved by the department, and the employers will select the students they wish to employ. Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Option if the demand for places exceeds the number of places available. The department reserves the right to determine and select the best qualified applicants.

Students are required to register in and pay fees for each employment term prior to the commencement of each employment term. Students will be required to submit an employment report upon the completion of each employment term.

Chemistry Program Focus Areas

Students may elect to take courses that, in combination, make up a Chemistry focus area. Currently, there are nine Chemistry focus areas. They are: Bio-analytical, Biopharmaceutical, Biophysical, Environmental, Inorganic, Materials Science, Organic, Physical, and Quantum/Computational. Each focus area has specific course requirements that students will satisfy in order to graduate and receive the focus area notation on their transcripts. Other focus areas may be selected with approval from the Department Head.

Required Courses for each Chemistry Focus Area (Note: Students are responsible for completing all prerequisite courses required for the completion of a specific Focus Area). The below course listings are not meant to be limiting. Plausible substitutions will be reviewed and approved by the Department of Chemistry on an individual basis.

Bioanalytical: 18 credit hours chosen from: **CHEM 2550, CHEM 2370, CHEM 3570, CHEM 4550, CHEM 4590, CHEM 4630, CHEM 4660**; plus a minimum of 9 credit hours from: **BGEN 3020 (6), MBIO 2020, MBIO 3410, PHYS 2600, PHYS 2610, PHYS 2260, STAT 2000**.

Biopharmaceutical: Each of: **CHEM 3390, CHEM 3580, CHEM 4580, CHEM 4590, CHEM 4670, CHEM 4690**; plus 9 credit hours chosen from: **BIOL 2380, BIOL 2410, BIOL 2420, BIOL 2520, BIOL 3290, BIOL 4470**

Biophysical: 18 credit hours chosen from: **CHEM 2370, CHEM 3360, CHEM 3370, CHEM 3490, CHEM 3570, CHEM 4590, CHEM 4620, CHEM 4630, CHEM 4640, CHEM 4700**; plus 9 credit hours chosen from: **BIOL 2500, BIOL 2520, MBIO 2410, MBIO 3460, MBIO 4540**

Environmental: Each of: **CHEM 2370, CHEM 2550, CHEM 4550, CHEM 4590**, and 6 credit hours of 3000 or 4000 level Chemistry courses; plus at least 9 credit hours chosen from: **ENVR 1000, ENVR 2000, ENVR 2180 (BIOL 2380), ENVR 3180, BIOL 4380**.

Inorganic: 18 credit hours chosen from: **CHEM 3390, CHEM 4680, CHEM 4570** (Topics in Inorganic Chemistry: Catalysis and Small Molecule Activation), **CHEM 4570** (Topics in Inorganic Chemistry: Bioinorganic Chemistry), **CHEM 4570** (Topics in Inorganic Chemistry: Inorganic Materials), **CHEM 4802** (Topics in Analytical Chemistry: Materials Characterization), **CHEM 3360**; plus 9 credit hours from **CHEM 3580, CHEM 4660, CHEM 4690, CHEM 3370, CHEM 3490, PHYS 2210 or PHYS 2260**. (Note: The Inorganic Chemistry Focus Area does not include 9 hours of non-Chemistry courses.)

Materials Science: Each of: **CHEM 3360, CHEM 3370, CHEM 3490, CHEM 4570, CHEM 4590, CHEM 4680**; plus 9 credit hours from: **BIOE 3320, ECE 3600, PHYS 2600, PHYS 2610**. (**MATH 1300** is highly recommended but does not count toward the 9 credit hour of non-Chemistry requirements).

Organic: 27 credit hours from: **CHEM 3390, CHEM 3580, CHEM 4580, CHEM 4590, CHEM 4620, CHEM 4630, CHEM 4660, CHEM 4670, CHEM 4680, CHEM 4690**. (Note: There are no non-Chemistry courses in the Organic Chemistry Focus Area)

Physical: 18 credit hours from: **CHEM 3360, CHEM 3370, CHEM 3490, CHEM 3570, CHEM 3580, CHEM 4100, CHEM 4660, CHEM 4800** (Topics in Physical/Theoretical Chemistry); plus 9 credit hours from: **MATH 2090, PHYS 2260, PHYS 2390, PHYS 2490, PHYS 2600, PHYS 2610, PHYS 3680**. (**MATH 1220** or **MATH 1300** are highly recommended but will not count toward the 9 credit hours of non-Chemistry requirements).

Quantum/Computational: Each of: **CHEM 3360, CHEM 3370, CHEM 3580, CHEM 4640, CHEM 4660, CHEM 4670**; plus 9 credit hours from: **COMP 2160, COMP 2190, MATH 2300, MATH 2600, PHYS 2380, PHYS 4250, PHYS 4520**.

ACADEMIC CALENDAR 2015-2016

Three Year Requirements

Courses taken as part of a three-year degree program provide an introduction to the major fields of study in Chemistry. Commencing in Fall Term 2010, students will have two options for a three year Degree under the Department of Chemistry.

Option A – Three Year General: As prescribed with all other faculty regulations in Section 3.2, students in this program must select 18 credit hours of 2000, 3000, and (or) 4000 level courses from each of two Science areas. To satisfy the requirement in the area of Chemistry, students must select a minimum of 18 credit hours from the following list of advanced level courses: **CHEM 2210, CHEM 2220, CHEM 2280, CHEM 2290, CHEM 2360, CHEM 2370, CHEM 2400 (CHEM 2380), CHEM 2470, CHEM 3360, CHEM 3370, CHEM 3390, CHEM 3400 (CHEM 3380), CHEM 3570, CHEM 3580, CHEM 3590, CHEM 4100, CHEM 4360, CHEM 4370, CHEM 4570, CHEM 4580, CHEM 4590, CHEM 4620, CHEM 4630, CHEM 4640, CHEM 4660, CHEM 4670, CHEM 4680, CHEM 4690** (subject to the Faculty requirement that of the 36 credit hours in the two advanced level Science areas, at least 6 credit hours must be at the 3000/4000 level).

Courses not allowed for use as advanced level courses in the 3-Year General Degree are: **CHEM 2240, CHEM 2550, CHEM 2560, CHEM 2770, CHEM 2780, CHEM 2860, CHEM 4550, the former CHEM 4600, CHEM 4610 (6), CHEM 4650, CHEM 4700, and CHEM 4710.**

Option B - Three Year B.Sc. – Chemistry Focus: Students that choose this path for their three-year degree program will follow the program chart below. The 24 credit hours of introductory courses and 36 credit hours of advanced level requirements have been prescribed in such a way so that students that follow the chart can seamlessly transfer to a 4-year Chemistry Honours or Major degree program should they choose to do so after the completion of the 90 credit hours listed in the chart.

Students anticipating a transfer to either the four year Major or Honours program at the end of their second or third year should consult with the Departmental Program Advisor before registering.

Laboratory Exemption Regulations

- valid for two calendar years only
- lab exemption given only one time per course
- laboratory marks are carried forward to the next course attempt
- students are responsible for laboratory questions on tests and examinations
- students must earn a minimum of 60% on the laboratory to be eligible for an exemption.

Biochemistry and Biotechnology Programs

The Department of Chemistry, in conjunction with the Department of Microbiology, offers Joint Honours programs, Joint Honours Cooperative Options, Joint four year Major programs and a Joint four year Major Cooperative Options in Biochemistry and Biotechnology. See sections 4.2 Biochemistry Program and 4.4 Biotechnology Program for full details.

4.5.2 Chemistry Honours Degree Program Chart

YEAR 1	YEAR 2	YEAR 3	YEAR 4
HONOURS⁴ (incl. Co-operative Option if selected) 120 CREDIT HOURS			
CHEM 1300, CHEM 1310 (B) PHYS 1050 ² (or PHYS 1020), PHYS 1070 MATH 1500 ¹ , MATH 1700 ¹	CHEM 2210, CHEM 2220, CHEM 2280, CHEM 2290, CHEM 2400, CHEM 2470, CHEM 2860 (CHEM 2360)	CHEM 3400, CHEM 3590	CHEM 4610 (6), CHEM 4710 (6)
In Year 1 or Year 2 the following must be completed: 6 credit hours from the Faculty of Arts, which should include the required "W" course 3 credit hours from Mathematics, Statistics or Computer Science courses ³ 12 credit hours of approved electives in years one and two		Sufficient credit hours (18) from the 2000, 3000 and 4000 level Chemistry ⁴ courses not yet taken to total a minimum of 63 credit hours of Chemistry courses at the 1000-4000 level. These credit hours may make up part of a focus area. 9 credit hours of non-Chemistry ⁶ courses which are part of a designated focus area ⁴ . If no Focus Area is selected, students must choose 9 credit hours of Chemistry courses. 15 credit hours of approved electives in years three and four ⁵	
		Work Terms (if Co-op selected): CHEM 3980, CHEM 3990	Work Terms (if Co-op selected): CHEM 4980 and/or CHEM 4990
30 Hours	30 Hours	30 Hours	30 Hours

NOTES:

1. **MATH 1230, MATH 1510 or MATH 1520** may be taken in place of **MATH 1500**; **MATH 1232 or MATH 1710** may be taken in place of **MATH 1700**; **MATH 1690** may be taken in place of **MATH 1500 and MATH 1700**.

2. **PHYS 1020** may be used in place of **PHYS 1050**. Students planning on completing a 4-year degree in Chemistry are required to complete **PHYS 1070**.
3. **MATH 1010, MATH 1020, MATH 1190, MATH 1191, COMP 1260 and COMP 1270** may not be used to satisfy this requirement.
4. Students may elect to complete the requirements set out in one of the Chemistry focus areas. If a student opts for one of the focus areas, they should consult with the Department of Chemistry and a Science Academic Advisor for information regarding specific course requirements for each focus area.
5. Elective courses should be selected in consultation with the Department of Chemistry and/or a Faculty of Science Academic Advisor.
6. Not all Focus Areas include non-Chemistry courses. Some Focus Areas are all Chemistry courses. Refer to the description of each Focus Area for more information.

(Letters in brackets indicate minimum prerequisite standing for further study. The number 6 in brackets indicates a 6 credit hour course.)

4.5.3 Chemistry Major Degree Program Chart

4-YEAR MAJOR^{4,5} (incl. Co-operative Option if selected) 120 CREDIT HOURS (comprising courses listed in chart below, and electives)			
CHEM 1300, CHEM 1310 (C+)	CHEM 2210, CHEM 2220, CHEM 2280, CHEM 2290, CHEM 2400, CHEM 2470, CHEM 2860 (CHEM 2360)	CHEM 3400, CHEM 3590	CHEM 4610 (6)
PHYS 1050 (or PHYS 1020 (C+)), PHYS 1070			
MATH 1500 ¹ , MATH 1700 ¹			
In Year 1 or Year 2 the following must be completed:		Sufficient credit hours (18) from the 2000, 3000 and 4000 level Chemistry ³ courses not yet taken to total a minimum of 57 credit hours of Chemistry courses at the 1000-4000 level. These credit hours may make up part of a focus area.	
6 credit hours from the Faculty of Arts, which should include the required "W" course.		9 credit hours of non-Chemistry courses ⁶ which are part of a designated focus area ³ . (Note: If no Focus Area is selected, students must choose 9 credit hours of Chemistry courses.)	
3 credit hours from Mathematics, Statistics or Computer Science courses ²		Work Terms (if Co-op selected): CHEM 3980, CHEM 3990	Work Terms (if Co-op selected): CHEM 4980 and/or CHEM 4990
30 Hours	30 Hours	30 Hours	30 Hours

NOTES:

1. **MATH 1230, MATH 1510 or MATH 1520** may be taken in place of **MATH 1500**; **MATH 1232 or MATH 1710** may be taken in place of **MATH 1700**; **MATH 1690** may be taken in place of **MATH 1500 and MATH 1700**.
2. **MATH 1010, MATH 1020, MATH 1190, MATH 1191, COMP 1260 and COMP 1270** may not be used to satisfy this requirement.
3. Students may elect to complete the requirements set out in one of the Chemistry focus areas. If a student opts for one of the focus areas, they should consult with the Department of Chemistry and a Science Academic Advisor for information regarding specific course requirements for each focus area.
4. **IMPORTANT:** The four year Major program need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.
5. Elective courses should be selected in consultation with the Department of Chemistry and/or a Faculty of Science Academic Advisor.
6. Not all Focus Areas include non-Chemistry courses. Some Focus Areas are all Chemistry courses. Refer to the description of each Focus Area for more information.

(Letters in brackets indicate minimum prerequisite standing for further study. The number 6 in brackets indicates a 6 credit hour course.)

4.5.4 Chemistry General Degree and Minor Requirements

THREE YEAR B.Sc. General – Chemistry Focus 90 CREDIT HOURS	
CHEM 1300, CHEM 1310 (C)	21 hours of required 2000 level Chemistry courses: CHEM 2210, CHEM 2220, CHEM 2280, CHEM 2290, CHEM 2400 (CHEM 2380), CHEM 2470, CHEM 2360
BIOL 1020, BIOL 1030	15 credit hours of 2000 level or higher CHEM: Excluding the Chemistry service courses (2240, 2560, 2770, 2780), Co-op courses (3980, 3990, 4980, 4990) and specialized courses (4610, 4700, 4710). A minimum of 6 credit hours must be chosen from the 3000 / 4000 level.
MATH 1500 ¹ , MATH 1700 ¹	6 credit hours of electives to be chosen from outside the Faculty of Science
PHYS 1050 ² , PHYS 1070 ²	18 credit hours of open electives
6 credit hours from the Faculty of Arts. (Should include the student's "W" requirement.)	
THREE YEAR GENERAL 90 CREDIT HOURS	
CHEM 1300, CHEM 1310 (C)	a minimum of 18 credit hours from the following list of advanced level courses: CHEM 2210, CHEM 2220, CHEM 2280, CHEM 2290, CHEM 2360, CHEM 2370, CHEM 2400 (CHEM 2380), CHEM 2470, CHEM 3360, CHEM 3370, CHEM 3400 (CHEM 3380), CHEM 3390, CHEM 3570, CHEM 3580, CHEM 3590, CHEM 4100, CHEM 4360, CHEM 4370, CHEM 4570, CHEM 4580, CHEM 4590, CHEM 4620, CHEM 4630, CHEM 4640, CHEM 4660, CHEM 4670, CHEM 4680, CHEM 4690 (subject to the Faculty requirement that of the 36 credit hours in the two advanced level Science areas, at least 6 credit hours must be at the 3000/4000 level).
MINOR	
CHEM 1300, CHEM 1310 (C)	Normally CHEM 2210 and CHEM 2220, plus an additional 6 credit hours of Chemistry

NOTES:

1. **MATH 1230 or MATH 1510 or MATH 1520** may be taken in place of **MATH 1500**; **MATH 1232 or MATH 1710** may be taken in place of **MATH 1700**; **MATH 1690** may be taken in place of **MATH 1500 and MATH 1700**.
2. **PHYS 1020** may be used in place of **PHYS 1050**; and, in the 3-year degree only - **PHYS 1030** may be used in place of **PHYS 1070**. Students planning on completing a 4-year degree in Chemistry are required to complete **PHYS 1070**.

(Letters in brackets indicate minimum prerequisite standing for further study. The number 6 in brackets indicates a 6 credit hour course.)

4.5.5 Chemistry - Physics Joint Honours Program

4.5.5 Chemistry - Physics Joint Honours Program			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
JOINT HONOURS² 120 CREDIT HOURS			
CHEM 1300 (B), CHEM 1310 (B)	CHEM 2210, CHEM 2220, CHEM 2280, CHEM 2290, CHEM 2400 or CHEM 2470	12 credit hours from whichever of CHEM 2400 or 2470 not taken and any of CHEM 2860 (CHEM 2360 /MBIO 2360), CHEM 2370 (MBIO 2370) or 3000 / 4000 level Chemistry courses	CHEM 4610 (6)
PHYS 1050 (B) (or PHYS 1020 (B+) ²), PHYS 1070 (B)	PHYS 2390, PHYS 2380, PHYS 2490, PHYS 2600, PHYS 2650	PHYS 2260, PHYS 2610, PHYS 3380, PHYS 3630, PHYS 3670, PHYS 3680	CHEM 4710 (6) or both PHYS 4672 and PHYS 4674
MATH 1500 ¹ (B), MATH 1700 ¹ (B)			PHYS 4390
6 credit hours from the Faculty of Arts, which should include the required "W" course			6 credit hours of 3000 / 4000 level Physics courses
6 credit hours of electives			3 credit hours of 3000 / 4000 level Chemistry courses
			6 credit hours of approved electives ³
30 Hours	30 Hours	30 Hours	30 Hours
NOTES:			
1. MATH 1230 or MATH 1510 or MATH 1520 may be taken in place of MATH 1500 ; MATH 1232 or MATH 1710 may be taken in place of MATH 1700 ; MATH 1690 may be taken in place of MATH 1500 and MATH 1700 .			
2. PHYS 1020 may be used in place of PHYS 1050 ; PHYS 1070 is required in the Chemistry and Physics Joint Honours program.			
3. Elective courses should be selected in consultation with the Department of Chemistry and/or a Faculty of Science Academic Advisor.			
(Letters in brackets indicate minimum prerequisite standing for further study. The number 6 in brackets indicates a 6 credit hour course.)			

4.5.6 Chemistry Course Descriptions

Chemistry Course Descriptions-0 Level

CHEM 0900 Preparatory Chemistry Cr.Hrs. 0

(Formerly 002.090) A course designed for students with little, or no background in chemistry who wish to achieve the prerequisites for advanced courses, or for students who require a refresher course in basic chemistry. Concurrent registration in CHEM 0900 and any of CHEM 1300, CHEM 1301, CHEM 1311 or CHEM 1320 is not permitted. (Pass/Fail grade only.) Prerequisite or Concurrent Requirement: Any grade 12 or 40S Mathematics course or equivalent.

Chemistry Course Descriptions-1000 Level

CHEM 1000 Understanding the World through Chemistry Cr.Hrs. 3

(Formerly 002.100) This course introduces students to the principles of chemistry necessary for an understanding of contemporary issues in agriculture, the environment, industry, medicine, and the economy. High school chemistry is not required. May be used as a prerequisite (minimum grade "B") for CHEM 1300 or CHEM 1301 (Developmental section). Not to be held with CHEM 1001 or the former 002.125. May not be used to fulfill chemistry requirements in a Chemistry Honours, Major, General or Minor program. Not available to students who have previously obtained credit in, or are concurrently registered in, any 2000 level university Chemistry course.

CHEM 1030 Carbon Chemistry in Nature and Society Cr.Hrs. 3

(Formerly 002.103) This course introduces organic molecules and illustrates the principles of organic chemistry with topics from cosmetics and personal care products, the petroleum industry, food preparation chemistry, polymers and plastics, poisons and biological toxins, and risk assessment. May not be used to fulfill chemistry requirements in a Chemistry Honours, Major, General or Minor program. Not available to students who have previously obtained credit in, or are concurrently registered in, any 2000 level university Chemistry course. Not to be held with CHEM 1031 or the former 002.125. Prerequisite: One of CHEM 1000, CHEM 1001 (002.100) (C), CHEM 1300, CHEM 1301 (002.130) (C), Chemistry 40S (or equivalent), or CHEM 0900 (002.090).

CHEM 1300 University 1 Chemistry: Structure and Modelling in Chemistry Cr.Hrs. 3

(Lab Required) (Formerly 002.130) Atomic and molecular models and their applications to chemistry, including a discussion of solid, liquid, and gaseous states, and of mixtures. Not to be held with CHEM 1301. Prerequisites: Applied Mathematics 40S or Pre-calculus Mathematics 40S, or the former Mathematics 40S (300); and Chemistry 40S (or equivalent) or CHEM 0900 (002.090) (P), or a minimum grade of "B" in CHEM 1000 or CHEM 1001 (002.100).

CHEM 1310 University 1 Chemistry: An Introduction to Physical Chemistry Cr.Hrs. 3

(Lab Required) (Formerly 002.131) Thermochemistry, chemical thermodynamics, and chemical kinetics. Prerequisite: CHEM 1300 or CHEM 1301 (002.130) (C).

CHEM 1320 University 1 Chemistry: An Introduction to Organic Chemistry Cr.Hrs. 3

(Lab Required) (Formerly 002.132) Structures, properties and reactions of organic molecules. Not to be held with CHEM 2210 or CHEM 2211 (002.221) Prerequisite: CHEM 1300 or CHEM 1301 (002.130) (C).

Chemistry Course Descriptions-2000 Level

CHEM 2210 Introductory Organic Chemistry 1: Structure and Function Cr.Hrs. 3

(Lab Required) (Formerly 002.221) An introduction to the concepts of organic reactivity and bonding in organic molecules. Preparation and properties of functionalized organic molecules. Not to be held with CHEM 1320 (002.132) or CHEM 2211. Prerequisite: CHEM 1310 or CHEM 1311 (002.131) (C).

CHEM 2220 Introductory Organic Chemistry 2: Reactivity and Synthesis Cr.Hrs. 3

(Lab Required) (Formerly 002.222) An introduction to the reactivity of organic compounds and organic spectroscopy. The application of functional group interconversions to syntheses. Not to be held with CHEM 2221. Prerequisite: CHEM 2210 or CHEM 2211 (002.221) (C).

CHEM 2240 Applied Chemistry for Engineers Cr.Hrs. 3

(Formerly 002.224) Bonding, surface chemistry, phase rule, electrochemistry, materials and descriptive inorganic chemistry of selected elements. Prerequisite: CHEM 1300 or CHEM 1301 (002.130) (C).

CHEM 2280 Physical Chemistry: Microscopic Descriptions of Matter Cr.Hrs. 3

(Lab Required) (Formerly 002.228) Molecular based approach to understanding physical behaviour of matter. Introduction to principles of quantum mechanics, electronic structure and bonding, molecular spectroscopy. Not to be held with CHEM 2281. Prerequisites: CHEM 1310 or CHEM 1311(002.131) (C); PHYS 1030 or PHYS 1031 (016.103) (C) or PHYS 1070 or PHYS 1071 (016.107) (C); plus six credit hours of 1000 level mathematics (preferably calculus) with the exception of the former 136.100, MATH 1010 (136.101), MATH 1190, MATH 1191 (136.119), FA 1020 (054.102), or MATH 1020 (136.102).

CHEM 2290 Chemical Energetics and Dynamics: Macroscopic Descriptions Cr.Hrs. 3

(Lab Required) (Formerly 002.229) Chemical energetics, entropy and the second law of thermodynamics, chemical dynamics. Not to be held with CHEM 2291. Prerequisites: CHEM 1310 or CHEM 1311 (002.131) (C); PHYS 1030 or PHYS 1031 (016.103) (C) or PHYS 1070 or PHYS 1071 (016.107) (C); plus six credit hours of 1000 level mathematics (preferably calculus) with the exception of the former 136.100, MATH 1010 (136.101), MATH 1190, MATH 1191 (136.119), MATH 1020 (136.102), or FA 1020 (054.102).

CHEM 2360 Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy Cr.Hrs. 3

(Lab Required) (Formerly 002.236) An introductory course dealing with kinds of molecules encountered in biochemistry, and the concept of metabolic energy as a product of catabolism and a requirement for biosynthesis. This course is also given in Microbiology as MBIO 2360. Not to be held with CHEM 2361, CHEM 2770 (002.277), MBIO 2360, MBIO 2361 (060.236), or MBIO 2770 (060.277). Prerequisites: CHEM 1310 or CHEM 1311 (002.131) (C+); and one of BIOL 1030, BIOL 1031, or the former 071.125 (C). NOTE: Students may hold this course for credit in the B.Sc. General Degree program, but may not use it to fulfill the minimum requirement of 12 credit hours in 2000 level Chemistry (pre-September 2008 regulations). Those students following the new General Degree regulations (effective 2008-09) are able to use this course as part of the 18 credit hours of advanced level Chemistry or Microbiology.

CHEM 2370 Biochemistry 2: Catabolism, Synthesis, and Information Pathways Cr.Hrs. 3

(Lab Required) (Formerly 002.237) An introductory course dealing with the basic metabolic processes that occur in living cells, including the production and use of metabolic energy, the breakdown and synthesis of biomolecules; the synthesis of DNA, RNA and proteins; and the regulation of these processes. This course is also given in Microbiology as MBIO 2370. Not to be held with CHEM 2371, CHEM 2780 (002.278), MBIO 2370, MBIO 2371 (060.237), or MBIO 2780 (060.278). Prerequisites: one of CHEM 2360, CHEM 2361 (002.236), MBIO 2360, or MBIO 2361 (060.236); and CHEM 2210 or CHEM 2211 (002.221), both courses with a minimum grade of "C". NOTE: Students may hold this course for credit in the B.Sc. General Degree program, but may not use it to fulfill the minimum requirement of 12 credit hours in 2000 level Chemistry (pre-September 2008 regulations). Those students following the new General Degree regulations (effective 2008-09) are able to use this course as part of the 18 credit hours of advanced level Chemistry or Microbiology.

CHEM 2400 Inorganic chemistry: Structure and Applications Cr.Hrs. 3

(Lab Required) Overview of chemical bonding, structure and reactivity across the Periodic Table, illustrated by examples linking Inorganic Chemistry with e.g. materials science and biochemistry. The lab component involves synthesis and analysis of simple inorganic compounds. Not to be held with CHEM 2380, CHEM 2381 or CHEM 2401. Prerequisite: CHEM 1310 or CHEM 1311 (C).

CHEM 2470 Introductory Analytical Chemistry Cr.Hrs. 3

(Lab Required) (Formerly 002.247) A course in quantitative analysis provides training useful for nearly all scientists. It equips the students with the theoretical principles on which the analytical methods are based, with the ability to plan and perform experimental work, to interpret the results. Not to be held with CHEM 2471. Prerequisites: CHEM 1310 or CHEM 1311 (002.131) (C); and three credit hours of mathematics with the exception of the former 136.100, MATH 1010, MATH 1190, MATH 1191, MATH 1020, or FA 1020.

CHEM 2550 Environmental Chemistry Cr.Hrs. 3

(Lab Required) (Formerly 002.255) An introduction to the chemistry of the environment. Emphasis will be on the composition of the natural environment and the processes of natural and human-introduced chemical species that take place within it. The course will provide students with the chemical basis for understanding the environment and environmental problems. This course is also taught in Environmental Science as ENVR 2550. Prerequisite: CHEM 1310 or CHEM 1311 (002.131) (C).

CHEM 2560 Water Quality Analysis for Engineers Cr.Hrs. 3

(Lab Required) Principles and applications of chemical and instrumental methods for the analysis of water quality. This course is restricted to students in Civil Engineering.

CHEM 2770 Elements of Biochemistry 1 Cr.Hrs. 3

(Lab Required) (Formerly 002.277) Basic concepts of biochemistry including the properties of biomolecules (amino acids and proteins, enzymes, carbohydrates, lipids, and nucleic acids) and aspects of energy production in cells. For students in Agricultural and Food Sciences, Human Ecology, and Four Year Biological Sciences programs in Science. May not be used as part of an Honours, Major, General, or Minor program in Chemistry or in Microbiology. This course is also given in Microbiology as MBIO 2770. Not to be held with CHEM 2360, CHEM 2361 (002.236), MBIO 2360, MBIO 2361 (060.236), CHEM 2860 (002.286), or MBIO 2770 (060.277). Prerequisites: one of CHEM 1310, CHEM 1311 (002.131) (C), or CHEM 1320 (002.132) (C); plus six credit hours of university level biological sciences.

CHEM 2780 Elements of Biochemistry 2 Cr.Hrs. 3

(Lab Required) (Formerly 002.278) The continuation of CHEM 2770 or MBIO 2770, dealing with nitrogen and lipid metabolism, representative biosynthetic pathways, and synthesis and importance of DNA, RNA and proteins. For students in Agricultural and Food Sciences, Human Ecology, and four-year Biological Science programs in Science. May not be used as part of an Honours, Major, General, or Minor program in Chemistry or Microbiology. This course is also given in Microbiology as MBIO 2780. Not to be held with CHEM 2370, CHEM 2371 (002.237), MBIO 2370, MBIO 2371 (060.237), MBIO 2780 (060.278) or the former courses 002.235, 002.240, 060.235, 060.240. Prerequisites: one of CHEM 2770 (002.277), MBIO 2770 (060.277) (C), CHEM 2360, CHEM 2361 (002.236), MBIO 2360, or MBIO 2361 (060.236) (C).

CHEM 2860 Chemistry of Biomolecules Cr.Hrs. 3

(Lab Required) (Formerly 002.286) The chemistry of molecules encountered in biochemistry, including their structures, reactions, and physical properties. The concept of metabolic energy in biochemistry. Not to be held with CHEM 2360, CHEM 2361 (002.236), CHEM 2770 (002.277), MBIO 2360, MBIO 2361 (060.236), MBIO 2770 (060.277), or the former courses 002.240, 060.240, 002.235 or 060.235. Prerequisite: one of CHEM 1310, CHEM 1311 (002.131), or the former 002.128 with a minimum grade of "C". This course is available only to students registered in the Chemistry Honours or Four Year Major program.

Chemistry Course Descriptions-3000 Level

CHEM 3360 Elementary Quantum Chemistry and Molecular Bonding Cr.Hrs. 3

(Lab Required) (Formerly 002.336) Elementary quantum chemistry and its applications to structure and bonding in molecules and solids. Prerequisite: CHEM 2280 (002.228) or CHEM 2281 or the former 002.230 (C).

CHEM 3370 Symmetry, Spectroscopy and Structure Cr.Hrs. 3

(Lab Required) (Formerly 002.337) Applications of symmetry in chemistry; molecular spectroscopy; structure of solids. Prerequisite: CHEM 2280 or CHEM 2281 (002.228) or the former 002.230 (C).

CHEM 3390 Structural Transformations in Organic Chemistry Cr.Hrs. 3

(Lab Required) (Formerly 002.339) An intermediate course dealing with the reactions of organic chemistry involving functional group transformations and carbon-carbon bond forming reactions. Prerequisite: one of CHEM 2220, CHEM 2221 (002.222), or the former 002.220 (C). CHEM 2290 or CHEM 2291 (002.229) is recommended.

CHEM 3400 Inorganic Chemistry: Reactivity and Properties Cr.Hrs. 3

(Lab Required) Advanced chemistry of the elements with emphasis on chemical reactivity, electronic structure and physical properties of inorganic compounds. The laboratory focuses on the preparation, structure determination and spectroscopic characterization of inorganic compounds. This course may not be held for credit with CHEM 3380. Prerequisite: CHEM 2400 or CHEM 2380 (C).

CHEM 3490 Introduction of Polymers Cr.Hrs. 3

(Formerly 002.349) An introduction to the formation, structure, physical properties, and degradation of polymers. Prerequisites: one of CHEM 2220, CHEM 2221 (002.222) or the former 002.220 (C); and CHEM 2290 or CHEM 2291 (002.229), or the former 002.230 (C).

CHEM 3570 Biophysical Chemistry Cr.Hrs. 3

The application of physical chemistry to biological problems, with an emphasis on quantitative interpretation. Topics include enzyme kinetics, bioenergetics, transport processes and spectroscopy. Prerequisites: CHEM 2360 and MATH 1500 (or equivalent). CHEM 2280 is recommended.

CHEM 3580 Methods in Physical Organic Chemistry Cr.Hrs. 3

(Lab Required) (Formerly 002.358) A course dealing with the application of physical chemical principles to organic reaction mechanisms. Prerequisite: one of CHEM 2220, CHEM 2221 (002.222) or the former 002.220 (C). Prerequisite or concurrent registration: CHEM 2290 or CHEM 2291(002.229).

CHEM 3590 Instrumental Analysis Cr.Hrs. 3

(Lab Required) A course dealing with the theory and use of standard instruments used for chemical and biochemical analyses. An introduction to the interpretation of data obtained from such analyses. This course is designed to follow a classical analytical chemistry course. Not to be held with ENVR 3550 (128.355) or the former 002.347 or the former 002.355. Prerequisite: CHEM 2470 (002.247) (C).

CHEM 3980 Work Term 1 Cr.Hrs. 0

Work assignments in business, industry or government for students registered in the Chemistry Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only)

CHEM 3990 Work Term 2 Cr.Hrs. 0

Work assignments in business, industry or government for students registered in the Chemistry Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

Chemistry Course Descriptions-4000 Level**CHEM 4100 MATERIALS CHEMISTRY Cr.Hrs. 3**

This course emphasizes the synthesis, structure, properties and applications of a wide variety of materials, providing insight into the chemistry behind many common and high-tech materials and devices. Specific examples include solar cells, fibre optics, batteries, polymer composites, magnetic and multiferroic materials. May not be held with CHEM 4570 when titled "Materials Chemistry." Prerequisite: CHEM 3400 (C).

CHEM 4360 Signalling and Regulation of Gene Expression Cr.Hrs. 3

(Formerly 002.436) The biochemistry of cell response to external stimuli, with emphasis on animals. Cell surface receptors and ligands; signalling to the nucleus; phosphorylation and proteolysis; transcription; gradients in cell patterning. Not to be held with CHEM 4361. Prerequisite: a "C" or better in one of CHEM 2370, CHEM 2371 (002.237), MBIO 2370, MBIO 2371(060.237), the former 002.235, or the former 060.235.

CHEM 4370 Glycobiology and Protein Activation Cr.Hrs. 3

(Formerly 002.437) The role of carbohydrate containing biomolecules in biochemistry and their importance for understanding some genetic diseases. The importance of limited proteolysis in activation of biomolecules. Not to be held with CHEM 4371 or the former 002.449. Prerequisite: a "C" or better in one of CHEM 2370, CHEM 2371 (002.237), MBIO 2370, MBIO 2371(060.237), the former 002.235, or the former 060.235.

CHEM 4550 Aquatic Chemistry Cr.Hrs. 3

(Formerly 002.455) An examination of biogeochemical processes affecting the distribution, speciation and bioavailability of chemical substances in the aquatic environment. The theoretical basis for the chemical behaviour of natural water systems is discussed, as well as the description of processes involved in wastewater treatment. This course is also taught in Environmental Science as ENVR 4550 (128.455). Prerequisite: A grade of "C" or better in one of CHEM 3590, the former 002.347, the former 002.355, or ENVR 3550 (128.355); or permission of the department.

CHEM 4570 Topics in Inorganic Chemistry Cr.Hrs. 3

(Formerly 002.457) A variety of topics from recent literature. This is an advanced 4000 level course. Registration requires departmental permission. This course may not be offered every year - check with department for availability.

CHEM 4580 Topics in Organic Chemistry Cr.Hrs. 3

(Formerly 002.458) Selected topics dealing with the structure and reactivity of organic compounds. This is an advanced 4000 level course. Registration requires departmental permission. This course may not be offered every year - check with department for availability.

CHEM 4590 Bioanalytical Methods Cr.Hrs. 3

(Lab Required) This course introduces different methods used currently for the analysis of biological materials. Qualitative and quantitative aspects are explored. Instrumentation is described and practical methods are designed. Not to be held with the former 002.347. Prerequisite: a grade of "C" or better in CHEM 3590, or ENVR 3550 (128.355), or the former 002.355.

CHEM 4610 Advanced Chemical Techniques Cr.Hrs. 6

(Lab required) A workshop course consisting of lectures, problem solving, and advanced instrumental techniques. The course is designed to train potential research students in techniques like NMR, mass spectroscopy, and chromatography. This course is required of all final year Honours students in Chemistry. May not hold with the former CHEM 4600 (002.460). Prerequisite: one of CHEM 3360 (002.336) (C), CHEM 3370 (002.337) (C), CHEM 3400 (C), CHEM 3380 (002.338) (C), CHEM 3390 (002.339) (C), CHEM 3590 (002.359) (C) or CHEM 3580 (002.358) (C).

CHEM 4620 Biochemistry of Nucleic Acids Cr.Hrs. 3

(Formerly 002.462) The structure of nucleic acids; synthesis and sequence determination; interaction with drugs and protein. Not to be held with CHEM 4621. Prerequisite: a "C" or better in one of CHEM 2370, CHEM 2371 (002.237), MBIO 2370, MBIO 2371 (060.237), the former 002.235, or the former 060.235.

CHEM 4630 Biochemistry of Proteins Cr.Hrs. 3

(Formerly 002.463) The structure and function of proteins, their physical and chemical properties and methods for studying them. Not to be held with CHEM 4631. Prerequisite: a "C" or better in one of CHEM 2370, CHEM 2371 (002.237), MBIO 2370, MBIO 2371 (060.237), the former 002.235, or the former 060.235.

CHEM 4640 Spectroscopy, Relaxation and Structure Cr.Hrs. 3

(Formerly 002.464) A course dealing with quantum mechanical manipulations and illustrations from magnetic resonance and other spectroscopies; relaxation and polarization phenomena. Prerequisite: CHEM 3370 (002.337) (C) or permission of the Instructor.

CHEM 4650 Molecular States and Processes Cr.Hrs. 3

(Formerly 002.465) A course dealing with various aspects of molecular states and processes including student selected topics. Prerequisite: CHEM 3370 (002.337) (C).

CHEM 4660 Computational Chemistry Cr.Hrs. 3

An overview of modern computational methods employed in the study of chemical systems, combining theoretical understanding with practical applications. Prerequisite: CHEM 3360

CHEM 4670 Drug Design and Drug Discovery Cr.Hrs. 3

An understanding of the design, synthesis and interactions of drug molecules. Emphasis will be on novel drug-like molecules in the early stages of drug discovery with special focus on brain diseases and infectious diseases. Prerequisites: CHEM 2220 (C); and one of CHEM 2360, CHEM 2361, MBIO 2360, MBIO 2361, 002.236, 060.236 (C) or CHEM 2860 (C).

CHEM 4680 Organometallic Chemistry Cr.Hrs. 3

(Formerly 002.468) Chemistry of organometallic compounds of the transition metals and representative elements. Prerequisite: CHEM 3400 (C), or CHEM 3380 (002.338) (C), or CHEM 3390 (002.339) (C)

CHEM 4690 Specific Methods in Organic Synthesis Cr.Hrs. 3

(Formerly 002.469) Advanced methods and principles of organic synthesis of complex molecules. Prerequisite: CHEM 3390 (002.339) (C).

CHEM 4700 Advanced Biochemistry Laboratory Cr.Hrs. 3

(Lab required) (Formerly 002.470) A laboratory and workshop consisting of lectures, problem solving, and advanced instrumental techniques such as magnetic resonance spectroscopy, mass spectrometry, circular dichroism, x-ray crystallography, fluorescence spectroscopy and computer analysis of protein sequences. This course is required for all final year Honours students in Biochemistry. Prerequisite or concurrent requirement: CHEM 4620 or CHEM 4621; and CHEM 4630 or CHEM 4631.

CHEM 4710 Research Project in Chemistry or Biochemistry Cr.Hrs. 6

(Lab required) (Formerly 002.471) A research project in any aspect of chemistry or biochemistry, chosen in consultation with the course administrator and an appropriate supervising faculty member. Written reports and oral presentation at the end of the project will be required. The course is normally available only to final year students in chemistry programs. Not to be held with CHEM 4711 or MBIO 4530 (060.453). Prerequisite: Permission of the course administrator.

CHEM 4800 Topics in Physical/Theoretical Chemistry Cr.Hrs. 3

Selected topics related to physical chemistry properties of matter, their measurement, and computational methods for studying them. This is an advanced 4000 level course, registration only by Departmental permission. This course may not be offered every year - check with department for availability.

CHEM 4802 Topics in Analytical Chemistry Cr.Hrs. 3

Selected topics on the most recent and sensitive techniques described in the literature in the Analytical, Bioanalytical and Environmental areas. A selection of topics among separation, surface, ionization, spectroscopy, voltammetry and spectrometry techniques will be covered. This is an advanced 4000 level course, registration only by Department permission. This course may not be offered every year - check with department for availability.

CHEM 4804 Topics in Biochemistry Cr.Hrs. 3

Selected advanced topics relevant to the study of biomolecules. This is an advanced 4000 level course, registration only by Departmental permission. This course may not be offered every year - check with department for availability.

CHEM 4980 Work Term 3 Cr.Hrs. 0

Work assignments in business, industry or government for students registered in the Chemistry Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

CHEM 4990 Work Term 4 Cr.Hrs. 0

Work assignments in business, industry or government for students registered in the Chemistry Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

4.6 Department of Computer Science

Head: John Anderson

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4.6.1 Program Information

Computer technology continues to advance and computer applications are found in all fields and disciplines. As new applications proliferate, opportunities for careers in computing will continue to be strong. Both the Major and the Honours programs offer a co-op option so students may combine education with employment experience.

The department must approve a student's Honour or Major program prior to registration for each Fall/Winter Term. Students must also obtain departmental approval for any and all revisions to their program.

The Computer Science Honours and Major programs, including the Coop programs, and the Software Engineering area of specialization, are accredited by the Computer Science Accreditation Council.

Honours

The Honours program in Computer Science at the University of Manitoba was the first Honours program in Canada to be given professional accreditation by the Canadian Information Processing Society. The program provides an opportunity to study the subject in greater depth than the other programs in Computer Science and leads to an Honours Bachelor of Computer Science degree (B.C.Sc.). In addition, this program gives professional preparation for careers in areas such as software engineering, system design or project management.

An outline of the Honours program is provided below. **MATH 1700** or equivalent is strongly recommended as an option. Optional courses are selected in consultation with the department advisor.

To enter the Honours program in Computer Science, a student must have completed at least 24 credit hours with a minimum GPA of 3.00, and also obtained a minimum grade of "B" in **COMP 1020**. Students are strongly encouraged to complete **MATH 1300 and MATH 1500** (or equivalents) with at least a "C" prior to entering the Computer Science Honours program. Failure to complete these first year Mathematics requirements will result in the inability to register for certain 2000 level required courses.

To continue in the Computer Science Honours program, students must maintain a minimum GPA of 3.00 and complete a minimum of 9 credit hours during each Fall and Winter Term.

To graduate from the Computer Science Honours program students must achieve a minimum GPA of 3.00 and obtain a minimum grade of "C" on the courses that make up the 120 credit hours of the degree.

Students can take a maximum of 90 credit hours of computer science, statistics and mathematics courses. Outside of computer science and mathematics courses, students are encouraged to select courses such that their programs include at least 15 credit hours of study in science, engineering, or business, and at least 9 credit hours of study in the humanities or social sciences.

Honours Cooperative Option

The first class of students graduated from the Cooperative program in October 1983. This program provides students with a total of 12 months of paid employment by the time they graduate. It enables them to obtain work experience with participating firms in Winnipeg as well as other parts of Canada. For example, students have, in the past, found employment in Calgary, Edmonton, Toronto, Vancouver and Ottawa, and they have found the program an invaluable preparation for their working lives.

Students interested in alternating employment terms and academic terms as part of their Honours Computer Science program may apply to enter the Cooperative Option in their second year in Honours Computer Science. The course and grade requirements for entry to this option are the same as those required for entry to the regular Honours program, as indicated in the chart below.

Students should refer to the general faculty regulations for Cooperative Options in Section 3.6, especially for information on performance requirements.

Students should note that the course and grade requirements for the Cooperative Option are the same as that of the regular Honours program.

REMINDER: Students must complete at least nine (9) credit hours per each Fall and Winter Term (or equivalent for cooperative students) to remain in the Honours program.

To graduate with the Honours degree, a student must present a minimum grade of "C" in each course which contributes to the degree and a GPA of 3.00.

Students can take a maximum of 90 credit hours of computer science, statistics and mathematics courses. Outside of computer science and mathematics courses, students are encouraged to select courses such that their programs include at least 15 credit hours of study in science, engineering, or business, and at least nine (9) credit hours of study in the humanities or social sciences.

Students in this program will normally graduate following the completion of the Year 4 academic requirements in December, will receive their degree in February, and will be eligible to attend the May Convocation.

Employment term positions available to the students will be approved by the department, and the employers will select the students they wish to employ. Students will apply for openings in the Cooperative Option in April of their second year in the Honours program. They will be notified of their

provisional acceptance in the program in September. Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Option if the demand for places exceeds the number of places available. The department reserves the right to determine and select the best qualified applicants.

The employment terms will be designed to provide students with the opportunity to acquire practical experience in a computer installation site and to acquire insight into areas of specialization within the computing field. Students can also typically earn enough to defray the cost of their university education.

Students are required to register in and pay fees for each employment term prior to the commencement of each employment term. Students will be required to submit an employment report upon the completion of each of their three employment terms.

Four Year Major

To enter the Major Degree program in Computer Science, a student must have completed at least 24 credit hours with a minimum GPA of 2.00, and also obtained a minimum grade of "C+" in **COMP 1020**. Students are strongly encouraged to complete **MATH 1300 and MATH 1500** (or equivalents) with at least a "C" prior to entering the Computer Science Major program. Failure to complete these first year Mathematics requirements will result in the inability to register for certain 2000 level required courses.

To continue in the Major program a student must maintain a minimum GPA of 2.00.

To graduate with the Computer Science Major degree, a student must present a minimum grade of "C" in: **MATH 1300, MATH 1500, STAT 1000, COMP 2080, COMP 2130, COMP 2140, COMP 2150, COMP 2160, COMP 2280, COMP 3350, COMP 3370, COMP 3430, COMP 4620** and in each of the 18 credit hours of 3000 and 4000 level Computer Science courses that apply to the Computer Science component of their degree program. Additionally, students must achieve a minimum GPA of 2.00 on the courses that contribute to the 120 credit hours of the degree.

This program is suitable for those students interested in combining a fairly extensive program in Computer Science with broad coverage of another subject or subjects of their choice (Science or non-Science). The program offers greater scheduling flexibility, more relaxed entrance requirements, and a wider range for the inclusion of electives from other disciplines than the Honours program, but it is not considered to offer the same professional training as the Honours program. Admission to graduate programs may be conditional upon completion of additional courses. Students intending to proceed to a master's degree from the four year Major program must consult with the department at the beginning of their second year of undergraduate study and in each subsequent year.

The student will be able to transfer to the Honours program at the end of the second year, provided that departmental and faculty requirements for the Honours program at that stage are satisfied.

Students, who at the end of Year 1 are undecided between the four year Major program and the Honours program, should note that the required courses in Year 2 Honours satisfy the requirements for both the Honours and Major programs. It is suggested that students with the necessary prerequisite standing in Year 1 may wish to register in the courses listed for Year 2 of the Honours program, and thus keep both options open.

Students can take a maximum of 90 credit hours of computer science, statistics and mathematics courses. Outside of computer science and mathematics courses, students are encouraged to select courses such that their programs include at least 15 credit hours of study in science, engineering, or business, and at least nine (9) credit hours of study in the humanities or social sciences. Students may be allowed to take up to 48 credit hours of courses outside the Faculty of Science with departmental permission, despite the faculty maximum of 36 credit hours. The permission would typically be granted if a student is completing a minor outside of Science and may have completed a variety of electives outside the Faculty prior to declaring a minor in one department.

Four Year Major Cooperative Option

To continue in the Major program a student must maintain a minimum GPA of 2.00.

To graduate with the Major degree, a student must present a minimum grade of "C" in: **MATH 1300, MATH 1500, STAT 1000, COMP 2080, COMP 2130, COMP 2140, COMP 2150, COMP 2160, COMP 2280, COMP 3350, COMP 3370, COMP 3430, COMP 4620** and in each of the 18 credit hours of 3000 and 4000 level Computer Science courses that apply to the Computer Science component of their degree program. Students must also obtain a minimum GPA of 2.00 on the 120 credit hours that contribute to the degree.

Students can take a maximum of 90 credit hours of computer science, statistics and mathematics courses. Outside of computer science and mathematics courses, students are encouraged to select courses such that their programs include at least 15 credit hours of study in science, engineering, or business, and at least 9 credit hours of study in the humanities or social sciences. Students may be allowed to take up to 48 credit hours of courses outside the Faculty of Science with departmental permission, despite the faculty maximum of 36 credit hours. The permission would typically be granted if a student is completing a minor outside of Science and may have completed a variety of electives outside the Faculty prior to declaring a minor in one department.

This program provides students with a minimum of 12 months of paid employment by the time they graduate. It enables them to obtain work experience with participating firms in Winnipeg as well as other parts of Canada.

Students interested in alternating employment terms and academic terms as part of their four year Major program in Computer Science may apply to enter the Cooperative Option in their third year of the four year Major program in Computer Science. The course and grade requirements for entry to this option are the same as those required for entry to the regular four year Major program, as indicated in the chart above. Students should refer to the general faculty regulations for Cooperative Options in Section 3.4.

Students should note that the course and grade requirements for the Cooperative Option are the same as that for the regular Major program. Students in this program will normally graduate following the completion of the Year 4 academic requirements in December, will receive their degree in February,

and will be eligible to attend the May Convocation.

Employment term positions available to the students will be approved by the department, and the employers will select the students they wish to employ. Students will apply for openings in the Cooperative Option in April of their second year in the Major program. They will be notified of their provisional acceptance in the program in September. Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Option if the demand for places exceeds the number of places available. The department reserves the right to determine and select the best qualified applicants.

The employment terms will be designed to provide students with the opportunity to acquire practical experience and insight into areas of specialization within the computing field. Students can also typically earn enough to defray the cost of their university education.

Students are required to register in, and pay fees for, each employment term prior to the commencement of each employment term. Students will be required to submit an employment report upon the completion of each of their three employment terms.

Three Year General

As prescribed with all other faculty regulations in Section 3.2, students in this program must select 18 credit hours of 2000, 3000, and (or) 4000 level courses from each of two Science areas. To satisfy the requirement in the area of Computer Science, students must select a minimum of 18 credit hours from the 2000, 3000, and (or) 4000 level courses offered by the department (subject to the Faculty requirement that of the 36 credit hours in the two advanced level Science areas, at least 6 credit hours must be at the 3000/4000 level.).

<p>Area Specializations</p> <p>Students who obtain a grade of "C" or better in the courses listed for an area of specialization will receive a notation on their transcript stating that they have met the requirements of that specialization. Students may obtain such a notation for more than one area.</p> <p>Theoretical Computer Science</p> <p>Requires: COMP 3170, COMP 3030, and COMP 4420; and two of COMP 4340, 4140, and/or COMP 4510.</p> <p>Networks and Security</p> <p>Requires: COMP 4140, COMP 4300, and COMP 4580.</p> <p>Artificial Intelligence</p> <p>Requires: COMP 3190; and two of COMP 4180, COMP 4190, COMP 4200, and/or COMP 4360.</p>	<p>Human-Computer Interaction and Computer Graphics</p> <p>Requires: COMP 3020, and COMP 3490; one of COMP 4020 or COMP 4490.</p> <p>Databases</p> <p>Requires: COMP 3380 and COMP 4380; and one of COMP 4710 or COMP 4740.</p> <p>Software Engineering</p> <p>Requires: COMP 3010, COMP 3020, COMP 3040, COMP 3380, COMP 4050, COMP 4350 and COMP 4620.</p> <p>Computer Systems</p> <p>Requires: One of COMP 3010, or COMP 3290; and two of COMP 4430, COMP 4550, COMP 4510, and/or COMP 4690.</p> <p>Web Based Systems</p> <p>Requires: COMP 3010, COMP 3020, COMP 3380, COMP 4350, COMP 4580</p>
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ACADEMIC CALENDAR 2015-2016

4.6.2 Computer Science

YEAR 1	YEAR 2	YEAR 3	YEAR 4
HONOURS ^{2,3,4,5} (Including Cooperative Option if selected) ² 120 CREDIT HOURS			
COMP 1010, COMP 1020 (B) MATH 1300(C) ¹ and MATH 1500(C) ¹	COMP 2080, COMP 2130 ¹ , COMP 2140, COMP 2150, COMP 2160, COMP 2280	COMP 3030, COMP 3170, COMP 3350, COMP 3370, COMP 3430	COMP 4620 and 21 credit hours of 4000 level Computer Science courses
In Year 1 and / or Year 2 the following must be completed: STAT 1000 (C) 6 credit hours from the Faculty of Arts, which should include the required 3 credit hour "W" course. <u>21 credit hours of approved elective courses</u> ^{3,4} 30 Hours		21 credit hours of approved electives ^{3,5} Work Terms (if Co-op Selected): COMP 2980, COMP 3980, COMP 4980 must be completed prior to the last academic term	
	30 Hours	30 Hours	30 Hours
FOUR YEAR MAJOR ^{2,3,4,5} (Including Cooperative Option if Selected) ² 120 CREDIT HOURS			
COMP 1010, COMP 1020 (C+) MATH 1300(C) ¹ and MATH 1500(C) ¹	COMP 2080, COMP 2130 ¹ , COMP 2140, COMP 2150, COMP 2160, COMP 2280	COMP 3350, COMP 3370, COMP 3430, COMP 4620 18 credit hours of 3000 or 4000 level Computer Science courses of which 6 credit hours must be at the 4000 level 30 credit hours of approved electives ^{3,5}	
In Year 1 or Year 2 the following must be completed: STAT 1000 (C) 6 credit hours from the Faculty of Arts, which should include the required 3 credit hour "W" course. <u>21 credit hours of approved electives</u> ^{4,5}		Work Terms (if Co-op Selected): COMP 2980, COMP 3980, COMP 4980 must be completed prior to the last academic term	
THREE YEAR GENERAL (90 CREDIT HOURS)			
COMP 1010, COMP 1020	18 credit hours of 2000, 3000, and (or) 4000 level Computer Science courses (subject to the Faculty requirement that of the 36 credit hours to in the two advanced level Science areas, at least 6 credit hours must be at the 3000/4000 level.)		
MINOR			
COMP 1010, COMP 1020	COMP 2140 Plus a minimum of 9 credit hours from 2000 and (or) 3000 level Computer Science courses.		
NOTES:			
<p>¹ MATH 1210 or MATH 1211, MATH 1220 or MATH 1310 may be taken in place of MATH 1300; MATH 1230, MATH 1510, MATH 1520, or MATH 1690 (6) may be taken in place of MATH 1500. A grade of "C" or better is required in each of the two 3 credit hour courses of Mathematics used as prerequisite to COMP 2130.</p> <p>² Entry to the Honours Cooperative Option and four year Major Cooperative Option is at the end of second year. Employment terms follow 3A (September-December), 3B (May-August) and 4A (January-April). Students in the Cooperative Option must complete three employment terms and receive a passing grade in COMP 2980, COMP 3980 and COMP 4980 prior to the last academic term.</p> <p>³ Additional information on how students may select their courses can be found at the beginning of this section.</p> <p>⁴ IMPORTANT: The Honours and four year Major degree need not be completed in the order prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program. Students in the Cooperative Option should be aware that while other arrangements are possible, they may jeopardize their chances of obtaining employment by selecting such arrangements. Students should discuss their planned sequence of courses with the department prior to making adjustments to the sequence above.</p> <p>⁵ IMPORTANT: A maximum of 90 credit hours of computer science, statistics and mathematics courses can be included in a Major or Honours program.</p>			

4.6.3 Computer Science - Mathematics Joint Honours Program (Including Co-op if selected)

<p>The departments of Computer Science and Mathematics offer a joint Honours program for in-depth study in both Computer Science and Mathematics.</p> <p>Honours Requirements</p> <p>To enter the Joint Honours Computer Science-Mathematics program, the student must have a minimum grade of "B" in each of COMP 1020, MATH 1300 and MATH 1700 (or any equivalent), and have satisfied the Faculty of Science requirements for entry to the honours program. It is recommended that STAT 2000 be completed in Year 1 as an elective.</p>			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
JOINT HONOURS (Including Cooperative Option if selected) 120 CREDIT HOURS			
<p>COMP 1010 and COMP 1020 (B)</p> <p>MATH 1300¹ (B), MATH 1690 (6) (B) (or MATH 1500¹ and MATH 1700¹(B))</p> <p>STAT 1000 (C)</p> <p>6 credit hours from the Faculty of Arts, which should include the required 3 credit hour "W" course²</p> <p>6 credit hours of electives</p>	<p>COMP 2080³, COMP 2140, COMP 2160, COMP 2280</p> <p>MATH 2202, MATH 2352 (6), MATH 2750 (6)</p> <p>one of: MATH 2600 or MATH 2800</p> <p>Work Term (if Co-op Selected)⁴:</p> <p>COMP 2980</p>	<p>COMP 3030, COMP 3170, COMP 3370, COMP 3430, COMP 4310 (or COMP 4420)</p> <p>Three of: COMP 3020, COMP 3290, COMP 3350, COMP 3380, COMP 3720</p> <p>Two of: COMP 4020, COMP 4050, COMP 4290, COMP 4350, COMP 4380, COMP 4720</p> <p>MATH 3740 (6) or MATH 3760 (6); and MATH 3350 (or MATH 3300 and MATH 3310) (6); and MATH 3400; and which ever of MATH 2600 or MATH 2800 not yet taken</p> <p>12 credit hours of 3000 or 4000 level Mathematics courses, of which at least 3 credit hours must be 4000 level</p> <p>Work Term (if Co-op Selected)⁴:</p> <p>COMP 3980</p>	<p>Work Term (if Co-op Selected)⁴:</p> <p>COMP 4980</p>
30 Hours	30 Hours	30 Hours	30 Hours
<p>NOTES:</p> <p>1 MATH 1510 or MATH 1520 may be taken in place of MATH 1500; MATH 1310 may be taken in place of MATH 1300; MATH 1710 may be taken in place of MATH 1700.</p> <p>2 As there are no electives in Year 2 of the program, students should complete the written English requirement in University 1. If not completed in University 1, a "W" course must be completed prior to Year 3 in addition to the required Year 2 courses.</p> <p>3 Students in this program will not take COMP 2130 or COMP 3130. COMP 2130 is waived as a prerequisite for students in this program.</p> <p>4 When chosen, the Cooperative Option work terms (2980, 3980, 4980) will normally be completed during the Summer Terms following years 2, 3, and 4 respectively. (Letters in brackets indicate minimum prerequisite standing for further study. The number 6 in brackets indicates a 6 credit hour course.)</p>			

4.6.4 Computer Science – Physics & Astronomy Joint Honours Program

The departments of Computer Science and Physics & Astronomy offer a joint Honours program for in-depth study in both Computer Science and Physics & Astronomy.

To enter the Joint Honours Computer Science-Physics and Astronomy program, the student must have a minimum grade of “B” in each of **PHYS 1050** (or “B+” in **PHYS 1020**), **PHYS 1070**, **MATH 1300**, **MATH 1500**, **MATH 1700** (or any equivalent), **COMP 1010** and **COMP 1020**. Students must complete a minimum of 9 credit hours per term in each Fall and Winter term.

To continue in the Honours program, students must maintain a minimum Degree GPA of 3.00, complete a minimum of 9 credit hours during each Fall and Winter term (or equivalent for students in the Co-operative option).

To graduate with the Honours degree, a student must obtain a minimum GPA of 3.00 and present a minimum grade of “C” in each course that contributes to the degree

The department must approve a student’s Honour or Major program each session. Students must also obtain departmental approval for any and all revisions to their program.

YEAR 1	YEAR 2	YEAR 3	YEAR 4
JOINT HONOURS (Including Cooperative Option if selected) 120 CREDIT HOURS			
PHYS 1050 (B) (or PHYS 1020 (B+)) and PHYS 1070 ¹ (B) COMP 1010, COMP 1020 (B) MATH 1300 ² (B), MATH 1500 ² (B), MATH 1700 ² (B) 6 credit hours from the Faculty of Arts, which must include the required 3 credit hour “W” course ³ 3 credit hours of electives	PHYS 2260, PHYS 2380, PHYS 2390, PHYS 2490, PHYS 2650 COMP 2080, COMP 2130, COMP 2140, COMP 2160, COMP 2280 Work Term (if Co-op Selected): COMP 2980 ⁴	PHYS 2600, PHYS 2610, PHYS 3380, PHYS 3670, PHYS 3680 COMP 2190, COMP 3170, COMP 3430 6 credit hours of 3000 and / or 4000 level Computer Science courses Work Term (if Co-op Selected): COMP 3980 ⁴	15 credit hours of 3000 and 4000 level Honours Physics courses, with at least 6 credit hours at the 4000 level 12 credit hours of 3000 or 4000 level courses from Computer Science, with at least 9 credit hours at the 4000 level by the end of Year 4 3 credit hours of approved electives Work Term (if Co-op Selected): COMP 4980 ⁴
30 Hours	30 Hours	30 Hours	30 Hours

NOTES:

¹ PHYS 1030 is not suitable for entry to the Honours program. Students must also take PHYS 1070 if they have already taken PHYS 1030. Students can hold credit for both PHYS 1030 and PHYS 1070.

² MATH 1220 or MATH 1310 may be taken in place of MATH 1300; MATH 1230, MATH 1510 or MATH 1520 may be taken in place of MATH 1500; MATH 1232 or MATH 1710 may be taken in place of MATH 1700; MATH 1690 may be taken in place of MATH 1500 and MATH 1700.

³ As there are no electives in Year 2 of the program, students should complete the University written English requirement in Year 1. If not completed in Year 1, a “W” course must be completed prior to Year 3 in addition to the required Year 2 courses.

⁴ When chosen, the Cooperative Option work terms (2980, 3980, 4980) will normally be completed during the Summer Terms following years 2, 3, and 4 respectively.

4.6.5 Computer Science – Statistics Joint Honours Program

The departments of Computer Science and Statistics offer a joint Honours program for in-depth study in both Computer Science and Statistics.

To enter the Joint Honours Computer Science-Statistics Program, the student must have a “B” or better in **COMP 1020** and in **STAT 2400** and a “C+” or better in **MATH 1220¹**, **MATH 1230¹** and **MATH 1232¹**. **Note:** that **MATH 1240** is not required to enter the program, however, it is recommended that it be completed in Year 1 as it is a prerequisite to a Year 2 course.

To graduate with the Honours degree a student must present a minimum grade of “C” in each course that contributes to the degree. In addition, the student must achieve a minimum DGPA of 3.00 and a minimum grad of “C+” in each of the program specific courses in Statistics.

Both departments must approve a student’s Honours program each session. Students must also obtain approval from both departments for any and all revisions to the program.

4.6.5 Computer Science – Statistics Joint Honours Program			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
JOINT HONOURS 120 credit hours (comprising courses listed in chart below, and electives)			
COMP 1010, COMP 1020 (B) STAT 1000, STAT 2000 (B) MATH 1220 ¹ (C+), MATH 1230 ¹ (C+), MATH 1232 ¹ (C+), MATH 1240 (C+) Plus 6 credit hours from the Faculty of Arts, which could include the required 3 credit hour “W” course.	COMP 2080 ² , COMP 2140, COMP 2150, COMP 2160, COMP 2190 STAT 2400 MATH 2080, MATH 2150 6 credit hours of electives.	COMP 3170, COMP 3380 STAT 3050, STAT 3400, STAT 3470, STAT 3480, STAT 3800 9 credit hours of electives ⁴ including 3 credit hours from 3 rd year COMP.	STAT 4100, STAT 4520, STAT 4530 21 credit hours of electives including 6 credit hours from 4 th year COMP ³ , 3 credit hours from 3 rd year COMP and 6 credit hours from 4 th year STAT courses
30 Hours	30 Hours	30 Hours	30 Hours
JOINT HONOURS COOPERATIVE OPTION³ 120 CREDIT HOURS (comprising courses listed in chart below, and electives)			
COMP 1010, COMP 1020(B) STAT 1000, STAT 2000 (B) MATH 1220 ¹ (C+), MATH 1230 ¹ (C+), MATH 1232 ¹ (C+), MATH 1240 (C+) Plus 6 credit hours from the Faculty of Arts, which could include the required 3 credit hour “W” course.	COMP 2080 ² , COMP 2140, COMP 2150, COMP 2160, COMP 2190, STAT 2400, MATH 2080, MATH 2150 6 credit hours of electives.	COMP 3170, COMP 3380 STAT 3050, STAT 3400, STAT 3470, STAT 3480, STAT 3800 9 credit hours of electives ⁴ including 3 credit hours from 3 rd year COMP	STAT 4100, STAT 4520, STAT 4530 21 credit hours of electives including 6 credit hours from 4 th year COMP ³ , 3 credit hours from 3 rd year COMP and 6 credit hours from 4 th year STAT courses.
30 Hours	30 Hours	30 Hours	30 Hours
NOTES:			
¹ MATH 1510 (B) or MATH 1500 (B) may be taken in place of MATH 1230; MATH 1300 (B) may be taken in place of MATH 1220; MATH 1710 (B) or MATH 1700 (B) may be taken in place of MATH 1232. ² COMP 2130 is waived as a prerequisite for students in this program. ³ COMP 4710 and COMP 4380 are suggested if offered. ⁴ The following courses are suggested: COMP 3350, COMP 3020, COMP 3490, STAT 3490, STAT 4630, STAT 4690. ⁵ The work terms COMP 2980, COMP 3980 and COMP 4980 will be completed in the summers following Year 2, Year 3 and Year 4, respectively and must be completed by the last academic term.			

4.6.6 Computer Science Course Descriptions

Computer Science Course Descriptions-1000 Level

COMP 1010 Introductory Computer Science 1 Cr.Hrs. 3

(Lab Required) (Formerly 074.101) An introduction to computer programming using a procedural high level language. Not to be held with COMP 1011 or COMP 1012 or COMP 1013. Prerequisite: any grade 12 or 40S Mathematics, or equivalent.

COMP 1012 Computer Programming for Scientists and Engineers Cr.Hrs. 3

(Lab Required) An introduction to computer programming suitable for solving problems in science and engineering. Students will implement algorithms for numerical processing, statistical analysis and matrix operations. Not to be held with COMP 1010, COMP 1011 or COMP 1013. Prerequisite: Mathematics 40S or equivalent. Co-requisite: MATH 1230 or MATH 1500 or MATH 1501 (or equivalent).

COMP 1020 Introductory Computer Science 2 Cr.Hrs. 3

(Lab Required) More features of a procedural language, elements of programming. Not to be held with COMP 1021. Prerequisite: COMP 1010 or COMP 1011 (074.101) (C); or COMP 1012, COMP 1013 (C) or High School Computer Science 40S (75%) and any grade 12 or 40S Mathematics, or equivalent.

COMP 1260 Introductory Computer Usage 1 Cr.Hrs. 3

(Formerly 074.126) This course offers an introduction to modern computer services. Areas covered will include word processing, spreadsheets, data management systems and graphics. No prior computer knowledge is necessary. May not hold with COMP 1261. May not be taken within the Computer Science Honours or Major program.

COMP 1270 Introductory Computer Usage 2 Cr.Hrs. 3

(Formerly 074.127) Using advanced tools to design web pages. Students will also learn how to make effective presentations, work in other operating system environments, use file transfer tools, apply simple script programming to web page designs, and understand current issues relating to technology in society. May not hold with COMP 1271. May not be taken within the Computer Science Honours or Major program. Recommended Prerequisite: COMP 1260, COMP 1261 (074.126) or equivalent knowledge is strongly recommended.

Computer Science Course Descriptions-2000 Level

COMP 2080 Analysis of Algorithms Cr.Hrs. 3

(Formerly 074.208) Methods of analyzing the time and space requirements of algorithms. Average case and worst case analysis. Models of computation. Prerequisites: COMP 2130 (074.213) (C); and one of COMP 2140 (074.214), the former 074.206, or COMP 2061 (C). STAT 1000 or STAT 1001 is strongly recommended.

COMP 2130 Discrete Mathematics for Computer Science Cr.Hrs. 3

An introduction to the set theory, logic, integers, combinatorics and functions for today's computer scientists. Prerequisites: COMP 1020 or COMP 1021 (C), and a "C" in one of: MATH 1210, MATH 1211, MATH 1220, MATH 1300, MATH 1301 (136.130), MATH 1310 (136.131); and one of: MATH 1230, MATH 1500, MATH 1501(136.150), MATH 1510 (136.151), MATH 1520 (136.152), the former 136.153, or MATH 1690 (136.169).

COMP 2140 Data Structures and Algorithms Cr.Hrs. 3

(Lab Required) (Formerly 074.214) Introduction to the representation and manipulation of data structures. Topics will include lists, stacks, queues, trees, and graphs. Not to be held with COMP 2061 or 074.206. Prerequisites: one of COMP 1020, COMP 1021 (074.102), or the former 074.123 (C).

COMP 2150 Object Orientation Cr.Hrs. 3

(Formerly 074.215) Design and development of object-oriented software. Topics will include inheritance, polymorphism, data abstraction and encapsulation. Examples will be drawn from several programming languages. Not to be held with the former 074.215 or 074.227. Prerequisite: COMP 2160 (074.216); and one of COMP 2140 (074.214), the former 074.206, or COMP 2061(C).

COMP 2160 Programming Practices Cr.Hrs. 3

(Lab Required) (Formerly 074.216) Introduction to issues involved in real-world computing. Topics will include memory management, debugging, compilation, performance, and good programming practices. Not to be held with the former 074.225. Prerequisite: COMP 1020 or COMP 1021 (074.102) (C).

COMP 2190 Introduction to Scientific Computing Cr.Hrs. 3

An applied computational course introducing topics such as approximation by polynomials, solution of non-linear equations, linear systems, simulation and computational geometry. May not hold with COMP 2191. Prerequisites: One of COMP 1020 or COMP 1021 (074.102), or COMP 1012 (C) or COMP 1013 (C); and one of MATH 1230, MATH 1500, MATH 1501 (136.150) (C), MATH 1510 (136.151) (C), MATH 1520 (136.152) (C), the former 136.153 (C), or MATH 1690 (136.169) (C). Prerequisite or concurrent registration: One of MATH 1220, MATH 1300, MATH 1301, or MATH 1310.

COMP 2280 Introduction to Computer Systems Cr.Hrs. 3

(Lab Required) (Formerly 074.228) Data representation and manipulation, machine-level representation of programs, assembly language programming, and basic computer architecture. Not to be held with the former 074.222 or 074.240; also not available to students who have previously completed ECE 3610. Prerequisites: COMP 2140 (074.214) (C), COMP 2160 (074.216) (C), and COMP 2130 (074.213) (C).

COMP 2980 Workterm 1 Cr.Hrs. 0

(Formerly 074.298) Work assignment in business, industry, or government for students registered in the Computer Science Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail)

Computer Science Course Descriptions-3000 Level

COMP 3010 Distributed Computing Cr.Hrs. 3

(Formerly 074.301) An introduction to the development of client server and peer-to-peer systems through web applications, distributed programming models, and distributed algorithms. Prerequisite: COMP 2150 (074.215) (C).

COMP 3020 Human-Computer Interaction 1 Cr.Hrs. 3

(Formerly 074.302) Human-computer interaction: human factors and usability, user-centered design, prototyping, usability evaluation. Not to be held with the former 074.371. Prerequisite: one of COMP 2140 (074.214), the former 074.206, or COMP 2061 (C). A course in cognitive psychology, such as PSYC 2480 (017.248), is recommended.

COMP 3030 Automata Theory and Formal Languages Cr.Hrs. 3

(Formerly 074.303) An introduction to automata theory, grammars, formal languages and their applications. Topics: finite automata, regular expressions and their properties; context-free grammars, pushdown automata and properties of context-free languages; Turing machines and their properties. Prerequisite: COMP 2080 (074.208) (C).

COMP 3040 Technical Communication in Computer Science Cr.Hrs. 3

(Formerly 074.304) This course is designed to help students become more effective and confident writers in the context of the computing profession. Students will be introduced to a broad range of written and oral presentation styles used in the computing workplace. Prerequisite: Students must be enrolled in third year (or higher) of a majors or honours programme in the Department of Computer Science.

COMP 3090 Digital Logic 2 Cr.Hrs. 3

(Formerly 074.309) Design and implementation of digital circuits. Minimization and state reduction, asynchronous circuits, arithmetic circuits, implementation using modern hardware techniques. Not to be held with ECE 2220, or the former 074.342, 074.447 or 074.422. Prerequisite: COMP 2280 (074.228) (C); or both of the former 074.222 and 074.223(C).

COMP 3170 Analysis of Algorithms and Data Structures Cr.Hrs. 3

(Formerly 074.317) Fundamental algorithms for sorting, searching, storage management, graphs, databases and computational geometry. Correctness and analysis of those algorithms using specific data structures. An introduction to lower bounds and intractability. Prerequisites: one of COMP 2140 (074.214), the former 074.206, or COMP 2061(C); and COMP 2080 (074.208) (C).

COMP 3190 Introduction to Artificial Intelligence Cr.Hrs. 3

(Formerly 074.319) Principles of artificial intelligence: problem solving, knowledge representation and manipulation; the application of these principles to the solution of 'hard' problems. Prerequisite: one of COMP 2140 (074.214), the former 074.206, or COMP 2061(C).

COMP 3290 Introduction to Compiler Construction Cr.Hrs. 3

(Formerly 074.329) Introduction to the standard compiler phases: scanning, parsing, symbol-table management, code generation, and code optimization. The emphasis is on the simpler techniques for compiler construction such as recursive descent. Prerequisites: COMP 2140 (or 074.214 or 074.206 or COMP 2061)(C) and COMP 2280 (074.228 or 074.222 or ECE 3610)(C). COMP 2160 (074.216) is recommended.

COMP 3350 Software Engineering 1 Cr.Hrs. 3

(Formerly 074.335) Introduction to software engineering. Software life cycle models, system and software requirements analysis, specifications, software design, testing and maintenance, software quality. Prerequisites: COMP 2150 (074.215) (C), or COMP 2061(074.206) (C).

COMP 3370 Computer Organization Cr.Hrs. 3

(Formerly 074.337) Principles of computer systems architecture, organization and design. Performance, instruction sets, processors, input/output, memory hierarchies. Prerequisite: COMP 2280 (074.228 or 074.222)(C) or ECE 3610 (C).

COMP 3380 Databases Concepts and Usage Cr.Hrs. 3

(Formerly 074.338) An introduction to database systems including the relational, hierarchical, network and entity-relationship models with emphasis on the relational model and SQL. Prerequisite: one of COMP 2140 (074.214), the former 074.206, or COMP 2061(C).

COMP 3430 Operating Systems Cr.Hrs. 3

(Lab Required) (Formerly 074.343) Operating systems, their design, implementation, and usage. Not to be held with the former 074.450 or 074.460. Prerequisites: one of COMP 2140 (074.214 or 074.206 or COMP 2061)(C); and COMP 2280 (C) or ECE 3610 (C). COMP 2160 (074.216) is recommended.

COMP 3440 Programming Language Concepts Cr.Hrs. 3

(Formerly 074.344) An introduction to major concepts involved in the design of modern programming languages. The imperative, functional, and logical families and differences between them. Facilities for high level data and control structures, modular programming, data typing, and other topics will be covered. Not to be held with the former 074.310 or 074.348. Prerequisite: one of COMP 2140 (074.214), the former 074.206, or COMP 2061(C).

COMP 3490 Computer Graphics 1 Cr.Hrs. 3

An introductory course in computer graphics including topics such as raster graphics, two and three dimensional transforms, and simple rendering. Prerequisite: COMP 2140 (C); and either COMP 2190 (C), or a C in both: MATH 1300 (or MATH 1220, MATH 1310, MATH 1301, MATH 1210 or MATH 1211) and MATH 1500 (or MATH 1230, MATH 1501, MATH 1510 or MATH 1520).

COMP 3820 Introduction to Bioinformatics Algorithms Cr.Hrs. 3

An introduction to problems in molecular biology and computational solutions. Focus on design and analysis of efficient algorithms. Prerequisites: COMP 2080 (074.208). Suggested prerequisite: MBI0 1410. Suggested concurrent requirement: COMP 3170.

COMP 3980 Workterm 2 Cr.Hrs. 0

(Formerly 074.398) Work assignment in business, industry, or government for students registered in the Computer Science Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail). Prerequisite: COMP 2980 (074.298) (P).

Computer Science Course Descriptions-4000 Level**COMP 4020 Human-Computer Interaction 2 Cr.Hrs. 3**

(Formerly 074.402) Advanced issues in the field of human-computer interaction. Topics will be selected from current research and development issues in the field of HCI. Prerequisite: COMP 3020 (074.302) (C). A course in cognitive psychology such as PSYC 2480 (017.248) is recommended.

COMP 4050 Project Management Cr.Hrs. 3

(Formerly 074.405) Introduction to the issues involved in managing large, complex software projects. Prerequisite: COMP 3350 (074.335) (C).

COMP 4060 Topics in Computer Science Cr.Hrs. 3

(Formerly 074.406) This course will examine topics of interest at the fourth-year level. Specific topics will vary from year to year. Topics will be selected from current research in computer science. Prerequisite: Departmental permission.

COMP 4140 Introduction to Cryptography and Cryptosystems Cr.Hrs. 3

(Formerly 074.414) Description and analysis of cryptographic methods used in the authentication and protection of data. Classical cryptosystems and cryptoanalysis, the Advanced Data Encryption Standard (ADES) and Public-key cryptosystems. Prerequisite: COMP 2130 (074.213) (C). Students must be registered in fourth year of a Major or Honours programme in the Department of Computer Science.

COMP 4180 Intelligent Mobile Robotics Cr.Hrs. 3

Topics include artificial intelligence, computer vision, human-robot interaction, and multi-robot systems. These abstract components are grounded in the problem of developing a team of intelligent mobile robots. All topics are covered with specific emphasis on applied problems, e.g. real-time performance. Not to be held with the former COMP 4060 –“Mobile Robotics”. Prerequisites: COMP 2160 (074.216) and COMP 3190 (074.319) (C).

COMP 4190 Artificial Intelligence Cr.Hrs. 3

(Formerly 074.419) Reasoning with temporal knowledge; causal reasoning; plausible reasoning; nonmonotonic reasoning; abductive reasoning. Prerequisite: COMP 3190 (074.319) (C).

COMP 4200 Expert Systems Cr.Hrs. 3

Organization of expert systems; knowledge representation in expert systems; inference; knowledge engineering; tools for building expert systems; limitations of expert systems. Prerequisite: COMP 3190 (074.319) (C).

COMP 4300 Computer Networks Cr.Hrs. 3

(Lab required) This course examines the principles of computer networks, including network architectures, algorithms, protocols, and performance. May not be held with the former COMP 3720 or the former COMP 4720 or ECE 3700. Prerequisite: COMP 2280 (C).

COMP 4340 Graph Theory Algorithms 1 Cr.Hrs. 3

(Formerly 074.434) Spanning trees, connectivity, planar graphs, directed graphs, networks, colouring problems and tours are studied and their applications to computer science will be highlighted. Prerequisite: COMP 3170 (074.317) (C).

COMP 4350 Software Engineering 2 Cr.Hrs. 3

(Formerly 074.435) Advanced treatment of software development methods. Topics will be selected from requirements gathering, design methodologies, prototyping, software verification and validation. Prerequisite: COMP 3350 (074.335) (C).

COMP 4360 Machine Learning Cr.Hrs. 3

(Formerly 074.436) Learning strategies; evaluation of learning; learning in symbolic systems; neural networks, genetic algorithms. Prerequisite: COMP 3190 (074.319) (C).

COMP 4380 Database Implementation Cr.Hrs. 3

(Formerly 074.438) Implementation of modern database systems including query modification/optimization, recovery, concurrency, integrity, and distribution. Prerequisite: COMP 3380 (074.338) (C).

COMP 4420 Advanced Design and Analysis of Algorithms Cr.Hrs. 3

(Formerly 074.442) Algorithm design with emphasis on formal techniques in analysis and proof of correctness. Computational geometry, pattern matching, scheduling, numeric algorithms, probabilistic algorithms, approximation algorithms and other topics. Prerequisites: COMP 3170 (074.317) (C); and STAT 1000 or STAT 1001 (005.100) (C).

COMP 4430 Operating Systems 2 Cr.Hrs. 3

(Formerly 074.443) Design and implementation of modern operating systems. Detailed analysis of an open source modern operating system and hands-on experience with its kernel and major components. Prerequisites: COMP 2160 (074.216) (C) and COMP 3430 (074.343) (C).

COMP 4490 Computer Graphics 2 Cr.Hrs. 3

(Formerly 074.449) Methods in computer graphics including topics such as representation of curves and surfaces, viewing in three dimensions, and colour models. Prerequisite: COMP 3490 (074.349) (C).

COMP 4510 Introduction to Parallel Computation Cr.Hrs. 3

(Formerly 074.451) An overview of the architectures of current parallel processors and the techniques used to program them. Not to be held with ECE 4530 or the former 024.446. Prerequisites: COMP 3370 (074.337) (C) and COMP 3430 (074.343) (C).

COMP 4520 Undergraduate Honours Project Cr.Hrs. 3

(Formerly 074.452) A research based project on a specific area of computer science. Students must find a faculty supervisor and write a proposal in their penultimate term. If acceptable, the defined research is to be carried out in the student's final term. Permission to take the course is given on an individual basis. Available to 4th Year students only. Prerequisite: departmental permission.

COMP 4550 Real-Time Systems Cr.Hrs. 3

(Formerly 074.455) An introduction to the theory and practice of real-time systems. Topics include the design of real-time systems, scheduling, event based processing, and real-time control. This course may not be held for credit if a student has previously completed both of ECE 4240 and ECE 3760. Prerequisites: COMP 3430 (074.343) (C) and COMP 3370 (074.337) (C)

COMP 4560 Industrial Project Cr.Hrs. 3

(Formerly 074.456) Students will work in teams on an industrial project. Projects are supplied by the Department. Prerequisites: COMP 3350 (074.335) (C) and departmental permission.

COMP 4580 Computer Security Cr.Hrs. 3

(Lab Required) (Formerly 074.458) Computer security and information management. This course will examine state-of-the-art knowledge about the issues relevant to data and computer security. Prerequisite: COMP 3430 (074.343) (C); and one of COMP 3010 (074.301) or COMP 3720 (074.430) (C).

COMP 4620 Professional Practice in Computer Science Cr.Hrs. 3

Background and rationale to view Computer Science in a professional context. Examination of professional ethics, intellectual property, and privacy considerations important to Computer Scientists. May not be held with the former COMP 3620. Prerequisite: COMP 3350 (C).

COMP 4690 Computer Systems and Architecture Cr.Hrs. 3

(Formerly 074.469) Investigation of today's modern computer architecture and system design concepts, including requirements, specifications, and implementation. Instruction sets, instruction-level parallelism, speculative execution, multi-threaded architectures, memory hierarchy, multiprocessors, storage design and implementation, and interconnection networks. Prerequisite: COMP 3370 (074.337) (C).

COMP 4710 Introduction to Data Mining Cr.Hrs. 3

Introduction to data mining concepts and their applications. Prerequisite: COMP 3380 (074.338) or consent of department.

COMP 4740 Advanced Databases Cr.Hrs. 3

(Formerly 074.474) Parallel, distributed, object-oriented, object-relational, and XML databases; other emerging database technologies. Prerequisite: COMP 3380 (074.338) (C).

COMP 4980 Workterm 3 Cr.Hrs. 0

(Formerly 074.498) Work assignment in business, industry, or government for students registered in the Computer Science Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail). Prerequisite: COMP 3980 (074.398) (P).

COMP 4990 Workterm 4 Cr.Hrs. 0

Work assignment in business, industry, or government for students registered in the Computer Science Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment (Pass/Fail). Prerequisite: COMP 4980 (P).

4.7 Interdisciplinary Courses in Forensic Science

FORS 2000 Introductory Forensic Science Cr.Hrs. 3

Survey course which introduces forensic science via a series of guest lectures provided by experts from within the university and from the community (e.g., Winnipeg Police, RCMP, Chief Medical Examiner, etc.). Multidisciplinary topics will be covered including how a case is studied, use of scientific techniques in investigations, collection of evidence, the role of the expert witness, and presentation of evidence in court. Prerequisites: BIOL 1030 (C+), CHEM 1310 (C+).

FORS 3000 Forensics Processing and Analysis Cr.Hrs. 3

(Lab Required) Theory and practice of processing and analysis of various types of forensic evidence. Lectures will be given by experts from within the university and within the community. Topics covered in lecture and lab exercises include protocols to identify, document and protect visible and latent forensic scientific evidence, analytical methods with forensic applications, rules and procedures governing the collection of evidence and the use of scientific data in court. Prerequisite: FORS 2000.

4.8 Genetics Program

Campus Address & General Office: 212 Biological Sciences Building

Telephone: 204 474 9245

Email Address: andersow@cc.umanitoba.ca

Website: umanitoba.ca/science/biological_sciences

4.8.1 Program Information

The Faculty of Science offers an interdisciplinary program leading to a B.Sc. (Honours) degree or B.Sc. Major in Genetics. Genetics is the science of heredity dealing with the mechanisms of inheritance and has generated concepts basic to modern biology. Three areas are represented in this program: classical genetics, population genetics, and molecular genetics. Courses from Arts, Agricultural and Food Sciences, and Medicine are included in this program.

Genetics Entry, Continuation, and Graduation requirements

Honours

To enter the Honours program in Genetics, a student must have completed at least 24 credit hours with a minimum GPA of 3.00, and also obtained a minimum grade of "B" in **BIOL 1030**, and a minimum grade of "C+" in **CHEM 1310**. **STAT 1000**, **MATH 1500** and the additional 3 credit hours of specified Mathematics courses are program requirements and students are strongly encouraged to complete these courses in first year.

* Students interested in studying Genetics should note that Grade 12 mathematics and chemistry are prerequisite to **CHEM 1300**. Effective 2009-2010, students will also require Biology 40S (or equivalent) and any Grade 12 mathematics course (or equivalent) for entry to **BIOL 1020** (the required prerequisite for **BIOL 1030**).

To continue in the Genetics Honours program, students must maintain a minimum GPA of 3.00, and complete a minimum of 9 credit hours during each Fall and Winter Term.

To graduate with the B. Sc. Honours degree, a student must maintain a minimum 3.00 GPA and achieve a minimum grade of "C" on all courses that make up the 120 credit hours of the degree.

Honours Cooperative Option

Students interested in alternating academic terms and terms of paid employment as part of their Honours Genetics program may enter the Cooperative Option in April of their second year in Genetics Honours. This five year program provides students with minimum 12 months of paid employment by the time they graduate. It enables them to obtain work experience in research and industry with participating firms, government agencies and University units.

The course and grade requirements for entry and continuation in the Cooperative Option are the same as that for regular Honours program (see above). Students are required to complete the first and second year requirements of the program and **MBIO 3410** before they begin their first employment term. Each academic term in the third and subsequent years must comprise nine (9) credit hours. Students should refer to the general faculty regulations for B. Sc. (Honours) Cooperative Options in Section 3.6.

Students must apply for openings in the Cooperative Option and should check with the Co-op office for the April deadline information. They will be notified of their provisional acceptance in the program by September. Acceptance into the program is dependent upon the students receiving an employment placement. Employment term positions available to the students will be approved by the department, and the employers will select the students they wish to employ. Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Option if the demand for places exceeds the number of places available. The department reserves the right to determine and select the best qualified applicants.

Students are required to register in and pay fees for each employment term prior to the commencement of each employment term. Students will be required to submit an employment report upon the completion of each 4-month employment term.

Major

To enter the Major Degree program in Genetics, a student must have completed at least 24 credit hours with a minimum GPA of 2.00, and also obtained a minimum grade of "C+" in **BIOL 1030**, and a minimum grade of "C" in **CHEM 1310**. **STAT 1000**, **MATH 1500** and the additional 3 credit hours of specified Mathematics courses are program requirements and students are strongly encouraged to complete these courses in first year.

* Students interested in studying Genetics should note that Grade 12 mathematics and chemistry are prerequisite to **CHEM 1300**. Effective 2009-2010, students will also require Biology 40S (or equivalent) and any Grade 12 mathematics course (or equivalent) for entry to **BIOL 1020** (the required prerequisite for **BIOL 1030**).

To continue in the Genetics Major Degree program, students must maintain a minimum GPA of 2.00.

To graduate with the Bachelor of Science (Major) in Genetics, a student must obtain passing grades on all courses, obtain a minimum GPA of 2.00 on the 120 credit hours that make up the degree, and a minimum grade of C in all required and optional courses that contribute to the Major.

Major Cooperative Option

Students interested in alternating academic terms and terms of paid employment as part of their Genetics Major program may enter the Cooperative Option in April of their second year. This five year program provides students with minimum 12 months of paid employment by the time they graduate. It enables them to obtain work experience in research and industry with participating firms, government agencies and University units.

The course and grade requirements for entry and continuation in the Cooperative Option are the same as that for regular Major Degree program (see above). Students are required to complete the first and second year requirements of the program and MBIO 3410 before they begin their first employment term. Students should refer to the general faculty regulations for B. Sc. (Major) Cooperative Options in Section 3.6.

Students must apply for openings in the Cooperative Option and should check with the Co-op office for the April deadline information. They will be notified of their provisional acceptance in the program by September. Acceptance into the program is dependent upon the student receiving an employment placement. Employment term positions available to the students will be approved by the department, and the employers will select the student(s) they wish to employ. Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Option if the demand for places exceeds the number of places available. The department reserves the right to determine and select the best qualified applicants.

Students are required to register in and pay fees for each employment term prior to the commencement of each employment term. Students will be required to submit an employment report upon the completion of each 4-month employment term.

4.8.2 Genetics Program Charts

4.8.2 Genetics			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
HONOURS (Including Cooperative Option^{3,4,5} if selected) 120 CREDIT HOURS			
CHEM 1300, CHEM 1310 BIOL 1020, BIOL 1030 STAT 1000 MATH 1500 ¹ One of: MATH 1200, MATH 1300 ¹ , or MATH 1700 ¹	BIOL 2500, BIOL 2520 CHEM 2210, CHEM 2220, CHEM 2360 (MBIO 2360), CHEM 2370 (MBIO 2370) MBIO 1010, MBIO 2020 STAT 2000	BIOL 3500 MBIO 3410 PLNT 3140 BGEN 3020 (6) One of: ANTH 2240, ANTH 2560, ANTH 2860, or ANTH 2890 42 credit hours from list of optional courses (a minimum of 18 of these credit hours must be 4000 level)	
In Year 1 or Year 2: 3 credit hours from the Faculty of Arts 3 credit hour "W" course ² 6 credit hours of electives		Work Terms (if Co-op Selected)^{3,4,5}: MBIO 3980, MBIO 3990, MBIO 4980 and/or MBIO 4990	
30 Hours	30 Hours	30 Hours	30 Hours

YEAR 1	YEAR 2	YEAR 3	YEAR 4
MAJOR (Including Cooperative Option if selected)^{3,4,5} 120 CREDIT HOURS			
CHEM 1300, CHEM 1310 BIOL 1020, BIOL 1030 STAT 1000 MATH 1500 ¹ One of: MATH 1200, MATH 1300 ¹ , or MATH 1700 ¹	BIOL 2500, BIOL 2520 CHEM 2210, CHEM 2220, CHEM 2360 (MBIO 2360), CHEM 2370 (MBIO 2370) MBIO 1010, MBIO 2020 STAT 2000	BIOL 3500 MBIO 3410 PLNT 3140 BGEN 3020 (6) One of: ANTH 2240, ANTH 2560, ANTH 2860, or ANTH 2890 33 credit hours from list of optional courses (a minimum of 15 of these credit hours must be 4000 level) 9 credit hours of approved elective courses	
In Year 1 or Year 2: 3 credit hours from the Faculty of Arts 3 credit hour "W" course ² 6 credit hours of electives		Work Terms (if Co-op Selected)^{3,4,5}: MBIO 3980, MBIO 3990, MBIO 4980 and/or MBIO 4990	

NOTES:

¹ MATH 1220 or MATH 1310 may be taken in place of MATH 1300; MATH 1230, MATH 1510, or MATH 1520 may be taken in place of MATH 1500; MATH 1232 or MATH 1710 may be taken in place of MATH 1700; MATH 1690 may be taken in place of MATH 1500 and MATH 1700; MATH 1240 may be taken in place of MATH 1200.

² As there are no electives in Year 2 of the program, students should complete the University written English requirement in Year 1. If not completed in Year 1, a "W" course must be completed prior to Year 3 in addition to the required Year 2 courses.

³ Students that begin their first work term in May must take BGEN 3020 in Year 3, while students that begin their first work term in January must take BGEN 3020 in Year 4.

⁴ IMPORTANT: Students in the cooperative program are advised to ensure that they are able to satisfy the prerequisites for all 3000 and 4000 level courses they plan to take.

⁵ MBIO 4530 and BGEN 4010 are not available to students in the Cooperative Option.

(The number 6 in brackets indicates a 6 credit hour course.)

The optional courses are:

Biological Sciences: **BIOL 2410, BIOL 2420, BIOL 3290, BIOL 3300, BIOL 3542, BIOL 3560, BIOL 4500, BIOL 4540, BIOL 4542, BIOL 4560**

Chemistry: **CHEM 2280, CHEM 2290, CHEM 4360, CHEM 4370, CHEM 4620, CHEM 4630**

Microbiology: **MBIO 3000, MBIO 3010, MBIO 3030, MBIO 3430, MBIO 3440, MBIO 3450, MBIO 3460, MBIO 4010, MBIO 4020², MBIO 4410, MBIO 4530¹ (6), MBIO 4540, MBIO 4670 (or the former MBIO 4570), MBIO 4672², MBIO 4600, MBIO 4610.**

Forensic Science: **FORS 2000** (satisfies the University "W" requirement)

Computer Science: **COMP 1010, COMP 1020, COMP 1260, COMP 1270**

Physics: **PHYS 1020, PHYS 1030, PHYS 1050, PHYS 1070**

Animal Science: **ANSC 3500, ANSC 4280**

Pharmacology: **PHAC 4030, PHAC 4040**

Plant Science: **PLNT 2530, PLNT 3500, PLNT 3520, PLNT 4330, PLNT 4610**

Human Genetics: **BGEN 4010¹**

By an appropriate selection of courses from this list, students can obtain particular program emphasis in either plant, human or molecular genetics.

All programs must contain a minimum of 18 credit hours of 4000 level courses as options in Years 3 and 4.

Other suitable optional courses may be arranged through consultation with the Genetics program committee.

NOTES:

¹ **MBIO 4530 (6) and BGEN 4010 (6)** are project courses. A research project is chosen in consultation with the Microbiology department (**MBIO 4530**) or Biochemistry and Medical Genetics (**BGEN 4010**) and the Genetics program committee, and is supervised by a staff member. Only one of **MBIO 4530** or **BGEN 4010** may be elected in this program.

² **MBIO 4020** and **MBIO 4672** are not available options for students in the Genetics Honours Degree program.

4.9 Department of Mathematics

Head: Stephen Kirkland

Campus Address & General Office: 342A Machray Hall

Telephone: 204 474 8703

Email Address: mathematics_dept@umanitoba.ca

Website: <http://www.math.umanitoba.ca/>

4.9.1 Program Information

Mathematics provides the language, reasoning and analytic tools that many other disciplines use to investigate their areas. These include all the physical sciences, computer and engineering sciences, social sciences, and the biological and health sciences. A wide range of business, industrial, and government programs rely on mathematics to provide insight and analysis. Students may specialize in mathematics alone or in combinations with physics, computer science, economics, or statistics.

The department must approve a student's Honour or Major program each session. Students must also obtain approval for any and all revisions to their program.

NOTE: Students entering either the Faculty of Arts or Science, and intending to take courses from the department, are strongly advised to speak to a Science Academic Advisor or a faculty advisor in the department concerning an appropriate choice of mathematics courses. They may also consult the Department of Mathematics website at umanitoba.ca/science/mathematics.

Honours Requirements

To enter the Honours program in Mathematics, a student must have completed at least 24 credit hours with a minimum GPA of 3.00, and also obtained a minimum grade of "B" in either **MATH 1232 or MATH 1690**, or a minimum grade of "A" in **MATH 1700**.

To continue in the Mathematics Honours program, students must maintain a minimum GPA of 3.00, and complete a minimum of 9 credit hours during each Fall and Winter Term.

To graduate with the B. Sc. Honours degree, a student must maintain a minimum 3.00 GPA and achieve a minimum grade of "C" on all courses that make up the 120 credit hours of the degree.

List of Year 2 Mathematics electives (of which two are required for the core requirements): **MATH 2030, MATH 2040, NATG 2070, MATH 2140, MATH 2160, MATH 2170**.

Other electives normally allowed are:

Statistics: STAT 2000, STAT 2400, STAT 3470, STAT 3480, STAT 3400 (STAT 3500), STAT 3800 (STAT 3600), STAT 4100 (STAT 4140), STAT 4520, STAT 4530, STAT 4580, STAT 4590, STAT 4600, STAT 4620, STAT 4630, STAT 4690.

Physics: PHYS 2380, PHYS 2600, PHYS 2610, PHYS 2650, PHYS 3670, PHYS 3680, PHYS 3650, PHYS 3660, PHYS 3630, PHYS 3640, PHYS 3380, PHYS 4390, PHYS 4620, PHYS 4640, PHYS 4650.

Chemistry: CHEM 2280, CHEM 2290, CHEM 3360, CHEM 3370, CHEM 4640, CHEM 4650.

Economics: ECON 2010, ECON 2030, ECON 3010, ECON 3030, ECON 4040, ECON 4042.

Mechanical Engineering: MECH 3490.

Other courses may be chosen with permission of the department. Students are required to obtain the approval of the department concerning their choice of electives.

Double Honours: A student may elect Honours in Mathematics and one other field, subject to the approval of both departments. The Mathematics prescription for a Double Honours program is as indicated in the table below.

Honours programs must be approved each year by the department.

Four Year Major Requirements

To enter the four year Major in Mathematics, a student must have a "C+" in either **MATH 1232 or MATH 1690** or a minimum grade of "B" in **MATH 1700**, and have satisfied all Faculty requirements for entry to the program.

To continue in the Mathematics Major degree program students must maintain a minimum DGPA of 2.00.

To graduate with the B. Sc. Major degree, a student must achieve a minimum GPA of 2.00 on the 120 credit hours that contribute to the degree, and a minimum grade of "C" in each of the Major Program Specific courses (see below).

Major Program Specific Courses

MATH 1220, MATH 1230, MATH 1232, MATH 1240, MATH 2020, MATH 2030, MATH 2080, MATH 2090, MATH 2150, MATH 2160, MATH 2180, MATH 3320, MATH 3322, MATH 3340, MATH 3360, MATH 3390, MATH 3440, MATH 3460.

List of Year 2 Mathematics Electives (of which two are required for the core requirements): **MATH 2030, MATH 2040, MATH 2070, MATH 2140, MATH 2160, MATH 2170**.

Other electives can be chosen from the general list of approved electives, as in the honours program. For advice on this point students should talk to a faculty member in the department.

Four Year Major in Applied Mathematics with Option (Computer Science, Economics, Statistics)

These programs provide a sound general knowledge of applied mathematics together with a significant number of courses in the option area. Courses in the Computer Science option provide training in aspects of computer science which are most useful to the practicing mathematician. Courses in the Computer Sciences, Economics, and Statistics options are fundamental to each area and provide a strong, mathematical basis for further study.

To enter the four year Major in Applied Mathematics with one of the above three options, a student must have a "C+" in either **MATH 1232 or MATH 1690** or a minimum grade of "B" in **MATH 1700**, and have satisfied all faculty requirements for entry to the program.

To continue in the Applied Mathematics Major degree programs, students must maintain a minimum DGPA of 2.00.

To graduate with the B. Sc. Major degree, a student must achieve a minimum GPA of 2.00 on the 120 credit hours that contribute to the degree, and a minimum grade of "C" in each of the Major Program Specific courses (see below).

ACADEMIC CALENDAR 2015-2016

Applied Mathematics Major Program Specific Courses

MATH 1220, MATH 1230, MATH 1232, MATH 1240, MATH 2070, MATH 2080, MATH 2090, MATH 2140, MATH 2160, MATH 2180, MATH 3340, MATH 3420, MATH 3440, MATH 3460 and MATH 3470.

It is recommended that students take all 12 credit hours of 1000 level mathematics courses in their initial 30 credit hours; however, students should take at least **MATH 1230, MATH 1232 and MATH 1220**. See the individual charts below for additional requirements for each option.

Options List: **MATH 2030, MATH 2040, MATH 2170**, or any 3000/4000 level MATH course.

Three Year General

As prescribed with all other faculty regulations in Section 3.2, students in this program must select 18 credit hours of 2000, 3000, and (or) 4000 level courses from each of two Science areas. To satisfy the requirement in the area of Mathematics, students must select a minimum of 18 credit hours of 2000, 3000, and (or) 4000 level Mathematics courses (subject to the Faculty requirement that of the 36 credit hours in the two advanced level Science areas, at least 6 credit hours must be at the 3000/4000 level).

See a Science Academic Advisor or a Faculty Advisor in the department for information regarding entry to or completion of any of the programs outlined.

4.9.2.1 Mathematics Honours Program Chart

4.9.2 Mathematics			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
MATHEMATICS HONOURS 120 CREDIT HOURS			
MATH 1220 ¹ , MATH 1230 ¹ , MATH 1232 ¹ , MATH 1240	MATH 2020, MATH 2080, MATH 2090, MATH 2150, MATH 2180 6 credit hours from the following list: MATH 3030, MATH 2040, MATH 2070, MATH 2140, MATH 2160 ² , MATH 2170	36 credit hours Mathematics courses, which must include the following: MATH 3320, MATH 3340, MATH 3390, MATH 3440, MATH 3470, MATH 3472; And one of the two concentrations listed below: Applied and Computational Mathematics Concentration: MATH 3420, MATH 3460, MATH 4370; and additional 9 credit hours to be chosen from: MATH 3322, MATH 3330, MATH 4280, MATH 4320 ³ , MATH 4330 ³ , MATH 4380 ³ , MATH 4390 ³ , MATH 4440, MATH 4460 ³ Pure Mathematics Concentration: MATH 3322, one of (MATH 3410 ³ or MATH 3480 ³), MATH 4260, and one of (MATH 4300 ³ or MATH 4340 ³ or MATH 4360 ³); and an additional 6 credit hours to be chosen from: MATH 3360, MATH 4240 ³ , MATH 4270, MATH 4280, MATH 4290, MATH 4450, MATH 4470 ³	
STAT 1000, COMP 1010			
The following must be completed in Year 1 or Year 2: 6 credit hours from the Faculty of Arts, which should include the required "W" course.		12 credit hours of electives from: MATH 2030, MATH 2070, MATH 2160 (if not taken as a required 2 nd year elective), MATH 2170 and all Year 3 and 4 mathematics courses	
15 credit hours of electives (review above list for acceptable electives)		12 credit hours of approved (not necessarily mathematics) electives (review above list for acceptable electives)	
30 credit hours	30 credit hours	30 credit hours	30 credit hours

NOTES:

¹ Students are strongly advised to take **MATH 1220, MATH 1230 and MATH 1232**. The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved: **MATH 1300 (A)** in place of **MATH 1220, MATH 1500 (A)** or **MATH 1510 (A)** in place of **MATH 1230, MATH 1700 (A)** or **MATH 1710 (A)** in place of **MATH 1232, MATH 1690 (B)** in place of **MATH 1230 and MATH 1232**.

² Department strongly recommends choosing **MATH 2160** as one of the electives in Year 2.

³ These courses may not be offered every year, but are usually offered once every second year. Please refer to Aurora Student for courses offered in the current year and to the website of the Department of Mathematics for the planned schedule of future course offerings.

4.9.2.2 Mathematics Double Honours Program Chart

MATHEMATICS HONOURS DOUBLE MINIMUM 120 CREDIT HOURS (comprising courses listed in chart below, and the required courses from the other department)			
MATH 1220 ¹ , MATH 1230 ¹ , MATH 1232 ¹ , MATH 1240 STAT 1000 COMP 1010 Plus 6 credit hours from the Faculty of Arts, which should include the required "W" course	MATH 2020, MATH 2080, MATH 2090, MATH 2150, MATH 2180 6 credit hours from the following list: MATH 2030, MATH 2040, MATH 2070, MATH 2140, MATH 2160, MATH 2170	MATH 3320, MATH 3340, MATH 3390, MATH 3440, MATH 3470, MATH 3472	15 credit hours from: MATH 2030, MATH 2070, MATH 2160 (if not taken as a required 2nd year elective), MATH 2170; and all Year 3 and 4 mathematics courses of which at least 9 credit hours must be 4000 level.

NOTES:

¹ Students are strongly advised to take **MATH 1220, MATH 1230 and MATH 1232**. The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved: **MATH 1300 (A)** in place of **MATH 1220, MATH 1500 (A)** or **MATH 1510 (A)** in place of **MATH 1230, MATH 1700 (A) or MATH 1710 (A)** in place of **MATH 1232, MATH 1690 (B)** in place of **MATH 1230 and MATH 1232**.

4.9.2.3 Mathematics Major Program Chart

MATHEMATICS FOUR YEAR MAJOR 120 CREDIT HOURS		
MATH 1220 ¹ , MATH 1230 ¹ , MATH 1232 ¹ , MATH 1240	MATH 2020, MATH 2080, MATH 2090, MATH 2150, MATH 2180 6 credit hours from the following: MATH 3030, MATH 2040, MATH 2070, MATH 2140, MTH 2160, MATH 2170	A total of 48 credit hours from MATH 2030, MATH 2070, MATH 2160, MATH 2170 and any 3000/4000 level Mathematics courses, which must include: MATH 2030 (if not already taken as Year 2 elective), MATH 2160 (if not already taken as Year 2 elective), MATH 3320, MATH 3322, MATH 3340, MATH 3360, MATH 3390, MATH 3440, MATH 3460
STAT 1000, COMP 1010 15 credit hours of approved electives The following must be completed in Year 1 or Year 2: 6 credit hours from the Faculty of Arts, which should include the required "W" course.		12 credit hours of approved electives

NOTES:

¹ Students are strongly advised to take **MATH 1220, MATH 1230 and MATH 1232**. The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved: **MATH 1300 (B) in place of MATH 1220, MATH 1500 (B) or MATH 1510 (B)** in place of **MATH 1230, MATH 1700 (B) or MATH 1710 (B)** in place of **MATH 1232, MATH 1690 (C+)** in place of **MATH 1230 and MATH 1232**.

ACADEMIC CALENDAR 2015-2016

4.9.2.4 Applied Mathematics with Computer Science Option Program Chart

APPLIED MATHEMATICS FOUR YEAR MAJOR with COMPUTER SCIENCE OPTION 120 CREDIT HOURS		
MATH 1220 ¹ , MATH 1230 ¹ , MATH 1232 ¹ , MATH 1240	MATH 2080, MATH 2090, MATH 2150, MATH 2160, MATH 2180	MATH 2070, MATH 2140, MATH 3340, MATH 3420, MATH 3440, MATH 3460, MATH 3470
COMP 1010, COMP 1020	COMP 2140	
6 credit hours from the Faculty of Arts, which should include the required "W" course	STAT 1000 and STAT 2000	
6 credit hours of approved electives	9 credit hours chosen from: MATH 2030, MATH 2040, MATH 2170, or any 3000/4000 level MATH course One of the following patterns (9 credit hours): Graphics: COMP 2190, COMP 3490, COMP 4490 Software: COMP 2150, COMP 2160; and one of: COMP 3380, COMP 3440 or COMP 3020 Theoretical Computer Science: COMP 2080, and two of: COMP 3030, COMP 3170, COMP 3820 or COMP 4420 Hardware: COMP 2160, COMP 2280; and one of: COMP 3370 or COMP 3430 Artificial Intelligence: COMP 3190; and two of: COMP 4180, COMP 4190, COMP 4200, COMP 4360	
	27 credit hours of electives taken during years 2, 3 and 4	

NOTES:

¹ Students are strongly advised to take **MATH 1220, MATH 1230 and MATH 1232**. The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved: **MATH 1300 (A)** in place of **MATH 1220, MATH 1500 (A) or MATH 1510 (A)** in place of **MATH 1230, MATH 1700 (A) or MATH 1710 (A)** in place of **MATH 1232, MATH 1690 (B)** in place of **MATH 1230 and MATH 1232**.

4.9.2.5 Applied Mathematics with Economics Option Program Chart

APPLIED MATHEMATICS FOUR YEAR MAJOR with ECONOMICS OPTION 120 CREDIT HOURS		
MATH 1220 ¹ , MATH 1230 ¹ , MATH 1232 ¹ , MATH 1240	MATH 2020, MATH 2090, MATH 2150, MATH 2160, MATH 2180	MATH 2070, MATH 2140, MATH 3340, MATH 3420, MATH 3440, MATH 3460, MATH 3470, MATH 4370
ECON 1010 and ECON 1020 (or ECON 1210 and ECON 1220)		
9 credit hours of electives	STAT 1000, STAT 2000 COMP 1010 ECON 2030, ECON 3030 6 credit hours from: MATH 2030, MATH 2040, MATH 2170, or any 3000/4000 level MATH course 6 credit hours from: ECON 2010, ECON 2020, ECON 3010 and ECON 3020	
	24 credit hours of approved electives taken during years 2, 3 and 4	
3 credit hour "W" course must be taken in Year 1 or Year 2		

NOTES:

¹ Students are strongly advised to take **MATH 1220, MATH 1230 and MATH 1232**. The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved: **MATH 1300 (A)** in place of **MATH 1220, MATH 1500 (A) or MATH 1510 (A)** in place of **MATH 1230, MATH 1700 (A) or MATH 1710 (A)** in place of **MATH 1232, MATH 1690 (B)** in place of **MATH 1230 and MATH 1232**.

4.9.2.6 Applied Mathematics with Statistics Option Program Chart

APPLIED MATHEMATICS FOUR YEAR MAJOR with STATISTICS OPTION 120 CREDIT HOURS		
MATH 1220 ¹ , MATH 1230 ¹ , MATH 1232 ¹ , MATH 1240	MATH 2080, MATH 2090, MATH 2150, MATH 2160, MATH 2180	MATH 2070, MATH 2140, MATH 3340, MATH 3420, MATH 3440, MATH 3460, MATH 3470
STAT 1000	STAT 2000	STAT 2400, STAT 3400, STAT 3470, STAT 3480, STAT 3800
6 credit hours from the Faculty of Arts, which should include the required "W" course	COMP 1010	
	9 credit hours from: MATH 2030, MATH 2040, MATH 2170, or any 3000/4000 level MATH course	
	6 credit hours of 3000 or 4000 level Statistics courses	
9 credit hours of electives	18 credit hours of approved electives taken during years 2, 3 and 4	

NOTES:

¹ Students are strongly advised to take **MATH 1220, MATH 1230 and MATH 1232**. The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved: **MATH 1300 (A) in place of MATH 1220, MATH 1500 (A) or MATH 1510 (A) in place of MATH 1230, MATH 1700 (A) or MATH 1710 (A) in place of MATH 1232, MATH 1690 (B) in place of MATH 1230 and MATH 1232.**

4.9.2.7 Mathematics General Degree and Minor Requirements

THREE YEAR GENERAL (90 CREDIT HOURS)	
MATH 1220 ¹ , MATH 1230 ¹ , MATH 1232 ¹ , MATH 1240	18 credit hours of 2000, 3000, and (or) 4000 level Mathematics courses (subject to the Faculty requirement that of the 36 credit hours to be completed in the two advanced level Science areas, at least 6 credit hours must be at the 3000/4000 level.)"
MINOR	
MATH 1220 ¹ , MTH 1230 ¹ , MATH 1232 ¹ , plus a minimum of 9 credit hours from MATH 1240 ¹ and 2000 and (or) 3000 level Mathematics courses.	

NOTES:

¹ **MATH 1500 or MATH 1510** may be taken in place of **MATH 1230**; **MATH 1300** may be taken in place of **MATH 1220**; **MATH 1700 or MATH 1710** may be taken in place of **MATH 1232**. **MATH 1200** may be taken in place of **MATH 1240**, but these courses are not equivalent. i.e. students should note that **MATH 1240** is a prerequisite to some 2nd year mathematics courses or which **MATH 1200** is not a prerequisite.

4.9.2.8 Mathematics – Physics and Astronomy Joint Honours Program

Honours Requirements			
<p>To enter the Joint Honours Mathematics – Physics Honours program the student must have a minimum grade of “B” in: MATH 1232 or MATH 1690 (or a minimum grade of “A” in MATH 1700), PHYS 1050 (or “B+” in PHYS 1020) and PHYS 1070.</p>			
<p>To continue in the Honours program, students must maintain a minimum DGPA of 3.00, complete a minimum of 9 credit hours each Fall and Winter Term.</p>			
<p>To graduate with the B. Sc. Honours degree, a student must achieve a minimum DGPA of 3.00 and a minimum grade of “C+” in each of the Honours Program Specific courses, and a minimum grade of “C” on all remaining courses that contribute to the 129 credit hours of the degree. See the Calendar entry for each of the Department of Mathematics and the Department of Physics and Astronomy for the Honours Program Specific courses.</p>			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
JOINT HONOURS 129 CREDIT HOURS (129 credit hours)			
MATH 1220 ¹ , MATH 1230 ¹ , MATH 1232 ¹ (B), MATH 1240 PHYS 1050 (B) (or PHYS 1020 (B+)) ² and PHYS 1070 (B) STAT 1000 COMP 1010 6 credit hours from the Faculty of Arts, which should include the required “W” course ⁴	PHYS 2260, PHYS 2380, PHYS 2600, PHYS 2610, PHYS 2650 ³ MATH 2020, MATH 2080, MATH 2090, MATH 2150, MATH 2180	MATH 3320, MATH 3340, MATH 3440, MATH 3460, MATH 3470, MATH 3472 PHYS 3670, PHYS 3680, PHYS 3650, PHYS 3630, PHYS 3380 3 credit hours from 3000 and 4000 level Physics Honours courses	MATH 3322 12 credit hours from: MATH 2030, MATH 2070, MATH 2160, MATH 2170, or any 3000 or 4000 level Mathematics courses, of which 3 credit hours must be at the 4000 level PHYS 3430 (6), PHYS 3640 ⁵ , PHYS 3660, PHYS 4390 3 credit hours from 3000 and 4000 level Physics Honours courses
30 Hours	30 Hours	36 Hours	33 Hours
<p>NOTES:</p> <p>¹ Students are strongly advised to take MATH 1220, MATH 1230 and MATH 1232. The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved: MATH 1300 (A) in place of MATH 1220, MATH 1500 (A) or MATH 1510 (A) in place of MATH 1230, MATH 1700 (A) or MATH 1710 (A) in place of MATH 1232, MATH 1690 (B) in place of MATH 1230 and MATH 1232.</p> <p>² PHYS 1030 is not suitable for entry to the program. Students must also take PHYS 1070 if they have already taken PHYS 1030. Students can hold credit for both PHYS 1030 and PHYS 1070.</p> <p>³ The corequisite of PHYS 2490 is waived. It is recommended that students audit PHYS 2390 and PHYS 2490 in second year.</p> <p>⁴ As there are no electives in Year 2 of the program, students should complete the university written English requirement in Year 1. If not completed in Year 1, a “W” course must be completed prior to Year 3 in addition to the required Year 2 courses.</p> <p>⁵ The prerequisite of PHYS 2490 is waived.</p> <p>(Letters in brackets indicate minimum prerequisite standing for further study. The number 6 in brackets indicates a 6 credit hour course.)</p>			

4.9.2.9 Mathematics – Economics Joint Honours Program

The Department of Mathematics along with the Department of Economics (Faculty of Arts) offer a joint Honours program for students wishing in depth study in Mathematics and Economics. For Economics course listings, refer to the Faculty of Arts chapter in the Calendar.			
To enter the Joint Honours Mathematics - Economics program, the student must have a minimum grade of "B" in: ECON 1010 and ECON 1020 (or ECON 1210 and ECON 1220), either MATH 1232 or MATH 1690 (or a minimum grade of "A" in MATH 1700) and have satisfied the Faculty of Science requirements for entry to the honours program.			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
JOINT HONOURS 120 CREDIT HOURS			
Both ECON 1010, ECON 1020, or both ECON 1210 and ECON 1220 MATH 1220 ¹ , MATH 1230 ¹ , MATH 1232 ¹ , MATH 1240 STAT 1000 ³ COMP 1010 ³	ECON 2010, ECON 2020 MATH 2020, MATH 2080, MATH 2090, MATH 2150, MATH 2180	ECON 3010, ECON 3020, ECON 3040 ³ MATH 2030, MATH 2160, MATH 3320, MATH 3340, MATH 3440, MATH 3470. MATH 3472 24 credit hours of approved Economics courses ³ 3 credit hours from MATH 2140, MATH 3420, MATH 3460, MATH 4370, or any Mathematics course at the 4000 level.	
6 credit hours of electives, including the required "W" course.	9 credit hours of approved electives	3 credit hours of Mathematics courses at the 3000 or 4000 level.	
30 Hours	30 Hours	30 Hours	30 Hours
NOTES:			
<p>¹ Students are strongly advised to take MATH 1220, MATH 1230 and MATH 1232. The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved: MATH 1300 (A) in place of MATH 1220, MATH 1500 (A) or MATH 1510 (A) in place of MATH 1230, MATH 1700 (A) or MATH 1710 (A) in place of MATH 1232, MATH 1690 (B) in place of MATH 1230 and MATH 1232.</p> <p>² Some courses may be taken in a different year than indicated; STAT 1000, COMP 1010, ECON 3040 may be taken in Year 2. The normal prerequisite for ECON 3040 is ECON 2040 [or the former ECON 3170 (018.317)], which will be waived for students in this program who have completed Year 1.</p> <p>³ Of the 24 credit hours in electives in Economics in Years 3 and 4, no more than 6 credit hours may be at the 2000 level or below and at least 6 credit hours must be at the 4000 level. Students are encouraged to take ECON 4010, ECON 4020 and ECON 4040.</p>			

4.9.2.10 Mathematics - Computer Science Joint Honours Program

4.9.2.10 Mathematics - Computer Science Joint Honours Program (Including Co-op if selected)

The departments of Computer Science and Mathematics offer a joint Honours program for in-depth study in both Computer Science and Mathematics.

Honours Requirements

To enter the Joint Honours Computer Science-Mathematics program, the student must have a minimum grade of “B” in each of COMP 1020, either MATH 1232 or MATH 1690 (or a minimum grade of “A” in MATH 1700), and have satisfied the Faculty of Science requirements for entry to the honours program. It is recommended that STAT 2000 be completed in University 1 as an elective.

YEAR 1	YEAR 2	YEAR 3	YEAR 4
JOINT HONOURS (Including Cooperative Option if selected) 120 CREDIT HOURS			
COMP 1010 and COMP 1020 (B) MATH 1220 ¹ , MATH 1230 ¹ , MATH 1232 ¹ , MATH 1240 STAT 1000 (C) 6 credit hours from the Faculty of Arts, which should include the required 3 credit hour “W” course ² 3 credit hours of electives	COMP 2080 ² , COMP 2140, COMP 2160, COMP 2280 MATH 2020, MATH 2080, MATH 2090, MATH 2150, MATH 2180 3 credit hours of approved electives	COMP 3030, COMP 3170, COMP 3370, COMP 3430 Three of: COMP 3010, COMP 3020, COMP 3290, COMP 3350, COMP 3380, COMP 3190, COMP 3440, COMP 3490, COMP 3820 Three of: COMP 4020, COMP 4140, COMP 4180, COMP 4190, COMP 4290, COMP 4300, COMP 4340, COMP 4350, COMP 4360, COMP 4380, COMP 4490, COMP 4510, COMP 4580, COMP 4690, COMP 4710 MATH 2030, MATH 2160, MATH 3320, MATH 3440, MATH 3470, MATH 3472 9 credit hours from MATH 2070, MATH 2170, any 3000 or 4000 level Mathematics courses, of which at least 3 credit hours must be 4000 level	
	Work Term (if Co-op Selected)³:	Work Term (if Co-op Selected)³:	Work Term (if Co-op Selected)³:
	COMP 2980	COMP 3980	COMP 4980
30 Hours	30 Hours	30 Hours	30 Hours

NOTES:

¹ Students are strongly advised to take **MATH 1220, MATH 1230 and MATH 1232**. The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved: **MATH 1300 (A) in place of MATH 1220, MATH 1500 (A) or MATH 1510 (A)** in place of **MATH 1230, MATH 1700 (A) or MATH 1710 (A)** in place of **MATH 1232, MATH 1690 (B)** in place of **MATH 1230 and MATH 1232**.

² Students in this program will not take **COMP 2130**. **COMP 2130** is waived as a prerequisite for students in this program.

³ When chosen, the Cooperative Option work terms (2980, 3980, 4980) will normally be completed during the Summer Terms following years 2, 3, and 4 respectively.

(Letters in brackets indicate minimum prerequisite standing for further study. The number 6 in brackets indicates a 6 credit hour course.)

4.9.2.11 Mathematics - Statistics Joint Honours Program

4.9.2.11 Mathematics - Statistics Joint Honours Program			
<p>The departments of Statistics and Mathematics offer a joint Honours program for students wishing in depth study in Statistics and Mathematics.</p> <p>To enter the Honours program students must have satisfied the Faculty of Science requirements for entry to the program, and have obtained a minimum grade of "B" in STAT 1000, either MATH 1232 or MATH 1690 (or a minimum grade of "A" in MATH 1700).</p> <p>To graduate with the B. Sc. Honours degree, a student must achieve a minimum DGPA of 3.00 and a minimum grade of "C+" in each of the Honours Program Specific courses, and a minimum grade of "C" on all remaining courses that contribute to the 120 credit hours of the degree. See the Calendar entry for each of the Department of Statistics and the Department of Mathematics for the Honours Program Specific courses.</p>			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
JOINT HONOURS 120 CREDIT HOURS (comprising courses listed in chart below, and electives)			
MATH 1220 ¹ , MATH 1230 ¹ , MATH 1232 ¹ (B), MATH 1240	STAT 2000 ² , STAT 2400 MATH 2020, MATH 2080, MATH 2090, MATH 2150, MATH 2160, MATH 2180	STAT 3050, STAT 3470, STAT 3480, STAT 3400, STAT 3800	STAT 4100, STAT 4520, STAT 4530
<p>The following courses must be taken in Year 1 or Year 2:</p> <p>STAT 1000 (B), COMP 1010</p> <p>6 credit hours from the Faculty of Arts, which should include the required "W" course</p> <p>12 credit hours of approved electives</p>		<p>Plus a total of 30 credit hours from: MATH 2070, MATH 2170 and any 3000/4000 level Mathematics courses, which must include at least 3 credit hours at the 4000 level and must also include MATH 2030, MATH 3320, MATH 3322, MATH 3340, MATH 3470, MATH 3472, MATH 3440, MATH 3460</p> <p>6 credit hours of approved electives</p>	
30 Hours	30 Hours	30 Hours	30 Hours
<p>NOTES:</p> <p>¹ Students are strongly advised to take MATH 1220, MATH 1230, MATH 1232. The following substitutions are allowed (but not advised), provided the grades indicated in brackets are achieved: MATH 1300 (A) in place of MATH 1220, MATH 1500 (A) or MATH 1510 (A) in place of MATH 1230, MATH 1700 (A) in place of MATH 1232, MATH 1690 (B) in place of MATH 1230 and MATH 1232.</p> <p>² STAT 2000 may be taken in Year 1.</p> <p>(Letters in brackets indicate minimum prerequisite standing for further study. The number 6 in brackets indicates a 6 credit hour course.)</p>			

4.9.3 Mathematics Course Descriptions

Mathematics Course Descriptions-0 Level

MATH 0500 Preparing for University Mathematics Cr.Hrs. 0

A voluntary non-credit mathematics course for students, holding credit in Pre-Calculus 40S or Applied Mathematics 40S or equivalent, who would benefit from improving their knowledge and skills concerning topics included in the Manitoba secondary school mathematics curriculum.

This course may be taken prior to or concurrently with MATH 1200, 1210, 1300, 1310, 1500, 1510, 1520, 1700, 1710 or 1690. Students participating in this course should purchase the set of notes "Preparing for University Mathematics" from the University of Manitoba Bookstore.

Prerequisite: a grade of 60% in Pre-Calculus 40S, 70% in Applied Mathematics 40S or a grade of 60% or better in the Math Skills course offered by Extended Education. (NOTE: The fee for this course is non-refundable upon withdrawal).

Mathematics Course Descriptions-1000 Level

MATH 1010 Applied Finite Mathematics Cr.Hrs. 3

(Lab Required) (Formerly 136.101) For students needing to fill the requirement of a university level mathematics course. Introduces students to modern applications of discrete mathematics. Topics include: mathematics of finance, linear programming, graph theory, and game theory. This is a terminal course and may not be used as a prerequisite for other Mathematics courses. This course cannot be used as part of an Honours, Major, General or Minor program in the mathematical sciences. Not available to any student already holding a grade of "C" or better in any Mathematics course with the exception of MATH 1020 (136.102), FA 1020 (054.102), MATH 1190, MATH 1191 (136.119). Not to be taken concurrently with any other Mathematics course with the exception of MATH 1020, FA 1020, MATH 1190, or MATH 1191. No prerequisite.

MATH 1020 Mathematics in Art Cr.Hrs. 3

(Formerly 136.102) Specific theory, structuring systems, and mathematical methods and principles used in works of art from various historical periods and contexts will be explored in relation to Euclidean and non-Euclidean geometries. Topics include: linear perspective; shapes, patterns, balance and symmetry; ratio, proportion and harmony; and order, dynamics, and chaos. The course will be one half art and one half mathematics, team-taught by faculty from the School of Art and the Department of Mathematics. This course is also given in the School of Art as FA 1020. This is a terminal course and may not be used as a prerequisite for other Mathematics courses. This course cannot be used as part of an Honours, Major, General or Minor program in the mathematical sciences. Not available to any student already holding a grade of "C" or better in any Mathematics course with the exception of MATH 1010 (136.101), MATH 1190, MATH 1191 (136.119). Not to be taken concurrently with any other Mathematics course with the exception of MATH 1010, MATH 1190, or MATH 1191. Not to be held with FA 1020 (054.102). No prerequisite.

MATH 1200 Elements of Discrete Mathematics Cr.Hrs. 3

(Lab Required) (Formerly 136.120) Sequences and series, trigonometry, complex numbers, algebra of polynomials, approximation of zeros of functions, linear difference equations. Not to be held with MATH 1210, MATH 1211 or MATH 1201. Not available to any student holding credit in any Mathematics course numbered 2000 or higher, unless MATH 1200 is a required course in a student's program. Prerequisite: a minimum grade of 60% in Pre-calculus 40S or the former Mathematics 40S (300), or a grade of 60% or better in the Mathematical Skills course taught by Extended Education.

MATH 1210 Techniques of Classical and Linear Algebra Cr.Hrs. 3

(Lab Required) To introduce a variety of practical algebraic concepts and skills necessary for the study of calculus and advanced engineering mathematics. The emphasis of this course is in the development of methodology and algebraic skill necessary for successful completion of subsequent engineering mathematics courses. This course is intended for Engineering and Geophysics students only. Not to be held with MATH 1200 (136.120), MATH 1201, MATH 1211, MATH 1220, MATH 1300 (136.130), MATH 1301, or MATH 1310 (136.131). Prerequisites: a minimum grade of 60% in Pre-calculus Mathematics 40S or the former Mathematics 40S (300), or a grade of "C" or better in the Mathematical Skills course taught by Extended Education.

MATH 1220 Linear Algebra 1 Cr.Hrs. 3

(Laboratory required) This course is intended for students in mathematically rich disciplines including those planning to enter an Honours or Major program in Mathematics or Statistics. An introduction to vectors, matrices, systems of linear equations and three-dimensional geometry. Not to be held with MATH 1210, MATH 1211, MATH 1300, MATH 1301, MATH 1310, or the former MATH 1680. Prerequisite: Pre-calculus Mathematics 40S (70%) or the former Mathematics 40S (300) (70%), or the Mathematical Skills course taught by Extended Education (B). NOTE: Applied Mathematics 40S (70%) may be used as a prerequisite to this course.

MATH 1230 Differential Calculus Cr.Hrs. 3

(Laboratory required) The course is intended for students in mathematically rich disciplines including those planning to enter an Honours or Major program in Mathematics or Statistics. Rigorous treatment of limits, continuity, and differentiation (with epsilon-delta proofs), applications in optimization problems, related rates, l'Hopital's rule, curve sketching, Taylor polynomials. Not to be held with MATH 1500, MATH 1501, MATH 1510, MATH 1520, the former MATH 1680, or MATH 1690. Prerequisite: Pre-calculus Mathematics 40S (70%) or the former Mathematics 40S (300) (70%), or the Mathematical Skills course taught by Extended Education (B).

MATH 1232 Integral Calculus Cr.Hrs. 3

(Laboratory required) This course is intended for students in mathematically rich disciplines including those planning to enter an Honours or Major program in Mathematics or Statistics. Integral calculus: theory and techniques of integration, curve sketching (parametric and polar), volume, arc length, surface area and partial derivatives. Sequences and series. Not to be held with MATH 1690, MATH 1700, MATH 1701, MATH 1710. Prerequisite: MATH 1230 (C) or MATH 1500 (B) or MATH 1501 (B) or MATH 1510 (B).

MATH 1240 Elementary Discrete Mathematics Cr.Hrs. 3

(Laboratory required) The course is intended for students in mathematically rich disciplines including those planning to enter an Honours or Major program in Mathematics or Statistics. An introduction to Discrete Mathematics. Topics include mathematical induction, modular arithmetic, Boolean algebras, basic sentential logic, elementary set theory and functional notation, partial orders, basic graph theory, basic counting. Not to be held with MATH 3120. Prerequisite: Pre-calculus Mathematics 40S (60%) or the former Mathematics 40S (300) (60%), or the Mathematical Skills course taught by Extended Education (C).

MATH 1300 Vector Geometry and Linear Algebra Cr.Hrs. 3

(Lab Required) (Formerly 136.130) An introduction to vectors, matrices, systems of linear equations and three-dimensional geometry. Not to be held for credit with MATH 1210, MATH 1211, MATH 1220, MATH 1310 (136.131), MATH 1301, or the former MATH 1680 (136.168). Prerequisite: a minimum grade of 60% in Pre-calculus Mathematics 40S or the former Mathematics 40S (300), or a grade of "C" or better in the Mathematical Skills course taught by Extended Education. NOTE: A minimum grade of 70% in Applied Mathematics 40S may be used as a prerequisite to this course.

MATH 1310 Matrices for Management and Social Sciences Cr.Hrs. 3
(Lab Required) (Formerly 136.131) Matrix methods with examples relevant to the Management and Social Sciences. Topics include vectors, matrices, systems of linear equations, and determinants; applications include economic models, the simplex method for linear programming, Markov chains, and game theory. Not to be held with MATH 1210, MATH 1211, MATH 1220, MATH 1300 (136.130), MATH 1301, or the former MATH 1680 (136.168). Prerequisite: a minimum grade of 60 % in Pre-calculus Mathematics 40S or the former Mathematics 40S (300), or a grade of "C" or better in the Mathematical Skills course taught by Extended Education. NOTE: A minimum grade of 70% in Applied Mathematics 40S may be used as a prerequisite to this course.

MATH 1500 Introduction to Calculus Cr.Hrs. 3
(Lab Required) (Formerly 136.150) Differentiation and integration of elementary functions, with applications to maxima and minima, rates of change, area, and volume. Not to be held with MATH 1230, MATH 1501, MATH 1510 (136.151), MATH 1520 (136.152), the former 136.153, the former MATH 1680 (136.168), or MATH 1690 (136.169). Prerequisite: a minimum grade of 60% in Pre-calculus Mathematics 40S or the former Mathematics 40S (300), or a grade of "C" or better in the Mathematical Skills course taught by Extended Education.

MATH 1510 Applied Calculus 1 Cr.Hrs. 3
(Lab Required) (Formerly 136.151) Functions and graphs; limits and continuity; differentiation of functions defined explicitly, implicitly and parametrically; applications of derivatives to velocity and acceleration, related rates, maxima and minima; differentials, indefinite and definite integrals, application of integration to area. Physical applications in this course make it especially suitable for students intending to take programs in engineering. Not to be held with MATH 1230, MATH 1500, MATH 1501 (136.150), MATH 1520 (136.152), the former 136.153, the former MATH 1680 (136.168), or MATH 1690 (136.169). Prerequisite: a minimum grade of 60% in Pre-calculus Mathematics 40S or the former Mathematics 40S (300), or a grade of "C" or better in the Mathematical Skills course taught by Extended Education; and Physics 40S (300) or a "P" in PHYS 0900 (016.090).

MATH 1520 Introductory Calculus for Management and Social Sciences Cr.Hrs. 3
(Lab Required) (Formerly 136.152) Differentiation and integration of functions of one variable and partial differentiation of functions of several variables. Emphasizes applications in the areas of management and social science. Not to be held with MATH 1230, MATH 1500, MATH 1501 (136.150), MATH 1510 (136.151), the former 136.153, the former MATH 1680 (136.168), or MATH 1690 (136.169). Prerequisite: a minimum grade of 60% in Pre-calculus Mathematics 40S or the former Mathematics 40S (300), or a minimum grade of "C" in the Mathematical Skills course taught by Extended Education.

MATH 1690 Calculus Cr.Hrs. 6
(Lab Required) (Formerly 136.169) An introduction to the calculus of functions of one variable. This course covers the same material as MATH 1500 (136.150) and MATH 1700 (136.170) together, but in greater depth. Exposure to high school calculus (45S) is desirable, but not essential. This course is intended for students planning to enter an Honours or 4 year Major program in Mathematics. Not to be held with MATH 1230, MATH 1232, MATH 1500, MATH 1501 (136.150), MATH 1510 (136.151), MATH 1520 (136.152), the former 136.153, the former MATH 1680 (136.168), MATH 1700, MATH 1701 (136.170), MATH 1710 (136.171), or the former 136.173. Prerequisite: a minimum grade of 80 % in Pre-calculus Mathematics 40S or the former Mathematics 40S (300).

MATH 1700 Calculus 2 Cr.Hrs. 3
(Lab Required) (Formerly 136.170) Theory and techniques of integration, curve sketching, volume, arc length, surface area and partial derivatives. Not to be held with MATH 1232, MATH 1690 (136.169), MATH 1701, MATH 1710 (136.171), or the former 136.173. Prerequisite: A grade of "C" or better in one of MATH 1230, MATH 1500, MATH 1501 (136.150), MATH 1510 (136.151), MATH 1520 (136.152), the former 136.153, or the former MATH 1680 (136.168).

MATH 1710 Applied Calculus 2 Cr.Hrs. 3
(Lab Required) (Formerly 136.171) Applications of integration to volumes, centres of mass, moments of inertia, work and fluid pressure; differentiation of trigonometric, inverse trigonometric, exponential, and logarithmic functions; techniques of integration; polar coordinates. Physical applications in this course make it especially suitable for students intending to take programs in engineering. Not to be held with MATH 1232, MATH 1690 (136.169), MATH 1700 (136.170), MATH 1701, or the former 136.173. Prerequisite: A grade of "C" or better in one of MATH 1230, MATH 1500 (136.150), MATH 1501, MATH 1510 (136.151), MATH 1520 (136.152), the former 136.153, or the former MATH 1680 (136.168). Prerequisite or concurrent Requirement: PHYS 1050 or PHYS 1051.

Mathematics Course Descriptions-2000 Level

MATH 2020 Algebra 1 Cr.Hrs. 3
(Laboratory required) Groups, Rings, Fields: Elementary Concepts and Examples. Not to be held with the former MATH 3350. Prerequisite: MATH 2090 (C) or the former MATH 2352 (C) or the former MATH 2300 (B) or MATH 2301 (B).

MATH 2030 Combinatorics 1 Cr.Hrs. 3
(Laboratory required) Introductory combinatorics, including basic counting, permutations and combinations, enumeration, inclusion-exclusion, pigeonhole principle, solving basic recursions, relations, and derangements. Not to be held with the former MATH 3400. Prerequisites: MATH 1240 (C) or [the former MATH 2202 (C) and the former MATH 2352 (C)] or consent of instructor.

MATH 2040 Curves and Surfaces Cr.Hrs. 3
(Laboratory required) Curves and surfaces in the plane and space. Intrinsic geometry of curves and surfaces: Serret Frenet frames, first and second fundamental forms, curvature and the Gauss map. Geodesics and parallel transport. Theorema Egregium and Gauss-Bonnet theorems. Prerequisites: [MATH 1232 (C) or MATH 1690 (C) or MATH 1700 (B) or MATH 1701 (B) or MATH 1710 (B)] and [MATH 1220 (C) or MATH 1300 (B) or MATH 1301 (B)]; or consent of instructor.

MATH 2070 Graph Theory 1 Cr.Hrs. 3
(Laboratory required) Introduction to graphs, digraphs, and multigraphs. Topics include trees, cycles and circuits, planarity, basic graph algorithms, and applications of graph theory to social and physical sciences. Not to be held with the former MATH 2400 or COMP 4340. Prerequisites: MATH 1240 (C) and [MATH 1220 (C) or MATH 1300 (B) or MATH 1301 (B)].

MATH 2080 Introduction to Analysis Cr.Hrs. 3
(Laboratory required) Fundamental properties of the real number system as a complete ordered field, Archimedean property, existence of square roots, density of rational numbers, uncountability of real numbers. Sequences, subsequences, limit theorems, monotonicity, Bolzano-Weierstrass theorem, Cauchy sequences. Rigorous treatment of limits and continuity of functions of one and several variables. Uniform continuity. Applications. Not to be held with the former MATH 2202. Prerequisites: [MATH 1232 (C) or MATH 1690 (C) or MATH 1700 (B) or MATH 1701 (B) or MATH 1710 (B)] and [MATH 1220 (C) or MATH 1300 (B) or MATH 1301 (B)] and MATH 1240 (C).

MATH 2090 Linear Algebra 2 Cr.Hrs. 3

(Laboratory required) The course is intended for students in mathematically rich disciplines. Abstract vector spaces, linear transformations, bases and coordinatization, matrix representations, orthogonalization, diagonalization, principal axis theorem. Not to be held with the former MATH 2300, MATH 2301, or the former MATH 2352. Prerequisite: MATH 1220 (C) or MATH 1300 (B) or MATH 1301 (B).

MATH 2120 Introductory Numerical Methods for Engineers Cr.Hrs. 4

(Lab Required) (Formerly 136.212) Numerical methods applied to problems in engineering; roots of nonlinear equations and systems of linear equations, numerical differentiation and integration, initial-value problems. For Engineering and Geophysics students only. Not to be held with MATH 2600 (136.260) or MATH 2601. Prerequisites: one of COMP 1010, COMP 1011 (074.101), COMP 1012, COMP 1013, the former 074.111, or the former 074.112 (C); pre- or corequisite: MATH 2132 or the former MATH 2100 (136.210) (C).

MATH 2130 Engineering Mathematical Analysis 1 Cr.Hrs. 3

(Lab required) Multivariable differential and integral calculus up to and including multiple integrals in cylindrical and spherical coordinates. For Engineering and Geophysics students only. This course may not be held for credit with MATH 2720 (136.272, 136.270), MATH 2750 (136.275), or the former MATH 2110 (136.211). Prerequisites: MATH 1210 or MATH 1211 and MATH 1710 (136.171) (C).

MATH 2132 Engineering Mathematical Analysis 2 Cr.Hrs. 3

(Lab required) Infinite series, Taylor and Maclaurin Series; ordinary differential equations including Laplace transforms. For Engineering and Geophysics students only. This course may not be held for credit with MATH 2800 (136.280), MATH 2730 (136.273, 136.271), or the former MATH 2100 (136.210). Prerequisites: MATH 1210 (C) or MATH 1211 (C), and MATH 1710 (136.171) (C).

MATH 2140 Modelling Cr.Hrs. 3

(Laboratory required) Introductory course on the design and analysis of mathematical models for real-life phenomena arising in the natural, engineering and social sciences. Not to be held with the former MATH 3820 or MATH 3821. Prerequisite: MATH 1230 (C+) or MATH 1690 (C+) or MATH 1500 (B) or MATH 1501 (B) or MATH 1510 (B) or MATH 1220 (C) or MATH 1300 (B) or MATH 1301 (B).

MATH 2150 Multivariable Calculus Cr.Hrs. 3

(Laboratory required) The course is intended for students in mathematically rich disciplines. Parametric curves, arc length and curvature. Functions of several variables. Level curves. Partial derivatives, gradient, divergence and curl. Max/min problems. Double and triple integrals, line and surface integrals of functions and vector fields, and applications. Green's, Stokes, and divergence theorems. Not to be held with MATH 2130, MATH 2720, MATH 2721, or the former MATH 2750. Prerequisite: MATH 2080 (C) or the former MATH 2202 (C).

MATH 2160 Numerical Analysis 1 Cr.Hrs. 3

(Laboratory required) Elementary techniques of numerical solution of mathematical problems: solution of equations, linear systems of equations, nonlinear equations; finite and divided differences, interpolation; numerical differentiation and integration. Not to be held with MATH 2120, the former MATH 2600, or MATH 2601. Prerequisites: [MATH 1232 (C) or MATH 1690 (C) or MATH 1700 (B) or MATH 1701 (B) or MATH 1710 (B)] and [MATH 1220 (C) or MATH 1300 (B) or MATH 1301 (B)].

MATH 2170 Number Theory 1 Cr.Hrs. 3

(Laboratory required) Prime numbers, unique factorization, linear congruences, Chinese remainder theorem, multiplicative functions, primitive roots and quadratic reciprocity. Not to be held with the former MATH 2500 or MATH 2501. Pre- or corequisite: MATH 2020 or [(the former MATH 2352 (C) or the former MATH 2300 (B) or MATH 2301 (B)) and consent of instructor].

MATH 2180 Real Analysis 1 Cr.Hrs. 3

(Laboratory required) Introduction to metric spaces including connectedness, compactness and continuity; topics in infinite series of numbers, and sequences and series of functions. Not to be held with the former MATH 3230. Prerequisite: MATH 2080 (C) or the former MATH 2202 (C).

MATH 2720 Multivariable Calculus Cr.Hrs. 3

(Formerly 136.272) Calculus of several variables. For students in Actuarial Mathematics programs only. Not to be held with MATH 2721 (136.272, 136.270), the former MATH 2750 (136.275), the former MATH 2110 (136.211), MATH 2130, or MATH 2150. Prerequisites: A grade of "C" or better in one of MATH 1220, MATH 1300 (136.130), MATH 1301, or MATH 1310 (136.131) (C); and a grade of "C" or better in one of MATH 1232, MATH 1690 (136.169), MATH 1700 (136.170), MATH 1701, MATH 1710 (136.171), or the former 136.173.

Mathematics Course Descriptions-3000 Level

MATH 3120 Applied Discrete Mathematics Cr.Hrs. 3

(Lab Required) (Formerly 136.312) Sets, groups, graphs, and Boolean algebra. For Engineering students only. Not to be held with COMP 2130 (074.213), or the former 074.212. Prerequisites: ECE 2220 (C) and MATH 2130 (C).

MATH 3132 Engineering Mathematical Analysis Cr.Hrs. 3

Vector integral calculus; series of Ordinary differential equations; Fourier series and Partial differential equations. For Engineering and Geophysics students only. Not to be held with MATH 3740 (136.374), MATH 3800 (136.380), or the former MATH 3100 (136.310). Prerequisites: MATH 2130 (C) and MATH 2132 (C).

MATH 3142 Engineering Mathematical Analysis 4 Cr.Hrs. 3

Introduction to discrete mathematics; systems of linear differential equations; complex function theory and applications. For Engineering and Geophysics students only. Not to be held with MATH 3110 (136.311), MATH 3700 (136.370), MATH 3710 (136.371), or MATH 3800 (136.380). Prerequisites: MATH 2130 (C); and MATH 2132 or the former MATH 2110 (136.211) (C). NOTE: MATH 3132 is highly recommended.

MATH 3320 Algebra 2 Cr.Hrs. 3

Basic structure theory of groups, integral domains and field extensions. Not to be held with the former MATH 3350. Prerequisite: MATH 2020 (C) or [(the former MATH 2352 (C) or the former MATH 2300 (B) or MATH 2301 (B)) and consent of instructor].

MATH 3322 Algebra 3 Cr.Hrs. 3

A continuation of topics in Algebra 1 and Algebra 2. More structure theory of groups, general ring theory, fields and field extensions, Galois theory. Prerequisite: MATH 3320 (C) or [the former MATH 3350 (C) and consent of instructor].

MATH 3330 Computational Algebra Cr.Hrs. 3

An introduction to the use of computers for symbolic mathematical computation, involving solving nonlinear systems and differential equations. A suitable software package will be used to explore applications. Prerequisite: MATH 2090 (C) or the former MATH 3300 (C) or the former MATH 3350 (C) or consent of instructor.

MATH 3340 Complex Analysis 1 Cr.Hrs. 3

Analytic functions, Cauchy's theorem and integral formula, series representation of analytic functions, calculus of residues, Rouché's theorem and the principle of the argument. Not to be held with the former MATH 3710. Prerequisites: [MATH 2180 (C) or the former MATH 3230 (C)] and [MATH 2150 (C) or MATH 2720 (B) or MATH 2721 (B) or the former MATH 2750 (C)].

MATH 3360 Combinatorics 2 Cr.Hrs. 3

Advanced topics in combinatorics, including generating functions, elementary design theory, recurrences, chains and antichains, Polya counting. The course is challenging and is intended for students in mathematically rich disciplines. Not to be held with the former MATH 4400. Prerequisite: MATH 2030 (C) or the former MATH 3400 (C).

MATH 3370 Graph Theory 2 Cr.Hrs. 3

Advanced topics in graph theory, including matchings and coverings, optimization, factors, flows, extremal graph theory, basic Ramsey theory, connectivity, and spectral graph theory. Selected applications in science and operations research are studied. The course is challenging and is intended for students in mathematically rich disciplines. Not to be held with COMP 4340. Prerequisite: MATH 2070 (C) or the former MATH 2400 (B) or permission of instructor.

MATH 3380 Introduction to Projective Planes Cr.Hrs. 3

Affine planes and projective planes, cross ratio, complex projective plane (the great unifier), Desargues' theorem, projective planes over division rings, Pappus' theorem and commutativity, the fundamental theorem for projectivities on a line, introduction of coordinates in a projective plane. Not to be held with the former MATH 2552 or the former MATH 3430. Prerequisite: MATH 2020 (C) or the former MATH 3300 (C) or the former MATH 3350 (C) or consent of instructor.

MATH 3390 Introduction to Topology Cr.Hrs. 3

Topological spaces, continuity, connectedness, compactness, separation properties. Not to be held with the former MATH 3240. Prerequisite: MATH 2180 (C) or the former MATH 3230 (C) or consent of instructor.

MATH 3410 Introduction to Mathematical Logic Cr.Hrs. 3

Propositional and first-order logic. Recursion theory. Not to be held with the former MATH 4250. Prerequisite: MATH 2020 (C) or the former MATH 2202 (C) or the former MATH 2352 (C) or consent of instructor.

MATH 3420 Numerical Analysis 2 Cr.Hrs. 3

Numerical methods for eigenvalue problems, nonlinear systems, initial-value problems, boundary-value problems; finite difference methods for ordinary and partial differential equations; error analysis. Not to be held with the former MATH 3600 or MATH 3601. Prerequisites: [MATH 2090 (C) or the former MATH 2300 (B) or MATH 2301 (B) or the former MATH 2352 (C)] and [MATH 2150 (C) or MATH 2720 (B) or MATH 2721 (B) or the former MATH 2750 (C)] and [MATH 2160 (C) or the former MATH 2600 (C) or MATH 2601 (C)]. Pre- or corequisite: MATH 3440 or the former MATH 2800 or MATH 2801.

MATH 3440 Ordinary Differential Equations Cr.Hrs. 3

Theory and applications of ordinary differential equations; existence and uniqueness of solutions, linear systems, simple nonlinear systems. This course is theory-based and is intended for students in mathematically rich disciplines. Not to be held with the former MATH 3800. Prerequisite: MATH 2180 (C) or [(MATH 1300 (B) or MATH 1301 (B)) and (the former MATH 2730 (B) or MATH 2731 (B) or the former MATH 2750 (C))].

MATH 3460 Partial Differential Equations Cr.Hrs. 3

Method of characteristics for first order PDEs, wave, beam, heat and Laplace equations, derivation of PDEs, existence and uniqueness, energy estimates, well-posedness, maximum principles, separation of variables. Not to be held with the former MATH 3810. Prerequisites: [MATH 2150 (C) or (the former MATH 2750 (C)) or ((MATH 2720 (B) or MATH 2721 (B)) and (the former MATH 2730 (B) or MATH 2731 (B)))] and [MATH 3440 (C) or the former MATH 3800 (C)].

MATH 3470 Real Analysis 2 Cr.Hrs. 3

Functions of bounded variation, Riemann-Stieltjes integration and Lebesgue integration. Not to be held with the former MATH 3740 or the former MATH 3760. Prerequisites: [MATH 2150 (C) or MATH 2720 (B) or MATH 2721 (B) or the former MATH 2750 (C)] and [MATH 2180 (C) or the former MATH 3230 (C)].

MATH 3472 Real Analysis 3 Cr.Hrs. 3

Fourier series and Fourier transforms; orthogonal systems and L2 theory, convergence and approximation. Multivariable calculus of maps from \mathbb{R}^n to \mathbb{R}^m , general chain rule and general notion of derivative, implicit function and inverse function theorems. Not to be held with the former MATH 3740 or the former MATH 3760. Prerequisite: MATH 3470 (C).

MATH 3480 Set Theory Cr.Hrs. 3

Axiomatic set theory. Cardinality, well-ordered sets, ordinal numbers, cardinal numbers. Axiom of Choice. Ordinal and cardinal arithmetic. Transfinite induction and recursion. Not to be held with the former MATH 3220. Prerequisite: MATH 2020 (C) or the former MATH 2202 (C) or consent of instructor. 0

Mathematics Course Descriptions-4000 Level**MATH 4240 Advanced Group Theory Cr.Hrs. 3**

Representation theory of finite groups, presentations of finite and infinite groups, or other topics. Prerequisite: MATH 3322 (C) or the former MATH 3350 (C) or consent of instructor.

MATH 4260 Abstract Measure Theory Cr.Hrs. 3

Lebesgue and abstract measures, measurable functions, convergence theorems, absolutely continuous functions, measure spaces, the Radon-Nikodym theorem, Fubini's and Tonelli's theorems. Not to be held with the former MATH 4750. Prerequisite: MATH 3472 (C) or the former MATH 3740 (B+) or the former MATH 3760 (C).

MATH 4270 Algebraic Topology Cr.Hrs. 3

This course will serve as an introduction to elements of homotopy or homology theory. Not to be held with the former MATH 4230. Prerequisites: [MATH 3322 (C) or the former MATH 3300 (C)] and [MATH 3390 (C) or the former MATH 3240 (C)], or consent of instructor.

MATH 4280 Basic Functional Analysis Cr.Hrs. 3

Banach spaces, Hahn-Banach, open mapping and closed graph theorems, principle of uniform boundedness, linear operators and functionals, dual space, L_p and L_q spaces, weak and weak* topologies, Hilbert spaces and compact operators on a Hilbert space. Not to be held with the former MATH 4750. Prerequisites: [MATH 3472 (C) or the former MATH 3740 (B+) or the former MATH 3760 (C)] and [MATH 3390 (C) or the former MATH 3240 (C)], or consent of instructor.

MATH 4290 Complex Analysis 2 Cr.Hrs. 3

Conformal mappings, normal families, harmonic and subharmonic functions, Perron's family, Dirichlet problem and Green's function. Not to be held with the former MATH 4710. Prerequisites: [MATH 3340 (C) or the former MATH 3700 (B+) or the former MATH 3710 (C)] and [MATH 3390 (C) or the former MATH 3240 (C)].

MATH 4300 Combinatorial Geometry Cr.Hrs. 3

Topics in combinatorial geometry, including arrangements of convex bodies, introduction to polytopes, problems in discrete geometry, repeated distances, and geometric graphs. Prerequisite: MATH 3360 (C) or the former MATH 3400 (C) or consent of instructor.

MATH 4320 Dynamical Systems Cr.Hrs. 3

Techniques for the qualitative analysis of nonlinear systems of ordinary differential equations and discrete-time systems. Not to be held with the former MATH 4800. Prerequisite: MATH 3440 (C) or the former MATH 3800 (C).

MATH 4330 Fundamentals of Approximation Theory Cr.Hrs. 3

Theoretical aspects of approximation theory: density, existence, uniqueness; direct and inverse theorems for polynomial approximation. Prerequisites: [MATH 2080 (C) or the former MATH 2202 (C)] and [MATH 2160 (C) or the former MATH 2600 (C) or MATH 2601 (C)], or consent of instructor.

MATH 4340 Introduction to Algebraic Geometry Cr.Hrs. 3

This course will introduce students to the basics of affine and projective varieties through a combination of basic theoretical tools and elementary examples. Prerequisite: MATH 3322 (C) or the former MATH 3350 (C) or consent of instructor.

MATH 4360 Introduction to Differential Geometry Cr.Hrs. 3

Manifolds and submanifolds; vector and tensor fields, Lie brackets and derivatives. Also at least one of the following: exterior differential calculus and Stokes' theorem, introduction to Riemannian geometry, symplectic geometry and hamiltonian mechanics. Not to be held with the former MATH 4730. Prerequisites: [MATH 3472 (C) or the former MATH 3740 (B) or the former MATH 3760 (C)] and [MATH 3390 (C) or the former MATH 3240 (C)].

MATH 4370 Linear Algebra and Matrix Analysis Cr.Hrs. 3

Vector and matrix norms, matrix factorizations, eigenvalues and eigenvectors, theory of non-negative matrices. Applications to differential equations, math biology, numerical analysis, digital image processing, data mining, GPS, Markov chains, graph theory, etc will be given in this course. Not to be held with the former MATH 4310. Prerequisite: MATH 2090 (C) or the former MATH 2300 (B) or MATH 2301 (B) or the former MATH 2352 (C).

MATH 4380 Mathematical Biology Cr.Hrs. 3

Formulation, analysis and simulation of suitable models in mathematical biology. Applications will be chosen from fields such as population dynamics, epidemiology, ecology, immunology and cellular dynamics. Not to be held with the former MATH 3530. Prerequisite: MATH 4320 (C) or the former MATH 3800 (C) or consent of instructor.

MATH 4390 Numerical Approximation Theory Cr.Hrs. 3

Computational aspects of approximation by interpolatory polynomials, convolutions, artificial neural networks, splines and wavelets. Prerequisites: [MATH 2150 (C) or MATH 2720 (B) or MATH 2721 (B) or the former MATH 2750 (C)] and [MATH 2160 (C) or the former MATH 2600 (C) or MATH 2601 (C)], or consent of instructor.

MATH 4440 Numerical Analysis of Partial Differential Equations Cr.Hrs. 3

Finite difference method, mathematical theory of Elliptic PDEs, finite element method, iterative solution of linear systems, spectral methods. Emphasis will be on the error analysis (stability, consistency and convergence) of the various methods. Prerequisites: [MATH 3420 (C) or the former MATH 3600 (C) or MATH 3601 (C)] and [MATH 3460 (C) or the former MATH 3810 (C)] and [MATH 3470 (C) or the former MATH 3740 (B) or the former MATH 3760 (C)], or consent of instructor. It is recommended that MATH 4370 be taken prior to or at the same time.

MATH 4450 Number Theory 2 Cr.Hrs. 3

Algebraic number theory, arithmetic geometry and analytic number theory, Diophantine equations, examples such as arithmetic of elliptic curves and Dirichlet L-functions. Not to be held with the former MATH 3450. Prerequisites: [MATH 2020 (C) and MATH 2170 (C)] or [(the former MATH 2500 (C) or MATH 2501 (C)) and the former MATH 2202 (C) and the former MATH 2750 (C)], or consent of instructor.

MATH 4460 Partial Differential Equations 2 Cr.Hrs. 3

Green's function, Poisson, heat, Schrodinger and wave equations in two and three spatial dimensions, variational characterization of eigenvalues, Fourier and Laplace transforms, introduction to functional analytic techniques in PDEs. Not to be held with the former MATH 4810. Prerequisites: [MATH 3460 (C) or the former MATH 3810] and [MATH 3470 (C) or the former MATH 3740 (B) or the former MATH 3760 (C)], or consent of instructor.

MATH 4470 Rings and Modules Cr.Hrs. 3

The general theory of (non-commutative) rings, modules and algebras. Prerequisite: MATH 3322 (C) or the former MATH 3350 or consent of instructor.

MATH 4910 Project Course in Mathematics Cr.Hrs. 3

A research project by the student in consultation with the department head and an appropriate supervising Faculty member. A written report will be required to be submitted by the end of the term. An oral examination may be required. This course is restricted to students in the fourth year of the Honours or Major program in Mathematics and is not available to Graduate Students. This course may not be held for credit with MATH 4900. Prerequisite: Consent of Department.

MATH 4920 Topics in Mathematics Cr.Hrs. 3

(Formerly 136.492) Topics of current interest in Mathematics or Applied Mathematics upon the interests and requirements of students and faculty, and will include specialized topics not available in regular course offerings. Prerequisite: consent of department.

4.10 Department of Microbiology

Head: Deborah Court

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4.10.1 Program Information

Microbiology is the study of microorganisms such as bacteria, viruses, fungi, protozoa, and algae, and their interactions with the environment. It is also an area of study that plays a pivotal role in understanding other life science disciplines, such as medicine, agriculture, ecology, and pharmacy. Studies in cloning, recombinant DNA technology, and gene sequencing are part of the program. The departments of Microbiology and Chemistry offer joint Honours programs (including Co-op) and joint Four Year Major programs (including Co-op) in biochemistry and biotechnology (See Sections 4.2 and 4.4).

The department must approve a student's Honours or Major program prior to registration in each session. Students must also obtain approval for any and all revisions to their program.

Microbiology Prerequisite Information

Students are advised to take courses in the year suggested in the charts below; otherwise difficulties may arise with timetabling and prerequisite requirements. Students are responsible for all prerequisites and corequisites of the courses required or selected in all programs below. Since Chemistry courses form an integral part of all Microbiology programs, students should note that Grade 12 mathematics and chemistry are prerequisite to **CHEM 1300**.

Honours Requirements and Options

To enter the Honours program in Microbiology, a student must have completed at least 24 credit hours with a minimum GPA of 3.00, and also obtained a minimum grade of "B" in **MBIO 1010**, and a minimum grade of "C+" in **CHEM 1310**. **BIOL 1020, BIOL 1030, STAT 1000** and the 3 credit hours of specified Mathematics or Physics are program requirements and students are strongly encouraged to complete these courses in first year.

* Students interested in studying Microbiology should note that Grade 12 mathematics and chemistry are prerequisite to **CHEM 1300**. Effective 2009-2010, students will also require Biology 40S (or equivalent) and any Grade 12 mathematics course (or equivalent) for entry to **BIOL 1020** (the required prerequisite for **BIOL 1030**).

To continue in the Microbiology Honours program, students must maintain a minimum GPA of 3.00, and complete a minimum of 9 credit hours during each Fall and Winter Term.

To graduate from the Microbiology Honours program students must achieve a minimum GPA of 3.00 and obtain a minimum grade of "C" on the courses that make up the 120 credit hours of the degree.

Students who wish to elect **CHEM 2280, CHEM 2290 or CHEM 2470** as options should note the prerequisites in making a choice of mathematics courses.

By careful choice of electives, programs may be selected giving emphasis to various areas of Microbiology, e.g., Biochemistry and Molecular Biology or Environmental and Ecological Microbiology. In choosing optional courses, students should be aware of any prerequisite requirements.

Honours Cooperative Option

Students interested in alternating academic terms and terms of paid employment as part of their Honours Microbiology program may enter the Cooperative Option in April of their second year in Honours Microbiology. This program provides students with a minimum of 12 months of paid employment by the time they graduate. It enables them to obtain work experience in research and industry with participating firms, government agencies and university units.

The course and grade requirements for entry to this option are the same as those required for entry to the regular Honours program (see above), as indicated in the chart. Students are required to complete the first and second year requirements of the program; and **MBIO 3010 and MBIO 3410** before they begin their first employment term. Students should refer to the general faculty regulations for B.Sc. (Honours) Cooperative Options in Section 3.6.

To continue in the Honours Cooperative program a student must maintain a minimum GPA of 3.00, successfully complete each work term, and complete a minimum of 9 credit hours during each academic term. Students should note that the grade requirements for the Cooperative Option are the same as that for the regular Honours program (see above).

Students must check with the Co-op office for the April application deadline information. They will normally be notified of their provisional acceptance in the program by September. Acceptance into the program is dependent upon the student receiving an employment placement. Employment term positions available to the students will be approved by the department, and the employers will select the students they wish to employ. Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Option if the demand for places exceeds the number of places available. The department reserves the right to determine and select the best qualified applicants.

Students are required to register in and pay fees for each employment term prior to the commencement of each employment term. Students will be required to submit an employment report upon the completion of each employment term.

Four Year Major

To enter the Major Degree program in Microbiology, a student must have completed at least 24 credit hours with a minimum GPA of 2.00, and also obtained a minimum grade of "C+" in **MBIO 1010**, and a minimum grade of "C" in **CHEM 1310**, **BIOL 1020**, **BIOL 1030**, **STAT 1000** and the 3 credit hours of specified Mathematics or Physics are program requirements and students are strongly urged to complete these courses in first year.

* Students interested in studying Microbiology should note that Grade 12 mathematics and chemistry are prerequisite to **CHEM 1300**. Effective 2009-2010, students will also require Biology 405 (or equivalent) and any Grade 12 mathematics course (or equivalent) for entry to **BIOL 1020** (the required prerequisite for **BIOL 1030**).

To continue in the Microbiology Major Degree, students must maintain a minimum GPA of 2.00.

To graduate from, the 4-year Major degree program in Microbiology, students are required to obtain a minimum GPA of 2.00 on the 120 credit hours that contribute to the degree.

Potential entrants to this program should also note the following:

Students who wish to elect **CHEM 2280**, **CHEM 2290** or **CHEM 2470** as options should note the prerequisites in making a choice of mathematics courses.

Chemistry **CHEM 2210** must be taken before **MBIO 2370 (CHEM 2370)**. Courses **MBIO 2360** and **CHEM 2360**, and **MBIO 2370** and **CHEM 2370** are the same and credit cannot be held for both. Microbiology students will normally register in **MBIO 2360** and **MBIO 2370**, but **CHEM 2360** and **CHEM 2370** will be regarded as equivalents in the four year Major program.

Students must note course and grade prerequisites when selecting 3000 and 4000 level Microbiology courses.

Microbiology **MBIO 4530** is not available in this program.

By careful choice of electives, programs may be selected giving emphasis to various areas of Microbiology, e.g., Biochemistry and Molecular Biology or Environmental and Ecological Microbiology. In choosing optional courses, students should be aware of any prerequisite requirements.

The listed requirements are minimum requirements. Students are reminded that should they wish to take further courses in Microbiology, they are at liberty to do so within the degree regulations.

Four Year Major Cooperative Option

Students interested in alternating employment terms and academic terms as part of their Major program in Microbiology may enter the Cooperative Option in April of their second year in Microbiology. This program provides students with a minimum of 12 months of paid employment by the time they graduate. It enables them to obtain work experience in research and industry with participating firms, government agencies and University units.

The course and grade requirements for entry to this option are the same as those required for entry to the regular Major program. **MBIO 3010** and **MBIO 3410** are required in Year 3. Students are required to complete the first and second year requirements of the program and **MBIO 3410** before they begin their first employment term. See the general faculty regulations for B.Sc. (Major) Cooperative Option in Section 3.4.

Students must check with the Co-op office for the April application deadline information. They will normally be notified of their provisional acceptance in the program by September. Acceptance into the program is dependent upon the student receiving an employment placement. Employment term positions available to the students will be approved by the department, and the employers will select the students they wish to employ. Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Option if the demand for places exceeds the number of places available. The department reserves the right to determine and select the best qualified applicants.

Students are required to register in and pay fees for each employment term prior to the commencement of each employment term. Students will be required to submit an employment report upon the completion of each employment term.

Option List for All Microbiology Programs:

Agroecology: **AGEC 2370**

Biological Sciences:

BIOL 2242 (BOTN 2010), **BIOL 2260 (BOTN 2210)**, **BIOL 2261**, **BIOL 2300 (BOTN 2370, ZOOL 2370)**, **BIOL 2301 (BOTN 2371, ZOOL 2371)**, **BIOL 2380 (BOTN 2180, ZOOL 2180)**, **BIOL 2381**, **BIOL 2410 (ZOOL 2530)**, **BIOL 2411 (ZOOL 2531)**, **BIOL 2420 (ZOOL 2540)**, **BIOL 2421 (ZOOL 2541)**, **BIOL 2540**, **BIOL 3260 (BOTN 2290)**, **BIOL 3290 (BOTN 3280)**, **BIOL 3291**, **BIOL 3330 (BOTN 3250)**, **BIOL 3370 (ZOOL 3500)**, **BIOL 3400 (BIOL 3450)**, **BIOL 3452 (BOTN 3010)**, **BIOL 3460 (ZOOL 3530)**, **BIOL 3462 (ZOOL 3540)**, **BIOL 3470**, **BIOL 3472**, **BIOL 3500 (BOTN 3460)**, **BIOL 3501**, **BIOL 3542**, **BIOL 3560 (ZOOL 3060)**, **BIOL 3561**, **BIOL 4242 (BOTN 4130)**, **BIOL 4244 (BOTN 4160)**, **BIOL 4246 (BOTN 4050)**, **BIOL 4250 (BOTN 4210)**, **BIOL 4430 (BOTN 4120)**, **BIOL 4480 (ZOOL 4600)**, **BIOL 4540 (ZOOL 4150)**, **BIOL 4542 (ZOOL 4270)**, **BIOL 4560 (ZOOL 4140)**

Chemistry:

CHEM 2280, **CHEM 2290**, **CHEM 2380**, **CHEM 2400**, **CHEM 2470**, **CHEM 3390**, **CHEM 3590**, **CHEM 3570**, **CHEM 4590**, **CHEM 4360**, **CHEM 4370**, **CHEM 4620**, **CHEM 4630**, **CHEM 4670**

Environmental Science: **ENVR 2180**

Food Sciences: **FOOD 4150**, **FOOD 4280**

General Agriculture: **AGRI 2180**

Pharmacology: **PHAC 4030**, **PHAC 4040**

Plant Science: **PLNT 3400**

Statistics: **STAT 2000**

NOTE: Other suitable options may be selected with permission of the department.

Three Year General

As prescribed with all other faculty regulations in Section 3.2, students in this program must select 18 credit hours of 2000, 3000 and (or) 4000 level courses from each of two Science areas. To satisfy the requirement in the area of Microbiology, students must take a minimum of 18 credit hours of Microbiology courses as prescribed in the chart below (subject to the Faculty requirement that of the 36 credit hours in the two advanced level Science areas, at least 6 credit hours must be at the 3000/4000 level.).

Students wishing to elect courses in Microbiology in fulfilment of the requirements for the B.Sc. (General) degree should note the following:

- Students must obtain a grade of “C” or better in the following: **MBIO 1010, BIOL 1020, BIOL 1030, CHEM 1300 and CHEM 1310.**
- Students are encouraged to elect additional Microbiology courses above the required minimum.
- Microbiology **MBIO 2770 and MBIO 2780 (CHEM 2770 and CHEM 2780)** are not available in this program.

Minor

Students must complete **MBIO 1010, CHEM 1300, CHEM 1310, BIOL 1020, BIOL 1030**, plus 12 credit hours of Microbiology courses at the 2000 and (or) 3000 level.

Biochemistry and Biotechnology Programs

The Department of Microbiology, in conjunction with the Department of Chemistry, offers Joint Honours programs, Joint Honours Cooperative Option programs, Joint four year Major programs and Joint four year Major Cooperative Option programs in Biochemistry and Biotechnology. See Sections 4.2 Biochemistry Program and 4.4 Biotechnology Program for full details.

4.10.2 Microbiology Program Charts

4.10.2 Microbiology			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
HONOURS⁶ 120 CREDIT HOURS			
MBIO 1010 ⁵ BIOL 1020, BIOL 1030 CHEM 1300, CHEM 1310	MBIO 2020, MBIO 2360 (CHEM 2360), MBIO 2370 (CHEM 2370) BIOL 2500, BIOL 2520 CHEM 2210, CHEM 2220	MBIO 3010, MBIO 3030, MBIO 3280, MBIO 3410, MBIO 3470	MBIO 4010, MBIO 4440, MBIO 4480, MBIO 4530 (6), MBIO 4600, MBIO 4610
In Year 1 or Year 2 the following must be completed: 3 credit hours of Mathematics or Physics chosen from: MATH 1200 ¹ , MATH 1300 ¹ , MATH 1500 ¹ , PHYS 1020 or PHYS 1050 STAT 1000 6 credit hours from the Faculty of Arts, which should include the required “W” course. 9 credit hours of approved electives 3 credit hours from Microbiology or from the option list		15 credit hours of Microbiology courses ³ 9 credit hours chosen from Microbiology courses ³ or from the option list (see below)	
30 Hours	30 Hours	30 Hours	30 Hours
HONOURS COOPERATIVE OPTION⁶ 120 CREDIT HOURS			
MBIO 1010 ⁵ BIOL 1020, BIOL 1030 CHEM 1300, CHEM 1310	MBIO 2020, MBIO 2360 (CHEM 2360), MBIO 2370 (CHEM 2370) BIOL 2500, BIOL 2520 CHEM 2210, CHEM 2220	MBIO 3010, MBIO 3030, MBIO 3280, MBIO 3410, MBIO 3470	MBIO 4010, MBIO 4440, MBIO 4480, MBIO 4600, MBIO 4610
In Year 1 or Year 2 the following must be completed: 3 credit hours of Mathematics or Physics from MATH 1200 ¹ , MATH 1300 ¹ , MATH 1500 ¹ , PHYS 1020 or PHYS 1050 STAT 1000 6 credit hours from the Faculty of Arts, which should include the required “W” course 9 credit hours of approved electives 3 credit hours chosen from Microbiology courses ³ or from the option list (see below)		21 credit hours of Microbiology courses ³ 9 credit hours chosen from Microbiology courses ³ or from the option list (see below) Work Terms: MBIO 3980, MBIO 3990, MBIO 4980 and/or MBIO 4990	
30 Hours	30 Hours	30 Hours	30 Hours

4.10.3 Microbiology Course Descriptions

Microbiology Course Descriptions-1000 Level

MBIO 1010 Microbiology I Cr.Hrs. 3

(Lab Required) Topics will include the definition and history of microbiology, concepts of practical microbiology, prokaryotic cell structure, prokaryotic specialization in gene expression and transfer of genetic information, the role of microbes in environments including the human body, and applications of microbiology to food production and biotechnology. Not to be held with MBIO 1011 or the former MBIO 2100 (MBIO 2101) or MBIO 2110 (MBIO 2111). Prerequisite: BIOL 1020.

MBIO 1220 Essentials of Microbiology Cr.Hrs. 3

(Formerly 060.122) An introduction to the essential principles of microbiology including immunity, with emphasis on microbial disease. Not available to students who have previously obtained credit in or are currently enrolled in MBIO 1010 or MBIO 1011 (or the former MBIO 2100 or MBIO 2101). NOTE: MBIO 1220 is intended for students planning to enter the College of Nursing or other health care or related programs. Students that have completed MBIO 1010 but wish to take MBIO 1220 to satisfy Faculty of Nursing entrance requirements must obtain departmental permission prior to registering for MBIO 1220. MBIO 1220 cannot be used to satisfy the requirements of the Microbiology Honours or Major degree programs. MBIO 1220 can be used as an elective course in any Science program.

MBIO 1410 Introduction of Molecular Biology Cr.Hrs. 3

An introduction to the mechanisms, themes and patterns that are present in the molecular biology of organisms ranging from bacteria to humans. The basic applications of molecular biology to disciplines such as medical microbiology, criminology, genetic fingerprinting, genome sequencing, and bioinformatics will be discussed. Not available to students who have previously obtained credit in, or are currently enrolled in the following courses: the former MBIO 2410, BIOL 2500, BIOL 2501, MBIO 2020, MBIO 2021, the former MBIO 2100, MBIO 2101, MBIO 3410 or MBIO 3411. Prerequisite: one of grade 12 Biology, grade 12 Chemistry, BIOL 1000, CHEM 1000, or higher level Chemistry or Biology course; or consent of department. NOTE: MBIO 1410 is intended for students outside of Microbiology and Biological Sciences who require an introduction to molecular biology, such as those with interests in bioinformatics, biophysics, or bioengineering. Although this course may be used as an elective in an Arts or Science program, it may not be used to meet a program requirement for an Honours or Major program in Microbiology.

Microbiology Course Descriptions-2000 Level

MBIO 2020 Microbiology II Cr.Hrs. 3

(Lab Required) Topics will include bacterial growth, chromosome replication, the specifics of transcription and translation and their application to the regulation of microbial gene expression. Families of bacterial and animal viruses, their modes of reproduction and pathogenicity will be discussed. Mutation and gene transfer in bacteria will be introduced. Not to be held with MBIO 2021 or MBIO 2110 (60.211), MBIO 2111. Prerequisites: MBIO 1010 or MBIO 1011 and one of CHEM 1310, CHEM 1311 or CHEM 1320 (C).

MBIO 2230 Introductory Biogeochemistry Cr.Hrs. 3

(Formerly 060.223) The roles and interactions of biological, chemical and geological reactions in determining the composition of the environment. Microorganisms as major agents of biogeochemical change and their roles in the element cycles will be especially emphasized. Not available to students who have previously obtained credit in MBIO 4320 (060.432) or MBIO 4440 (060.444) or are currently registered in MBIO 4440. Prerequisite: one of MBIO 1010, MBIO 1011, BIOL 1030, BIOL 1031 or the former 071.125(C); and CHEM 1310 or CHEM 1311 (002.131) (C).

MBIO 2360 Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy Cr.Hrs. 3

(Lab Required) (Formerly 060.236) An introductory course dealing with kinds of molecules encountered in biochemistry, and the concept of metabolic energy as a product of catabolism and a requirement for biosynthesis. This course is also given in Chemistry as CHEM 2360. Not to be held with MBIO 2361, MBIO 2770 (060.277), CHEM 2360, CHEM 2361 (002.236), CHEM 2860 (002.286), or CHEM 2770 (002.277) Prerequisites: CHEM 1310 or CHEM 1311 (002.131) (C+); and one of BIOL 1030, BIOL 1031, or the former 071.125, (C). NOTE: Students may hold this course for credit in the B.Sc. General Degree program, but may not use it to fulfill the minimum requirement of 12 credit hours in 2000 level Chemistry (pre-September 2008 regulations). Those students following the new B.Sc. General Degree regulations (effective 2008-09) are able to use this course as advanced level credit in both Microbiology and Chemistry.

MBIO 2370 Biochemistry 2: Catabolism, Synthesis, and Information Pathways Cr.Hrs. 3

(Lab Required) (Formerly 060.237) An introductory course dealing with the basic metabolic processes that occur in living cells, including the production and use of metabolic energy, the breakdown and synthesis of biomolecules; the synthesis of DNA, RNA and proteins; and the regulation of these processes. This course is also given in Chemistry as CHEM 2370. Not to be held with MBIO 2371, MBIO 2780 (060.278), CHEM 2370, CHEM 2371 (002.237), or CHEM 2780 (002.278). Prerequisites: CHEM 2210 (002.221) (C); and one of MBIO 2360 (060.236), MBIO 2361, CHEM 2360 (002.236), or CHEM 2361 (C). NOTE: Students may hold this course for credit in the B.Sc. General Degree program, but may not use it to fulfill the minimum requirement of 12 credit hours in 2000 level Chemistry (pre-September 2008 regulations). Those students following the new B.Sc. General Degree regulations (effective 2008-09) are able to use this course as advanced level credit in both Microbiology and Chemistry.

MBIO 2420 Introductory Virology Cr.Hrs. 3

An introduction to the general principles of eukaryotic virology, with emphasis on animal virus systems. These principles will be reinforced and expanded to deal with specific viruses that cause acute and chronic infections in humans. Topics to be discussed include the molecular structure of viruses; the basic multiplication strategies of the major virus families; mechanisms of host immune evasion and viral latency, persistence, and oncology. Prerequisite: MBIO 1010

MBIO 2770 Elements of Biochemistry 1 Cr.Hrs. 3

(Lab Required) (Formerly 060.277) Basic concepts of biochemistry including the properties of biomolecules (amino acids and proteins, enzymes, carbohydrates, lipids, and nucleic acids) and aspects of energy production in cells. For students in Agricultural and Food Sciences, Human Ecology, and four-year Biological Sciences programs in Science. May not be used as part of an Honours, Major, General, or Minor program in Chemistry or in Microbiology. This course is also given in Chemistry as CHEM 2770. Not to be held with CHEM 2770 (002.277), MBIO 2360, MBIO 2361 (060.236), CHEM 2360, CHEM 2361 (002.236), or CHEM 2860 (002.286). Prerequisites: CHEM 1310 or CHEM 1311 (002.131) (C) or CHEM 1320 (or 002.132) (C), plus six credit hours of university level biological sciences.

MBIO 2780 Elements of Biochemistry 2 Cr.Hrs. 3

(Lab Required) (Formerly 060.278) The continuation of MBIO 2770 (CHEM 2770), dealing with nitrogen and lipid metabolism, representative biosynthetic pathways, and synthesis and importance of DNA, RNA and proteins. For students in Agricultural and Food Sciences, Human Ecology, and four-year Biological Sciences programs in Science. May not be used as part of an Honours, Major, General, or Minor program in Chemistry or Microbiology. This course is also given in Chemistry as CHEM 2780. Not to be held with CHEM 2780 (002.278), MBIO 2370, MBIO 2371 (060.237), CHEM 2370, or CHEM 2371 (002.237). Prerequisite: A grade of "C" or better in one of MBIO 2770 (060.277), CHEM 2770 (002.277), MBIO 2360, MBIO 2361 (060.236), CHEM 2360, or CHEM 2361 (002.236).

Microbiology Course Descriptions-3000 Level

MBIO 3000 Applied Biological Safety Cr.Hrs. 3

A comprehensive overview of (i) applied biological safety in research and industrial environments and (ii) the disease-causing features of relevant infectious agents and considerations for their containment. The course consists of lectures and demonstration components. Prerequisite: MBIO 1010 (MBIO 1011)(C) or the former MBIO 2100 (or equivalent MBIO 2101, 060.210) (C); and one of CHEM 1310, CHEM 1311 (002.131), CHEM 1320 (002.132) or permission of instructor. Check with department for availability.

MBIO 3010 Mechanisms of Microbial Disease Cr.Hrs. 3

(Formerly 060.301) A consideration of host-parasite relationships, an introduction to the immune response, microbial pathogenesis, viral diseases, clinical microbiology and public health, and an introduction to antimicrobial agents. Not to be held with MBIO 3011. Prerequisites: MBIO 2020 (MBIO 2021)(C) or the former MBIO 2100 (or equivalent MBIO 2101, 060.210) (C). Co-requisite: one of MBIO 2360, MBIO 2361 (060.236), CHEM 2360 or CHEM 2361 (002.236).

MBIO 3030 Microbiology III Cr.Hrs. 3

(Lab Required) The course will include an introduction to microbial growth and genomics approaches used for the analysis of microbial metabolism. Using these tools, the physiology of microbial cell walls, transport, and motility, as well as microbial metabolism as related to ATP production, respiration, fermentation and carbon fixation will be discussed. Not to be held with MBIO 3031 or the former MBIO 2100 (60.210). Prerequisites: MBIO 2020 (MBIO 2021)(C); and one of MBIO 2370, MBIO 2371, CHEM 2370, CHEM 2371 (C); or consent of instructor.

MBIO 3280 Microbial Communities Cr.Hrs. 3

(Lab Required) This course will examine microbial communities, which will be discussed in terms of their composition, physiological adaptations and their effects on their abiotic and biological surroundings. Topics will include nutrient cycling, biodegradation and adaptation to extreme environments, and the applications arising from these microbial functions. Methods for quantitation of microbial biomass and biological activity will be discussed. This course may not be held for credit with MBIO 2280. Prerequisites: both MBIO 1010 (MBIO 1011)(C) and CHEM 1310 (CHEM 1311, 002.131)(C); or MBIO 2100 (MBIO 2101, 060.210)(C). MBIO 2020 (MBIO 2020, MBIO 2110) and MBIO 2410 are recommended prerequisites.

MBIO 3410 Molecular Biology Cr.Hrs. 3

(Formerly 060.341) A rigorous treatment of the foundations of modern day molecular biology as it pertains to molecular disease, gene and cell manipulation, and cellular controls. Not to be held with MBIO 3411. Prerequisites: One of MBIO 2370, MBIO 2371 (060.237), CHEM 2370, CHEM 2371 (002.237), MBIO 2780 (060.278), or CHEM 2780 (002.278) (C); and a C or better in one of MBIO 2020 (MBIO 2021), MBIO 2110 (MBIO 2111), BIOL 2520 (BIOL 2521, ZOOL 2280, ZOOL 2281) or BIOL 2500 (BIOL 2501, BOTN 2460, BOTN 2460).

MBIO 3430 Molecular Evolution Cr.Hrs. 3

(Formerly 060.343) An analysis starting with prebiotic evolution, progressing through the elaboration of macromolecules and examining their adaptation to their function as cellular components. Proteins, carbohydrates, and nucleic acids as structural, catalytic, and genetic elements in evolution of living systems. Prerequisite: MBIO 2410 (C) or MBIO 3410 (C) or permission of instructor. MBIO 2020 (MBIO 2021) and one of MBIO 2370, MBIO 2371, CHEM 2370, CHEM 2371, MBIO 2780 or CHEM 2780 are strongly recommended for students who have not completed MBIO 3410.

MBIO 3450 Regulation of Biochemical Processes Cr.Hrs. 3

(Formerly 060.345) Mechanisms of regulation of enzyme activity, including allosteric, control of selected biosynthetic and degradative pathways and regulation of gene expression. Contact department regarding availability. Not to be held with MBIO 3451. Prerequisites: MBIO 2020 (MBIO 2021) or MBIO 2110 (MBIO 2111) (C); and one of MBIO 2370, MBIO 2371, CHEM 2370, or CHEM 2371 (C); or consent of the department.

MBIO 3460 Membrane and Cellular Biochemistry Cr.Hrs. 3

(Lab Required) (Formerly 060.346) Isolation, fractionation, structure and function of cellular membranes and subcellular components. The central role of these elements in the biochemistry of cellular processes will be stressed. Not to be held with MBIO 3461. Prerequisites: One of MBIO 2370, MBIO 2371 (060.237), CHEM 2370, or CHEM 2371 (002.237) (C).

MBIO 3470 Microbial Systematics Cr.Hrs. 3

(Lab Required) (Formerly 060.347) Characterization and classification of the major group of micro-organisms. Bases for divisions and the relatedness among organisms will be studied. Laboratory work on the identification of representative species. Prerequisite: MBIO 3030 (MBIO 3031) or MBIO 2110 (MBIO 2111) (C).

MBIO 3980 Work Term 1 Cr.Hrs. 0

(Formerly 060.398) Work assignments in business, industry or government for students registered in the Microbiology Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only). Prerequisite: MBIO 2370 (MBIO 2371) or CHEM 2370 (CHEM 2371).

MBIO 3990 Work Term 2 Cr.Hrs. 0

(Formerly 060.399) Work assignments in business, industry or government for students registered in the Microbiology Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

Microbiology Course Descriptions-4000 Level

MBIO 4010 Immunology H Cr.Hrs. 3

(Lab Required) (Formerly 060.401) Topics will include antigens, antibodies, antigen-antibody reactions, immunogenetics, regulation of immune reactions, complement, hypersensitivities, autoimmunity, immunodeficiencies, transplantation and tumour immunology. Priority will be given to fourth year Science Honours students. Not to be held with MBIO 4011, MBIO 4020 (060.402), or the former 060.444. Prerequisite: MBIO 3010 or MBIO 3011 (060.301) (C).

MBIO 4020 Immunology Cr.Hrs. 3

(Formerly 060.402) Topics will include antigens, antibodies, antigen-antibody reactions, immunogenetics, regulation of immune reactions, complement, hypersensitivities, autoimmunity, immunodeficiencies, transplantation and tumour immunology. Not to be held with MBIO 4010, MBIO 4011 (060.401). Prerequisite: MBIO 3010 or MBIO 3011 (060.301) (C).

MBIO 4030 Special Topics in Microbiology Cr.Hrs. 3

Microbiology is a very broad field that encompasses a wide range of specialized topics. In this course, students can pursue a specific topic in detail through lectures, assigned readings, seminars and research projects. The course is normally restricted to third and fourth year Honours and Major students. Topics to be covered by the course shall be decided by the instructor(s) in consultation with the student(s) and with the approval from the Department. Grades are based on written assignments and reports. Evaluation may also include oral presentation and poster presentation(s). Prerequisite: Consent of Department.

MBIO 4410 Virology Cr.Hrs. 3

(Formerly 060.441) A comprehensive examination of fundamental properties of viruses, virus taxonomy, and the different ways in which viruses replicate. The ways viruses cause disease and experimental methods used in virology also will be examined. Not to be held with MBIO 4411, or for credit by students who have already taken MMIC 7010 (097.701). Prerequisites: MBIO 3010 or MBIO 3011 (060.301) (C); and MBIO 3410 or MBIO 3411(060.341) (C).

MBIO 4440 Systems Microbiology: from Genomes to Life Cr.Hrs. 3

(Lab Required) The purpose of this course is to use knowledge of the components of the bacterial cell to synthesize an understanding of the growth of microbes and their adaptation to their environments. The most recent research tools and systems biology approaches will be discussed. This course may not be held for credit with MBIO 3440. Prerequisites: MBIO 3030 (MBIO 3031)(C); or the former MBIO 2110 (MBIO 2111, 60.211)(C); and one of MBIO 2370, MBIO 2371, CHEM 2370, CHEM 2371(C).

MBIO 4480 Microbes in our Environment Cr.Hrs. 3

(Lab Required) A course investigating the diversity of roles microbes play in our immediate environment, and how they affect it. Environments to be examined may include the human body, waste treatment facilities and extreme environments. Molecular tools to study the community structure and roles of individual organisms will also be discussed. This course may not be held for credit with MBIO 3480 or MBIO 4320. Prerequisites: MBIO 3030 (MBIO 3031)(C); or the former MBIO 2110 (MBIO 2111, 60.211)(C); and one of MBIO 2370, MBIO 2371, CHEM 2370, CHEM 2371(C).

MBIO 4520 Industrial Bioprocesses Cr.Hrs. 3

(Lab Required) Bioprocesses for a range of commercially important healthcare and industrial products including antibiotics, vaccines, steroids, therapeutic recombinant proteins, monoclonal antibodies, and ethanol will be discussed. Other topics will include bioreactor design, metabolic engineering, applied genetic engineering and animal cell technology. This course may not be held for credit with MBIO 4510. Prerequisites: MBIO 3030 (or one of MBIO 2100 or MBIO 2101) (C); and one of MBIO 2370, MBIO 2371, CHEM 2370, CHEM 2371 (C).

MBIO 4530 Project in Microbiology Cr.Hrs. 6

(Lab Required) (Formerly 060.453) A research project chosen in consultation with the department head, and supervised by a staff member. A written report is normally required. The course is available only to final year Honours students in Microbiology, the Joint Microbiology-Chemistry programs, or the Genetics program. Not to be held with CHEM 4710 (002.471).

MBIO 4540 Biological Energy Transduction Cr.Hrs. 3

(Formerly 060.454) Biochemistry of biological processes involving inter-conversion of different forms of energy such as oxidative phosphorylation, membrane transport and contractile processes. Not to be held with MBIO 4541. Prerequisite: MBIO 2020 (MBIO 2021) or MBIO 2110 (MBIO 2111) (C); and one of MBIO 2370, MBIO 2371, CHEM 2370, or CHEM 2371(C); or consent of the department. MBIO 3030 (MBIO 3031) is recommended as a prerequisite to this course.

MBIO 4600 Molecular Genetics of Prokaryotes Cr.Hrs. 3

(Lab Required) (Formerly 060.460) A detailed examination of replication, expression, mutability, repair and transposition of DNA in bacteria and their viruses. Priority will be given to Science Honours and Majors students. Check with department for availability. Not to be held with MBIO 4601, MBIO 4602 or the former 060.452 or 060.456. Prerequisites: MBIO 2020 (MBIO 2021) or MBIO 2110 (MBIO 2111) (C); and one of MBIO 2370, MBIO 2371, CHEM 2370, or CHEM 2371 (C). BIOL 2500, (BIOL 2501, BOTN 2460, BOTN 2461) is recommended.

MBIO 4602 Molecular Genetics of Prokaryotes - Lectures Cr.Hrs. 3

A detailed examination of replication, expression, mutability, repair and transposition of DNA in bacteria and their viruses. Lecture material will be identical to that of MBIO 4600, but MBIO 4602 lacks the laboratory component. Honours and Major students must register in MBIO 4600. Check with the department for availability. Not to be held with MBIO 4600, MBIO 4601 or the former 060.460, 060.452 or 060.456. Prerequisites: MBIO 2020 (MBIO 2021) or the former MBIO 2110 (MBIO 2111) (C); and one of MBIO 2370, MBIO 2371, or CHEM 2370, CHEM 2371(C). BIOL 2500 (BOTN 2460, BOTN 2461) is recommended.

MBIO 4610 Molecular Genetics of Eukaryotes Cr.Hrs. 3

(Lab Required) (Formerly 060.461) A comprehensive study dealing with replication and expression of DNA, genome structure, and the involvement of genes in diseases such as cancer. Priority will be given to Science Honours and Majors students. Check with the department for availability. Not to be held with MBIO 4612. Prerequisites: MBIO 2020 (MBIO 2021) or MBIO 2110 (MBIO 2111) (C); and MBIO 3410 or MBIO 3411. BIOL 2500 (BIOL 2501, BOTN 2460, BOTN 2461) is recommended.

MBIO 4612 Molecular Genetics of Eukaryotes - Lectures Cr.Hrs. 3

A comprehensive study dealing with replication and expression of DNA, genome structure, and the involvement of genes in diseases such as cancer. Lecture material will be identical to that of MBIO 4610, but MBIO 4612 lacks the laboratory component. Honours and Majors students must register in MBIO 4610. Check with the department for availability. Not to be held with the MBIO 4610. Prerequisites: MBIO 2020 (MBIO 2021) or MBIO 2110 (MBIO 2111) (C); and MBIO 3410 or MBIO 3411 (C). BIOL 2500 (BIOL 2501, BOTN 2460, BOTN 2461) is recommended.

MBIO 4670 Applied Molecular Biology H Cr.Hrs. 3

(Lab Required) The overall objective of this course is to introduce and describe current molecular techniques and their application to biological problems. These include, but are not limited to basic gene cloning, mutagenesis, and over-expression. Priority will be given to Science Honours students. Not to be held with MBIO 4672, or the former MBIO 4570 (60.457), MBIO 4581 or the former MBIO 4580 (60.458). Prerequisites: MBIO 3410 or MBIO 3411 (60.341) (C).

MBIO 4672 Applied Molecular Biology Cr.Hrs. 3

The overall objective of this course is to introduce and describe the current molecular techniques and their application to biological problems. These include, but are not limited to, basic gene cloning, mutagenesis and over-expression. Not to be held with MBIO 4670, the former MBIO 4570 (060.457), MBIO 4581 or the former MBIO 4580 (060.458). Prerequisite: MBIO 3410 or MBIO 3411 (060.341) (C).

MBIO 4980 Work Term 3 Cr.Hrs. 0

(Formerly 060.498) Work assignments in business, industry or government for students registered in the Microbiology Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

MBIO 4990 Work Term 4 Cr.Hrs. 0

(Formerly 060.499) Work assignments in business, industry or government for students registered in the Microbiology Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only).

4.11 Department of Physics and Astronomy

Head: Kumar Sharma

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4.11.1 Program Information

Physics is the discipline that by experiment and logical analysis examines the laws of nature that form the basis for all relationships and interactions between matter and energy. Knowledge of physics is also essential in other natural sciences, such as chemistry and geology, and to professions such as engineering, medicine and dentistry. Astronomy, the other focus of this department, examines the universe, the earth and the planets, as well as phenomena such as quasars, pulsars, comets, and asteroids; a planetarium and an astronomical observatory are part of this program. In both Physics and Astronomy mathematical skills are developed simultaneously.

The department must approve a student's Honour or Major program prior to registration in each session. Students must also obtain approval for any and all revisions to their program.

The Department of Physics and Astronomy and the Department of Electrical and Computer Engineering have defined focus areas of study within their own programs. Students taking the courses recommended for these focus areas will find it easier to transfer between programs in Physics and Astronomy and Electrical and Computer Engineering programs. Students interested in obtaining more information about transferring to a Physics program from Electrical Engineering should consult with the Head of the Physics department.

Honours

To enter the Honours programs in Physics and Astronomy, a student must have completed at least 24 credit hours with a minimum GPA of 3.00, and also obtained a minimum grade of "B" in **PHYS 1070**, or a "B+" in **PHYS 1030**. Students are strongly encouraged to complete **MATH 1300**, **MATH 1500**, and **MATH 1700** in Year 1. Not only are these courses required in the Physics and Astronomy programs, they are required prerequisites to several second year Physics and Astronomy required courses.

To continue in the Physics and Astronomy Honours program, students must maintain a minimum GPA of 3.00, and complete a minimum of 9 credit hours during each Fall and Winter Term.

To graduate with the B. Sc. Honours degree, a student must achieve a minimum GPA of 3.00 and minimum grade of "C" in each course that contributes to the 120 credit hours of the degree.

There are a number of awards — the Coish, the C.P. Loewen, the Neamtan, the Roulston, and the Sen Scholarships — available in this program.

Joint Honours

The Department of Physics and Astronomy offers joint honours programs in conjunction with the Departments of Mathematics, Computer Science, and Chemistry.

To enter the Joint Honours Mathematics-Physics program the student must have a minimum grade of "B" in: **MATH 1300**, **MATH 1510**, **MATH 1710** (or **MATH 1690**), **PHYS 1050** (or "B+" in **PHYS 1020**) and **PHYS 1070**.

To enter the Joint Honours Computer Science-Physics program, the student must have a minimum grade of "B" in: **PHYS 1050** (or "B+" in **PHYS 1020**), **PHYS 1070**, **MATH 1300**, **MATH 1500** (or equivalent), **MATH 1700** (or equivalent), and **COMP 1020**.

To enter the Joint Honours Chemistry-Physics program, the student must have a minimum grade of "B" in: **PHYS 1050** (or "B+" in **PHYS 1020**), **PHYS 1070**, **CHEM 1300**, **CHEM 1310**, **MATH 1500** and **MATH 1700**.

Double Honours

The Department of Physics and Astronomy offers a double honours degree in conjunction with the Biochemistry program.

Four Year Major

The goal of this program is to provide an excellent physics education for a student with broad interests. It provides more control over the degree program, permitting significantly more electives and scheduling flexibility.

To enter the four year Major program in Physics and Astronomy, a student must have **PHYS 1070** (C+) or **PHYS 1030** (B). In addition, students must have satisfied the faculty requirements for entry to the four year Major program. Students are strongly encouraged to complete **MATH 1300**, **MATH 1500**, and **MATH 1700** in Year 1. Not only are they required courses in the Physics and Astronomy programs, these courses are required prerequisites to several required second year Physics and Astronomy courses.

Three Year General

As prescribed with all other faculty regulations in Section 3.2, students in this program must select 36 credit hours of 2000 and (or) 3000 level courses from two Science departments. To satisfy the requirement in the Department of Physics and Astronomy, students must select a minimum of 18 credit hours from the list in the chart below.

Variations in any of the programs listed above may be possible, but must be approved by the head of the department and the Science general office.

4.11.2 Physics and Astronomy Program Charts

4.11.2 Physics and Astronomy			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
HONOURS Option A: Astronomy¹ 120 CREDIT HOURS			
PHYS 1050 (or PHYS 1020) and PHYS 1070 (B)(or PHYS 1030 B+) MATH 1300 ² , MATH 1500 ² , MATH 1700 ² 6 credit hours of ARTS including the "W" requirement.	PHYS 2070 (6), PHYS 2260, PHYS 2380, PHYS 2390, PHYS 2490, PHYS 2600, PHYS 2610, PHYS 2650	PHYS 3180, PHYS 3380, PHYS 3430 (6), PHYS 3630, PHYS 3650, PHYS 3670 MATH 2090	PHYS 3680, PHYS 3640, PHYS 4230, PHYS 4240 (6), PHYS 4390 A 3 credit hour, 4000 level Physics and Astronomy course
		9 credit hours of 3000 and/or 4000 level Physics and Astronomy courses.	
9 credit hours of open electives (PHYS 1810 and PHYS 1820 are highly recommended).	3 credit hours of open electives ³ .	3 credit hours of open electives ³ .	3 credit hours of open electives ³ .
HONOURS Option B: Physics¹ 120 CREDIT HOURS			
PHYS 1050 (or PHYS 1020) and PHYS 1070(B) (or PHYS 1030 B+) MATH 1300 ² , MATH 1500 ² , MATH 1700 ² 6 credit hours of ARTS including the "W" requirement.	PHYS 2260, PHYS 2380, PHYS 2390, PHYS 2490, PHYS 2600, PHYS 2610, PHYS 2650	PHYS 3380, PHYS 3430 (6), PHYS 3650, PHYS 3670, PHYS 3680, PHYS 3630 PHYS 3660 MATH 2090	PHYS 3640, PHYS 4250, PHYS 4390, PHYS 4510, PHYS 4520, PHYS 4590 6 credit hours ⁴ chosen from: PHYS 4672, PHYS 4674, PHYS 4676, PHYS 4678
9 credit hours of open electives	9 credit hours of open electives ³	3 credit hours of open electives ³	6 credit hours of open electives ³
HONOURS Option C: Medical and Biological¹ 120 CREDIT HOURS			
PHYS 1050 (or PHYS 1020), PHYS 1070 ² (B) (or PHYS 1030 B+) MATH 1300 ² , MATH 1500 ² , MATH 1700 ²	PHYS 2260, PHYS 2380, PHYS 2390, PHYS 2490, PHYS 2600, PHYS 2610, PHYS 2650	PHYS 3380, PHYS 3430 (6), PHYS 3650, PHYS 3670, PHYS 3680, PHYS 3630, PHYS 3220 MATH 2090	PHYS 3640, PHYS 4250, PHYS 4560 6 credit hours ⁴ chosen from: PHYS 4672, PHYS 4674, PHYS 4676, PHYS 4678
The following can be completed in Year 1 or Year 2: 6 credit hours of ARTS including the "W" requirement 6 credit hours chosen from: BIOL 1410, BIOL 1412 , BIOL 2520 12 credit hours of open electives ³		3 credit hours chosen from: PHYS 4360, PHYS 4400, ECE 3780	
		15 credit hours of open electives ³	
30 Hours	30 Hours	30 Hours	30 Hours
FOUR YEAR MAJOR 120 CREDIT HOURS			
PHYS 1050 (or PHYS 1020), PHYS 1070 ² (C+) (or PHYS 1030 (B)) MATH 1300 ² , MATH 1500 ² , MATH 1700 ² 6 credit hours from the Faculty of Arts including the required "W" course	PHYS 2260, PHYS 2380, PHYS 2390, PHYS 2490, PHYS 2600 MATH 1240 ²	PHYS 2610, PHYS 2650, PHYS 3380, PHYS 3630, PHYS 3670, PHYS 3680 MATH 2090	PHYS 3640, PHYS 3430 (6), PHYS 3650 3 credit hours of 3000 level Physics and Astronomy 3 credit hours of 4000 level Physics and Astronomy
9 credit hours of open electives	12 credit hours of open electives ³	9 credit hours of open electives ³	12 credit hours of open electives ³
30 Hours	30 Hours	30 Hours	30 Hours
THREE YEAR GENERAL (90 CREDIT HOURS)			

ACADEMIC CALENDAR 2015-2016

	A minimum of 18 credit hours must be chosen from this list: PHYS 2070, PHYS 2210 (or the former PHYS 2200), PHYS 2250, PHYS 2260, PHYS 2270, PHYS 2280, PHYS 2350, PHYS 2380, PHYS 2700, PHYS 2710, PHYS 3180, PHYS 3380, PHYS 3800, PHYS 4230. (Subject to the Faculty requirement that of the 36 hours of advanced level courses, at least 6 credit hours must be chosen from the 3000 and (or) 4000 level.)
MINOR	
PHYS 1050 (C) and PHYS 1070 (C) (or PHYS 1020 (C+) and PHYS 1030 (C+))	A minimum of 12 credit hours from PHYS 2070, PHYS 2210 (or the former PHYS 2200), PHYS 2250, PHYS 2260, PHYS 2270, PHYS 2280, PHYS 2350, PHYS 2380, PHYS 2700, PHYS 2710, PHYS 3180, PHYS 3380, PHYS 3800.
JOINT HONOURS: PHYSICS – CHEMISTRY refer to section 4.5.3	
JOINT HONOURS: PHYSICS – COMPUTER SCIENCE (including Co-operative Option) refer to section 4.6.4	
JOINT HONOURS: PHYSICS – MATHEMATICS refer to section 4.9.3	

NOTES:

¹ Students must achieve a minimum grade of "C" in all courses contributing to the Honours program.

² **MATH 1220** may be taken in place of **MATH 1300**; **MATH 1230** or **MATH 1510** or **MATH 1520** may be taken in place of **MATH 1500**; **MATH 1232** or **MATH 1710** may be taken in place of **MATH 1700**; **MATH 1690** may be taken in place of **MATH 1500** and **MATH 1700**. **MATH 1200** may be taken in lieu of **MATH 1240**.

³ Although they are not required courses in the Physics programs, **MATH 2150**, **MATH 2080**, **MATH 2180**, and **MATH 3340** are highly recommended electives for the Physics Honours and Four Year Major degrees, and should be taken when possible.

⁴ The selection of these 6 credit hours must be made in consultation with the Departmental Program Advisor.

IMPORTANT: The Honours and four year Major program need not be completed in the manner prescribed in the chart above. The chart indicates the recommended arrangement of the required courses and is meant to be a guide around which students can plan their program (Letters in brackets refer to minimum prerequisite standing required for further study. The number 6 in brackets indicates a 6 credit hour course).

4.11.3 Physics and Astronomy Course Descriptions

Physics and Astronomy Course Descriptions-0 Level

PHYS 0900 Preparing for University Physics Cr.Hrs. 0

(Formerly 016.090) A review of elementary physics, emphasizing the laws of mechanics, for students considering enrolling in a first-year university physics course. Mathematical techniques used in solving physics problems and the relevance of physics to everyday life will be stressed. Although this course may be used as part of the prerequisite requirements for first-year Physics courses, students are encouraged to take Physics 40S whenever possible.

Physics and Astronomy Course Descriptions-1000 Level

PHYS 1020 General Physics 1 Cr.Hrs. 3

(Lab Required) (Formerly 016.102) It's a crazy world; come and find out why objects fall, slide, bounce, stick, go in circles or stay straight, float or sink, glide or crash. Why don't satellites fall to the ground? What exactly does weightlessness mean anyway? Find answers to these and other questions as you get to know Newton's and other basic laws of nature and see what makes the world go round. This course, together with the sequel PHYS 1030 (or 016.103), is recommended for students seeking either a single, comprehensive course in Physics or entry into health science programs. It may also be used for entry into the Honours Physics program ("B+" or better) or the Major Physics program ("B" or better). Not to be held with PHYS 1021, PHYS 1050, PHYS 1051 (016.105), PHYS 1410 (016.141), PHYS 1420 (016.142), or the former 016.127. Prerequisites: Either Physics 40S, PHYS 0900 (016.090) (P), or equivalent; and either Pre-calculus Mathematics 40S, Applied Mathematics 40S (with 70% or better), or equivalent. It is strongly recommended that students attain a minimum of 70% as the average of their marks in Physics 40S and Pre-calculus Mathematics 40S.

PHYS 1030 General Physics 2 Cr.Hrs. 3

(Lab Required) (Formerly 016.103) Discover how physics is the basis of the hi-tech world we live in and how we live in it. Learn how to use simple, intuitive physics concepts that are described using little math and no calculus to understand a diversity of topics including how electricity is made, what drives the greenhouse effect, what makes a diamond sparkle, lasers, LASIC eye surgery and the workings of the human eye. This course, together with its prerequisite PHYS 1020 (016.102), is recommended for students seeking either a single comprehensive course in Physics, or entry into health science programs. Not suitable for entry to Major or Honours in Physics. This course may not be held with PHYS 1031, PHYS 1410 (016.141), PHYS 1420 (016.142), or the former 016.120. Prerequisite: One of PHYS 1020, PHYS 1021 (016.102) (C), PHYS 1050, or PHYS 1051 (016.105) (C).

PHYS 1050 Physics 1: Mechanics Cr.Hrs. 3

(Lab Required) (Formerly 016.105) It's rocket science! Mechanics is the science of describing (Kinematics) and explaining (Dynamics) motion. The basic concepts of calculus together with laws of conservation of momentum and energy are used to develop the tools required to describe, analyze and predict the outcomes of linear and rotational motion in simple mechanical systems. A brief introduction to the Einstein theory of special relativity provides a taste of modern approaches to this subject. This course develops a strong scientific foundation for students considering a program of study in engineering or the physical sciences. Not to be held with PHYS 1020, PHYS 1021 (016.102), PHYS 1051, PHYS 1410 (016.141), PHYS 1420 (016.142), or the former courses 016.118, 016.120, or 016.127. Prerequisites: Pre-calculus Mathematics 40S (300) (or equivalent) (60 percent) and Physics 40S (300) (or equivalent) (60 percent); or PHYS 0900 (016.090) (Pass). It is strongly recommended that students attain a minimum of 80 per cent as the average of their marks in Physics 40S (300) and Pre-calculus Mathematics 40S (300). Prerequisite or concurrent requirement: One of MATH 1230, MATH 1500, MATH 1501, MATH 1510, MATH 1520, the former 136.153 or MATH 1690.

PHYS 1070 Physics 2: Waves and Modern Physics Cr.Hrs. 3

(Lab Required) (Formerly 016.107) At the heart of modern communications, waves and oscillations are key to understanding the world around us from subatomic scales to biology, traffic flow, the stock market, climate change and the cosmos itself. Learn about the mysterious quantum world, the basis of the latest nanotechnology, where particles are waves and waves are particles. Explore Bohr's model of the atom and discover Heisenberg's Uncertainty Principle. This calculus based course addresses the underlying concepts for all modern science and engineering. This course, like Physics 1 (PHYS 1050), is intended for students considering a program in the physical sciences. Not to be held for credit with PHYS 1071, PHYS 1410 (016.141), PHYS 1420 (016.142). Prerequisites: PHYS 1050 (PHYS 1051, 016.105, 016.118) (C) or PHYS 1020 (PHYS 1021, 016.102) (B); and "C" or better in one of MATH 1230, MATH 1500, MATH 1501 (136.150), MATH 1510 (136.151), MATH 1520 (136.152), or the former 136.153. Prerequisite or corequisite: one of MATH 1232, MATH 1700, MATH 1701, MATH 1690, MATH 1710, or the former 136.173.

PHYS 1300 Energy and the Environment Cr.Hrs. 6

(Formerly 016.130) This course provides a broad physical outlook on the environment in which we live. Emphasis will be placed on topics of current interest such as the atmosphere, outer space, the fundamental structure of energy and matter, energy sources, the application of physical principles in modern technology, etc. The lectures will include films and demonstrations; student participation will be encouraged in discussions and in the choice of topics. The course is designed for students of all faculties and a prior knowledge of mathematics and physics is not a requirement. Not to be held with PHYS 1301. This course cannot be used as a part of a Major or Minor in Physics.

PHYS 1810 General Astronomy 1 Cr.Hrs. 3

(Lab Required) (Formerly 016.181) The topics covered in this course outline the properties of stars and planets that can be observed and the physics necessary to interpret these observations. It includes a brief introduction to galaxies and cosmology. Using lectures and laboratory sections, it provides an astronomy background and introduction to the scientific method. It ranges from introductory physical background to considering current research problems. This course is mainly descriptive, taught at a qualitative level, with simple arithmetic and trigonometry used frequently. Not to be held with the former 016.180.

PHYS 1820 General Astronomy 2: Exotic Stars, Galaxies and Cosmology Cr.Hrs. 3

(Lab Required) (Formerly 016.182) This course extends the material from General Astronomy 1, increasing the student's physical understanding of topics like black holes, galaxies, and the expanding universe. Topics range from the Big Bang to the formation of neutron stars. A significant amount of simple arithmetic and trigonometry is used to provide the insights into physical background and to illuminate current research problems. Labs and observing sessions are used to teach scientific method. Not to be held with the former 016.180. Prerequisites: Pre-calculus Mathematics 40S or equivalent, or consent of department

PHYS 1830 Perspective on the Universe Cr.Hrs. 3

(Lab Required) (Formerly 016.183) This general interest course is a qualitative course on the concepts and discoveries in astronomy. Topics may vary from year to year and could include Life on Other Worlds or Astronomy in the News. These themes are used to give the student a qualitative astronomy background ranging from planets and stars to galaxies and cosmology. A few special sessions at Glenlea Observatory and the Lockhart Planetarium introduce the student to scientific method. Although simple arithmetic and trigonometry will be used occasionally, this is a descriptive course.

Physics and Astronomy Course Descriptions-2000 Level

PHYS 2060 Fundamentals of Physics in Radiation Therapy Cr.Hrs. 3

(Lab Required) (Formerly 016.206) Provides the student with a fundamental understanding of the physical nature of photons and electrons and the manner in which they interact with an absorbing scattering medium. The concepts presented in this series will enhance the student's ability to make decisions regarding clinical radiation therapy treatments. Also taught by Allied Health as RTT 2060. Restricted to students in the Radiation Therapy program. Prerequisite: PHYS 1030 or PHYS 1031 (016.103) (C). Prerequisite or concurrent requirements: RTT 2040 and RTT 2080.

PHYS 2070 Observational Astronomy Cr.Hrs. 6

(Lab Required) (Formerly 016.207) Students will undertake a project on galaxies or nebulae using the University of Manitoba's Astronomical Observatory at Glenlea. Prerequisite: PHYS 1030 or PHYS 1031 (016.103) (B); or PHYS 1070 or PHYS 1071 (016.107) (C); or one of PHYS 1810 (016.181) (C) or PHYS 1830 (016.183) (C).

PHYS 2090 Radiation Protection in Radiation Therapy Cr.Hrs. 3

(Formerly 016.209) Previews fundamental concepts used to minimize the risk when working with radiation, with emphasis on radiation therapy. Includes types and sources of radiation, radiation quantities and units, biological effect and potential risks, basic principles of protection, regulation and dose limits, methods of dose monitoring, and applications in radiation therapy. Also taught by Allied Health as RTT 2090. Restricted to students in the Radiation Therapy program. Prerequisites: RTT 2100 (163.210) (C), RTT 2060 (163.206) (C).

PHYS 2150 Radiation Biology Cr.Hrs. 3

(Formerly 016.215) This course deals with the fundamentals of radiation biology and focuses on the effects of radiation at a cellular and molecular level. Also taught by Allied Health as RTT 2150. Restricted to students in the Radiation Therapy program. Prerequisite: PHYS 1030 or PHYS 1031 (016.103) (C).

PHYS 2152 Modern Physics for Engineers Cr.Hrs. 3

(Lab Required) An overview of topics in modern physics including wave particle duality, atomic structure and quantum mechanics. Elementary classical electromagnetic theory and wave theory are reviewed as an introduction to the modern physics concepts. For Engineering students only. Not to be held with PHYS 1070 or PHYS 1071 (016.107). Prerequisites: a "C" or better in one of PHYS 1050, PHYS 1051 (016.105), or the former 016.118; or a "B" or better in PHYS 1020 or PHYS 1021 (016.102); and a "C" or better in one of MATH 1230, MATH 1500, MATH 1501 (136.150), MATH 1510 (136.151), MATH 1520 (136.152), or the former 136.153; and a "C" or better in one of MATH 1232, MATH 1700, MATH 1701 (136.170), MATH 1710 (136.171), the former 136.173, or MATH 1690 (136.169). Prerequisite or concurrent requirement: MATH 2130.

PHYS 2210 Understanding Electricity and Magnetism Cr.Hrs. 3

An introduction ranging from its history to connections with real-world phenomena in engineering and biology, and common sense on the understanding of the phenomena. The student is carefully guided through mathematical derivations. Physics is used to develop the theory and the applications of such things as motors, radios, magnetic resonance imaging (MRI) systems and computers. Not to be held with PHYS 2200, PHYS 2201, PHYS 2600 (016.260) or PHYS 2610 (016.261). Prerequisites: A "C" or better in PHYS 1070 (PHYS 1071, 016.107, 016.106, 016.120), or a "C+" or better in both of PHYS 1020 (PHYS 1021, 016.102) and PHYS 1030 (PHYS 1031, 016.103); and a "C" or better in one of MATH 1230, MATH 1500, MATH 1501 (136.150), MATH 1510 (136.151), MATH 1520 (136.152), the former 136.153, or MATH 1690 (136.169). Prerequisite or corequisite: MATH 1200 or MATH 1201 or MATH 1240; and one of MATH 1232, MATH 1690, MATH 1700, MATH 1701, MATH 1710, or the former 136.173.

PHYS 2250 Introductory Modern Physics Cr.Hrs. 3

Come join us as we explore the ground breaking discoveries in physics during the last 100 years that have laid the foundation for our modern high-tech world and brought us nuclear power, computers, nanotechnology and new energy technologies (to name a few). Then, finish off with a look into the future, at the 21st century physics frontier. Not available to students who have previously obtained credit in, or are currently registered in PHYS 2251, PHYS 2380 (016.238) or the former 016.250. Not available to students in Honours or Major programs in Physics. Prerequisites: a "C" or better in PHYS 1070 (PHYS 1071, 016.107, 016.127), or a "C+" or better in both of PHYS 1020 (PHYS 1021, 016.102) and PHYS 1030 (PHYS 1031, 016.103); and a "C" or better in one of MATH 1230, MATH 1500, MATH 1501 (136.150), MATH 1510 (136.151), MATH 1520 (136.152), the former 136.153, or MATH 1690 (136.169). Prerequisite or corequisite: MATH 1200 or MATH 1201 or MATH 1240; and one of MATH 1232, MATH 1690, MATH 1700, MATH 1701, MATH 1710 or the former 136.173.

PHYS 2260 Optics Cr.Hrs. 3

(Lab Required) A survey of refraction, reflection, simple lens systems and optical systems, dispersion, achromatism and an elementary treatment of diffraction, interference, and polarization. Not to be held with PHYS 2261. Prerequisites: A "C" or better in PHYS 1070 (PHYS 1071, 016.107) or PHYS 2152, or a "C+" or better in both of PHYS 1020 (PHYS 1021, 016.102) and PHYS 1030 (PHYS 1031, 016.103); and a "C" or better in one of MATH 1230, MATH 1500, MATH 1501 (136.150), MATH 1510 (136.151), MATH 1520 (136.152), the former 136.153, or MATH 1690 (136.169). Prerequisite or Corequisite: One of MATH 1220, MATH 1300, MATH 1301 (136.130), or MATH 1310 (136.131); and one of MATH 1232, MATH 1690, MATH 1700, MATH 1701 (136.170), MATH 1710 (136.171), or the former 136.173.

PHYS 2270 Physical Topics for Biologists A Cr.Hrs. 3

(Formerly 016.227) Physical topics with a relation to biology are discussed. Radiative transfer of energy, boundary layers, heat conduction, diffusion, mass transport, and the use of radioactive materials in biology are considered. Not to be held with PHYS 2271. Prerequisite: a grade of "C" or better in one of PHYS 1050, PHYS 1051 (016.105), PHYS 1020, or PHYS 1021 (016.102); or consent of department.

PHYS 2280 Physical Topics for Biologists B Cr.Hrs. 3

(Formerly 016.228) Physical properties of solids, liquids, and gases including diffusion and membranes; radiation and radioactivity. Aspects of particular interest to the biological sciences are stressed. Not to be held with PHYS 2281. Prerequisite: a grade of "C" or better in one of PHYS 1070, PHYS 1071 (016.107), PHYS 1030, or PHYS 1031 (016.103); or consent of department.

PHYS 2350 Energy Sources: Physical Aspects Cr.Hrs. 3

(Formerly 016.235) A detailed investigation of the physical aspects of energy production and utilization. Critical comparison of the various energy sources including solar, nuclear, fossil, and wind will be emphasized. The physics of energy collection, production, storage, and distribution will be discussed in the context of thermodynamics, radiation, solid state and nuclear physics. Prerequisite: a grade of "C" or better in one of PHYS 1070, PHYS 1071 (016.107), PHYS 1030, or PHYS 1031 (016.103); or consent of department.

PHYS 2380 Quantum Physics 1 Cr.Hrs. 3

The first in a sequence of three courses on Quantum Physics. This course introduces the basic principles of quantum theory including cavity radiation and Planck's postulate, wave-particle duality, the Bohr model, and the Schrodinger theory of quantum mechanics. Special emphasis is placed on the derivation of the time independent Schrodinger equation and its solutions in one dimension. Not to be held with the former 016.250. Prerequisites: PHYS 1070 or PHYS 1071 (016.107) or PHYS 2152 (C); and one of MATH 1232 (C), MATH 1690 (136.169) (C), MATH 1700, MATH 1701 (136.170) (C), MATH 1710 (136.171) (C), or the former 136.173 (C).

PHYS 2390 Theoretical Physics 1 Cr.Hrs. 3

This course provides an introduction to the mathematics required for both the Honours and Major programs in Physics and Astronomy. Topics include series expansions, partial derivatives, vector calculus and integral theorems. Not to be held with the former 016.237. Prerequisites: PHYS 1070, PHYS 1071 (016.107) (C); and a grade of "C" or better in one of MATH 1232, MATH 1690 (136.169), MATH 1700, MATH 1701 (136.170), MATH 1710 (136.171), or the former 136.173.

PHYS 2490 Theoretical Physics 2 Cr.Hrs. 3

This course provides a continuation of the introduction to the mathematics required for both the Honours and Major programs in Physics and Astronomy. Topics include Fourier series, differential equations, special functions, boundary value problems and transform methods. Not to be held with the former 016.237. Prerequisite: PHYS 2390.

PHYS 2600 Electromagnetic Field Theory Cr.Hrs. 3

(Lab Required) Electric field, electric potential, Gauss' law, capacitors, dielectric materials, magnetic fields, Ampere's law, magnetic induction, magnetic materials, displacement current, integral form of Maxwell's equations. In addition to the lectures, the course includes a tutorial session of two hours per week. Not to be held with PHYS 2200 or PHYS 2201 (016.220). Prerequisites: a "C" or better in one of PHYS 1070, PHYS 1071 (016.107), PHYS 2152, the former 016.106, or the former 016.120; and a "C" or better in one of MATH 1232, MATH 1690 (136.169), MATH 1700, MATH 1701 (136.170), MATH 1710 (136.171) or the former 136.173.

PHYS 2610 Circuit Theory and Introductory Electronics Cr.Hrs. 3

(Lab Required) (Formerly 016.261) Ohm's law, Kirchhoff's laws, DC circuit analysis, equivalent circuits, AC circuit analysis, complex impedance, RLC circuits, magnetic coupling, transformers, diodes and diode circuits. Not to be held with PHYS 2200 or PHYS 2201 (016.220). Prerequisite: PHYS 2600 (016.260) (C).

PHYS 2650 Classical Mechanics 1 Cr.Hrs. 3

(Formerly 016.265) The first in a sequence of three courses on intermediate to advanced level mechanics. Topics include dynamics of a particle, conservation theorems, rotation, rolling motion, oscillations, gravitation and central force motion, and associated mathematical methods. Prerequisite: one of PHYS 1070, PHYS 1071 (016.107), or the former 016.106, or PHYS 2152 (C). Prerequisite or concurrent requirements: PHYS 2490 or MATH 3132.

PHYS 2700 Concepts of Physical Science to 1900 Cr.Hrs. 3

(Formerly 016.270) The evolution of scientific thought is traced through three major historical periods, namely the early Greeks, the scientific revolution of the 16th and 17th centuries and the modern period up to 1900. The course is designed to present the key ideas of scientific inquiry into the nature of heat, light, matter and celestial mechanics within their historical context. Not to be held with the former 016.131. This course is not to be held for credit in a Major or Honours program in Physics and Astronomy.

PHYS 2710 Concepts of Physical Science from 1900 Cr.Hrs. 3

(Formerly 016.271) This course deals with the concepts of modern physics which arose near the turn of the twentieth century and revolutionized our view of the physical world. Einstein's Theory of Relativity, the Bohr-Rutherford atom and wave-particle duality are discussed. The impact of these ideas on modern society is explored. N.B. This course should be preceded by PHYS 2700 (016.270) or the former 016.131. Not to be held with the former 016.132. This course is not to be held for credit in a Major or Honours program in Physics and Astronomy.

Physics and Astronomy Course Descriptions-3000 Level**PHYS 3180 Stars Cr.Hrs. 3**

(Formerly 016.318) This course is an application of physics to the structure of stars, their formation and evolution; theoretical models and observations; comparisons of main sequence stars like our Sun, binary star systems, post-main sequence evolution, and the final stages of stellar evolution such as the formation of white dwarfs, neutron stars and black holes. Prerequisite: PHYS 1070 or PHYS 1071 (016.107) or PHYS 2152 (C).

PHYS 3220 Medical Physics and Physiological Measurement Cr.Hrs. 3

(Formerly 016.322) This course will introduce the core subject areas of Medical Physics, in particular the physics of physiology and of radiology. The mechanics of body systems and the theory, medical applications and safety issues relating to the production, use, detection and measurements of electromagnetic radiation (both ionizing and non-ionizing) will be included. It will also cover Medical imaging (Ultrasound, CT and MRI) and will provide the student with an understanding of the physics underlying neurological, audiological, respiratory and vascular function and measurements. Prerequisite: one of PHYS 2600 (016.260) (C) or PHYS 2210 (or the former PHYS 2200 or 016.220)(C), or ECE 3580, or consent of the department.

PHYS 3360 Intermediate Modern Physics Cr.Hrs. 6

(Formerly 016.336) Introduction to wave mechanics and its applications in atomic, molecular, and solid state physics. A survey of nuclear and particle physics phenomena. An introduction to astrophysics. Prerequisite: PHYS 2250 or PHYS 2251 (016.225) (C).

PHYS 3380 Quantum Physics 2 Cr.Hrs. 3

(Formerly 016.338) This course is the sequel to PHYS 2380 (016.238). It focuses on solutions of the three-dimensional Schrodinger equation with special emphasis on one-electron atoms, multi-electron atoms, and single molecules. Not to be held with PHYS 4640 (016.464), PHYS 4650 (016.465), the former 016.358, or the former 016.370. Prerequisite: PHYS 2380 (016.238), or the former 016.250 (C).

PHYS 3430 Honours Physics Laboratory Cr.Hrs. 6

(Lab Required) (Formerly 016.343) Six hours per week. Prerequisites: PHYS 2260 or PHYS 2261 (016.226) (C); and one of PHYS 2610 (016.261) or the former 016.269 (C); or consent of department.

PHYS 3570 Physics of Materials 1 Cr.Hrs. 3

(Formerly 016.357) Introduction to the physics of materials. Solids within the elastic limit: stress and strain tensors, elastic constants. Liquids: continuity equation, Bernoulli, Euler and Navier-Stokes equations. Recommended prerequisite or concurrent requirement: PHYS 3680.

PHYS 3630 Electro - and Magnetostatic Theory Cr.Hrs. 3

Material covered will include electrostatics (i.e. Gauss' Law, Laplace and Poisson equations) and magnetostatics (Lorentz force, Maxwell equations) as well as the properties of electrostatic fields in matter and magnetism in materials. Not to be held with the former 016.369. Prerequisites: PHYS 2600 (016.260) (C); and PHYS 2490 or the former 016.237 or MATH 3132 (C); or consent of department.

PHYS 3640 Electro - and Magnetodynamics and Special Relativity Cr.Hrs. 3

Topics covered will include time dependent Maxwell's equations, Ohm's and Faraday's Law, electromagnetic waves, potential and fields, radiation, and special relativity including the Lorentz transformations. Not to be held with the former 016.369. Prerequisite: PHYS 3630 or ECE 3590(C).

PHYS 3650 Classical Mechanics 2 Cr.Hrs. 3

(Formerly 016.365) The second in a sequence of three courses on intermediate to advanced level mechanics. Topics include dynamics of a system of particles, noninertial reference frames, dynamics of rigid bodies, calculus of variations, Lagrangian and Hamiltonian dynamics. Not to be held with the former 016.233. Prerequisite: PHYS 2650 (016.265) (C).

PHYS 3660 Classical Mechanics 3 Cr.Hrs. 3

(Formerly 016.366) The third in a sequence of three courses on intermediate to advanced level mechanics. Topics include nonlinear oscillations and chaos, coupled oscillations, the wave equation in continuous media, special relativity. Not to be held with the former 016.356. Prerequisite: PHYS 3650 (016.365) (C).

PHYS 3670 Classical Thermodynamics Cr.Hrs. 3

An introduction to the laws of classical equilibrium thermodynamics and their applications. Not to be held with the former 016.341. Prerequisite: PHYS 2490 or the former 016.237 or MATH 3132 (C).

PHYS 3680 Statistical Mechanics Cr.Hrs. 3

An introduction to the principles of classical and quantum statistical mechanics and their applications. Not to be held with the former 016.341. Prerequisites: PHYS 2380 (016.238) (C) and PHYS 3670 (C).

PHYS 3800 Topics in Astronomy Cr.Hrs. 6

(Lab Required) (Formerly 016.380) An assignment and conference course to be taken only through consultation with the head of the department. The topics will vary depending upon student needs and interests, and will include specialized topics not available in regular course offerings.

Physics and Astronomy Course Descriptions-4000 Level

PHYS 4010 General Relativity I: A Relativistic Theory of Gravity Cr.Hrs. 3

Topics include Newtonian gravity, the theory of special relativity, relativistic hydrodynamics, relativistic electrodynamics, curved space-time, tensor calculus and Einstein's equations. Prerequisites: PHYS 2490 and PHYS 3650 or approval of the instructor.

PHYS 4020 General Relativity II: Applications and Cosmology Cr.Hrs. 3

Topics include static solutions of Einstein's equations, gravitational waves, static models for stars (white dwarfs, neutron stars), dynamic models for stars (Birkhoff theorem, black holes), cosmology (Robertson-Walker metric, Friedmann equations), extended and alternative theories for gravity (e.g. Brans-Dicke theory, Einstein-Cartan theory, and Kaluza-Klein theory). Prerequisite: PHYS 4010.

PHYS 4230 The Phenomenology of Galaxies Cr.Hrs. 3

(Formerly 016.423) This course describes the phenomenology of galaxies as determined by recent observational data. Topics include the characteristics and distribution of stars; radiation from the interstellar medium (hydrogen, molecular gas and dust); the kinematics of the stellar and gaseous components of the Milky Way; the formation and evolution of galaxies and clusters of galaxies. Prerequisite: PHYS 3180 (016.318) (C).

PHYS 4240 Astronomy Project Cr.Hrs. 6

(Formerly 016.424) A research oriented course involving processing, analysis, and interpretations of astrophysical data. Available topics include neutron stars, supernova remnants, astrophysical jet sources, the interstellar medium, and galactic structure. Prerequisites: PHYS 2070 (016.207) (C) and PHYS 3180 (016.318) (C). Prerequisite or concurrent requirement PHYS 4230.

PHYS 4250 Computational Physics Cr.Hrs. 3

(Formerly 016.425) Application of numerical methods and programming skills to model a variety of physics problems on a computer. Topics include differential equations, boundary value and eigenvalue problems, special functions, and Monte Carlo methods, with examples from classical, quantum, and statistical mechanics. Prerequisites: PHYS 2490 or the former 016.237 (C); or consent of department.

PHYS 4300 Topics in Physics Cr.Hrs. 3

(Formerly 016.430) Topics will vary depending upon student needs and interests, and will include specialized topics not available in regular course offerings. Prerequisite: a "C" or better in one of PHYS 3380 (016.338), the former 016.370, or the former 016.358; or consent of department.

PHYS 4360 Medical Radiation Physics Cr.Hrs. 3

The relevant physics of the production and interaction of radiation beams used in both diagnostic and therapeutic medicine will be covered. Such beams included X- and g-rays, particle beams, visible and I.R. radiation, microwaves, and ultrasound. Prerequisite: PHYS 4560 (016.456) or consent of instructor.

PHYS 4390 Quantum Physics 3 Cr.Hrs. 3

Sequel to PHYS 3380 (016.338). Hilbert space formalism, symmetry and conservation laws, angular momentum, stationary state perturbation theory, variational methods. Not to be held with the former 016.438. Prerequisites: PHYS 2490 or the former 016.237 (C); and PHYS 3380 (016.338) (C).

PHYS 4400 Medical Imaging Cr.Hrs. 3

Fundamental principles of image formation, analysis of the characteristics of medical images, parametric description of image quality; application to transmission radiography. Prerequisite: Consent of instructor.

PHYS 4510 Introduction to Nuclear Physics Cr.Hrs. 3

(Formerly 016.451) Nuclear properties, the nuclear two-body problem; the deuteron and nucleon-nucleon scattering, nuclear models, nuclear disintegration; alpha-decay, gamma transitions, and beta-decay nuclear reactions; elementary particles. Prerequisite: a "C" or better in one of PHYS 3380 (016.338), the former 016.370, or the former 016.358.

PHYS 4520 Introduction to Solid State Physics Cr.Hrs. 3

(Formerly 016.452) An introduction to the following topics as they relate to the properties of solids: crystal structure and lattice energy; lattice vibrations and specific heat; free-electron theory and band theory-metals, semiconductors and insulators; vacancies, diffusion, dislocations, and simple alloys. Prerequisite: a "C" or better in one of PHYS 3380 (016.338), the former 016.370, or the former 016.358.

PHYS 4560 Applied Nuclear Science Cr.Hrs. 3

(Formerly 016.456) Review of nuclear physics, radioactive decay, nuclear reactions, interaction of radiation with matter, stopping powers, radiation dosimetry, radiation hazards; applications of nuclear science in medicine, nuclear reactors, chain reaction, moderators, neutron transport theory, nuclear fusion. Prerequisite: PHYS 4510 (016.451) (C).

PHYS 4590 Advanced Optics Cr.Hrs. 3

Light as a classical electromagnetic wave, optical fields in media, interference by wavefront and amplitude splitting, diffraction, diffraction theory of image formation, spatial filtering and image processing, coherence theory. Not to be held with the former 016.458. Prerequisites: PHYS 2260 (016.226) (C); and PHYS 3640 or the former 016.369 (C).

PHYS 4600 Lasers and Applications Cr.Hrs. 3

Light and atoms: semi-classical theory, principles of laser operation and properties of laser light, polarization optics, Gaussian beam optics, laser spectroscopy. Not to be held with the former 016.458. Prerequisites: PHYS 2260 (016.226) and PHYS 3380 (016.338) (C).

PHYS 4620 Advanced Classical Mechanics Cr.Hrs. 3

(Formerly 016.462) Canonical invariants and Lagrange and Poisson brackets. Hamilton-Jacobi theory, action-angle variables, normal modes of vibration. Prerequisite: PHYS 3660 (016.366) or the former 016.356 (C).

PHYS 4630 Physics of Materials 2 Cr.Hrs. 3

(Formerly 016.463) Physics of materials beyond the elastic limit, emphasizing atomistic features. Structural aspects, crystal defects, plastic deformation, radiation damage, diffusion and dislocations. Prerequisite: PHYS 3570 (016.357) (C).

PHYS 4672 Physics Laboratory A Cr.Hrs. 3

(Lab Required) For students in term 1 of their final year in Honours. Experiments are available in nuclear physics, solid state physics, and optics. All are open ended, permitting the student to pursue the investigation of a phenomenon as far as desired. First part of a two course series. Not to be held with the former PHYS 4670, 016.444 or PHYS 4570 (016.457). Prerequisites: PHYS 3430 (016.343) (C) or consent of department.

PHYS 4674 Physics Laboratory B Cr.Hrs. 3

(Lab Required) For students in term 2 of their final year in Honours. Experiments are available in nuclear physics, solid state physics, and optics. All are open ended, permitting the student to pursue the investigation of a phenomenon as far as desired. Second part of a two course series. Not to be held with the former PHYS 4670, 016.444 or PHYS 4570 (016.457). Prerequisites: PHYS 3430 (016.343) (C); and one of PHYS 4672 (C) or PHYS 4676 (C).

PHYS 4676 Honours Thesis - Proposal and Preparation Cr.Hrs. 3

For students in term 1 of their final year in Honours. The student will prepare a proposal for the undergraduate thesis and demonstrate the feasibility of the project under the supervision of a faculty member. The results of the study will be presented (in written and oral form) to an examining committee during the term. Both experimental and theoretical topics are acceptable. A grade of C (based on the presentations) is required to proceed to the next course which forms the final stage of the honours thesis. Not to be held with the former PHYS 4670, the former 016.444, the former PHYS 4570 (016.457), or PHYS 4672. Prerequisites: PHYS 3430 (016.343) (C) and consent of department.

PHYS 4678 Honours Thesis - Dissertation Cr.Hrs. 3

For students in term 2 of their final year in Honours. The student will complete the work needed and produce an undergraduate thesis under the supervision of a faculty member. The grade will be based on the examining committee's evaluation of a progress report (presented mid-term) and an evaluation of the thesis manuscript and oral presentation at the end of term. Both experimental and theoretical topics are acceptable. Not to be held with the former PHYS 4670 (016.444), PHYS 4570 (016.457), PHYS 4672, or PHYS 4674.

4.12 Psychology Program

Head: Dan Bailis

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4.12.1 Program Information

Psychology is the scientific study of behaviour and mental processes, including the biological bases of behaviour and cognitive processes, and behavioural and cognitive neuroscience. The Honours and Major programs combine courses in Psychology with related courses in Science. Courses from the Faculty of Arts are included in this program. The Faculty of Science offers programs leading to a B.Sc. (Honours) degree in Psychology and a B.Sc. (Major) degree in Psychology.

Honours

To enter the Honours program, students must have obtained a grade of "B" or better in **PSYC 2260** and a grade of "B" in six credit hours in courses offered by the Faculty of Science. In addition, students must have obtained a degree grade point average of 3.50. Introductory courses in Biological Sciences, Chemistry, Computer Science, Mathematics or Statistics are highly recommended.

Students will normally take **PSYC 2260** in Year 2 and enter Honours in Year 3. Students who qualify for entry to the 4-Year Major in Psychology after Year 1 should choose that option. See the 4-Year Major entry requirements for details.

To continue in the Honours program, a student must register in a minimum of 9 credit hours in each Fall and Winter Term and must meet all of the continuation criteria of the Faculty of Science. In addition, students must maintain a minimum degree grade point average of 3.50 based on all courses in the program. Students who do not meet the minimum continuation requirement will be required to withdraw from the Honours program.

To graduate, a student must obtain 120 credit hours of courses with grades of "C" or better in each course and with a minimum grade point average of 3.00 on the 120 credit hours that contribute to the degree. In addition, students must complete the program of study in the chart below.

Four Year Major

To enter the Major program, students must normally have obtained a grade of C+ or better in **PSYC 1200** (or in both **PSYC 1211 and PSYC 1221**) and in six credit hours in courses offered by the Faculty of Science and meet the Faculty of Science requirements for entry to the Major program. Introductory courses in Biological Sciences, Chemistry, Computer Science, Mathematics, or Statistics are highly recommended.

To continue in the Major program, a student must meet all of the continuation criteria of the Faculty of Science. This includes maintaining a minimum GPA of 2.00 at each point of assessment, and no more than 18 credit hours of failing grades after entry to the program. Students who do not meet the minimum continuation requirement will be required to withdraw from the Major program. The department must approve a student's Major program for each session. All program revisions must also have prior approval.

To graduate with the degree of Bachelor of Science (Major), a student must complete 120 credit hours of courses with passing grades (D or better) in each course, with a minimum GPA of 2.00 on the 120 credit hours that contribute to the degree. In addition, the student must complete the program of study as listed in the program chart below.

NOTE: Psychology cannot be used to fulfill either the introductory or advanced level Science requirements in the 3-year B.Sc. General Degree.

4.12.2 Psychology

YEAR 1	YEAR 2	YEAR 3	YEAR 4
HONOURS⁸ 120 CREDIT HOURS (comprising courses listed in chart below, and electives)			
PSYC 1200 (B) (or PSYC 1211 (B) and PSYC 1221 (B)) (6) 6 credit hours Science ¹ (B)	PSYC 2250, PSYC 2260 6 credit hours 2000 or 3000 level ² Psychology 15 credit hours Science ⁵ 3 credit hours options ⁶	PSYC 3200, PSYC 3340, PSYC 3630 3 credit hours from PSYC 3520, PSYC 3560, PSYC 3590 or a 4000 level PSYC course 9 credit hours Psychology ³ 9 credit hours Science ⁵	PSYC 4520 (6) 18 credit hours Psychology ⁴ 6 credit hours Science ⁵
30 Hours	30 Hours	30 Hours	30 Hours
FOUR YEAR MAJOR^{8,9} 120 CREDIT HOURS (comprising courses listed in chart below, and electives)			
PSYC 1200 (C+)(or PSYC 1211 (C+) and PSYC 1221(C+)) (6) 6 credit hours Science ¹ (C+)	PSYC 2250, PSYC 2260 6 credit hours 2000 or 3000 level Psychology ⁷	18 credit hours 2000 or 3000 level Psychology ⁷	18 credit hours 2000 or 3000 level Psychology ⁷

	Plus 30 credit hours of courses from departments in the Faculty of Science, including a minimum of 18 credit hours at the 2000 level or above ⁵ .	
A "W" course must be taken in Year 1 or Year 2		
MINOR		
PSYC 1200 or (PSYC 1211 and PSYC 1221)	12 credit hours in Psychology courses numbered at the 2000 or 3000 level	
NOTES:		
<p>¹ Introductory courses in Biological Sciences, Chemistry, Computer Science, Mathematics, or Statistics are highly recommended.</p> <p>² These 6 credit hours must include 3 credit hours from each of two different lettered categories of Psychology courses below.</p> <p>³ These 9 credit hours must include 3 credit hours from each of two different lettered categories of Psychology courses below and not sampled in Year 2.</p> <p>⁴ These 18 credit hours must include 6 credit hours at the 4000 level; and 6 credit hours at any level including any remaining lettered category below.</p> <p>⁵ The Science courses that are chosen must be approved by the Department of Psychology and must include a minimum of 18 credit hours at the 2000 level or above.</p> <p>⁶ Free options are to be chosen from courses that are acceptable for credit in the Faculty of Science and must be approved by the Department of Psychology.</p> <p>⁷ During Years 2 to 4 a total of 42 credit hours of 2000 or 3000 level Psychology courses must be completed, including a minimum of 3 credit hours from each of the five lettered categories of courses below.</p> <p>⁸ The courses required in this program satisfy the university mathematics requirement.</p> <p>⁹ IMPORTANT: The four year Major program need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.</p> <p>(Letters in brackets indicated minimum prerequisite standing required for further study. The number 6 in brackets indicates a 6 credit hour course.)</p>		
Categories of Psychology Courses		
Category A:	Personality/Social	PSYC 2410, PSYC 2420, PSYC 2490, PSYC 2530
Category B:	Developmental	PSYC 2290
Category C:	Learning	PSYC 2440, PSYC 2470
Category D:	Cognitive	PSYC 2480
Category E:	Biological	PSYC 2360

Psychology Courses

All Psychology courses are available to Science students. For a complete course listing, see the Faculty of Arts section.

Psychology courses taught at the Université de Saint-Boniface can be used to satisfy degree requirements

4.13 Department of Statistics

Head: Xikui Wang

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4.13.1 Program Information

Statistics is a discipline grounded in mathematics that has practical applications in many other areas. Statistics is an analytical discipline that helps other disciplines carry out research projects and studies that involve measurement, comparison, and interpretation. Statistics is a useful ancillary subject to other sciences, the social sciences, and many of the professional programs. The department offers joint programs with Mathematics, Economics and Actuarial Mathematics.

Honours Requirements

Students will normally take **STAT 2000 and STAT 2400** in Year 2 and enter Honours in Year 3.

To enter the Honours program in Statistics, a student must have completed at least 24 credit hours with a minimum GPA of 3.00, and also obtained a minimum grade of "B" in **STAT 2400**. **STAT 1000, MATH 1220, MATH 1230, and MATH 1240** are all requirements of the Statistics Honours degree program and students are strongly encouraged to take these courses in Year 1.

To continue in the Statistics Honours program, students must maintain a minimum GPA of 3.00, and complete a minimum of 9 credit hours during each Fall and Winter Term.

To graduate with the B. Sc. Honours degree, a student must achieve a minimum GPA of 3.00 and minimum grade of "C" in each course that contributes to the 120 credit hours of the degree.

Statistics Honours Cooperative Option

Students interested in alternating academic terms and terms of paid employment as part of their Honours Statistics program may enter the Cooperative Option in April of their second year in Honours Statistics. This program provides students with a minimum of 12 months of paid employment by the time they graduate. It enables them to obtain work experience in research and industry with participating firms, government agencies and university units.

The course and grade requirements for entry to this option are the same as those required for entry to the regular Honours program (see above), as indicated in the chart. Students are required to complete the first and second year requirements of the program; and **STAT 3470 and STAT 3480** before they begin their first employment term. Students should refer to the general faculty regulations for B.Sc. (Honours) Cooperative Option in Section 3.6.

To continue in the Honours Cooperative program a student must maintain a minimum GPA of 3.00, successfully complete each work term and complete a minimum of 9 credit hours during each academic term. Students should note that the grade requirements for the Cooperative Option are the same as that for the regular Honours program (see above).

Students must check with the Co-op office for the April application deadline information. They will normally be notified of their provisional acceptance in the program by September. Acceptance into the program is dependent upon the student receiving an employment placement. Employment term positions available to the students will be approved by the department, and the employers will select the students they wish to employ. Students are advised that satisfying the entrance requirements

does not guarantee a place in the Cooperative Option if the demand for places exceeds the number of places available. The department reserves the right to select the best qualified applicants.

Students are required to register in and pay fees for each employment term prior to the commencement of each employment term. Students will be required to submit an employment report upon the completion of each employment term.

Four Year Major Requirements

Students will normally take **STAT 2000 and STAT 2400** in Year 2 and enter the four year Major in Year 3.

To enter the Major Degree program in Statistics, a student must have completed at least 24 credit hours with a minimum GPA of 2.00, and also obtained a minimum grade of "C+" in **STAT 2400**. **STAT 1000, MATH 1220, MATH 1230, and MATH 1240** are all requirements of the Statistics Honours degree program and students are strongly encouraged to take these courses in Year 1.

To continue in the four year Major program a student must maintain a minimum GPA of 2.00.

To graduate from the four year Major program a student must obtain a minimum GPA of 2.00 on the 120 credit hours that contribute to the degree and also a minimum grade of "C" in each of the Major Program Specific courses (see below).

Statistics Four Year Major Cooperative Option

Students interested in alternating academic terms and terms of paid employment as part of their Major program in Statistics may enter the Cooperative Option in April of their second year in Statistics. This program provides students with a minimum of 12 months of paid employment by the time they graduate. It enables them to obtain work experience in research and industry with participating firms, government agencies and university units.

The course and grade requirements for entry to this option are the same as those required for entry to the regular Major program. Students are required to complete the first and second year requirements of the program; and **STAT 3470 and STAT 3480** before they begin their first employment term. Students should refer to the general faculty regulations for B.Sc. (Major) Cooperative Option in Section 3.4.

To continue in the four year Major program a student must maintain a minimum GPA of 2.00. Students should note that the grade requirements for the Cooperative Option are the same as that for the regular Major program (see above).

Students must check with the Co-op office for the April application deadline information. They will normally be notified of their provisional acceptance in the program by September. Acceptance into the program is dependent upon the student receiving an employment placement. Employment term positions available to the students will be approved by the department, and the employers will select the students they wish to employ. Students are advised that satisfying the entrance requirements does not guarantee a place in the Cooperative Option if the demand for places exceeds the number of places available. The department reserves the right to select the best qualified applicants.

Students are required to register in and pay fees for each employment term prior to the commencement of each employment term. Students will be required to submit an employment report upon the completion of each employment term.

Major Program Specific courses

All courses specified in the program charts below (excluding the required optional courses and electives).

The department must approve a student's four year Major program each session. Students must obtain departmental approval for any and all revisions to their programs.

In order to improve their academic backgrounds as well as job opportunities, students should carefully elect the optional courses in this program. They should particularly consider the following sequence of courses in Economics and Computer Science.

Economics: ECON 1010, ECON 1020, ECON 2450, ECON 2460, ECON 2470, ECON 2480, ECON 3170, ECON 3180, ECON 3730, ECON 4120, ECON 4130.

Computer Science (Software and Artificial Intelligence): COMP 1260, COMP 1270, COMP 1010, COMP 1020, COMP 2080, COMP 2130, COMP 2140, COMP 3380, COMP 3440, COMP 4200, COMP 4380.

Computer Science (Numerical Analysis and Graphics): COMP 1260, COMP 1270, COMP 1010, COMP 1020, COMP 2080, COMP 2130, COMP 2140, COMP 2190, COMP 3140 or COMP 3490.

Three Year General

As prescribed with all other faculty regulations in Section 3.2, students in this program must select 18 credit hours of 2000, 3000, or 4000 level courses from each of two Science areas. To satisfy the requirement in the area of Statistics, students must take a minimum of 18 credit hours of 2000, 3000 and (or) 4000 level Statistics courses.

4.13.2 Statistics Program Charts

4.13.2 a Statistics Honours Program Charts

4.13.2 Statistics			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
HONOURS (Including Co-operative Option) 120 CREDIT HOURS (comprising courses listed in chart below, and electives)			
STAT 1000 MATH 1220 ¹ , MATH 1230 ¹ , MATH 1232 ¹ , MATH 1240	STAT 2400 (B) MATH 2030, MATH 2080, MATH 2150	STAT 3050, STAT 3400 ⁴ , STAT 3470, STAT 3480, STAT 3800	STAT 4100, STAT 4200, STAT 4520, STAT 4530
The following courses must be taken in Year 1 or Year 2: COMP 1010, STAT 2000 6 credit hours from the Faculty of Arts, which should include the required "W" course		15 credit hours chosen from: STAT 3170, STAT 3380, STAT 3490, STAT 4170, STAT 4580, STAT 4590, STAT 4600, STAT 4630, STAT 4690, STAT 4700 with at least 9 credit hours at the 4000 level. 6 credit hours chosen from: MATH 2140, MATH 2160, MATH 2180, MATH 3340, MATH 3440, MATH 3460, MATH 3470, MATH 3472 12 credit hours of approved elective courses - including courses to be chosen from an area of application outlined in note 2 below. ²	
21 credit hours of elective courses - including courses to be chosen from an area of application outlined in note 2 below. ²		Co-op Requirements: STAT 3980	Co-op Requirements: STAT 3990, STAT 4980, STAT 4990 (if a 4th work term selected)
30 Hours	30 Hours	30 Hours	30 Hours
HONOURS DOUBLE MINIMUM 120 CREDIT HOURS By arrangement with the departments concerned			

4.13.2 b Statistics Major Program Charts

4.13.2 Statistics			
FOUR YEAR MAJOR⁵ (Including Co-operative Option) 120 CREDIT HOURS (comprising courses listed in chart below, and electives)			
STAT 1000 MATH 1220 ¹ , MATH 1230 ¹ , MATH 1232 ¹ , MATH 1240	STAT 2400 (C+) MATH 2030, MATH 2080, MATH 2150	STAT 3050, STAT 3400 ⁴ , STAT 3470, STAT 3480, STAT 3800	STAT 4100, STAT 4200, STAT 4520, STAT 4530

ACADEMIC CALENDAR 2015-2016

The following courses must be taken in Year 1 or Year 2:		15 credit hours chosen from:	
COMP 1010, STAT 2000		STAT 3170, STAT 3380, STAT 3490, STAT 4170, STAT 4580, STAT 4590, STAT 4600, STAT 4630, STAT 4690, STAT 4700	
6 credit hours from the Faculty of Arts, which should include the required "W" course		6 credit hours chosen from:	
21 credit hours of elective courses - including courses to be chosen from an area of application outlined in note 3 below. ³		MATH 2140, MATH 2160, MATH 2180, MATH 3340, MATH 3440, MATH 3460, MATH 3470, MATH 3472	
		12 credit hours of elective courses - including courses required for the chosen area of application outlined in note 3 below. ³	
		Co-op Requirements:	Co-op Requirements:
		STAT 3980	STAT 3990, STAT 4980, STAT 4990 (if a 4th work term is selected)
30 Hours	30 Hours	30 Hours	30 Hours

NOTES:

¹ The following substitutes are allowed: **MATH 1300 (B)** in place of **MATH 1220**, **MATH 1500 (B)** or **MATH 1510 (B)** in place of **MATH 1230**, **MATH 1700 (B)** or **MATH 1710 (B)** in place of **MATH 1232**, **MATH 1690 (C)** in place of **MATH 1230** and **MATH 1232**.

² Of the electives chosen as part of the Honours Degree, 18 credit hours are to be selected from one department which represents a field of application such as: Actuarial Mathematics, Biological Sciences, Microbiology, Economics, Psychology or Sociology. (Mathematics and Computer Science are excluded from this list.) In consultation with the department, combinations of courses from a coherent area of studies may be selected.

³ Of the electives chosen as part of the Major Degree, 15 credit hours must be selected from either, Computer Science and Mathematics, or from one of the following departments: Actuarial Mathematics, Biological Sciences, Microbiology, Economics, Psychology, or Sociology.

⁴ **STAT 3400** has a pre or co-requisites of **MATH 2150**. Therefore students who wish to take **STAT 3400** should consider taking **MATH 2150** in YEAR 2.

⁵ **IMPORTANT:** The four year Major program need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

(The number 6 in brackets indicates a six credit hour course)

4.13.2 c Statistics Program Charts

4.13.2 Statistics	
THREE YEAR GENERAL (90 CREDIT HOURS)	
STAT 1000 and STAT 2000	A minimum of 18 credit hours of 2000, 3000, and (or) 4000 level Statistics courses (in addition to STAT 2000) ⁴
MINOR	
STAT 1000	STAT 2000, STAT 3000
	9 additional credit hours of 2000, 3000, or 4000 level Statistics courses ⁴

NOTES:

¹ The following substitutes are allowed: **MATH 1300 (B)** in place of **MATH 1220**, **MATH 1500 (B)** or **MATH 1510 (B)** in place of **MATH 1230**, **MATH 1700 (B)** or **MATH 1710 (B)** in place of **MATH 1232**, **MATH 1690 (C)** in place of **MATH 1230** and **MATH 1232**.

² Of the electives chosen as part of the Honours Degree, 18 credit hours are to be selected from one department which represents a field of application such as: Actuarial Mathematics, Biological Sciences, Microbiology, Economics, Psychology or Sociology. (Mathematics and Computer Science are excluded from this list.) In consultation with the department, combinations of courses from a coherent area of studies may be selected.

³ Of the electives chosen as part of the Major Degree, 15 credit hours must be selected from either, Computer Science and Mathematics, or from one of the following departments: Actuarial Mathematics, Biological Sciences, Microbiology, Economics, Psychology, or Sociology.

⁴ **STAT 3400** has a pre or co-requisites of **MATH 2150**. Therefore students who wish to take **STAT 3400** should consider taking **MATH 2150** in YEAR 2.

⁵ **IMPORTANT:** The four year Major program need not be completed in the manner prescribed in the chart above. The chart indicates one possible arrangement of the required courses and is meant to be a guide around which students can plan their program.

(The number 6 in brackets indicates a six credit hour course)

4.13.3 Statistics - Actuarial Mathematics Joint Honours Program

The Department of Statistics and the Warren Centre for Actuarial Studies and Research offer a joint Honours program for students wishing in depth study in Statistics and Actuarial Mathematics.
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Entry Requirements:

To enter the Joint Honours program, students must have completed 24 credit hours with a minimum DGPA of 3.00. Students must also obtain a minimum grade of “B” in STAT 2000. All of the courses listed in Year 1 of the program chart are program requirements and students are strongly urged to take them in the first year.

To continue in the Joint Honours Statistics - Actuarial Mathematics program, students must maintain a minimum DGPA of 3.00, and complete a minimum of 9 credit hours during each Fall and Winter Term.

To graduate with the B. Sc. Honours degree, a student must achieve a minimum DGPA of 3.00 and a minimum grade of “C+” on all required Actuarial Mathematics (ACT) courses and a grade of “C” on all remaining courses that contribute to the 120 credit hours of the degree.

The following courses with a “B” or better may be used for the Society of Actuaries (SoA) VEE credits: ECON 1010, ECON 1020, FIN 2200, STAT 3470 and STAT 3490. Contact the Warren Centre for Actuarial Studies and Research for further information.

Recommended Electives:

ACT 4000, ACT 4150, FIN 3410, COMP 1010, STAT 4630

YEAR 1	YEAR 2	YEAR 3	YEAR 4
JOINT HONOURS 120 CREDIT HOURS			
STAT 1000, STAT 2000 (B) ECON 1010 ³ , ECON 1020 ³ MATH 1220 ¹ , MATH 1230 ¹ , MATH 1232 ¹ , MATH 1240 3 credit hour “W” course	STAT 2400, STAT 3400 ACT 2020, ACT 2120, ACT 2210, ACC 1100 ² , FIN 2200 ^{2,3} MATH 2720 MATH 2300 ¹	STAT 3050, STAT 3470 ³ , STAT 3480, STAT 3490 ^{3,4} , STAT 3800 ACT 3340, ACT 3630 (or both ACT 3130 and ACT 3230)	STAT 4100, STAT 4200, STAT 4520, STAT 4530 ACT 4060, ACT 4160, ACT 4630 ⁴ MSCI 2150
3 credit hours of electives	6 credit hours of approved electives	6 credit hours of approved electives	3 credit hours of approved electives
30 Hours	30 Hours	30 Hours	30 Hours

NOTES:

¹ The following substitutions are allowed: MATH 1300 (C) or MATH 1310 (C) in place of MATH 1220 (C), MATH 1500 (B) or MATH 1510 (B) in place of MATH 1230 (C), MATH 1700 (B) or MATH 1710 (B) in place of MATH 1232.

² Students are strongly urged to complete ACC 1100 in Year 1 when possible FIN 2200 may be taken in Year 2, 3 or 4; however, it is strongly recommended that it be completed in Year 2. Note that ACC 1100 is a prerequisite for FIN 2200.

³ These courses may be used for SoA VEE credits if a grade of B or better is achieved. Contact the Warren Centre for Actuarial Studies and Research for further information.

⁴ STAT 3490 and ACT 4630 may be taken in Year 3 or 4.

(Letters in brackets indicate minimum prerequisite standing for further study.)

ACADEMIC CALENDAR 2015-2016

4.13.4 Statistics - Mathematics Joint Honours Program

The departments of Statistics and Mathematics offer a joint Honours program for students wishing in depth study in Statistics and Mathematics.			
To enter the Honours program students must have satisfied the Faculty of Science requirements for entry to the program, and have completed STAT 1000, MATH 1300 and either MATH 1690, or MATH 1500 and MATH 1700 or any equivalent with a minimum grade of "B" in each of STAT 1000 and MATH 1690 (or a "B" average in MATH 1500 and MATH 1700).			
To graduate with the B. Sc. Honours degree, a student must achieve a minimum DGPA of 3.00 and a minimum grade of "C+" in each of the Honours Program Specific courses, and a minimum grade of "C" on all remaining courses that contribute to the 120 credit hours of the degree. See the Calendar entry for each of the Department of Statistics and the Department of Mathematics for the Honours Program Specific courses.			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
JOINT HONOURS 120 CREDIT HOURS (comprising courses listed in chart below, and electives)			
MATH 1300 ¹ (B), MATH 1690 (6) (B) (or MATH 1500 ¹ and MATH 1700 ¹ (B))	STAT 2000 ² , STAT 2400 MATH 2202, MATH 2352 (6), MATH 2600, MATH 2750 (6), MATH 2800	STAT 3050, STAT 3470, STAT 3480, STAT 3400, STAT 3800	STAT 4100, STAT 4520, STAT 4530
The following courses must be taken in Year 1 or Year 2: STAT 1000 (B), COMP 1010 6 credit hours from the Faculty of Arts, which should include the required "W" course 12 credit hours of approved electives		Plus a total of 30 credit hours from: MATH 2400 and any 3000 / 4000 level Mathematics courses, which must include at least 3 credit hours at the 4000 level and must also include MATH 3230, MATH 3740 (6)(or MATH 3760 (6)), MATH 3350 (6) (or MATH 3300), MATH 3700 (or MATH 3710), MATH 3400 and MATH 3800 6 credit hours of approved electives	
30 Hours	30 Hours	30 Hours	30 Hours
NOTES: 1 MATH 1310 may be taken in place of MATH 1300; MATH 1510 or MATH 1520 may be taken in place of MATH 1500; MATH 1710 may be taken in place of MATH 1700. 2 STAT 2000 may be taken in Year 1. (Letters in brackets indicate minimum prerequisite standing for further study. The number 6 in brackets indicates a 6 credit hour course.)			

4.13.5 Statistics - Economics Joint Honours Program

The Department of Statistics along with the Department of Economics (Faculty of Arts) offer a Joint Honours program for students wishing in depth study in Statistics and Economics. For Economics course listings, refer to the Faculty of Arts chapter in the Calendar. Students will normally take STAT 2000 and STAT 2400 in second year and enter Honours in Year 3.			
To enter the Joint Honours Statistics Economics program in the Faculty of Science, the student must have a minimum grade of "B" in both of ECON 1010 and ECON 1020 (or ECON 1210 and ECON 1220) and STAT 2400; and an average grade of "B" or better with a minimum grade of "C+" in each of MATH 1220, MATH 1230 and MATH 1232 or any equivalents and have satisfied the Faculty of Science requirements for entry to the honours program.			
YEAR 1	YEAR 2	YEAR 3	YEAR 4
JOINT HONOURS 120 CREDIT HOURS			
Both ECON 1010 and ECON 1020 or both ECON 1210 and ECON 1220 STAT 1000 MATH 1220 ¹ , MATH 1230 ¹ , MATH 1232 ¹ , MATH 1240 COMP 1010 6 credit hours of electives including the required "W" course.	ECON 2010, ECON 2020 STAT 2000, STAT 2400 MATH 2030, MATH 2080, MATH 2140, MATH 2150 6 credit hours of approved Economics electives ²	ECON 3010, ECON 3020 STAT 3400, STAT 3470, STAT 3480, STAT 3490, STAT 3800 MATH 2160, MATH 3360 3 credit hours of approved Economics electives ²	ECON 4040, ECON 4042 STAT 4100, STAT 4200, STAT 4520, STAT 4530, 12 credit hours of approved Economics electives ²
30 Hours	30 Hours	30 Hours	30 Hours
NOTES: ¹ The following substitutes are allowed: MATH 1300 in place of MATH 1220, MATH 1500 in place of MATH 1230, MATH 1700 in place of MATH 1232. Students must attain specific grade requirements in order to meet the upper level course prerequisites. Consult course descriptions for further information. ² Of the 21 credit hours of electives in Economics in Years 2, 3 and 4, no more than 6 credit hours may be at the 2000 level or below; ECON 2030 and ECON 3040 are recommended in Year 2 or 3. The normal prerequisite for ECON 3040 is ECON 2040, which will be waived for students in this program who have completed Year 1. (Letters in brackets indicate minimum prerequisite standing for further study. The number 6 in brackets indicates a 6 credit hour course.)			

4.13.6 Statistics Course Descriptions

Statistics Course Descriptions-1000 Level

STAT 1000 Basic Statistical Analysis 1 Cr.Hrs. 3

(Formerly 005.100) An introduction to the basic principles of statistics and procedures used for data analysis. Topics to be covered include: gathering data, displaying and summarizing data, examining relationships between variables, sampling distributions, estimation and significance tests, inference for means. Not to be held with STAT 1001, STAT 2220 (005.222). Prerequisite: Any grade 12 or 405 Mathematics, or equivalent.

Statistics Course Descriptions-2000 Level

STAT 2000 Basic Statistical Analysis 2 Cr.Hrs. 3

Formerly 005.200) The study of estimation and hypothesis testing procedures for means and proportions in one, two and multiple sample situations; introduction to the analysis of variance; regression and correlation analysis; optional topics may include nonparametric procedures, design of experiments, probability models. Not to be held with STAT 2001. Prerequisite: STAT 1000 (005.100) (C), or STAT 1001 (C).

STAT 2220 Contemporary Statistics for Engineers Cr.Hrs. 3

(Lab Required) Descriptive statistics, basic probability concepts, special statistical distributions, statistical inference-estimation and hypothesis testing, regression, reliability, statistical process control. Not to be held with STAT 1000, STAT 1001, or 005.100. Prerequisite: a "C" or better in one of MATH 1232, MATH 1690 (136.169), the former MATH 1680 (136.168), MATH 1700, MATH 1701 (136.170), MATH 1710 (136.171), or the former 136.173.

STAT 2400 Introduction to Probability I Cr.Hrs. 3

(Lab Required) Basic probability, discrete distributions including binomial, hypergeometric, geometric and Poisson, joint distributions, continuous distributions, statistical inference and applications involving discrete random variables. This course is not available to any student who has previously obtained credit for STAT 3500. Prerequisites: STAT 1000 or STAT 1001 (005.100) (C); and one of MATH 1232 (C), MATH 1690 (C), or MATH 1700 (B), or MATH 1701 (B).

Statistics Course Descriptions-3000 Level

STAT 3000 Applied Linear Statistical Models Cr.Hrs. 3

Applied Linear regression and analysis of variance for designed experiments. This course is not for use in the Honours or Major degree programs in Statistics. Not to be held with STAT 3470 (005.347), STAT 3480 (005.348), the former STAT 3120 (005.312) or the former STAT 3130 (005.313). Prerequisite: STAT 2000 (005.200) or STAT 2001 (005.201) (C).

STAT 3050 Introduction to Probability Theory and Its Applications Cr.Hrs. 3

(Formerly 005.305) Development of the basic concepts of probability theory and application in areas of biostatistics, actuarial science, reliability theory, queuing theory. Prerequisites: STAT 3400 or the former STAT 3500 (005.350) (C); and MATH 2720 or MATH 2721(136.272, 136.270) (C); and MATH 2150 or MATH 2720 or MATH 2721 (or the former MATH 2750)(C).

STAT 3170 Statistical Quality Control Cr.Hrs. 3

(Formerly 005.317) Techniques for quality improvement through the use of statistical process control. Topics will include acceptance sampling, Pareto diagrams, boxplots, normal probability plots, control charts (EWMA and CUSUM), measurements of process capability and process performance. Prerequisite: STAT 2000 or STAT 2001 (005.200) (C).

STAT 3380 An Introduction to Nonparametric Statistics Cr.Hrs. 3

(Formerly 005.338) Parametric versus nonparametric inference; inference using ranks and order statistics; tolerance intervals; contingency tables; goodness-of-fit tests; examples from the social and physical sciences. Prerequisite: STAT 2000 or STAT 2001 (005.200) (C).

STAT 3400 Introduction to Probability II Cr.Hrs. 3

(Lab Required) Continuation of STAT 2400. Continuous distributions, properties of common distributions, distributions of functions of random variables. Not to be held with the former STAT 3500 (005.350). Prerequisite: STAT 2400(C). Prerequisite or Corequisite: one of MATH 2150, MATH 2720, MATH 2721 (or the former MATH 2750)(C), or the former MATH 2730, or MATH 2731.

STAT 3470 Statistical Methods for Research Workers 1 Cr.Hrs. 3

(Formerly 005.347) Linear regression, multiple regression, correlation analysis, introduction to one way analysis of variance, some related topics. Not to be held with STAT 3000 or the former STAT 3120 (005.312). Prerequisite: STAT 2000, STAT 2001 (005.200) (C). Prerequisite or Concurrent Requirement: STAT 3400 or the former STAT 3500 (005.350).

STAT 3480 Statistical Methods for Research Workers 2 Cr.Hrs. 3

(Formerly 005.348) Analysis of variance, randomized block design, nested and Latin square experiments, analysis of covariance. Not to be held with STAT 3000 or the former STAT 3130 (005.313). Prerequisite: STAT 3470 (005.347) (C).

STAT 3490 Time Series Analysis Cr.Hrs. 3

(Formerly 005.349) Trend and seasonal components, exponential smoothing by the multiple regression method, the Box-Jenkins Methodology, analysis of seasonal data. Prerequisite: a grade of "C" or better in one of: STAT 3470 (005.347), STAT 3000 or the former STAT 3120 (005.312).

STAT 3600 Intermediate Statistical Theory 2 Cr.Hrs. 3

(Formerly 005.360) Transformations, sampling distributions, convergence and introduction to estimation and hypothesis testing. Not to be held with the former 005.331 or STAT 3410 (or 005.341). Prerequisite: STAT 3500 (or 005.350) (C). Prerequisite or concurrent requirement : Whichever of MATH 2720 (or MATH 2721) or MATH 2730 (or MATH 2731) : the former 136.270 and 136.271 not yet taken.

STAT 3800 Mathematical Statistics Cr.Hrs. 3

(Lab Required) Multivariate distributions and transformations, order statistics, sampling distributions, convergence, introduction to statistical inference. Not to be held with the former STAT 3600 (005.360). Prerequisite: STAT 3400 or the former STAT 3500 (005.350) (C).

STAT 3980 Work Term I Cr.Hrs. 0

Work assignment in business, industry, or government for students registered in the Statistics Honours or Major Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail grade only). Prerequisites: STAT 3470 (C) and STAT 3480 (C).

STAT 3990 Work Term II Cr.Hrs. 0

Work assignments in business, industry or government for students registered in the Statistics Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail). Prerequisite: STAT 3980 (Pass).

Statistics Course Descriptions-4000 Level

STAT 4100 Statistical Inference 1 Cr.Hrs. 3

Introduction to methods of estimation, including asymptotic and Bayesian methods. Not to be held with the former STAT 4140 (005.414). Prerequisite: STAT 3800 or the former STAT 3600 (005.360).

STAT 4170 Lifetime Data Analysis Cr.Hrs. 3

(Formerly 005.417) An introduction to basic principles and techniques for lifetime data analysis in biostatistics and reliability, with emphasis on theory and applications. Topics to be covered include: censoring, truncation, survival and hazard functions, parametric and nonparametric methods, proportional hazards regression. Prerequisites: STAT 3480 (005.348) (C); and either STAT 3800 or the former STAT 3600 (005.360) (C); or consent of department.

STAT 4200 Statistical Inference 2 Cr.Hrs. 3

Introduction to methods of hypothesis testing, including asymptotic and Bayesian methods. Not to be held with the former STAT 4140 (005.414). Prerequisite: STAT 4100.

STAT 4520 Sampling Techniques 1 Cr.Hrs. 3

(Formerly 005.452) A development of sampling theory for use in sample survey problems, in regression estimates, in systematic sampling, sources of errors in surveys. Prerequisites: STAT 3800 or the former STAT 3600 (005.360) (C); and STAT 3480 (005.348); or consent of department.

STAT 4530 Design of Experiments 1 Cr.Hrs. 3

(Formerly 005.453) Objectives in designing experiments; designs commonly used in research including analysis and an introduction to the construction of designs. Prerequisites: STAT 3800 or the former STAT 3600 (005.360) (C); and STAT 3480 (005.348) (C); or consent of department.

STAT 4580 Sampling Techniques 2 Cr.Hrs. 3

(Formerly 005.458) A mathematical treatment of some advanced topics in sampling theory. Multistage sampling plans and other selected topics. Prerequisite: STAT 4520 (005.452) (C) or consent of department.

STAT 4590 Design of Experiments 2 Cr.Hrs. 3

(Formerly 005.459) The theory and analysis of experimental designs treated in STAT 4530 (005.453) and more advanced designs; construction of designs. Prerequisite: STAT 4530 (005.453) (C) or consent of department.

STAT 4600 Statistics Topics 1 Cr.Hrs. 3

(Formerly 005.460) Topics of current interest in Statistics that will vary with the needs and interests of students and Faculty. Prerequisite: STAT 3800 or the former STAT 3600 (005.360) (C); or consent of department.

STAT 4630 Stochastic Processes Cr.Hrs. 3

(Formerly 005.463) An introduction to stochastic processes. Prerequisite: STAT 3050 (005.305) (C); and STAT 3800 or the former STAT 3600 (005.360) (C); or consent of department.

STAT 4690 Applied Multivariate Analysis Cr.Hrs. 3

(Formerly 005.469) The course will emphasize applications of various techniques in multivariate analysis and gaining familiarity with the relevant programs in statistical packages, i.e., SAS, BMDP. Prerequisites: STAT 3480 (005.348) (C); and a "C" or better in one of MATH 1220 (or the former MATH 2300 or MATH 2301) and MATH 2150 (or the former MATH 2720 or MATH 2721 or MATH 2750) or consent of instructor.

STAT 4700 Statistical Consulting Cr.Hrs. 3

(Formerly 005.470) The role of a Statistics Consultant. Practical consulting experience. This course is normally open to fourth year and graduate students in Statistics. Prerequisites: STAT 3800 or the former STAT 3600 (005.360) (C); and STAT 3480 (005.348); or consent of department. Prerequisites or concurrent requirements: STAT 4520 and STAT 4530.

STAT 4980 Work Term III Cr.Hrs. 0

Work assignments in business, industry or government for students registered in the Statistics Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail). Prerequisite: STAT 3990 (Pass).

STAT 4990 Work Term IV Cr.Hrs. 0

Work assignments in business, industry or government for students registered in the Statistics Honours or Major Cooperative program. Requires submission of a written report covering the work completed during the four-month professional assignment. (Pass/Fail). Prerequisite: STAT 4980 (Pass).

4.14 Courses Offered in Other Faculties and Schools

All courses acceptable for credit in any degree program at the University of Manitoba are acceptable for credit in Science (excluding Pass/Fail courses) subject to overall degree requirements. All courses will be included on admission to the Faculty and will be applied toward the elective requirement in all degree programs offered in Science. For course descriptions, including any prerequisites and/or restrictions, see the chapter entitled Course Descriptions in this Calendar.

Students are reminded that normally a maximum of 30 credit hours (General Degree) or 36 credit hours (Major Degree) from courses offered by Faculties or Schools other than the Faculty of Science can contribute to degree requirements.

4.15 Resources for Students Interested in Science Related Professional Schools or Faculties

Program	University	Website	Phone Number
U of Manitoba Admissions Office		umanitoba.ca/student/admissions/	204.474.8808
Agriculture and Food Science	Manitoba	umanitoba.ca/faculties/afs/	204.474.7525
Dental Hygiene	Manitoba	umanitoba.ca/faculties/dentalhygiene/	204.789.3683
Dentistry	Manitoba	umanitoba.ca/faculties/dentistry/	204.789.3631
Education	Manitoba	umanitoba.ca/faculties/education/	204.474.9004
Engineering	Manitoba	umanitoba.ca/faculties/engineering/	204.474.9807
Environment	Manitoba	umanitoba.ca/faculties/environment/	204.474.7252
Human Ecology	Manitoba	umanitoba.ca/faculties/human_ecology/	204.474.8508
Kinesiology	Manitoba	umanitoba.ca/faculties/kinrec/	204.474.9747
Management	Manitoba	umanitoba.ca/management/	204.474.9353
Medical Rehabilitation	Manitoba	umanitoba.ca/medrehab/	204.789.3897
Medicine	Manitoba	umanitoba.ca/medicine/	204.789.3557
Nursing	Manitoba	umanitoba.ca/nursing/	204.474.7452
Pharmacy	Manitoba	umanitoba.ca/pharmacy/	204.474.9306
Graduate Studies	Manitoba	umanitoba.ca/faculties/graduate_studies/	204.474.9377
Related Programs not offered at the U of Manitoba			
Optometry	Waterloo	http://optometry.uwaterloo.ca/	519.888.4567
Veterinary Medicine	Saskatchewan	http://www.usask.ca/wcvm/	306.966.7447
Meteorology		http://www.msc-smc.ec.gc.ca/	

FACULTY OF SOCIAL WORK

Dean: Dr. James Mulvale
Associate Dean: Dr. Denis Bracken-Undergraduate Program; Dr. Lyn Ferguson-Research and Graduate Program
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Academic Staff: Please refer to the Faculty's website umanitoba.ca/faculties/social_work

Chapter Contents

SECTION 1: DEGREE OFFERED

- 1.1 Program
- 1.2 Interfaculty Option in Aging

SECTION 2: ADMISSION REQUIREMENTS

- 2.1 Admission to the Fort Garry Social Work Program
- 2.2 Admission to the Inner City Social Work Program
- 2.3 Admission to the Northern Social Work Program
- 2.4 Admission to the Distance Delivery Social Work Program
- 2.5 The Université de Saint-Boniface
- 2.6 Special Student Admission

SECTION 3: FACULTY ACADEMIC REGULATIONS

- 3.1 Prerequisite and Corequisite Policy
- 3.2 Residence Requirements for a Degree Program
- 3.3 Scholastic Progress
- 3.4 Professional Unsuitability Bylaw
- 3.5 Dean's Honour List
- 3.6 Appeal of Grades
- 3.7 Distance Courses Open to Fort Garry Campus and Inner City Social Work Students
- 3.8 Opting Into Field and Practices of the Two-Year Plan
- 3.9 Courses Open to Challenge for Credit
- 3.10 Credit for Social Work Courses Taken at Other Universities

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

- 4.1 Curriculum Outline
- 4.2 Field Instruction
- 4.3 Requirements for Graduation

SECTION 5: COURSE DESCRIPTIONS

SECTION 1: DEGREE OFFERED

Historically, the social work profession has focused on the well-being of people as well as the social structures and conditions that prevent a just and equal society. The Bachelor of Social Work Program is a professional program that is designed to prepare generalists who are knowledgeable of social work theories, and who can demonstrate skills related to practice, research, and social policy analysis. Students and graduates undertake these activities in accordance with the Canadian Association of Social Workers' Code of Ethics. The program is accredited by the Canadian Association for Social Work Education.

Graduates have competence for entry-level social work positions in a variety of different practice areas. The program is based on the principles of social justice, human rights, and anti-oppression, with an emphasis on critical thinking and understanding the structural roots of social problems. Foundation courses are grounded in critical theoretical frameworks including Indigenous worldviews, feminism, and anti-racism.

The program is offered at multiple geographic sites including the Fort Garry Campus, the William Norrie Centre (Inner-city), the Université de Saint-Boniface, and Thompson, Manitoba (Northern Social Work Program) as well as by Distance Delivery.

1.1 Program

Degree	*Years to Complete	*Total Credit Hours
Bachelor of Social Work (Full-Time)	4	123
Bachelor of Social Work (Concentrated)**	2	123
Bachelor of Social Work (Part-Time)	Up to 9	123

*This includes one year (30 credit hours) of prior university study.
 **Please see 4.1 B

1.2 Interfaculty Option in Aging

The Interfaculty Option in Aging is offered by the following faculties: Arts, Nursing, Kinesiology and Recreation Management, and Social Work. To complete the option, students will complete each of the following requirements: a) 2610* Health and Physical Aspects of Aging; b) 2650* The Social Aspects of Aging; c) one field placement SWRK 3150 or SWRK 4120 in aging d) one Field Focus of Social Work Practice course (SWRK 4200 or SWRK 4300) in aging. Students are encouraged to take courses from the participating units other than Social Work.

NOTE: *These courses are offered on a rotational basis by participating units.

Upon the successful completion of these requirements, a notation will be added to the student's transcript. For further information on the Interfaculty Option in Aging, please refer to the Faculty's website umanitoba.ca/faculties/social_work

SECTION 2: ADMISSION REQUIREMENTS

The following is a summary of the admission requirements to the Bachelor of Social Work program. Equivalent academic courses completed at recognized universities elsewhere will be considered. All admission requirements, as well as application deadline dates and forms, are included in an applicant information bulletin that is available from the Admissions Office, Enrolment Services, 424 University Centre; this information is also posted on the university's website.

2.1 Admission to the Fort Garry Social Work Program

Admission Requirements

Completion of 30 credit hours of university level courses which are acceptable to the University of Manitoba.

The written English and mathematics requirements are recommended to be completed as part of University 1. If these requirements are not met in University 1 (i.e. the first 30 credit hours) they must be completed prior to graduation.

Minimum GPA for consideration for all applicants (including Educational Equity applicants): 2.5

A Criminal Record Statement and a Child Abuse Registry (CAR) check (for a record of those registered as an offender) must be completed following selection.

Selection criteria: Two applicant pools are created; 60% of all spaces are allocated to applicants with the highest grades, and 40% of all spaces are allocated to applicants based on the Education Equity initiative.

Concentrated Program

All applicants wishing to complete the program in two years of full-time study must have completed a minimum of 51 credit hours of university study (which are acceptable to the University of Manitoba) prior to admission to the BSW program. Applicants wishing to complete the degree through the two year concentrated program must have an Adjusted Grade Point Average of 3.00 from all previous university study. In the event that three credit hours in each of written English and mathematics have not been completed as part of the 51 credit hours of previous university study, they must be completed within the first year of the two-year program.

The deadline for submission of applications in March 1st (for September start date).

The Selection Process

The selection process is designed to accomplish three objectives: to treat applicants fairly and equitably, to provide the diversity of practitioners required by the profession, and to provide for an efficient admissions process. The faculty selects applicants to the Fort Garry Campus B.S.W. program through two categories as described below.

Academic Achievement Category: 60% of all available positions are awarded on the basis of highest Adjusted Grade Point Average.

Educational Equity Initiative: 40% of all available positions are allocated to those eligible for inclusion in one or more of the Educational Equity Priority Groups and awarded on the basis of highest Adjusted Grade Point Average.

The purpose of the Educational Equity initiative is to achieve equality in professional education so that no person shall be denied educational opportunities or benefits for reasons unrelated to ability. In the fulfillment of this goal, the aim is to correct the conditions of disadvantage in professional education experienced by Canadian Aboriginal peoples, persons with disabilities, LGBTTOQ, immigrants and refugees to Canada, and persons who are, because of their race or colour, a visible minority in Canada. Giving effect to the principle of educational equity means more than treating persons in the same way; it also requires special measures and the accommodation of difference. Details of the Educational Equity initiative are provided in the application information bulletin.

Students in the Fort Garry Social Work Program must successfully meet the graduation criteria set for all BSW students in the Faculty of Social Work.

2.2 Admission to the Inner City Social Work Program

The Inner City Social Work (B.S.W.) ACCESS Program at the William Norrie Centre is an inner-city extension of the Faculty of Social Work. Students admitted to the centre are accepted directly into a four-year B.S.W. program, and do not require prior university study.

The objective of this program is to enhance the accessibility of the B.S.W. program by preparing as social workers those mature students who have had inner-city or similar social service experience, but who lack the normal university entrance requirements. Special academic and social support is provided to students admitted to the program. Staff assists candidates in arranging funding resources.

All students complete a total of 123 credit hours of university study. Full time or part-time study is offered.

Admission to the centre is limited. Applicants to the full-time program must be 21 years old, low income, and residents of Winnipeg at the time of application. The deadline date for submitting applications is early February.

A part-time B.S.W. Access program is offered to individuals who meet the above criteria, work for a Winnipeg or Aboriginal agency, and/or have two years employment in human service fields. Deadline for applications for part-time studies is mid January.

Students at the centre must successfully meet the graduation criteria set for all BSW students in the Faculty of Social Work. For further information, contact: Inner City Social Work Program, 485 Selkirk Avenue, Winnipeg, Manitoba, R2W 2M6; telephone: (204) 668-8160.

2.3 Admission to the Northern Social Work Program

The Northern Social Work (B.S.W.) ACCESS program, based in Thompson Manitoba, is an extension of the Fort Garry Faculty of Social Work. Students are admitted directly into a four-year B.S.W. program and do not require prior university study.

All students complete a total of 123 credit hours of university study. Full time or part-time study is offered.

The objective of this program is to enhance the accessibility of the B.S.W. program by preparing as social workers mature students who, without the support of the program, would be unable to successfully complete a university degree due to lack of financial resources, lack of academic qualifications and remote location. Special academic and personal support is provided to students admitted to the program, as well as some assistance in arranging funding resources.

ACADEMIC CALENDAR 2015-2016

Students who have completed 30 credit hours of university level courses and have a minimum GPA of 2.5 may apply as External Students.

Admission to the Northern Social Work program is limited. Applicants must meet specified northern residency requirements. The deadline date for submitting applications is March 1 (classes begin in September).

Students in the Northern Social Work program must successfully meet the graduation criteria set for all BSW students in the Faculty of Social Work. For further information, contact the Faculty of Social Work at Thompson, 3 Station Road, Thompson, Manitoba, R8N 0N3; telephone: (204) 677-1450

2.4 Admission to the Distance Delivery Social Work Program

The Faculty of Social Work is committed to the accessibility of social work education. The faculty has extended the concept of accessibility to include geographical accessibility through the delivery of the B.S.W. based on two approaches: (1) to individuals by means of an online study program and (2) to community-based groups using the cohort method.

The Distance Delivery B.S.W. program is intended to encourage individuals who are employed in the social services and living outside of Winnipeg, but who may not have had the opportunity to pursue professional social work education.

All students complete a total of 123 credit hours of university study. Full time or part-time study is offered.

Delivery methods for the online study component of the program include a combination of webconferences and online courses. Access to computer, high speed internet and headset with microphone is required.

All course examinations are scheduled and arranged by the university's Registrar's Office to take place in the student's community.

Delivery of the program to the community-based cohorts utilizes the face-to-face delivery with the option of a combination of face-to-face, webconferences, and online study.

Applicants to the Distance Delivery B.S.W. program must meet all three of the following requirements to be admitted into the program:

- Minimum of 30 credit hours of university level courses which are acceptable to the University of Manitoba, with a minimum GPA of 2.5 for consideration of all applicants, including Educational Equity applicants; and
- 1 year (1750 hours) of work experience, within the last 5 years, in the social services; and
- Residency outside of the city of Winnipeg.

Complete and detailed admissions information is available on our web site at umanitoba.ca/faculties/social_work or by calling the Faculty of Social Work Distance Delivery BSW Student Advisor at (204) 474-6070.

The deadline for submission of applications is March 1st (for September start date).

Students in the Distance Delivery B.S.W. program must successfully meet the graduation criteria set for all BSW students in the Faculty of Social Work.

2.5 The Université de Saint-Boniface

The Université de Saint-Boniface, in conjunction with the University of Manitoba, now offers a French language Bachelor of Social Work program. Please contact Program Coordinator at 237-1818 ext. 447 for more information.

2.6 Special Student Admission

A Special Student in Social Work is one who wishes to take undergraduate Social Work courses with no intentions of proceeding to a B.S.W. degree at the present time. In addition, the student is not currently registered at any other university. Students seeking admission as Special Students may request information from the Faculty of Social Work, 521 Tier Building; telephone (204) 474 7050. Criteria for admission are:

- Successful completion of a minimum of 30 credit hours of university level courses which are acceptable to the University of Manitoba;

and

- Adjusted Grade Point Average of 2.5 (C+).

Students are reminded they must submit an official transcript (one bearing the university seal) to the BSW Student Advisor along with the application form on their appointment day (University of Manitoba students need only provide a student history). An application fee applies. Once admitted as a Special Student, students will:

- Be limited to completion of nine credit hours of required social work courses plus SWRK 1310 and SWRK 2080.
- Be prohibited from adding courses in the Faculty of Social Work until August (refer to Aurora Student for specific dates).
- Have all courses classified as "SS," which means that grades for these courses may not generate a Grade Point Average.

Students Enrolled in other Faculties/Schools

Students currently enrolled in other faculties or schools at the University of Manitoba may register for Social Work courses provided they have completed a minimum of 30 credit hours of university study and achieved a minimum Cumulative Grade Point Average of 2.5. These students will also be limited to completion of SWRK 1310 and SWRK 2080 plus nine credit hours of required social work courses.

Courses available to Special Students and students enrolled in other faculties and schools at the University of Manitoba:

Required Social Work Courses:

SWRK 1310	Introduction to Social Welfare Policy Analysis
SWRK 2080	Interpersonal Communication Skills
SWRK 2090	Human Behaviour and Social Work Practice
SWRK 2110	Emergence of the Canadian Welfare State
SWRK 2130	Comparative Social Welfare Systems
SWRK 3130	Contemporary Canadian Social Welfare
SWRK 3100	Systematic Inquiry in Social Work
Elective Social Work Courses:	
SWRK 2050	Community & Organizational Theory
SWRK 2070	Small Group Dynamics
SWRK 4050	Selected Topics in Social Work
SWRK 4080	Current Issues in Social Welfare

NOTE: Special and non-Social Work students are required to abide by the same pre- /corequisite policy that applies to B.S.W. students.

SECTION 3: FACULTY ACADEMIC REGULATIONS

All students are asked to note that some academic policies and regulations are under review and are subject to change. The provisions of the chapter, General Academic Regulations and Requirements, and the chapter, University Policies, apply to all students. In addition, the Faculty of Social Work has regulations and requirements, published below, that apply specifically to its students.

3.1 Prerequisite and Corequisite Policy

The faculty has established a set of pre-/corequisite requirements to assist students in planning their program of study. All students must abide by the pre- and corequisite requirements for all courses. Any exceptions to the pre- and corequisite policy **MUST** be approved by the Committee on Academic Standings prior to course registration.

If a student successfully completes a course for which a pre/co-requisite requirement has not been satisfied, the grade from this course will be changed to RW – Required to Withdraw from the course.

3.2 Residence Requirements for a Degree Program

The general university residence requirement applies to the Faculty of Social Work.

3.3 Scholastic Progress

Except in circumstances covered in the official regulations referred to below, clear standing in the faculty requires both the Degree Grade Point Average and Subject Grade Point Average of 2.5 (C+) at the end of each term. A minimum grade of 2.0 (C) is required for all Social Work courses. The passing grades for electives taken in other faculties or schools are those required by the faculties or schools concerned. Complete statements of the regulations governing scholastic progress in the Faculty of Social Work are published in the B.S.W. Student Handbook. Students wishing to do so may consult the policy governing scholastic progress as written in the B.S.W. Student Handbook with the Chair of the Committee on Academic Standings, or the Dean. In the event of any question or dispute, this set of regulations shall be considered the official version. Directors of off-campus programs and the Student Services and Admissions/ Advising Office at Fort Garry Campus will advise students on issues concerning scholastic progress.

3.4 Professional Unsuitability Bylaw

The Senate has approved a bylaw granting authority to the faculty to require a student to withdraw for reasons of professional unsuitability (see the chapter, General Academic Regulations and Requirements). The bylaw is published in the B.S.W. Student Handbook. Students are reminded of their obligation to be familiar with all regulations governing their continued progress in the program.

3.5 Dean's Honour List

BSW student eligibility for the Dean's Honour List is considered on a term by term basis. To qualify for the Dean's Honour List a student must:

- Have completed a minimum of 9 credit hours in the term under consideration, of which a minimum 6 credit hours must be with a standard grade.
- and
- Have achieved a minimum Term GPA of 3.6

Pass/Fail courses are included in the credit hour count.

3.6 Appeal of Grades

The general university policy for appeal of assigned grades applies to the Faculty of Social Work. As well, the Faculty Council has approved a Social Work policy on the appeal of assigned grades and term work. The policy is outlined in the B.S.W. Student Handbook. The Faculty Council has established the Academic Standing Appeals Committee to deal with these matters.

3.7 Distance Courses Open to Fort Garry Campus and Inner City Social Work Students

B.S.W students who are enrolled in the Fort Garry Campus or Inner City Social Work programs may take up to six credit hours of selected social work courses through Distance Delivery. The following courses are excluded: SWRK 2080, SWRK 3100, SWRK 3140, SWRK 4200 and SWRK 4300. If any Fort Garry Campus or Inner City Social Work program students are enrolled in the above mentioned practice courses they will be withdrawn.

3.8 Opting Into Field and Practices of the Two-Year Plan

Students may apply for "opt-in" by fulfilling the following conditions:

- Consult with and submit written request for "Opt-in" to the Coordinator of Student Services and Admission/Advising Office and Field Coordinator no later than February 1.
- Successfully complete all Social Work courses required by the end of Winter term prior to opt-in year (except for SWRK 4210 Feminist Perspectives on Social Work Practice, SWRK 4220 Aboriginal People and Social Work Practice, SWRK 4200 Field Focus of Social Work Practice 1, SWRK 4300 Field Focus of Social Work Practice 2, SWRK 3150 Field Instruction 1 and SWRK 4120 Field Instruction 2) and
- Successfully complete all elective courses (including written English and mathematics requirements) by the end of Winter term prior to opt-in year.
- Achieve a minimum Degree Grade Point Average of 3.00 at point of opting in.
- Achieve a minimum Subject Grade Point Average of 3.00 at point of opting in.

Final approval to opt-in is also based on faculty resources: space availability in SWRK 4210 Feminist Perspectives on Social Work Practice and SWRK 4220 Aboriginal People and Social Work Practice during Summer Session; space availability in SWRK 4200 Field Focus of Social Work Practice 1 and SWRK 4300 Field Focus of Social Work Practice 2 courses in Fall and Winter terms; and the availability of concentrated field placements.

3.9 Courses Open to Challenge for Credit

The Faculty of Social Work accommodates those students who are qualified and who can demonstrate acceptable knowledge and skill, by allowing them to challenge certain Social Work courses. They are:

SWRK 2080 Interpersonal Communication Skills

SWRK 3100 Systematic Inquiry in Social Work

SWRK 3130 Contemporary Canadian Social Welfare

Information on the procedures for challenge is available in the B.S.W. Student Handbook. The dates at which courses may be challenged are given in the academic schedule of the Undergraduate Calendar.

3.10 Credit for Social Work Courses Taken at Other Universities

The Faculty of Social Work supports the principle of granting credit for social work courses taken within the last nine years in accredited programs leading to professional social work qualification. Information on granting credits for social work courses is available in the B.S.W. Student Handbook.

The Faculty of Social Work has articulated agreements with specific diploma and certificate programs. Please consult the B.S.W. Student Handbook for detailed information.

SECTION 4: PROGRAM AND GRADUATION REQUIREMENTS

When planning your workload, allow approximately two hours of study/ reading time for each hour of class time. It is also advisable to schedule time to use the library. The faculty will offer as many evening courses as possible each year.

4.1 Curriculum Outline

A) Three-Year Plan

This plan allows a Fort Garry Campus student who has completed 30-50 credit hours of general university study prior to admission, to combine Social Work professional courses with other university courses. It requires three years of full-time study, after admission to the faculty, to complete the requirements for the B.S.W. degree. A student who has already completed the 51 credit hours of general university study which are acceptable to the University of Manitoba may also register for this program ignoring the elective requirements.

Three-Year Plan Example

Course No.	Course Name	Credit Hours	Year
SWRK 1310	Introduction to Social Welfare Policy Analysis	3	1
SWRK 2080	Interpersonal Communication Skills	3	1
SWRK 2090	Human Behaviour and Social Work Practice	6	1
SWRK 3140	Introduction to Social Work Practice	3	1
SWRK 3150	Field Instruction 1	12	2
SWRK 4200	Field Focus of Social Work Practice 1	6	2
SWRK 4120	Field Instruction 2	12	3
SWRK 4300	Field Focus of Social Work Practice 2	6	3

SWRK 2110	Emergence of the Canadian Welfare State	3	1
	or		
SWRK 2130	Comparative Social Welfare Systems	3	1
SWRK 3100	Systematic Inquiry in Social Work	3	1
SWRK 3130	Contemporary Canadian Social Welfare	3	2
SWRK 4210	Feminist Perspectives on Social Work Practice	6	2 or 3
SWRK 4220	Aboriginal People and Social Work Practice	6	2 or 3

NOTES:

- 1) SWRK 1310 and SWRK 2080 are open to University 1 students,
 - 2) All students must take the foundation courses very early in the program. Failure to do so may restrict progression through the program.
 - 3) See course descriptions (Section 5) for a complete list of pre-/corequisites.
 - 4) Students must take SWRK 1310 before proceeding to SWRK 2110, SWRK 2130, and SWRK 3130. In addition, SWRK 1310, SWRK 2080 and SWRK 2090 are pre- or corequisite to SWRK 3140.
 - 4) All foundation courses (SWRK 1310, SWRK 2080, SWRK 2090 and SWRK 3140) are pre-requisite to SWRK 4200, SWRK 4300, SWRK 4210, SWRK 4220, SWRK 3150 and SWRK 4120. In addition, SWRK 3150 Field Instruction 1 is pre-requisite to SWRK 4120 Field Instruction 2.
 - 6) See Aurora Class Schedule for a list of SWRK 4200 and SWRK 4300 courses.
 - 7) Students must take one section of SWRK 4200 and one section of SWRK 4300. Each section is anchored in a different field or focus of social work practice. It is recommended that students take SWRK 4200 and SWRK 4300 courses that corresponds with their field placement area of practice.
 - 8) Students must take SWRK 4200 concurrently with SWRK 3150 and SWRK 4300 concurrently with SWRK 4120. If a student withdraws from SWRK 4200, he/she must also withdraw from SWRK 3150 and if a student withdraws from SWRK 4300, he/she must also withdraw from SWRK 4120. As well, if a student withdraws from SWRK 3150 he/she must withdraw from SWRK 4200 and if a student withdraws from SWRK 4120 he/she must withdraw from SWRK 4300. Students, who fail to withdraw from the corequisite course, will be withdrawn.
 - 9) Student admitted after '97-'98 must complete 3 credit hours of written English and 3 credit hours of mathematics as part of first 30 credit hours (unless completed prior to admission).
 - 10) This plan assumes that students do not take courses in the summer.
- Year 1 = 21 Credit hours social work courses 6 Credit hours electives
 Year 2 = 27 Credit hours social work courses 6 Credit hours electives
 Year 3 = 24 Credit hours social work courses 9 Credit hours electives

Planning Chart for Elective Courses for Three-Year Program

Required Electives	Credit Hours	Year
Admitted on basis of	30	1
Unallocated transfer		
Electives to be completed		
Written English (W)		1
Mathematics (M)		1

B) Two-Year Plan (Concentrated Program) – Fort Garry Campus

Fort Garry Campus students who have completed 51 credit hours of general university study prior to admission to the B.S.W. program, and have maintained a minimum Adjusted Grade Point Average (A.G.P.A.) of 3.00, are eligible for the two year plan (Concentrated Program). If a student has completed the 51 credit hours of general university study which are acceptable to the University of Manitoba, but does not have the required 3.00 A.G.P.A., or prefers a more extended time period, that student can register for either the three-year plan or the part-time plan.

Students eligible to register for the concentrated program may choose to do so at point of initial registration following admission only.

If any of the required social work courses were part of 51 credit hours completed prior to admission to the BSW program, they will have to be substituted with elective courses after admission to the BSW program. Any outstanding elective courses, including written English and mathematics requirements, must be completed by the end of Winter term in the first year of the BSW Concentrated Program.

Students must maintain a Degree Grade Point Average (D.G.A.P.) and Subject Grade Point Average (S.G.P.A.) of a minimum 3.00 at the end of each term to remain in the Concentrated Program. In an instance where one or both of these requirements are not met, the student's status will be changed from Concentrated to Regular.

Students planning on completing their program in two years must follow the structure outlined below (which requires completing at least 12 credit hours, including SWRK 4210 and SWRK 4220, during the summer).

Two-Year Plan

Year 1 (September - August)		
Course No.	Course Name	Credit Hours
SWRK 1310	Introduction to Social Welfare Policy Analysis	3
SWRK 2080	Interpersonal Communication Skills	3
SWRK 2090	Human Behaviour and Social Work Practice	6
SWRK 2110	Emergence of the Canadian Welfare State	3
	or	
SWRK 2130	Comparative Social Welfare Systems	3
SWRK 3100	Systematic Inquiry in Social Work	3
SWRK 3130	Contemporary Canadian Social Welfare	3
SWRK 3140	Introduction to Social Work Practice	3
SWRK 4210	Feminist Perspectives on Social Work Practice	6
SWRK 4220	Aboriginal People and Social Work Practice	6
Year 2 (September - May)		
SWRK 3150	Field Instruction 1	12
SWRK 4200	Field Focus of Social Work Practice 1	6
SWRK 4120	Field Instruction 2	12
SWRK 4300	Field Focus of Social Work Practice 2	6
Total credit hours		72

Note: See course descriptions (Section 5) for a complete list of pre/co requisites.

C) The Part-Time Plan

Please note that it is possible to pursue the Bachelor of Social Work degree through a program of part-time study. Part-time students must complete all the required social work and elective courses within nine years of their admission to the faculty.

4.2 Field Instruction

Field instruction provides students with an opportunity to engage, as beginning practitioners, in the processes of social work assessment, planning, intervention, evaluation and integration of theory from classroom to placement setting. Field students are placed in a variety of programs and agencies. These include school settings, policy placements, probation services, child and family services, immigrant and refugee services and health and disability settings.

B.S.W. students are required to register for two field placement courses, SWRK 3150 and SWRK 4120. Both courses are graded on a pass/fail basis. Students must successfully complete all prerequisite courses, have a Social Work (Subject) Grade Point Average of 2.50 and be in the appropriate year of their degree plan prior to commencing in field practicum. Students wishing to divert from their degree plan should consult with their Academic Advisor and/or the Coordinator of Student Services and Admissions/Advising Office before February 1. Both field practicum courses have a corequisite course, which is SWRK 4200: Field Focus of Social Work Practice 1 for SWRK 3150: Field Instruction 1. SWRK 4300: Field Focus of Social Work Practice 2 is the corequisite course for SWRK 4120: Field Instruction 2. The Field Focus course selected should correspond as closely as possible to the field placement's area of practice.

Field Instruction is provided by university-appointed, agency-based field instructors who have knowledge, skills, and expertise in social work practice. Field liaisons are also appointed and available to provide support to field students and field instructors throughout the academic session, as required. Students must meet all field requirements prior to commencing field placement, such as immunization policies, Child Abuse Registry Checks, Vulnerable Sector Record Check and Criminal Record Checks, as determined and specified by the respective field agency. Students are expected to demonstrate initiative and participate actively in all aspects of field placement. If a student is unable to attend field placement due to illness or agency closure, he/she must make up the field hours for that particular day.

The Field Coordinator is the Instructor of Record for SWRK 3150 and SWRK 4120. While the Faculty is responsible for assisting in securing a reasonable placement for the student (with the exception of Distance Delivery students who secure their own placements), it is important to note that a student is not guaranteed placement in a field setting on the basis of completion of prerequisite courses and/or submission of a Field Placement Request form. Students must demonstrate readiness for practice in the process of securing a placement. If concerns are raised regarding the student's behaviour, judgment or practice and/or if the student demonstrates difficulty in his or her attempts to attain confirmation as a result of his or her performance in the field interview process, the Field Coordinator and Associate Dean of Undergraduate Programs will determine what additional steps may be taken to resolve this matter, or may determine the student is unprepared for meeting the requirements of field placement at this time.

Students are allowed one voluntary withdrawal from the course SWRK 3150: Field Instruction 1 and one voluntary withdrawal from the course SWRK 4120: Field Instruction 2. If a student withdraws from SWRK 3150, he/she must withdraw from the corequisite SWRK 4200 and if a student withdraws from SWRK 4120, he/she must withdraw from corequisite SWRK 4300. A student with more than one voluntary withdrawal from SWRK 3150 or SWRK 4120 shall be required to withdraw from the Faculty.

A student who has two or more years of social work employment experience in the past five years may apply to register for SWRK 3152, Prior Learning Assessment and Recognition (PLAR), in lieu of his or her first field placement, SWRK 3150. Information regarding PLAR can be found at http://umanitoba.ca/faculties/social_work/future/564.html.

Fort Garry and Inner City Social Work Programs

Prior to applying for field placement, students are expected to participate in the Everything you wanted to know about Field workshop and The Resumé and Interview Preparation workshop offered at Fort Garry and Inner City programs prior to Field Information Day. Field Placement Request forms are available during the winter term at Field Information Day and/or by contacting the Field Program Assistant or Field Coordinator. Students requesting field placement during the regular academic session (September – April) or summer session (May to August) must submit a Field Placement Request form and resumé by March 1st. Field placements will not be secured for students who do not submit their request, along with all required documentation, by the aforementioned deadline date.

Fort Garry students in the regular, three-year program who are registered in SWRK 3150 or SWRK 4120 attend field placement two days per week (15 hours) during Fall and Winter terms. Inner City campus students registered in SWRK 3150 or SWRK 4120 attend field placement two days per week during first term and three days per week during second term. Fort Garry campus students in the Concentrated Program attend field placement four days per week (30 hours) during Fall and Winter terms, participating in one field placement only. Students contemplating switching to a concentrated field placement are required to make themselves aware of eligibility requirements of the Concentrated Program and to contact the Coordinator of Student Services and Admissions/Advising Office for confirmation of their eligibility no later than February 1.

Students deemed eligible for field are referred by the Field Coordinator to an appropriate field placement agency for consideration of an interview. Students who are accepted and offered field placement will receive e-mail placement confirmation, including key dates and relevant field information, prior to term commencement. Every effort will be made to place students registering in SWRK 4120, final field placement, in a setting related to one of their field focus areas of interest. However, final authority for field placement referral and confirmation rests with the Field Coordinator. Decisions may be based on availability of agency openings as well as the educational needs of students.

All students registered in Field Instruction courses (SWRK 3150 and SWRK 4120) are required to attend field orientation on Tuesday, September 2, 2014 and Wednesday, September 3, 2014. As attendance at field orientation is mandatory, field students are not required to attend classes on September 2nd and 3rd. Information regarding field orientation will be e-mailed to each field student in their placement confirmation letter. Students requiring additional information may contact the Field Program Assistant at 204-474-6171 or the Field Coordinator at 204-474-8300.

Northern Bachelor of Social Work Program

Students in the Northern Bachelor of Social Work program in Thompson work closely with the Field Coordinator in preparing for and securing an appropriate field placement. Students are required to complete a total of 490 field hours including 450 hours in placement and 40 hours of integrated seminar in order to successfully complete SWRK 3150 and SWRK 4120. Students requiring additional information may contact the Field Coordinator at 204-677-1456.

Distance Delivery Social Work Program

Students in the Distance Delivery BSW degree program are responsible for securing their own field placements. Field Application Forms are available online at http://umanitoba.ca/faculties/social_work/programs/distance/602.html

Students requesting field placement during:

- Fall/Winter (September to April) Students must attend an Orientation to Field: Are You Thinking About Field? Session offered throughout the months of March & April and must submit a completed Field Application Form by June 1st;
- Winter/Summer 1 (January to July) Students must attend an Orientation to Field: Are You Thinking About Field? Session offered throughout the months of August & September and must submit a completed Field Application Form by October 1st; and
- Summer (May to August) Students must attend an Orientation to Field: Are You Thinking About Field? Session offered throughout the months of December & January and must submit a completed Field Application Form by February 1st.

Field placements will not be approved for students who do not submit the completed Field Application Form by the deadline date.

Students completing registered in SWRK 3150 or SWRK 4120 in Fall/Winter terms (September to April) and Winter/Summer 1 terms (January to July) attend field placement two days or 15 hours per week for a total of 420 hours. Students registered in SWRK 3150 or SWRK 4120 in the Summer term (May to August) attend field placement four days or 30 hours per week for a total of 420 hours.

Final approval for field placement rests with the Distance Delivery Field Coordinator. Decisions may be based on availability of agency openings as well as the educational needs of students.

All students registered in Field Instruction courses (SWRK 3150 and SWRK 4120) are required to attend Field Instruction Sessions offered through AdobeConnect. Attendance at Field Instruction Sessions is mandatory. Students requiring information may contact the Distance Delivery Administrative Assistant at 204-474-9112 or the Distance Delivery Field Coordinator at 204-474-6812.

Accelerated Field – Inner City Social Work Program and Distance Delivery Social Work Program

Accelerated Field allows eligible students to undertake Field Instruction I (SWRK 3150) and Field Instruction 2 (SWRK 4120) in one field placement between September and April. Field Instruction includes four days of placement per week for a total of 840 hours. Students who are approved to take Accelerated Field must also register for two corequisite Field/Focus of Social Work Practice (SWRK 4200 and SWRK 4300) courses.

Inner City Social Work Program students and Distance Delivery Program students who have completed 75 credit hours including the four foundation courses (SWRK 1310, SWRK 2080, SWRK 2090 and SWRK 3140) and have maintained a minimum Degree Grade Point Average (D.G.P.A.) of 3.0 and Subject Grade Point Average (S.G.P.A.) of 3.0 are eligible to apply for Accelerated Field. Inner City Social Work Program (ICSWP) students in request of Accelerated Field must submit a written request to the Director of ICSWP requesting a transfer from regular to Accelerated Field placement. If approved, written documentation from the Director must be attached to the student's Field Request Form, due on March 1st. Distance Delivery Program students in request of Accelerated Field must attach to their Field Placement Request Form, a written request to the Coordinator of Distance Delivery Program. Requests and approvals must be handed in on time and are due at least 90 calendar days prior to the term that the student will commence.

All students registered in Distance Delivery Accelerated Field Instruction courses (SWRK 3150 and SWRK 4120) are required to attend Field Instruction Sessions offered through AdobeConnect. Attendance at Field Instruction Sessions is mandatory. Students requiring information may contact the Distance Delivery Administrative Assistant at 204-474-9112 or the Distance Delivery Field Coordinator at 204-474-6812.

4.3 Requirements for Graduation

Eligibility for graduation is contingent upon:

The successful completion of 72 credit hours of required Social Work courses; successful completion means attaining a minimum grade of "C" in all Social Work courses and a minimum Subject Grade Point Average (S.G.P.A.) of 2.50 (C+).

The successful completion of 51 credit hours of electives. Students admitted after 1997/98, are required to successfully complete three credit hours of written English and three credit hours of Mathematics. The passing grades for electives taken in other faculties or schools are those required by the faculties or schools concerned. A minimum of "C" must be attained in Social Work electives. The minimum Degree Grade Point Average (D.G.P.A.) required for graduation is also 2.50 (C+).

Total credit hours required for a B.S.W. are 123 (51 credit hours of electives + 72 credit hours of required Social Work courses).

Student Responsibilities

It is the student's responsibility to be familiar with all the requirements of the B.S.W. degree, to ensure compliance with degree program requirements, including prerequisite requirements, and to understand all relevant regulations, policies and practices. The final completion of degree requirements is the student's responsibility.

SECTION 5: COURSE DESCRIPTIONS

Course Descriptions-1000 Level

SWRK 1310 Introduction to Social Welfare Policy Analysis Cr.Hrs. 3

(Formerly 047.131) Examination of social welfare policy as the end product of ideologies. Introduction of elements of ideology and the comparison of competing ideological systems. The relationship of economic, political and ethical views of society and their manifestations in societal responses to human need and social services. Students may not hold credit for both SWRK 1310 (or 047.131) and the former 047.130.

Course Descriptions-2000 Level

SWRK 2050 Community and Organizational Theory Cr.Hrs. 3

(Formerly 047.205) Deals with concepts such as conflict and power which relate social work practice to the nature of secondary human relationships. These are applied to the dynamics within and between communities and organizations.

SWRK 2070 Small Group Dynamics Cr.Hrs. 3

(Formerly 047.207) Group norms, values, and goal as they relate to decision-making and communication patterns in groups. Membership roles and leadership styles are related to group development and group functioning.

SWRK 2080 Interpersonal Communication Skills Cr.Hrs. 3

(Formerly 047.208) A basic core of interpersonal skills for communicating effectively and for establishing and maintaining relationships in one-to-one and group situations. Emphasis is on experiential learning using a variety of techniques.

SWRK 2090 Human Behaviour and Social Work Practice Cr.Hrs. 6

(Formerly 047.209) Students are introduced to a broad range of theories and will develop an understanding of how people and environments reciprocally affect each other. Particular emphasis is placed on understanding how gender, race, ethnicity, socioeconomic factors, age, ability, and sexual orientation contribute to and influence human behaviour throughout the lifespan.

SWRK 2110 Emergence of the Canadian Social Welfare State Cr.Hrs. 3

(Formerly 047.211) An examination of the emergence of the Canadian welfare state from its various colonial inheritances to the Canada Assistance Plan. Social, political, economic, religious, geographical, demographic and cataclysmic factors influencing the development of the welfare state are examined and analyzed. Prerequisite: SWRK 1310 (or 047.131). Students may not hold credit for both SWRK 2110 (or 047.211) and the former 047.130.

SWRK 2130 Comparative Social Welfare Systems Cr.Hrs. 3

(Formerly 047.213) The welfare systems of three modern societies are examined and compared. Economic, political, social, religious, geographical, demographic and cataclysmic factors influencing the development of the various models of social provision are analyzed for their significance to the Canadian welfare system. Prerequisite: SWRK 1310 (or 047.131). Students may not hold credit for both SWRK 2130 (or 047.213) and the former 047.130.

SWRK 2650 The Social Aspects of Aging Cr.Hrs. 3

(Formerly 047.265) An examination of the social aspects of aging. Emphasis on understanding the aging process as a life transition involving adaptation through interaction with social and physical environments. Students may not hold credit for REC 2650 (or 123.265) and IDES 2650 (or 051.265) or HMEC 2650 (or 028.265) or SWRK 2650 (or 047.265). (A required Option in Aging course)

Course Descriptions-3000 Level

SWRK 3100 Systematic Inquiry in Social Work Cr.Hrs. 3

(Formerly 047.310) Relates systematic methods of scientific inquiry to social work practice; theory building for practice; information collection; descriptive data for decision-making, understanding technical research material, introduction to issues of research design.

SWRK 3130 Contemporary Canadian Social Welfare Cr.Hrs. 3

(Formerly 047.313) An examination of social welfare in Canadian society, leading to an evaluation of present approaches in the light of changing economic and social conditions and changing needs. Prerequisite: SWRK 1310 (or 047.131). Students may not hold credit for both SWRK 3130 (or 047.313) and the former 047.301.

SWRK 3140 Introduction to Social Work Practice Cr.Hrs. 3

(Formerly 047.314) Introduces students to ecological and other generalist based practice frameworks and the role of professional social workers. Course emphasizes values and knowledge in context of a rational approach to problem solving which includes problem definition, assessment, contracting, intervention and evaluation. Pre- or corequisite SWRK 1310 (or 047.131), SWRK 2080 (or 047.208) and SWRK 2090 (or 047.209).

SWRK 3150 Field Instruction 1 Cr.Hrs. 12

(Formerly 047.315) A first educationally directed field experience in which the student will have the opportunity to assume responsibility for social work engagement, assessment, planning, intervention and evaluation, integrating theory from class. While Access Programs may require additional field hours, 420 hours is the minimum required for all BSW students. This time commitment includes involvement with the agency in planning for, and engaging in, practice activity, and evaluation of performance. It also includes educational contact time with the field instructor in individual and/or group sessions. Subject to satisfactory completion and reports, students will be graded on a pass/fail basis. Prerequisites: SWRK 1310 (or 047.131), SWRK 2080 (or 047.208), SWRK 2090 (or 047.209), and SWRK 3140 (or 047.314), and consent by course instructor (Field Coordinator). Corequisite: 6 credit hours of SWRK 4200 (or 047.420).

SWRK 3152 Field Instruction 1 Cr.Hrs. 12

PLAR(SWRK 3152) is a self-study course in which the student (upon acceptance) will have the opportunity to demonstrate basic knowledge as required of all students in first field placement. Students will be required to demonstrate learning in social work engagement, assessment, planning, intervention and evaluation, as well as integration of values and ethics and theoretical frameworks as attained in pre-requisite foundation courses. Applicants who have been accepted and register in SWRK 3152 in lieu of first field placement, SWRK 3150, will be required to complete workbook assignments on or before designated due dates and to contact PLAR Assessor when additional clarification or support is required. Subject to satisfactory completion of assignments and reports, students will be evaluated and graded on a pass/fail basis. Prerequisites: SWRK 1310, SWRK 2080, SWRK 2090, SWRK 3140. Corequisites: SWRK 4200. Students may not hold credit for both SWRK 3152 and SWRK 3150.

Course Descriptions-4000 Level

SWRK 4050 Selected Topics in Social Work Cr.Hrs. 3

(Formerly 047.405) Directed readings or concentrated study in some aspect of social service which is of interest to the student. Students must contract with an instructor prior to registration. Prerequisite: written consent of instructor.

SWRK 4070 Social Problem and Social Work Practice Seminar Cr.Hrs. 3
(Formerly 047.407) In-depth study of the problem area, exploration of the ways other disciplines relate to the problem, and strengthening of interventive abilities of the student. Prerequisite: SWRK 3040 (or 047.304) / SWRK 3120 (or 047.312), SWRK 4200 (or 047.420) / SWRK 3150 (or 047.315) or written consent of instructor.

SWRK 4080 Current Issues in Social Welfare Cr.Hrs. 3
(Formerly 047.408) Study of a particular area of social welfare to improve policies and practices. Students may select one seminar from several which are offered. These may vary from year to year.

SWRK 4120 Field Instruction 2 Cr.Hrs. 12
(Formerly 047.412) A second educationally directed practice experience building on SWRK 3150 (or 047.315) in which the student will have the opportunity to carry a sustained professional role in situations which require the integration of values, knowledge, and skill at the level of a beginning professional practitioner. While Access Programs may require additional field hours, 420 hours is the minimum required for all BSW students. This time commitment includes involvement with the agency in planning for, and engaging in, practice activity, and evaluation of performance. It also includes educational contact time with the field instructor in individual and/or group sessions. Subject to satisfactory completion and reports, students will be graded on a pass/fail basis. Prerequisites: 6 credit hours of SWRK 4200 (or 047.420), and SWRK 3150 (or 047.315), and consent by course instructor (Field Coordinator). Corequisite: 6 credit hours of SWRK 4300.

SWRK 4130 Advanced Interpersonal Communication Skills Cr.Hrs. 3
(Formerly 047.413) An experiential course for self-understanding and self-awareness to produce a disciplined and conscious use of self in professional communication and relationships. Prerequisites: SWRK 2080 (or 047.208) and written consent of instructor.

SWRK 4200 Field Focus of Social Work Practice Cr.Hrs. 6
(Formerly 047.420) A seminar for the critical examination of social work theory, values, policy and skills in the context of a field or focus of practice. The course integrates policy with practice at micro, meso and macro levels. Course seminar topics may vary from year to year and are organized to cover various fields or focus of practice. Prerequisite: SWRK 1310 (or 047.131), SWRK 2080 (or 047.208), SWRK 2090 (or 047.209), and SWRK 3140 (or 047.314). Prerequisites: SWRK 1310 (or 047.131), SWRK 2080 (or 047.208), SWRK 2090 (or 047.209), and SWRK 3140 (or 047.314). Corequisite: SWRK 3150 (047.315). Students cannot hold credit for both swrk 4150 (or 047.415) and SWRK 4200 (or 047.420).

SWRK 4210 Feminist Perspectives on Social Work Practice and Social Welfare Policy Cr.Hrs. 6
(Formerly 047.421) An analysis of social work practice and welfare policy from a feminist perspective. Course emphasizes the integration of social work intervention with policy in the social welfare context and overlays concepts such as empowerment, ecological practice, oppression, and practice in context of cultural diversity. Prerequisites: SWRK 1310 (or 047.131), SWRK 2080 (or 047.208), SWRK 2090 (or 047.209), and SWRK 3140 (or 047.314). Students may not hold credit for both SWRK 4210 (or 047.421) and SWRK 4170 (or 047.417) or SWRK 4210 (or 047.421) and SWRK 4190 (or 047.419).

SWRK 4220 Aboriginal People and Social Work Practice Cr.Hrs. 6
(Formerly 047.422) An analysis of social work practice and welfare policy from an aboriginal perspective. The course emphasizes the linkage between practice and policy and overlays concepts such as colonization, decolonization, and approaches to practices which include cross culture, structure, and anti-oppression in the context of Aboriginal world views, experience and helping practices. Prerequisites: SWRK 1310 (or 047.131),

SWRK 2080 (or 047.208), SWRK 2090 (or 047.209), and SWRK 3140 (or 047.314). Students may not hold credit for both SWRK 4220 (or 047.422) and SWRK 4160 (or 047.416) or SWRK 4220 (or 047.422) and SWRK 4180 (or 047.418).

SWRK 4250 Family Group Conferences Cr.Hrs. 3
This course provides an overview of the research, theory and application of Family Group Conferencing within the context of child and family services and the implications for intervention. Emphasis is on experiential learning of Family Group Conferencing process and techniques.

SWRK 4260 Addiction and CFS Practice Cr.Hrs. 3
The focus of this course is to increase the student's knowledge about addictions as well as to develop student's skills for intervention with families affected by addiction within the context of child and family services. Emphasis is on experiential learning of knowledge, process and techniques.

SWRK 4270 Crisis Intervention Cr.Hrs. 3
This course provides an overview of the research, theory and application of crisis intervention, methods and techniques within the context of child and family services. Emphasis will be on expanding existing knowledge through experiential learning of crisis intervention processes and techniques.

SWRK 4300 Field Focus of Social Work Practice 2 Cr.Hrs. 6
A seminar for the critical examination of social work theory, values, policy and skills in the context of a field or focus of practice. The course integrates policy with practice at micro, meso and macro levels. Course seminar topics may vary from year to year and are organized to cover various fields or focus of practice. For students admitted after 1993-1994. Prerequisite: SWRK 4200 (Or 047.420), SWRK 3150 (or 047.315). Corequisite: SWRK 4120.

UNIVERSITÉ DE SAINT BONIFACE

Université de Saint-Boniface Profile and Programs Offered

L'Université de Saint-Boniface

Profil de l'université

L'Université de Saint-Boniface (l'Université), fondée en 1818, est située dans le quartier francophone au cœur même de la ville de Winnipeg. Ce quartier est situé sur les rives des rivières Rouge et Seine, dans l'est de Winnipeg.

L'Université de Saint-Boniface est le plus ancien établissement postsecondaire de l'Ouest canadien et est l'université de langue française au Manitoba. Elle est située à deux pas du centre-ville de Winnipeg, carrefour de nombreuses activités culturelles et sportives. L'Université est accessible à toute personne apte à poursuivre des études postsecondaires en français. Avec une vingtaine de programmes et 1 300 étudiants et étudiantes provenant de 25 pays, l'Université offre une éducation universitaire générale et spécialisée ainsi qu'une formation technique et professionnelle ([École technique et professionnelle](#)). À l'Université, nous avons l'intime conviction que l'apprentissage doit se poursuivre toute la vie! Notre Division de l'éducation permanente offre une [formation continue](#) (langues, développement professionnel, développement personnel, etc.) de qualité exceptionnelle ainsi que des programmes uniques destinés aux enfants d'âge scolaire.

Bien ancrée dans son milieu, l'Université contribue pleinement à la vitalité et à l'épanouissement de la francophonie manitobaine, canadienne et internationale. Grâce à son enseignement de qualité et à sa recherche dynamique, elle rayonne largement au-delà de ses frontières. Établissement à dimension humaine, l'Université se définit comme un milieu interculturel inclusif qui contribue au développement global de la personne.

Atouts de l'établissement

L'Université offre toute une gamme de programmes de premier cycle. Les étudiants obtiendront un diplôme supérieur tout en développant une variété de compétences hautement recherchées sur le marché du travail, notamment celle du bilinguisme. La Faculté des arts offre un baccalauréat général, un baccalauréat ès arts avec spécialisation (français) et une maîtrise ès arts (études canadiennes). La Faculté des sciences offre un baccalauréat ès sciences (programme coop avec majeure conjointe – microbiologie/biochimie) et un baccalauréat ès sciences (général). La Faculté d'éducation offre, après un premier baccalauréat, un baccalauréat en éducation, niveaux élémentaire et intermédiaire, un baccalauréat en éducation, niveau secondaire, un diplôme post baccalauréat en éducation et une maîtrise en éducation. L'École de traduction offre un baccalauréat ès arts avec spécialisation (traduction) et un certificat en traduction. L'École d'administration des affaires offre un baccalauréat en administration des affaires, tandis que l'École de service social offre un baccalauréat en service social.

Dans le secteur parascolaire, l'Université offre un programme comprenant de nombreuses activités dans les domaines artistique, sportif et social. Celles-ci apportent une dimension fort enviable à la vie étudiante.

En somme, l'Université est en mesure d'offrir une éducation de qualité supérieure, celle qui ouvrira les portes d'une future carrière tout en permettant une croissance sur le plan personnel.

L'Université embauche 110 professeurs équivalent temps plein. Le rapport étudiants/professeur est bas et les classes sont petites. La clientèle étudiante bénéficie de l'expertise d'un corps professoral qui s'illustre grâce à ses réalisations et son engagement envers l'établissement.

Formation universitaire

L'Université de Saint-Boniface offre toute une gamme de programmes universitaires de premier cycle en arts, en service social, en traduction, en sciences, en éducation, en administration des affaires et en sciences infirmières, ainsi que des programmes d'études supérieures en éducation et en études canadiennes.

Les étudiants et les étudiantes peuvent être admis directement en arts, en sciences ou en administration des affaires selon les critères d'admission spécifiques. Les étudiants et les étudiantes qui ne rencontrent pas les critères d'admission directe doivent compléter une [première année universitaire](#) (U1) avant de s'inscrire au programme de baccalauréat de leur choix.

FACULTÉ/ÉCOLE	DIPLÔME DÉCERNÉ	DURÉE
Faculté des arts	Baccalauréat ès arts (général)	3 ans
	Baccalauréat ès arts spécialisé en français	4 ans
	Baccalauréat ès arts majeure avancée en français	4 ans
	Maîtrise ès arts en études canadiennes (par Internet)	-
École de traduction	Baccalauréat spécialisé en traduction	4 ans
	Baccalauréat spécialisé en traduction (par Internet)	120 crédits
	Baccalauréat avec double spécialisation en français et en traduction	4 ans
	Certificat de traduction	30 crédits
	Certificat de traduction (par Internet)	30 crédits
École d'administration des affaires	Baccalauréat en administration des affaires	4 ans
Faculté des sciences	Baccalauréat ès sciences (général)	3 ans
	Baccalauréat ès sciences (majeure – programme coop)	4 ans
École de service social	Baccalauréat en service social	4 ans

ACADEMIC CALENDAR 2015-2016

Faculté d'éducation après un premier baccalauréat	Baccalauréat en éducation, niveau élémentaire	2 ans
	Baccalauréat en éducation, niveau secondaire	2 ans
	Diplôme postbaccalauréat en éducation	30 crédits
	Maitrise en éducation spécialisée en counselling*	-
	Maitrise en éducation spécialisée en éducation inclusive	-
	Maitrise en éducation spécialisée en administration scolaire*	-
	Maitrise en éducation spécialisée en langue, littérature et curriculum	-
	* programme offert par Internet et sur place	

Des études universitaires entreprises à l'Université de Saint-Boniface ouvrent la voie à des programmes dans d'autres universités. En voici quelques exemples à l'Université du Manitoba.

Université du Manitoba - Faculté ou école	Diplôme décerné	DUR E TOTALE	DUR E à l'USB
Pharmacie	Baccalauréat en pharmacie	5 ans	1 an
Médecine dentaire	Doctorat en médecine dentaire	6 ans	2 ans
Droit	Baccalauréat en droit	5 ans	2 ans
Médecine	Docteur	7 ans	4 ans
Réadaptation médicale	Baccalauréat en réadaptation médicale	4 ans	1 an
Génie	Baccalauréat en génie	4 ans	1 an

Annuaire

L'annuaire de l'Université de Saint-Boniface est désormais disponible en ligne seulement.

Admission

Vous voulez poursuivre vos études à l'Université de Saint-Boniface? La première étape est de déposer votre candidature à un des programmes de votre choix. Après avoir reçu l'[admission](#) officielle, vous pourrez passer à l'[inscription](#) aux cours.

Cette section contient les renseignements nécessaires pour faire votre demande d'admission pour les programmes de l'Université de Saint-Boniface.

Si vous n'avez jamais étudié dans cet établissement, veuillez lire attentivement les renseignements ci-dessous.

Si vous n'avez pas encore obtenu votre relevé de notes finales de 12^e année, vous pouvez quand même présenter une demande d'admission. Aussitôt les résultats reçus, il faudra les faire parvenir au Registrariat.

Si vous êtes en provenance d'une autre université ou d'un autre établissement d'enseignement postsecondaire, vous devez soumettre un relevé de notes officiel au moment de la demande d'admission ou dès que vos notes finales seront disponibles.

Étapes d'admission

1. La préparation

- Choisissez un

[programme](#) dans lequel vous désirez étudier.

Assurez-vous de répondre aux [conditions générales d'admission](#) et aux [exigences particulières](#) du programme choisi.

Déterminez votre [statut étudiant](#).

2. Remplir le formulaire

- Remplissez votre

[formulaire de demande d'admission](#). Faites parvenir votre formulaire d'admission, les documents requis ainsi que les [frais d'admission](#) au Registrariat, et ce, avant la date limite d'admission.

3. Suivi de la demande

- Il faut prévoir un délai d'environ trois semaines pour le traitement de votre demande.

Inscription

Dès que vous recevrez une confirmation écrite de votre admission à un programme particulier, vous pourrez vous inscrire en remplissant un formulaire d'inscription disponible au Registrariat.

- Si vous aviez été admis, mais n'avez pas suivi de cours depuis cinq ans, vous devrez obtenir l'autorisation de la faculté avant de vous réinscrire pour vous assurer que les cours déjà suivis satisfont aux exigences du programme actuel. Vous devrez ainsi remplir un formulaire de demande de réadmission disponible au Registrariat.

- Si vous désirez changer de faculté, vous devez remplir un formulaire de demande de transfert de faculté disponible au Registrariat.

- Si vous choisissez d'étudier à l'Université de Saint-Boniface, vous devez vous inscrire à cet établissement, même si vous comptez suivre un ou plusieurs cours à l'Université du Manitoba. Vous devrez toutefois payer vos frais de cours auprès de l'Université du Manitoba.
- Si vous voulez vous inscrire à un ou à plusieurs cours à l'USB, mais que votre établissement d'appartenance est l'Université du Manitoba ou tout autre collège affilié à l'Université du Manitoba, vous devez vous inscrire auprès de votre établissement d'appartenance.
- Deux jours ouvrables après votre inscription, votre facture sera disponible dans votre portail MonUSB. Veuillez consulter

[l'avis aux étudiants](#) pour vous renseigner davantage sur les factures.

Chaque faculté, école et programme peut avoir des règlements académiques précis. Il vous revient de prendre connaissance des règlements qui vous concernent et de les respecter. Pour connaître ces renseignements, veuillez consulter [l'annuaire](#), sous la rubrique de votre faculté ou école ou sous la rubrique Règlements académiques. Consultez également la section réservée à votre programme, qui pourrait contenir ses propres exigences.

Exigences linguistiques

En général, les exigences linguistiques minimales pour tous les programmes d'études universitaires et collégiaux exigent l'inscription à un plein cours ou à deux demi-cours de français. La réussite de ce ou ces cours est une condition d'obtention du diplôme. Veuillez noter que ces exigences constituent un minimum seulement.

Les profils linguistiques servent à vous diriger vers les cours de langue appropriés et à proposer les mesures d'enrichissement qui permettront de combler les lacunes, le cas échéant. Il ne s'agit pas de tests d'admission, mais plutôt de tests de classement.

Toute personne qui s'inscrit une première fois à l'USB fait dresser son profil linguistique en français par le Service de perfectionnement linguistique (SPL) avant de s'inscrire.

Puisque certains programmes exigent aussi des connaissances de la langue anglaise, les personnes admises à ces programmes et qui connaissent peu l'anglais doivent également faire dresser leur profil linguistique en anglais avant de s'inscrire.

Certains programmes exigent des attestations de mérite et d'excellence en français qui sont évaluées par le Test de maîtrise du français écrit et décernées par l'entremise du SPL.

Registrariat

Le Registrariat est le point d'entrée pour étudier à l'Université de Saint-Boniface. En plus de fournir de l'information sur l'admission à un programme, l'inscription aux cours, l'aide financière disponible et l'horaire des cours, le Registrariat est responsable des éléments suivants :

- [attestations d'études](#);
- [relevés de notes](#);
- [procédure d'appel de note](#);
- [participation à la collation des grades](#);
- [changements d'adresse](#);
- [changements de nom](#)

Le Registrariat est ouvert du lundi au vendredi de 8 h 30 à 16 h 30.

Registrariat
Université de Saint-Boniface
Téléphone : 1-204-235-4408
Numéro sans frais au Canada : 1-888-233-5112
registra@ustboniface.mb.ca
Notre site Web : www.ustboniface.ca

ACADEMIC CALENDAR 2015-2016

Maîtrise en Études canadiennes-Université de Saint-Boniface

Head: Yves Labrèche

Campus Address & General Office: Université de Saint-Boniface, 200 ave de la Cathédrale, Winnipeg R2H 0H7

Telephone: (204) 237-1818, ext. 540

Email Address: etcan@ustboniface.mb.ca

Website: www.ustboniface.ca

Academic Staff: Please refer to the website for Faculty: www.ustboniface.ca

Maîtrise ès Arts, études canadiennes Program Information

The Maîtrise ès Arts, études canadiennes is offered by the Université de Saint-Boniface, an affiliated college of the University of Manitoba, in French only, and only via the Internet. There are currently 5 students enrolled in the program. Several have recently completed their MA in études canadiennes, while a few have withdrawn from the program. Students are generally mid-career and are enrolled in the programme on a part-time basis, out of personal interest or for career enhancement. Graduates can pursue careers in the federal or provincial public service, in journalism, in the Foreign Service, or in the private sector; in addition, graduates of the programme may be admitted to doctoral programs, subject to program requirements.

Graduates of this program will receive a Maîtrise ès Arts en études canadiennes

Admission

In addition to the minimum admission requirements of the Faculty of Graduate Studies found in the Graduate Studies Regulations Section of this calendar, students must have taken four (4) years of studies at the university level. A pre-M.A. program is not available at this time.

Admission Deadlines

Canadian/U.S. students should submit their application and supporting documentation to the Faculty of Graduate Studies at least 6 months prior to their intended start date. International students should submit their application and supporting documentation to the Faculty of Graduate Studies at least 9 months prior to their intended start date.

Program Requirements

In addition to the minimum course requirements of the Faculty of Graduate Studies found in the Graduate Studies Regulations Section of this Calendar, students must complete a minimum number of 18 credit hours of graduate coursework. In addition, students must submit an acceptable thesis and pass a thesis oral examination.

Language requirement: Reading and comprehension skills in both French and English; course work and the thesis may be written in either French or English, subject to availability of a bilingual instructor.

Expected time to graduate: 2 - 3 Years

Education-Université de Saint-Boniface

Dean: S. Delaquis

Associate Dean: C. Lupien

Head: (and Graduate Chair) S. Delaquis

Campus Address & General Office: 200 de la Cathédrale Avenue

Telephone: (204) 233 0210, ext 302

Fax: (204) 233 0217

Email Address: etudessuperieuresFE@ustboniface.ca

Website: www.ustboniface.ca

Academic Staff: Please refer to the website for Faculty information: <http://www.ustboniface.ca/>

Education -St Boniface Program Info

The Department offers the following specializations: Inclusive Special Education; Educational Administration; Guidance and Counselling; Language, Literacy and Curriculum. Some courses are the French equivalent of the courses offered at the Faculty of Education, University of Manitoba. Many courses are specific to French education in the Province of Manitoba.

Contact the department for information on this program of study.

Courses taught at Université de Saint-Boniface

Faculté des arts-Anthropology

ANTH 1211 L'origine et l'antiquité de l'humanité Cr.Hrs. 3

(Ancien 076.121) Introduction à l'anthropologie physique et à l'archéologie. Évolution biologique, évolution et cultures des primates, fossiles démontrant la théorie de l'évolution, de l'origine et du développement de la culture humaine. On ne peut se faire créditer ANTH 1211 et ANTH 1210 (076.121) et l'ancien 076.120.

ANTH 1221 Anthropologie culturelle Cr.Hrs. 3

(Ancien 076.122) Étude comparative des sociétés et des cultures humaines. Les sujets suivants seront présentés : institutions familiales, sociales, économiques et politiques, langage vocal humain, systèmes de parenté, de rites et de croyances, stabilité et changements culturels. On ne peut se faire créditer ANTH 1221, ANTH 1220 (076.122), ANTH 1520 (076.152) et l'ancien 076.120.

ANTH 2001 Culture, société et pouvoir Cr.Hrs. 3

Aperçu des idées centrales à l'analyse des relations sociales, en mettant l'emphase sur l'individu, l'identité, le genre, la « race », l'ethnicité, la classe sociale et la dynamique de caste. On ne peut se faire créditer ANTH 2001 et ANTH 2000, l'ancien ANTH 2391 ou ANTH 2390. Préalable : une note minimale de C dans un des ANTH 1221, ANTH 1220 (076.122), ANTH 1520 (076.152), 076.109 ou 076.120, ou l'autorisation écrite de la professeure ou du professeur.

ANTH 2011 Langage et culture Cr.Hrs. 3

(Ancien 076.201) Considération générale de la nature du langage et des interrelations entre le langage et les autres aspects de la culture. Corrélations socioculturelles des variations linguistiques. Ethnographie de la communication. Origine et évolution du langage. On ne peut se faire créditer ANTH 2011, ANTH 2010 (076.201) et ANTH 2370 (076.237). Préalable : une note minimale de C dans un de ANTH 1221, ANTH 1220 (076.122), ANTH 1520 (076.152) ou 076.120, ou l'autorisation écrite de la professeure ou du professeur.

ANTH 2041 Les Amérindiens de l'Amérique du Nord : une étude socio-culturelle Cr.Hrs. 3

(L'ancien 076.204) Survol ethnographique des cultures des peuples amérindiens de l'Amérique du Nord. L'étudiant(e) qui détient le crédits du ANTH 2041 (076.204) ne peut se faire créditer aucun des cours ANTH 2040 (076.204) ou l'ancien 076.345. Préalable: [une note minimale de C dans un de: ANTH 1220 (076.122) ou ANTH 1221 (076.122) ou ANTH 1520 (076.152) ou l'ancien 076.109 ou l'ancien 076.120] ou le consentement écrite du professeur. Donné au Université de Saint-Boniface.

ANTH 2071 Religions amérindiennes et inuites Cr.Hrs. 3

(Ancien 076.207) Étude comparative et interprétative des valeurs, croyances et pratiques religieuses propres aux traditions autochtones. Attention particulière accordée aux religions traditionnelles, à l'impact du christianisme sur ces religions, et à l'émergence de la spiritualité autochtone contemporaine en mettant l'accent sur l'expérience et les structures, fonctions et significations des mythes, récits et rituels qui composent l'idéologie religieuse autochtone.

ANTH 2101 Introduction à l'archéologie Cr.Hrs. 3

(Ancien 076.210) Introduction générale à l'étude des principes de l'archéologie et à l'analyse et l'interprétation des matériaux et artefacts rencontrés dans les études en archéologie. On ne peut se faire créditer ANTH 2101 et ANTH 2100 et l'ancien 076.290. Préalable : une note minimale de C dans ANTH 1210 (076.121) ou ANTH 1211 ou l'ancien 076.120, ou l'autorisation écrite de la professeure ou du professeur.

ANTH 2381 Arts, symboles et cultures Cr.Hrs. 3

(Ancien 076.238) Étude des contextes sociaux et des fonctions des comportements artistiques et symboliques humains dans une perspective comparative. On ne peut se faire créditer ANTH 2381 et ANTH 2380 (076.238). Préalable : une note minimale de C dans un de ANTH 1221, ANTH 1220 (076.122), ANTH 1520 (076.152), les anciens 076.109, 076.120, ou l'autorisation écrite de la professeure ou du professeur.

ANTH 2551 Culture et l'individu Cr.Hrs. 3

(Ancien 076.255) Étude des corrélations entre le cycle de vie, les fonctions et dysfonctions psychologiques, et les institutions sociales et culturelles. Accent mis sur les rituels d'enculturation et du cycle de vie. On ne peut se faire créditer ANTH 2551 et ANTH 2550 (076.255). Préalable : une note minimale de C dans un de ANTH 1221, ANTH 1220 (076.122), ANTH 1520 (076.152), les anciens 076.109 ou 076.120, ou l'autorisation écrite de la professeure ou du professeur.

ANTH 2831 Méthodes en ethnologie Cr.Hrs. 3

(L'ancien 076.283) Panorama des méthodes de recherche utilisées en ethnologie, y compris les techniques analytiques et de recherche sur le terrain. Préalable: [une note minimale de C dans un des cours suivants: ANTH 1220 (076.122) ou ANTH 1221 (076.122) ou ANTH 1520 (076.152) ou l'ancien 076.120] ou l'autorisation écrite du professeur. Donné au Université de Saint-Boniface.

ANTH 2861 Évolution et diversité humaine Cr.Hrs. 3

(Ancien 076.286) Une introduction à l'étude de l'interaction des rôles de l'hérédité, de la culture et de l'environnement dans les diverses populations du genre humain et introduction aux principes biologiques de base expliquant les variations des populations humaines. On ne peut se faire créditer ANTH 2861 et ANTH 2860. Préalable : une note minimale de C dans ANTH 1211 ou ANTH 1210 (076.121) ou l'ancien 076.120, ou l'autorisation écrite de la professeure ou du professeur.

ANTH 3321 Femmes, sociétés et cultures Cr.Hrs. 3

(L'ancien 076.332) Étude critique des rôles de la femme selon une approche interculturelle à partir d'analyses ethnographiques des sociétés et des cultures africaines, amérindiennes et asiatiques. L'étudiant(e) ne peut se faire créditer à la fois le ANTH 3321 (076.332) et le ANTH 3320 (076.332). Préalable: [une note minimale de C dans un des cours suivants: ANTH 1220 (076.122) ou ANTH 1221 (076.122) ou ANTH 1520 (076.152) ou l'ancien 076.109 ou l'ancien 076.120] ou l'autorisation écrite du professeur. Donné au Université de Saint-Boniface.

ANTH 3381 Problèmes sociaux contemporains et l'anthropologie Cr. Hrs. 3

(Ancien 076.347) Étude du développement des principaux paradigmes des courants théoriques et méthodologiques en anthropologie. On ne peut se faire créditer ANTH 3471 et ANTH 3470. Préalable : (une note minimale de C dans ANTH 2000 ou ANTH 2001 et un cours de 3 crédits parmi ANTH 2020, ANTH 2530 ou ANTH 2831) ou (une note minimale de C dans l'ancien ANTH 2390 ou ANTH 2391 (076.239)), ou l'autorisation écrite de la professeure ou du professeur.

ANTH 3461 Ethnologie des Amérindiens de l'Amérique du Nord Cr.Hrs. 3

(L'ancien 076.346) Études ethnographiques et ethnologiques de quelques sociétés amérindiennes de l'Amérique du Nord. On étudiera aussi les changements survenus depuis les premiers contacts. L'étudiant(e) ne peut se faire créditer à la fois le ANTH 3461 (076.346) et le ANTH 3460 (076.346). Préalable: [une note minimale de C dans un des cours suivants: ANTH 1220 (076.122) ou ANTH 1221 (076.122) ou ANTH 1520 (076.152) ou l'ancien 076.109 ou l'ancien 076.120] ou l'autorisation écrite du professeur. Donné au Université de Saint-Boniface.

ANTH 3471 Histoire de la pensée anthropologique Cr.Hrs. 3

(Ancien 076.347) Étude du développement des principaux paradigmes des courants théoriques et méthodologiques en anthropologie. L'étudiant(e) ne peut se faire créditer à la fois le ANTH 3471 (076.338) et le ANTH 3470 (076.338). Préalable : une note minimale de C dans [ANTH 2000 ou ANTH 2001 + un cours de 3 cr.hrs. de niveau 2000 du groupe B] ou [l'ancien ANTH 2391 (076.239) ou l'ancien ANTH 2390 (076.239)] ou l'autorisation écrite de la professeure ou du professeur.

ANTH 3501 Peuples de l'Arctique Cr.Hrs. 3

(L'ancien 076.350) Étude ethnographique des peuples autochtones des régions circumpolaires d'Asie, d'Amérique du Nord et du Groënland, avec une attention spéciale portée aux situations causées par différents contacts culturels. L'étudiant(e) ne peut se faire créditer à la fois le ANTH 3501 (076.350) et le ANTH 3500 (076.350). Préalable : [une note minimale de C dans un des cours suivants: ANTH 1220 (076.122) ou ANTH 1221 (076.122) ou ANTH 1520 (076.152) ou l'ancien 076.109 ou l'ancien 076.120] ou l'autorisation écrite du professeur.

ANTH 3531 Peuples d'Amérique du Sud Cr.Hrs. 6

(L'ancien 076.353) Étude de certaines cultures sudaméricaines, notamment celles des Andes, de l'Amazonie et de la Patagonie, Seront analysées les premières civilisations de même que l'adaptation des autochtones à la société contemporaine. Donné au Université de Saint-Boniface.

ANTH 3551 Sous-cultures canadiennes Cr.Hrs. 3

(Ancien 076.355) Étude anthropologique de la communauté, de l'ethnicité et du statut social dans la société canadienne. On ne peut se faire créditer ANTH 3551 (076.355) et ANTH 3550 (076.355).

ANTH 3751 Globalisation et mondialisation: Une perspective anthropologique Cr.Hrs. 3

(Ancien 076.375) Perspective anthropologique sur la mondialisation et sur l'expansion du capitalisme dans les zones périphériques du monde. Étude de la transformation des sociétés et cultures autochtones; de l'émergence des conflits ethniques; et de la résistance. Approche comparative de processus transnationaux et globaux particuliers. L'étudiant(e) ne peut se faire créditer à la fois le ANTH 3751 (076.375) et le ANTH 3750 (076.375). Préalable : une note minimale de C dans ANTH 2000 ou ANTH 2001 ou ANTH 1220 (076.122) ou ANTH 1221 (076.122) ou ANTH 1520 (076.152) ou l'ancien ANTH 2390 (076.239) ou l'ancien ANTH 2391 (076.239) ou l'ancien 076.120 ou l'autorisation écrite de la professeure ou du professeur.

ANTH 3811 Anthropologie des systèmes de croyances Cr.Hrs. 3

(L'ancien 076.381) Étude comparative des systèmes de croyances, de rites sacrés et de cérémonies dans les sociétés et les cultures du monde. L'étudiant(e) ne peut se faire créditer à la fois le ANTH 3811 (076.381) et le ANTH 3810 (076.381). Préalable : [une note minimale de C dans un des cours suivants: ANTH 1220 (076.122) ou ANTH 1221 (076.122) ou ANTH 1520 (076.152) ou l'ancien 076.109 ou l'ancien 076.120] ou l'autorisation écrite du professeur. Donné au Université de Saint-Boniface.

ANTH 3971 Ethnographie régionale Cr.Hrs. 3

(Ancien 076.397) Survol ethnographique de la culture d'une aire géographique d'intérêt pour le département ou l'étudiant. Le contenu variera d'année en année alors l'étudiant(e) peut se faire créditer ce cours plus d'une fois. On ne peut se faire créditer ANTH 3971 (076.397) et ANTH 3970 (076.397). Préalable : une note minimale de C dans un des cours suivants : ANTH 1220 (076.122), ANTH 1221 (076.122), ANTH 1520 (076.152), l'ancien 076.120, ou l'autorisation écrite de la professeure ou du professeur

Faculté des arts-ARTS

ARTS 1111 Introduction aux études universitaires (3) Cr.Hrs. 3

(Ancien 099.111) Cours offert sous forme de séminaires dont le but est de faciliter la transition vers l'université. Développement des connaissances, des compétences et des attitudes nécessaires pour bien réussir les études universitaires. Il y a un maximum de 30 inscriptions par section. On ne peut se faire créditer à la fois ARTS 1111 et ARTS 1110 (099.111). Ce cours est offert uniquement aux étudiants qui ont complété moins de 60 crédits.

Faculté des arts-Economics

ECON 1011 Introduction à la microéconomie Cr.Hrs. 3

Étude des principes de base de la microéconomie, plus particulièrement l'offre et la demande, la détermination des prix, les structures de marché, l'allocation des ressources, le comportement des consommateurs et des entreprises ainsi que quelques exemples d'interventions du gouvernement dans les marchés. Des sujets comme l'inégalité économique, l'équité, les effets externes, les biens collectifs ou autres enjeux politiques ou de microéconomie peuvent aussi être traités dans ce cours. On ne peut se faire créditer ECON 1011 et ECON 1201, ECON 1200 (018.120), ECON 1211, ECON 1210 (018.121), ECON 1221 ou ECON 1220 (018.122).

ECON 1021 Introduction à la macroéconomie Cr.Hrs. 3

Étude des principes de base de la macroéconomie, plus particulièrement l'offre et la demande agrégées, les indicateurs économiques que sont le chômage et l'inflation, le PIB et le niveau de vie, les finances publiques et la politique budgétaire, la monnaie et la politique monétaire. Quelques éléments de l'économie mondiale tels que taux de change et balance des paiements peuvent aussi être traités dans ce cours. On ne peut se faire créditer ECON 1021 et ECON 1201, ECON 1200 (018.120), ECON 1211, ECON 1210 (018.121), ECON 1221 ou ECON 1220 (018.122).

ECON 1211 Introduction aux politiques et aux problèmes économiques canadiens Cr.Hrs. 3

(L'ancien 018.121) Une étude de principes majeurs qui sous-tendent et de certains facteurs qui influencent l'économie canadienne et de ses régions. L'étudiant (e) qui détient les crédits du ECON 1211 ne peut se faire créditer aucun des cours ECON 1210 (018.121), l'ancien ECON 1200 (018.120), l'ancien ECON 1201 (018.120), ECON 1010, ECON 1020, ECON 1011 ou ECON 1021.

ECON 1221 Introduction aux politiques et aux problèmes économiques mondiaux Cr.Hrs. 3

(L'ancien 018.122) Une étude de principes majeurs qui marquent l'économie mondiale et l'environnement. L'étudiant(e) qui détient les crédits du ECON 1221 (018.122) ne peut se faire créditer aucun des cours ECON 1220 (018.122), l'ancien ECON 1200 (018.120), l'ancien ECON 1201 (018.120), ECON 1010, ECON 1020, ECON 1011 ou ECON 1021.

ECON 2311 Problèmes économiques du Canada Cr.Hrs. 6

(L'ancien 018.231) Application de la théorie économique aux problèmes actuels du Canada: les disparités régionales, l'agriculture, l'échange, la pratique concurrentielle, la propriété étrangère et l'éducation, etc. L'étudiant(e) ne peut se faire créditer à la fois le ECON 2311 (018.231) et le ECON 2310 (018.231). Préalable: une note minimale de C dans six heures-crédits au niveau 1000 en sciences économiques. Donné au Université de Saint-Boniface.

ECON 2451 Théorie microéconomique et ses applications 1 Cr.Hrs. 3
(L'ancien 018.245) Théorie de la demande du consommateur, de la production et des coûts, de la demande des facteurs de production et de la structure des marchés dans une perspective historique et institutionnelle. L'étudiant(e) qui détient les crédits du ECON 2451 (018.245) ne peut se faire créditer aucun des cours ECON 2450 (018.245) ou ECON 2700 (018.270). Préalable: [une note minimale de C dans ECON 1010 ou ECON 1011 ou l'ancien ECON 1200 (018.120) ou l'ancien ECON 1201] ou [une note minimale de C dans chacun de ECON 1210 (ou ECON 1211) ou l'ancien 018.121) et ECON 1220 (ou ECON 1221 ou l'ancien 018.122)].

ECON 2461 Théorie microéconomique et ses applications 2 Cr.Hrs. 3
(L'ancien 018.246) Théorie du marché des facteurs de production, de la distribution et de l'équilibre général, économie du bien-être et faillite des marchés, dans une perspective historique et institutionnelle. L'étudiant(e) qui détient les crédits du ECON 2461 (018.246) ne peut se faire créditer aucun des cours ECON 2460 (018.246) ou ECON 3700 (018.370). Préalable: une note minimale de C dans un des cours suivants: ECON 2450 (018.245) ou ECON 2451 (018.245) ou ECON 2700 (018.270). Donné au Université de Saint-Boniface.

ECON 2471 Théorie macroéconomique et ses applications 1 Cr.Hrs. 3
(L'ancien 018.247) Étude des fluctuations dans le revenu national, la production, l'emploi la monnaie et les prix ainsi qu'étude des politiques de stabilisation, dans une perspective historique et institutionnelle. L'analyse s'effectue à partir d'un modèle macroéconomique d'une économie fermée. L'étudiant(e) qui détient les crédits du ECON 2471 (018.247) ne peut se faire créditer aucun des cours ECON 2470 (018.247) ou ECON 2800 (018.280). Préalable: [une note minimale de C dans ECON 1020 ou ECON 1021 ou l'ancien ECON 1200 (018.120) ou l'ancien ECON 1201 (018.120)] ou [une note minimale de C dans chacun de ECON 1210 (ou ECON 1211) ou l'ancien 018.121) et ECON 1220 (ou ECON 1221 ou l'ancien 018.122)].

ECON 2481 Théorie macroéconomique et ses applications 2 Cr.Hrs. 3
(L'ancien 018.248) Théorie du revenu national, de l'emploi, de l'inflation, de la balance des paiements. Politiques de stabilisation et croissance économique. L'analyse s'effectue à partir d'un modèle macroéconomique d'une économie ouverte dans une perspective historique et institutionnelle. L'étudiant(e) qui détient les crédits du ECON 2481 (018.248) ne peut se faire créditer aucun des cours ECON 2480 (018.248) ou ECON 3800 (018.380). Préalable: une note minimale de C dans un des cours suivants: ECON 2470 (018.247) ou ECON 2471 (018.247) ou ECON 2800 (018.280). Donné au Université de Saint-Boniface.

ECON 3301 Histoire économique du Canada Cr.Hrs. 6
(L'ancien 018.330) Étude de la croissance économique du Canada en soulignant l'influence de l'Europe et des États-Unis. L'étudiant(e) ne peut se faire créditer à la fois le ECON 3301 (018.330) et le ECON 3300 (018.330). Préalable: aucun. Donné au Université de Saint-Boniface.

ECON 3641 L'économie et le système financier Cr.Hrs. 3
(L'ancien 018.364) Les flux des fonds prêtables et le système financier. L'épargne et l'investissement: l'offre et la demande d'actifs financiers des ménages et des entreprises. Théorie bancaire et intermédiaires financiers. L'arbitrage parmi les marchés financiers et les pays; politiques gouvernementales avec attention particulière au contexte canadien. L'étudiant(e) qui détient les crédits du ECON 3641 (018.364) ne peut se faire créditer aucun des cours ECON 3640 (018.364) ou FIN 3460 (009.346). Préalable: une note minimale de C dans un des cours suivants: ECON 2450 (018.245) ou ECON 2451 (018.245) ou ECON 2460 (018.246) ou ECON 2461 (018.246) ou ECON 2700 (018.270) ou ECON 3700 (018.370). Donné au Université de Saint-Boniface.

ECON 3651 Théorie et politique monétaires Cr.Hrs. 3
(L'ancien 018.365) La demande et l'offre de monnaie. La structure des taux d'intérêts. Les outils de la politique monétaire. La gestion monétaire par la banque centrale et le gouvernement. L'étudiant(e) ne peut se faire créditer à la fois le ECON 3651 (018.365) et le ECON 3650 (018.365). Préalables: une note minimale de C dans un des suivants: ECON 2470 (018.247) ou ECON 2471 (018.247) ou ECON 2480 (018.248) ou ECON 2481 (018.248) ou ECON 2800 (018.280) ou ECON 3800 (018.380). Donné au Université de Saint-Boniface.

ECON 3661 La pensée économique et les institutions sociales Cr.Hrs. 6
(L'ancien 018.366) L'évolution de la pensée économique dans son interaction avec l'évolution des institutions sociales et les conditions matérielles et intellectuelles des diverses époques. L'étudiant(e) ne peut se faire créditer à la fois le ECON 3661 (018.366) et le ECON 3660 (018.366). Préalable: [une note minimale de C dans six heures-crédits au niveau 1000 en sciences économiques] ou autorisation écrite du professeur. Donné au Université de Saint-Boniface.

Faculté des arts-English

ENGL 1061 Anglais langue seconde I Cr.Hrs. 3
(L'ancien 004.106) Révision et approfondissement de la grammaire anglaise. Élargissement du vocabulaire propre à la langue soutenue et sensibilisation aux pièges posés par les gallicismes d'ordre lexical et syntaxique. Étude des principes fondamentaux de rédaction: style, organisation et argumentation. Étude pratique de l'anglais parlé dans diverses situations. Expressions idiomatiques. Amélioration de la prononciation. Apprentissage des principes de base et exercices pratiques d'art oratoire en anglais. On ne peut se faire créditer le ENGL 1061 (004.106) et l'ancien 004.104. Préalable: Admission sur recommandation du SPL. Voir section 9.14 (Profil linguistique en anglais) de l'annuaire de l'USB.

ENGL 1071 Anglais langue seconde II Cr.Hrs. 3
(Ancien 004.107) Suite d'ENGL 1061. Révision et approfondissement de la grammaire anglaise. Élargissement du vocabulaire propre à la langue soutenue et sensibilisation aux pièges posés par les gallicismes d'ordre lexical et syntaxique. Étude des principes fondamentaux de rédaction, notamment sur le plan du style, l'usage idiomatique, et le vocabulaire. Étude pratique de l'anglais parlé dans diverses situations. Expressions idiomatiques. Amélioration de la prononciation. Apprentissage des principes de base et exercices pratiques de l'art oratoire en anglais. On ne peut se faire créditer ENGL 1071 (004.107) et l'ancien 004.105. Une note minimale de C (60%) est requise pour réussir ENGL 1071. Préalable: [une note minimale de C dans ENGL 1061 (ancien 004.106) ou l'ancien 004.104] ou la recommandation du Service de perfectionnement linguistique.

ENGL 1201 Representative Literary Works Cr.Hrs. 6
(L'ancien 004.120) An introduction to the study of literature, with emphasis on the development of reading and writing skills. Poetry, prose and drama from various historical periods. Texts for each section will be announced. Students may not hold credit for ENGL 1201 (004.120) and any of: ENGL 1200 (004.120) or the former 004.124. English 40S or the former English 300 are strongly recommended, but English 40G or the former 301 or 305 will also be accepted.

ENGL 1301 Literature Since 1900 Cr.Hrs. 6
(Ancien 004.130) An introduction to the study of literature, with emphasis on the development of reading and writing skills. Poetry, prose and drama from Canada, Britain, the United States and other countries. Texts for each section will be announced. Students may not hold credit for ENGL 1301 (004.130) and any of: ENGL 1300 (004.130) or the former 004.126. English 40S or the former English 300 are strongly recommended, but English 40G or the former 301 or 305 will also be accepted.

ENGL 2001 Intermediate Writing and Research Cr.Hrs. 6

(Ancien 004.200) Designed to teach students how to read, write, and research at the university level, this course stresses effective expository writing, prose reading, and research skills. There is no prerequisite for this course. Note: Credit in ENGL 2001 (004.200) is acceptable toward a degree in Arts or Science, but does not satisfy the humanities requirement in the Faculty of Arts. It may not be held for credit in the 30 hours for a Major (General) or the 18 hours for a Minor but may be held for credit in the 48 hours for the Major (Advanced). On ne peut se faire créditer ENGL 2001 et ENGL 2000 (004.200).

ENGL 2071 Literature of the Sixteenth Century Cr.Hrs. 6

(Ancien 004.207) A survey of poetry, prose and drama by major and minor writers in historical context. Students may not hold credit for ENGL 2071 and ENGL 2070 (004.210). Prerequisite : a grade of C or better in one of : ENGL 1201, ENGL 1200 (004.120), ENGL 1301, ENGL 1300 (004.130), 004.126, or both ENGL 1400 (or the former ENGL 1310 (004.131)) and ENGL 1340 (004.134).

ENGL 2091 Literature of the Seventeenth Century Cr.Hrs. 6

(L'ancien 004.209) A survey of poetry, prose and drama by major and minor writers in historical context. Students may not hold credit for ENGL 2091 (004.209) and any of: ENGL 2090 (004.209) or the former 004.215. Prerequisite: [a grade of "C" or better in ENGL 1200 (004.120) or ENGL 1201 (004.120) or ENGL 1300 (004.130) or ENGL 1301 (004.130) or the former 004.126] or [a grade of "C" or better in each of ENGL 1310 (004.131) and ENGL 1340 (004.134)]. Given at Université de Saint-Boniface.

ENGL 2161 British Literature since 1900 Cr.Hrs. 6

(Ancien 004.216) A survey of poetry, prose and drama by major and minor writers in historical context. Students may not hold credit for both ENGL 2160 (004.216) or ENGL 2161 (004.216). Prerequisites : a grade of C or better in one of : ENGL 1201 (004.120), ENGL 1200 (004.120), ENGL 1300 (004.130), ENGL 1301 (004.130) or the former 004.126 or a grade of C or better in each of ENGL 1310 (004.131) and ENGL 1340 (004.134).

ENGL 2961 Drama 1 Cr.Hrs. 3

An introduction to dramatic forms and conventions. Prerequisite : a grade of C or better in one of ENGL 1201, ENGL 1200, ENGL 1300, ENGL 1301 or both of ENGL 1310 and ENGL 1340.

ENGL 3011 Shakespeare Cr.Hrs. 6

(L'ancien 004.301) Critical study of the works of this author, including historical context. Students may not hold credit for ENGL 3011 (004.301) and any of: ENGL 3010 (004.301) or the former 004.310. Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. Given at Université de Saint-Boniface.

ENGL 3141 Studies in the Victorians Cr.Hrs. 3

(L'ancien 004.314) Students may not hold credit for ENGL 3141 (004.314) and any of: ENGL 3140 (004.314) or the former 004.329. Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre Handbook for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit.

ENGL 3271 Studies in Canadian Literature Cr.Hrs. 3

(Ancien 004.327) Students may not hold credit for ENGL 3271 (004.327) and any of : ENGL 3270 (former 004.327) or the former 004.388. As the course content will vary from year to year, students may take this course more than once for credit. Prerequisite : a grade of C or better in six hours of English at the 2000 level.

ENGL 3671 Studies in the Novel Cr.Hrs. 6

(L'ancien 004.367) Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. Students may not hold credit for both ENGL 3671 (004.367) and ENGL 3670 (004.367). NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre Handbook for detailed course descriptions. As the course content will vary from year to year, students may take this course more than once for credit. Given at Université de Saint-Boniface.

ENGL 3961 Drama 2 Cr.Hrs. 3

(L'ancien 004.396) Advanced study of selected topics. Students may not hold credit for ENGL 3961 (004.396) and any of: ENGL 3960 (004.396) or the former 004.297. Prerequisite: a grade of "C" or better in six hours of English at the 2000 level. NOTE: The content of this course will vary from year to year. Students are asked to consult the Department of English, Film, and Theatre Handbook for detailed course descriptions. Given at Université de Saint-Boniface.

Faculté des arts: Français-1000 Level

FRAN 1001 Grammaire de l'écrit Cr.Hrs. 6

(Laboratoire requis). Perfectionnement du français par l'entremise d'activités de compréhension et de production de textes divers menant à une étude approfondie de la grammaire, à l'enrichissement du vocabulaire et à un aperçu de la stylistique interne. Développement d'habitudes de travail telles que l'utilisation des outils de rédaction et l'autocorrection. Mise en pratique des notions apprises dans le cours et activités orales dans le cadre des séances de travaux dirigés obligatoires. N. B. : Une note minimale de C constitue un préalable à FRAN 1091. On ne peut s'inscrire à FRAN 1001 et à FRAN 1111 de façon concomitante.

FRAN 1021 L'art de parler Cr.Hrs. 3

Correction et amélioration du français parlé (structures de phrases, aspects grammaticaux d'erreurs courantes). Distinction entre la langue parlée et la langue écrite. Prise de conscience des différents registres de la langue en fonction des différentes situations de communication. Apprentissage des techniques de l'expression orale : exposé, débat, discours.

FRAN 1071 Lectures dirigées Cr.Hrs. 3

Lecture et analyse de divers textes d'actualité, accompagnées d'exercices de compréhension et de rédaction.

FRAN 1091 Rédaction universitaire Cr.Hrs. 3

Un aperçu général de la production littéraire au Canada français depuis ses origines à nos jours, d'après une étude de textes ayant comme thèmes la quête du bonheur. Préalables : une note minimale de C dans le FRAN 1091 et une note minimale de C dans l'un des FRAN 1021, FRAN 1071 ou FRAN 1111.

FRAN 1111 Grammaire et laboratoire Cr.Hrs. 3

(Laboratoire requis). (Ancien 144.111) Approfondissement des notions de la grammaire. Attention particulière accordée à l'analyse de la phrase. N.B. : On ne peut s'inscrire à FRAN 1111 et à FRAN 1001 de façon concomitante.

Faculté des arts: Français-2000 Level

FRAN 2523 Atelier de théâtre Cr.Hrs. 6

Initiation à la pratique de l'art théâtral. Ateliers sur les grandes théories du théâtre, les techniques de l'art dramatique, les écoles de jeu depuis le XVIII^e siècle et les divers aspects pratiques d'une production théâtrale : jeu de lumières, conception et plantation d'un décor. On ne peut se faire créditer FRAN 2523 et l'ancien FRAN 2521. Préalable : autorisation écrite de la professeure ou du professeur.

FRAN 2531 Introduction au théâtre 1 Cr.Hrs. 3

(L'ancien 144.253) Étude de plusieurs oeuvres, des principaux aspects techniques et de diverses théories dramatiques - du théâtre grec au théâtre de XIXe siècle. Préalable: [une note minimale de C dans le FRAN 1091 (144.109)] et [une note minimale de C dans un cours choisi parmi les suivants: FRAN 1021 (144.102) ou FRAN 1071 (144.107) ou FRAN 1111 (144.111)]. Donnée au Université de Saint-Boniface.

FRAN 2541 Introduction au théâtre 2 Cr.Hrs. 3

(L'ancien 144.254) Étude de plusieurs oeuvres, des principaux aspects techniques et de diverses théories dramatiques. Préalables: [une note minimale de C dans le FRAN 1091 (144.109)] et [une note minimale de C dans un cours choisi parmi les suivants: FRAN 1021 (144.102) ou FRAN 1071 (144.107) ou FRAN 1111 (144.111)].

FRAN 2631 Poésie et chanson dans la littérature française Cr.Hrs. 3

(L'ancien 144.263) Étude des étapes de la poésie français ainsi que des liens qu'elle a eues avec la chanson à travers les âges. Une attention particulière sera accordée aux époques où les deux formes sont étroitement liées ou inséparables. Préalables: [une note minimale de C dans le FRAN 1091 (144.109)] et [une note minimale de C dans un cours choisi parmi les suivants: FRAN 1021 (144.102) ou FRAN 1071 (144.107) ou FRAN 1111 (144.111)]. Donnée au Collège de Saint-Boniface.

FRAN 2641 Le discours amoureux dans la littérature française Cr.Hrs. 3

(L'ancien 144.264) Étude des diverses formes du discours amoureux et de ses stratégies rhétoriques et linguistiques dans la littérature romanesque française. Préalables: [une note minimale de C dans le FRAN 1091 (144.109)] et [une note minimale de C dans un cours choisi parmi les suivants: FRAN 1021 (144.102) ou FRAN 1071 (144.107) ou FRAN 1111 (144.111)]. Donnée au Université de Saint-Boniface.

FRAN 2661 La fantaisie dans la littérature française Cr.Hrs. 3

(L'ancien 144.266) Aperçu historique des diverses formes que la fantaisie a prises dans la littérature française du XVIe au XVIIIe siècles. Étude approfondie des courants fantaisistes qui ont animé les œuvres littéraires aux XIXe et XXe siècles. Préalables: [une note minimale de C dans le FRAN 1091 (144.109)] et [un cours choisi parmi les suivants: FRAN 1021 (144.102) ou FRAN 1071 (144.107) ou FRAN 1111 (144.111)]. Donnée au Université de Saint-Boniface.

FRAN 2681 Civilisation française Cr.Hrs. 3

(L'ancien 144.268) Étude des éléments représentatifs de deux peuples français: grands courants de pensée, mouvements de l'histoire, de la société et de la mentalité. Préalables: [une note minimale de C dans le FRAN 1091 (144.109)] et [une note minimale de C dans un des FRAN 1021 (144.102) ou FRAN 1071 (144.107) ou FRAN 1111 (144.111)]. Donnée au Collège de Saint-Boniface.

FRAN 2831 L'individu et le pays Cr.Hrs. 3

Un aperçu général de la production littéraire au Canada français depuis ses origines à nos jours, d'après une étude de textes ayant comme thème: l'individu et le pays. Préalables: une note minimale de C dans le FRAN 1091 et une note minimale de C dans un des FRAN 1021, FRAN 1071 ou FRAN 1111.

FRAN 2841 La quête du bonheur Cr.Hrs. 3

(L'ancien 144.284) Un aperçu général de la production littéraire au Canada français depuis ses origines à nos jours, d'après une étude de textes ayant comme thèmes la quête du bonheur. Préalables: [une note minimale de C dans le FRAN 1091 (144.109)] et [une note minimale de C dans un des FRAN 1021 (144.102) ou FRAN 1071 (144.107) ou FRAN 1111 (144.111)]. Donnée au Université de Saint-Boniface.

FRAN 2851 Le folklore et la littérature orale Cr.Hrs. 3

(L'ancien 144.285) Une étude des moeurs et coutumes au Canada français: une attention particulière sera accordée aux proverbes, récits et chansons traditionnels. Préalables: [une note minimale de C dans le FRAN 1091 (144.109)] et [une note minimale de C dans un des FRAN 1021 (144.102) ou FRAN 1071 (144.107) ou FRAN 1111 (144.111)].

FRAN 2861 L'influence de la littérature orale Cr.Hrs. 3

(L'ancien 144.286) Ce cours proposera l'étude de la littérature orale fixée (contes, légendes, mythes) ainsi que de textes modernes du XXe siècle (romans, poésie, nouvelles), produits au Canada français qui illustrent les influences certaines de cette littérature orale. En étudiant les contes, légendes et mythes, venant surtout du Canada, l'étudiant(e) verra comment cette source peut nourrir la veine inspiratrice d'un auteur. Préalables: [une note minimale de C dans le FRAN 1091 (144.109)] et [une note minimale de C dans un des FRAN 1021 (144.102) ou FRAN 1071 (144.107) ou FRAN 1111 (144.111)].

FRAN 2881 Civilisation canadienne-française Cr.Hrs. 3

(L'ancien 144.288) Étude des éléments représentatifs du peuple canadien-français: grands courants de pensées, mouvements de l'histoire, évolution de la société et de la mentalité. Préalables: [une note minimale de C dans le FRAN 1091 (144.109)] et [une note minimale de C dans un des FRAN 1021 (144.102) ou FRAN 1071 (144.107) ou FRAN 1111 (144.111)]. Donnée au Université de Saint-Boniface.

FRAN 2911 Procédés d'écriture Cr.Hrs. 3

Étude des diverses formes de la communication: non verbale, verbale, orale, écrite. Une attention particulière sera accordée au contexte de la communication: registres de langue, ambiguïtés de langage et polysémie de l'expression. Préalables: une note minimale de C dans FRAN 1091 et l'un des FRAN 1021, FRAN 1071 ou FRAN 1111. Note: le FRAN 1111 est fortement recommandé.

FRAN 2921 Cours de phonétique française Cr.Hrs. 3

Étude approfondie du système phonétique et de la transcription phonétique de la langue française. Exercices systématiques portant sur l'articulation, l'accent, l'intonation, le rythme, la pause, la liaison et l'élision. Préalable: une note minimale de C dans FRAN 1111.

FRAN 2931 Initiation à la linguistique Cr.Hrs. 3

Dégagement des instruments linguistiques nécessaires à la compréhension des mécanismes de la langue française. Description des structures internes pour que l'étudiant(e) puisse prendre connaissance de ses éléments constitutifs. Préalable: une note minimale de C dans FRAN 1111.

FRAN 2941 Structures du français contemporain Cr.Hrs. 3

Étude systématique de la syntaxe du français dans la perspective de la linguistique générative et transformationnelle. Préalable: une note minimale de C dans FRAN 1111.

FRAN 2991 Création de textes variés Cr.Hrs. 3

(L'ancien 144.299) Pratique des divers procédés d'écriture présentés au FRAN 2911 (144.291). Rédaction de textes argumentatifs, incitatifs, expressifs, narratifs, descriptifs. Préalable: une note minimale de C dans le FRAN 2911 (144.291). Donnée au Université de Saint-Boniface.

Faculté des arts: Français-3000 Level**FRAN 3531 Le théâtre québécois Cr.Hrs. 3**

Aperçu historique et étude du théâtre québécois de Lescaurbot à Tremblay. Étude des oeuvres de Gratien Gélinas, Marcel Dubé, Michel Tremblay, etc. Préalable: une note minimale de C dans un cours de niveau 2000 (3 crédits).

FRAN 3541 Le théâtre de l'Ouest Cr.Hrs. 3

(L'ancien 144.354) Étude d'oeuvres d'auteurs franco-manitobains, tels que Auger, Dorge, Ferland, etc. Préalable: un cours (3 crédits) avec une note minimale de C de niveau 2000. Donné au Université de Saint-Boniface.

FRAN 3631 Les romanciers du XXe siècle Cr.Hrs. 3

(L'ancien 144.363) Étude de romans ayant le plus marqué le paysage littéraire du XXe siècle. Auteurs tels que: Gide, Colette, Sartre, de Beauvoir, Duras. Préalable: un cours (3 crédits) avec une note minimale de C de niveau 2000. Donné au Université de Saint-Boniface.

FRAN 3641 Le rire dans la littérature française Cr.Hrs. 3

Étude du développement de la veine comique à travers la littérature française, de son origine au Moyen-Age jusqu'aux temps modernes en passant par ses manifestations au cours des différents siècles. Préalable : note minimale de C dans un cours de littérature de niveau 2000 (3 crédits).

FRAN 3651 Littérature et vision tragique du monde Cr.Hrs. 3

(L'ancien 144.365) Étude du développement de la veine tragique à travers la littérature française, de son origine au Moyen-Age jusqu'aux temps modernes en passant par ses manifestations au cours des différents siècles. Préalable: un cours (3 crédits) avec une note minimale de C de littérature de niveau 2000. Donné au Université de Saint-Boniface.

FRAN 3661 L'esprit de la révolution française Cr.Hrs. 3

Le maintien des formes classiques qui atteignent, au début du XVIIIe siècle, un summum d'élégance et de raffinement et l'apparition, d'une part, des idées nouvelles qui entraîneront la chute de l'ancien régime et, d'autre part, d'une sensibilité annonciatrice d'un âge nouveau. Préalable : note minimale de C dans un cours de niveau 2000 (3 crédits).

FRAN 3671 Études de poésie Cr.Hrs. 3

(L'ancien 144.367) Étude des formes poétiques de la Renaissance (Marot, poètes de la Pléiade, poètes baroques), du Romantisme (Lamartine, Musset, Vigny, Hugo), du Parnasse (Gautier) et du début du Symbolisme (Baudelaire). Préalable: un cours (3 crédits) avec une note minimale de C de niveau 2000. Donné au Université de Saint-Boniface.

FRAN 3681 Thèmes romantiques Cr.Hrs. 3

(L'ancien 144.368) Les origines et les caractéristiques du Romantisme. Sa persistance et ses déboires à travers les grands mouvements littéraires du XIXe siècle - Réalisme, Naturalisme, Parnasse et Symbolisme. Préalable: un cours (3 crédits) avec une note minimale de C de niveau 2000. Donné au Université de Saint-Boniface.

FRAN 3731 Initiation aux littératures francophones Cr.Hrs. 3

(L'ancien 144.373) Introduction générale portant sur l'ensemble de la production littéraire dans les pays francophones autres que le Canada français et la France. Étude des contextes socio-historiques qui ont favorisé l'épanouissement de cette littérature. Étude de thèmes majeurs, de structures et d'esthétiques particulières retrouvées dans une sélection d'oeuvres choisies. Préalable: un cours (3 crédits) avec une note minimale de C de niveau 2000 ou 3000.

FRAN 3831 L'époque de la contestation Cr.Hrs. 3

(L'ancien 144.383) Étude approfondie de la société québécoise et des signes précurseurs de cet éclatement qui eut lieu au début des années 60 appelé la Révolution tranquille. Une attention particulière sera accordée à la poésie, la chanson, les nouvelles et aux essais produits pendant cette période de revendication populaire. Préalable: un cours (3 crédits) avec une note minimale de C de niveau 2000. Donné à l'université de Saint-Boniface.

FRAN 3841 La révolution tranquille et le roman Cr.Hrs. 3

(L'ancien 144.384) Étude approfondie de la genèse du roman et à l'explosion des nouvelles formes de littérature depuis la Révolution tranquille au Québec. Préalable: un cours (3 crédits) avec une note minimale de C de niveau 2000. Donné à l'université de Saint-Boniface.

FRAN 3851 Littérature de l'Ouest: Poésie, nouvelles Cr.Hrs. 3

(L'ancien 144.385) Une étude de la poésie et des nouvelles produites dans l'Ouest francophone du Canada depuis le siècle dernier: l'étudiant(e) pourra apprécier l'évolution des styles et des thèmes par l'analyse de textes choisis. Préalable: un cours (3 crédits) avec une note minimale de C de niveau 2000. Donné à l'université de Saint-Boniface.

FRAN 3861 Littérature de l'Ouest: Roman Cr.Hrs. 3

(L'ancien 144.386) Une étude des romans produits dans l'Ouest francophone du Canada depuis le siècle dernier. L'étudiant(e) suivra l'évolution du genre romanesque de style et d'inspiration classique et traditionnelle jusqu'à l'expression moderne et post-moderne des écrivains franco-canadiens de l'Ouest. Préalable: un cours (3 crédits) avec une note minimale de C de niveau 2000.

FRAN 3911 Procédés et analyses stylistiques Cr.Hrs. 3

Étude détaillée de la structure des textes et des procédés stylistiques mis en oeuvre par des écrivains et des journalistes. Une place importante sera accordée à la presse, à la publicité et aux réalités sociales les plus proches des étudiants. Préalable : une note minimale de C dans FRAN 2911.

FRAN 3931 Lexicologie et lexicographie Cr.Hrs. 3

(L'ancien 144.393) Objectifs de la lexicologie; étude des unités lexicales dans le cadre de la théorie linguistique; analyses lexicales à partir de textes choisis. Problèmes théoriques et pratiques de la lexicographie. Préalable: une note minimale de C dans le FRAN 2931 (144.293). Donné au Université de Saint-Boniface.

FRAN 3941 Syntaxe du français contemporain Cr.Hrs. 3

(L'ancien 144.394) Étude des modèles fonctionnel, distributionnel et transformationnel de la syntaxe. Approfondissement du modèle transformationnel par l'analyse des transformations binaires. Préalable: une note minimale de C dans le FRAN 2941 (144.294). Donné au Université de Saint-Boniface.

FRAN 3951 Évolution de la langue Cr.Hrs. 3

(L'ancien 144.395) Place du français dans le tableau des grandes familles de langues. Origines de la langue française et sa naissance. Les dialectes de l'ancien français. Étude de quelques textes illustrant l'évolution du français du Moyen-Age au XVIIe siècle. Préalable: une note minimale de C dans le FRAN 2911 (144.291) ou FRAN 2931 (144.293). Donné au Université de Saint-Boniface.

FRAN 3991 Création littéraire: conte et nouvelle Cr.Hrs. 3

(L'ancien 144.399) Création de contes, de nouvelles et d'autres textes fictifs à partir d'une étude détaillée des genres narratifs. Une partie du cours sera consacrée à l'étude des divers types de phrase et des contextes où ils pourraient être employés. Préalable: une note minimale de C dans le FRAN 2911 (144.291). Donné au Université de Saint-Boniface.

Faculté des arts: Français-4000 Level

FRAN 4011 Sociocritique Cr.Hrs. 3

(L'ancien 144.401) Initiation aux méthodes critiques du XXe siècle se fondant sur les principes de la sociologie moderne. Préalables: une note minimale de C dans le FRAN 2911 (144.291) et un cours (3 crédits) de littérature de niveau 2000, 3000 ou 4000. Donné au Université de Saint-Boniface.

FRAN 4021 Critique féministe Cr.Hrs. 3

(L'ancien 144.402) Étude de différents courants de la critique féministe, en rapport avec les théories de la critique littéraire moderne. Problématique d'une écriture au féminin et d'une lecture féministe d'oeuvres littéraires, françaises et québécoises. Préalables: une note minimale de C dans le FRAN 2911 (144.291) et un cours (3 crédits) de littérature de niveau 2000, 3000 ou 4000. Donné au Université de Saint-Boniface.

FRAN 4071 Sujets particuliers Cr.Hrs. 3

(L'ancien 144.407) Le contenu de ce cours variera d'année en année selon les besoins des étudiant(e)s et, selon la spécialité du professeur. Préalable: un cours (3 crédits) avec une note minimale de C de niveau 2000 ou 3000.

FRAN 4081 Littérature et cinéma Cr.Hrs. 3

Étude d'oeuvres littéraires et de leur réalisation cinématographique conduisant à un examen de problèmes de l'adaptation à l'écran d'une oeuvre littéraire ainsi qu'à une comparaison des techniques d'expression des deux arts et à une réflexion sur la création dans les deux langages spécifiques, le langage textuel et le langage visuel. Préalable : note minimale de C dans un cours de 3 crédits de niveau 2000 ou 3000.

FRAN 4551 L'âge d'or du théâtre français Cr.Hrs. 3

(L'ancien 144.455) Étude thématique, dramatique et esthétique de six pièces représentatives de l'école classique du théâtre français (XVIIe siècle). Préalable: un cours (3 crédits) avec une note minimale de C de niveau 2000 ou 3000. Donné à l'université de Saint-Boniface.

FRAN 4561 Le théâtre français du XVIIIe siècle Cr.Hrs. 3

(L'ancien 144.456) Étude du renouveau des formes dramatiques dans quelques oeuvres du théâtre français du XVIIIe siècle. Préalable: un cours (3 crédits) avec une note minimale de C de niveau 2000 ou 3000. Donné au Université de Saint-Boniface.

FRAN 4591 Création littéraire: théâtre Cr.Hrs. 3

(L'ancien 144.459) Étude des procédés d'écriture d'une pièce de théâtre. Ateliers d'écriture, débouchant sur la création d'une pièce. Préalable: une note minimale de C dans le FRAN 2911 (144.291) et un cours (3 crédits) de théâtre de niveau 2000 ou 3000. Donné au Université de Saint-Boniface.

FRAN 4641 Réalisme et engagement Cr.Hrs. 3

(L'ancien 144.464) Les rapports du roman avec la société de l'histoire au XIXe et XXe siècles. Étude de la peinture de la société dans le roman. Préalable: un cours (3 crédits) avec une note minimale de C de niveau 2000 ou 3000. Donné à l'université de Saint-Boniface.

FRAN 4661 Nouveaux visages du roman Cr.Hrs. 3

(Ancien 144.466) Étude détaillée de quelques oeuvres romanesques produites depuis le début des années 1980 (romans de Le Clézio, Perec, Duras, Sarraute, etc.). Préalable: un cours (3 crédits) avec une note minimale de C de niveau 2000 ou 3000.

FRAN 4731 Littérature africaine Cr.Hrs. 3

(L'ancien 144.473) Une introduction à la littérature des pays africains francophones. Études de textes qui ont marqué le XXe siècle, avec une accentuation sur les productions après l'ère des indépendances. Préalable: une note minimale de C dans le FRAN 3731 (144.373). Donné au Université de Saint-Boniface.

FRAN 4741 Littérature maghrébine Cr.Hrs. 3

(L'ancien 144.474) Étude d'une sélection d'oeuvres francophones choisies et écrites par les auteurs connus des pays maghrébins. Certains aspects particuliers à cette littérature seront abordés: histoire, culture, thèmes, structures, langue, technique et style. Préalable: une note minimale de C dans le FRAN 3731 (144.373). Donné au Université de Saint-Boniface.

FRAN 4751 Littérature antillaise Cr.Hrs. 3

(L'ancien 144.475) Introduction générale à la littérature antillaise avec une mise en situation historique et socio-culturelle. Étude des thèmes majeurs, des particularités stylistiques dans quelques oeuvres choisies parmi les plus représentatives des tendances littéraires des XIXe et XXe siècles. Préalable: une note minimale de C dans le FRAN 3731 (144.373). Donné au Université de Saint-Boniface.

FRAN 4831 Littérature de l'Acadie et des Cajuns Cr.Hrs. 3

(L'ancien 144.483) Introduction portant sur l'ensemble de la littérature acadienne et cajune (de la Louisiane) avec une mise en contexte géographique, historique et socio-culturelle. Étude thématique stylistique et formelle de quelques oeuvres représentatives des tendances littéraires des XIXe et XXe siècles. Préalable: avoir suivi un cours (3 crédits) de niveau 2000 ou 3000. Donné au Université de Saint-Boniface.

FRAN 4841 Le roman du terroir Cr.Hrs. 3

Aperçu général de l'histoire de la littérature canadienne-française depuis la fin du XIXe siècle jusqu'en 1945. Étude d'oeuvres représentatives de chacune des périodes considérées (roman d'aventures, roman du terroir, roman régionaliste, etc.). Préalable : une note minimale de C dans un cours de 3 crédits de niveau 2000 ou 3000.

FRAN 4921 Les parlers régionaux Cr.Hrs. 3

À travers des documents audio-visuels et écrits, étude des principales caractéristiques phonétiques, syntaxiques, morphologiques, sémantiques et lexicales de certaines variantes régionales du français (ex. de France, d'Afrique, des Antilles, d'Amérique du Nord). Préalables : note minimale de C dans FRAN 2911 et FRAN 2931.

FRAN 4931 La langue dans la littérature Cr.Hrs. 3

(L'ancien 144.493) Étude détaillée de textes littéraires allant du XVIII au XXe siècle et visant l'appréciation des différents styles et l'initiation aux différentes méthodes d'analyse de textes. Préalable: une note minimale de C dans le FRAN 2911 (144.291) ou FRAN 2931 (144.293). Donné au Université de Saint-Boniface.

FRAN 4971 Sociolinguistique Cr.Hrs. 3

(L'ancien 144.497) Initiation aux rapports que l'on peut établir entre la langue et la société, aux domaines d'étude et aux méthodes de la sociolinguistique. Préalable: une note minimale de C dans le FRAN 2931 (144.293). Donné au Université de Saint-Boniface.

FRAN 4991 Création littéraire: Poésie Cr.Hrs. 3

(L'ancien 144.499) Mise en pratique de techniques de création poétique (étude des rythmes, des images, des sonorités, etc.) pour la réalisation d'oeuvres poétiques originales. Préalables: une note minimale de C dans le FRAN 2911 (144.291) et un cours (3 crédits) de poésie de niveau 2000 ou 3000. Donné au Université de Saint-Boniface.

Faculté des arts-Géographie**GEOG 1281 Introduction à la géographie humaine Cr.Hrs. 3**

(L'ancien 053.128) Étude des divers aspects du milieu humain: la population, l'habitat et les ressources naturelles. L'étudiant ne peut se faire créditer avec le GEOG 1280, ou GEOG 1200 ou GEOG 1201 (053.120).

GEOG 1291 Introduction à la géographie physique Cr.Hrs. 3

(L'ancien 053.129) Étude des divers aspects de l'environnement physique: le climat, le relief, les sols et la végétation. L'étudiant ne peut se faire créditer avec GEOG 1290 (053.129), ou GEOG 1200 ou GEOG 1201 (053.120).

GEOG 2211 Géographie économique (HS) Cr.Hrs. 6

(L'ancien 053.221) Introduction à l'expression spatiale des activités économiques. Le cours traite du concept de ressource, de la localisation et de l'utilisation des ressources naturelles, des théories sur les facteurs de localisation des activités industrielles, de l'agriculture et des fondements du développement régional. Donné au Université de Saint-Boniface. Préalable: une note minimale de C dans un minimum de 3 heures-crédits de géographie de niveau 1000 ou l'autorisation écrite du professeur.

GEOG 2331 Espace, populations et migrations : perspectives géographiques Cr.Hrs. 3

Étude des facteurs qui déterminent le nombre et la répartition des populations. Analyse des variations dans la fécondité, la mortalité et les migrations, ainsi qu'analyse des causes et conséquences de ces variations. On ne peut se faire créditer GEOG 2331 et: GEOG 2330, GEOG 2481 ou GEOG 2480 (053.248). Préalable : Une note minimale de C dans un cours de géographie de 3 crédits de niveau 1000 ou l'autorisation écrite de la professeure ou du professeur.

GEOG 2541 Météorologie et climatologie (PS) Cr.Hrs. 3

(L'ancien 053.254) Étude de la nature, des contrôles et des observations du temps et des variations spatio-temporelles du climat. Donné au Université de Saint-Boniface. Préalable: une note minimale de C dans un minimum de 3 heures-crédits de géographie de niveau 1000, ou l'autorisation écrite du professeur.

GEOG 2551 Géomorphologie (PS) Cr.Hrs. 3

(Ancien 053.255) Vue d'ensemble des reliefs variés de la surface du globe et des processus géomorphologiques responsables de leur formation. (Laboratoire hebdomadaire). Préalable: une note minimale de C dans un minimum de 3 crédits de géographie de niveau 1000 ou l'autorisation écrite de la professeure ou du professeur.

GEOG 2651 Géographie politique I Cr.Hrs. 3

(Ancien 053.265) Étude des relations qui existent entre l'État et son territoire : sa localisation, ses frontières et ses disparités régionales. On ne peut se faire créditer GEOG 2651 et GEOG 2430 (053.243). Préalable : une note minimale de C dans un minimum de 3 crédits de géographie de niveau 1000 ou l'autorisation écrite de la professeure ou du professeur.

GEOG 2661 Géographie politique II Cr.Hrs. 3

(Ancien 053.266) Étude des rapports de force entre les États et leurs relations avec l'espace, les ressources, la population et les groupes ethniques. On ne peut se faire créditer GEOG 2661 et GEOG 2430 (053.243). Préalable : une note minimale de C dans GEOG 2651 (053.265) ou l'autorisation écrite de la professeure ou du professeur.

GEOG 3411 Géographie de l'eau Cr.Hrs. 3

(Ancien 053.341) L'eau, élément essentiel de la géographie physique. Bilan d'eau, cycle hydrologique, infiltration, percolation et écoulement, eaux souterraines, hydrologie fluviale et marine. Cours d'eau, lacs et océans, environnement. On ne peut se faire créditer GEOG 3411 et GEOG 3410. Préalable : une note minimale de C dans le GEOG 1291 ou GEOG 1290 (053.129) ou l'autorisation écrite de la professeure ou du professeur.

GEOG 3421 L'eau, enjeu géostratégique Cr.Hrs. 3

(L'ancien 053.342) L'eau, un enjeu stratégique d'importance: un survol historique des enjeux liés à l'eau et les enjeux actuels, la répartition inégale de la ressource .eau. et son partage équitable, les solutions techniques, économiques, institutionnelles et juridiques envisagées et le droit international. Préalable: une note minimale de C dans le GEOG 1280 ou GEOG 1281 (053.128), et les deux GEOG 2651 (053.265) et GEOG 2661 (053.266) (ou le GEOG 2430 (053.243), ou l'autorisation écrite du professeur.

GEOG 3431 Géographie de Canada (A) Cr.Hrs. 3

(Ancien 053.343) Étude du Canada par région. On ne peut se faire créditer GEOG 3431 et GEOG 3430 (053.343), GEOG 2560 (053.256), GEOG 2570 (053.257) ou GEOG 3701 (053.370). Préalable: une note minimale de C dans un minimum de 6 crédits de géographie de niveau 1000, ou l'autorisation écrite de la professeure ou du professeur.

GEOG 3481 Particularités de la géographie du Canada (A) Cr.Hrs. 3

(Ancien 053.348) Étude des problèmes propres à la géographie canadienne: régions, urbanisme, milieu rural, ressources, utilisation du sol. Préalable: une note minimale de C dans un des cours suivants: GEOG 2560 (053.256), GEOG 2570 (053.257), GEOG 3431 ou GEOG 3430 (053.343), ou l'autorisation écrite de la professeure ou du professeur.

GEOG 3501 Géographie de l'Europe (A) Cr.Hrs. 6

(L'ancien 053.350) Vue générale sur la géographie du continent européen et plus spécifiquement sur l'Union européenne. L'accent sera placé sur quelques pays. Donné au Université de Saint-Boniface. Préalable: une note minimale de C dans un minimum de 6 heures-crédits de géographie de niveau 1000, ou l'autorisation écrite du professeur

GEOG 3591 Géographie des pays en voie de développement (A) Cr.Hrs. 6

(L'ancien 053.359) Le thème principal sera la modernisation des pays en voie de développement: exemples de l'Asie méridionale et de l'Afrique noire. Seront étudiés les aspects suivants: le développement historique, les problèmes démographiques et sociaux, l'utilisation du sol et la conservation des ressources, l'urbanisation et l'industrialisation. L'étudiant ne peut se faire créditer à la fois le GEOG 3590 (053.359) . Donné au Université de Saint-Boniface. Préalable: une note minimale de C dans un minimum de 6 heures-crédits de géographie niveau 1000, ou l'autorisation écrite du professeur.

GEOG 3761 Sujets particuliers en géographie Cr.Hrs. 6

(L'ancien 053.376) Le contenu de ce cours variera d'année en année selon les besoins des étudiants et la spécialité du professeur. Donné au Université de Saint-Boniface. Préalable: l'autorisation écrite du professeur.

GEOG 3771 Sujets particuliers en géographie Cr.Hrs. 3

Le contenu de ce cours variera d'année en année selon les besoins des étudiants et la spécialité du professeur. Préalable: l'autorisation écrite du professeur.

GEOG 3821 Les territoires de la francophonie mondiale (A, HS) Cr.Hrs. 3

(Ancien 053.382) La mise en place des espaces francophones partout dans le monde : le développement et l'éclatement des empires français et belge. La territorialité et l'identité au sein de la francophonie internationale. Répartition géographique et développement institutionnel. Ententes politiques et aspirations territoriales. On ne peut se faire créditer GEOG 3821 et GEOG 3820. Préalable : une note minimale de C dans un minimum de 6 crédits de géographie de niveau 1000.

GEOG 3831 L'espace francophone panaméricain (A, HS) Cr.Hrs. 3

(Ancien 053.383) L'étude des communautés francophones des Amériques dans le temps et dans l'espace. La mise en place de la francophonie panaméricaine et les circonstances de son éclatement. Ses enjeux économiques, sociaux, politiques et culturels. Les infrastructures, les institutions et les réseaux francophones. Préalable: une note minimale de C dans le GEOG 3821 (053.382).

GEOG 3841 Les espaces francophones de l'Afrique, de l'Asie et de l'Océanie (A, HS) Cr.Hrs. 3

(L'ancien 053.384) L'étude des communautés francophones africaines, asiatiques et océaniques. Les étapes de la colonisation et de la décolonisation, l'évolution vers l'indépendance et l'accession au statut d'État souverain. La mise en place des infrastructures, des institutions et des réseaux francophones. Donné au Université de Saint-Boniface. Préalable: une note minimale de C dans GEOG 3821 (053.382).

Faculté des arts-German**GRMN 1123 Introduction à l'allemand 1 Cr.Hrs. 3**

Trois heures de cours plus une heure de laboratoire de langue par semaine. Le cours est destiné aux étudiants et aux étudiantes n'ayant aucune connaissance de l'allemand ou n'en ayant qu'une connaissance minimale. Le cours comporte une initiation à la grammaire fondamentale, mais l'accent est mis sur le développement d'aptitudes à la lecture et à la conversation. On ne peut se faire créditer GRMN 1123 et l'ancien GRMN 1121 ou GRMN 1120. On ne peut s'inscrire à ce cours si on a déjà obtenu des crédits pour l'allemand 40S ou GRMN 2100 (008.210) ou GRMN 2101.

GRMN 1125 Introduction à l'allemand 2 Cr.Hrs. 3

Trois heures de cours plus une heure de laboratoire de langue par semaine. Le cours est destiné aux étudiants et aux étudiantes n'ayant aucune connaissance de l'allemand ou n'en ayant qu'une connaissance minimale. Le cours comporte une initiation à la grammaire fondamentale, mais l'accent est mis sur le développement d'aptitudes à la lecture et à la conversation. On ne peut se faire créditer GRMN 1125 et l'ancien GRMN 1121 ou GRMN 1120. On ne peut s'inscrire à ce cours si on a déjà obtenu des crédits pour l'allemand 40S ou GRMN 2100 (008.210) ou GRMN 2101. Préalable : GRMN 1123.

GRMN 2103 Allemand intermédiaire 1 (A) L Cr.Hrs. 3

Trois heures de cours plus une heure de conversation par semaine. Révision de la grammaire, exercices, développement des compétences orales pratiques, conversation et usage moderne. Introduction à la prose et à la poésie allemande. On ne peut se faire créditer GRMN 2103 et GRMN 2101 ou GRMN 2100. Préables: Allemand 40S ou une note minimale de C dans GRMN 1121, GRMN 1120 ou GRMN 1125, ou l'autorisation écrite du professeur ou de la professeure.

GRMN 2105 Allemand intermédiaire 2 (A) L Cr.Hrs. 3

Trois heures de cours plus une heure de conversation par semaine. Révision de la grammaire, exercices, développement des compétences orales pratiques, conversation et usage moderne. Exploration plus approfondie de la prose et de la poésie allemande. On ne peut se faire créditer GRMN 2105 et GRMN 2101 ou GRMN 2100. Préables : une note minimale de C dans GRMN 2103, ou l'autorisation écrite du professeur ou de la professeure.

GRMN 3201 Deutsche sprachpraxis I Cr.Hrs. 6

(Ancien 008.320) Usage de l'allemand contemporain par la conversation, l'écriture et les exercices pratiques; étude de textes fictifs et non-fictifs et de films. L'accent est mis sur l'acquisition de vocabulaire et sur les particularités stylistiques et structurelles. On ne peut se faire créditer le GRMN 3201 (008.320) et le GRMN 3200 (008.320). Préalable: une note minimale de C dans GRMN 2100 (008.210) ou GRMN 2101 (008.210).

GRMN 3211 Allemand commercial Cr.Hrs. 6

(L'ancien 008.321) Initiation, au moyen d'exercices oraux et écrits, au vocabulaire commercial et aux techniques d'écriture dans le domaine des affaires. Révision de la grammaire allemande avec l'accent sur la composition et la conversation appliquées au domaine commercial. On ne peut se faire créditer le GRMN 3211 (008.321) et le GRMN 3210 (008.321). Préalable: [une note minimale de C dans GRMN 2100 (008.210) ou GRMN 2101 (008.210) ou le GRMN 2110 (008.211)] ou l'autorisation écrite du professeur ou de la professeure. Donné au Université de Saint-Boniface.

GRMN 3601 Sujets particuliers Cr.Hrs. 3

(Ancien 008.360) Contenu variable en fonction des besoins et des intérêts des étudiantes et des étudiants et de la professeure ou du professeur. On ne peut se faire créditer GRMN 3601 et GRMN 3600 (008.360). Le contenu variera d'année en année, il sera donc possible de se faire créditer ce cours plus d'une fois. Préalable : une note minimale de C dans GRMN 2101 ou GRMN 2100 (008.210), ou l'autorisation écrite de la professeure ou du professeur.

Faculté des arts-History**HIST 1201 Initiation à la civilisation occidentale (G) Cr.Hrs. 6**

(Ancien 011.120) Aperçu de l'histoire culturelle du monde occidental de l'antiquité grecque à nos jours. L'étudiant(e) qui détient les crédits du HIST 1201 (011.120) ne peut se faire créditer aucun des cours HIST 1200 (011.120) ou HIST 1350 (011.135) ou HIST 1360 (011.136).

HIST 1441 Histoire du Canada (C) Cr.Hrs. 6

(Ancien 011.144) Étude de l'évolution générale du Canada, des "origines" à nos jours. À travers un survol des principales périodes, régions, groupes, personnages et institutions qui ont contribué à la formation et à la transformation de la société canadienne, il s'agira d'illustrer la richesse et la complexité des rapports humains dans le temps et l'espace. L'étudiant(e) qui détient les crédits du HIST 1441 (011.144) ne peut se faire créditer aucun des cours HIST 1440 (011.144) ou HIST 1390 (011.139) ou HIST 1400 (011.140).

HIST 2041 Histoire des États-Unis jusqu'en 1877 (A) Cr.Hrs. 3

(L'ancien 011.204) Une vue générale du développement du peuple américain et de l'établissement jusqu'à la période de Reconstruction. L'étudiant(e) ne peut se faire créditer à la fois le HIST 2041 (011.204) et le HIST 2230 (011.223). Donné au Université de Saint-Boniface.

HIST 2191 Histoire économique et sociale canadienne du XIXe siècle (C) Cr.Hrs. 6

(L'ancien 011.219) Ce cours aborde l'émergence de l'industrialisation au Canada et ses effets sur la société canadienne. La mise en place d'une bourgeoisie industrielle et d'un prolétariat sera examinée attentivement de même que ses implications sur la société canadienne. Donné au Université de Saint-Boniface.

HIST 2381 Le monde du 20e siècle (G,M) Cr.Hrs. 6

(Ancien 011.238) Les crises du monde moderne, y compris l'impact, sur une échelle universelle, de la civilisation occidentale, du choc des idéologies, de la guerre, de la paix et la modernisation. On ne peut se faire créditer HIST 2381 (011.238) et HIST 2380 (011.238).

HIST 2481 Histoire de la France depuis 1500 (E) Cr.Hrs. 6

(L'ancien 011.248) Aperçu de la Renaissance des XVIIe, XVIIIe et XIXe siècles et de l'époque contemporaine. Donné au Université de Saint-Boniface.

HIST 2661 Histoire de l'Union soviétique (E) Cr.Hrs. 3

Une attention particulière sera donnée à la Révolution russe de 1917, à la nature et au fonctionnement du système politique soviétique, aux expériences sociales et économiques du régime soviétique ainsi qu'au rôle des Soviétiques dans la politique internationale. L'étudiant(e) qui détient le crédits du HIST 2661 ne peut se faire créditer aucun des cours HIST 2660 (011.266) HIST 2490 (011.249) ou l'ancien HIST 3471 (011.347). Donné au Université de Saint-Boniface.

HIST 2671 Histoire du capitalisme (M) Cr.Hrs. 3

Étude de l'émergence et de l'évolution de capitalisme ainsi que de ses conséquences sociales du 15e siècle jusqu'à nos jours. L'étudiant(e) ne peut se faire créditer à la fois le HIST 2671 et le HIST 2670 (011.267).

HIST 2761 Histoire des États-Unis depuis 1877 (A) Cr.Hrs. 3

(L'ancien 011.276) Une revue générale du développement du peuple américain à partir de la Reconstruction jusqu'au présent. L'étudiant(e) qui détient le crédits du HIST 2761 (011.276) ne peut se faire créditer aucun des cours HIST 2760 (011.276) ou HIST 2230 (011.223). Donné au Université de Saint-Boniface.

HIST 2841 Histoire de la Russie jusqu'en 1917 (E) Cr.Hrs. 3

Un survol historique du développement de la Russie jusqu'à la fin de la période impériale. L'étudiant(e) qui détient le crédits du HIST 2841 ne peut se faire créditer aucun des cours HIST 2840 (011.284) ou HIST 2490 (011.249) ou l'ancien HIST 3471 (011.347). Donné au Université de Saint-Boniface.

HIST 2971 Le Canada moderne : de 1921 à nos jours (C) Cr.Hrs. 6

(Ancien 011.297) Étude approfondie de la transformation du Canada en un Etat moderne, entité nationale, politique, économique, sociale et culturelle. L'étudiant(e) ne peut se faire créditer à la fois le HIST 2971 (011.297) et le HIST 2970 (011.297).

HIST 2991 Histoire de l'Église catholique depuis 1540 (G) Cr.Hrs. 3

Histoire de l'Église catholique depuis 1540 jusqu'à nos jours. On portera attention particulièrement à la réponse que l'Église a donnée à la modernisation du monde ainsi qu'à l'évolution théologique et aux réformes institutionnelles. L'étudiant(e) ne peut se faire créditer à la fois le HIST 2991 et le HIST 2990 (011.299). Donné au Université de Saint-Boniface.

HIST 3011 La guerre au 20e siècle Cr.Hrs. 3

Ce cours aborde le phénomène de la guerre au 20e siècle dans tous ses aspects: militaires, économiques, sociaux, culturels, humains. Il sera question des deux guerres mondiales et de la Guerre froide mais aussi des guerres régionales ou locales. Nous traiterons aussi des différentes formes que la guerre a prises au siècle dernier: décolonisation, guérilla, terrorisme. Préalable: [avoir obtenu une note minimale de C dans six crédits en histoire] ou l'autorisation écrite de la professeure ou du professeur. Donné au Université de Saint-Boniface.

HIST 3101 Histoire de l'Éducation en Occident depuis 1500, une introduction (M) Cr.Hrs. 3

Introduction à l'histoire de l'éducation en Occident. Présentation des grands jalons au cours des cinq cents dernières années. Parmi les thèmes abordés, il y aura la création et de l'évolution des différents niveaux d'écoles, la programmation, le financement, la place de l'Église et celle de l'État dans l'éducation, les méthodes d'enseignement, les différences entre les sexes, la progression de l'alphabétisation et de la scolarisation. Préalable: [avoir obtenu une note minimale de C dans six crédits en histoire] ou l'autorisation écrite de la professeure ou du professeur.

HIST 3111 Sujets spéciaux 1 (G) Cr.Hrs. 3

Occasion d'étudier un thème choisi en histoire. Le contenu varie mais doit comprendre un travail en histoire sociale ou culturelle ou sur un sujet spécifique. Consulter le département d'histoire et le Guide d'inscription. Préalable: [avoir obtenu une note minimale de C dans six crédits en histoire] ou l'autorisation écrite de la professeure ou du professeur. Le contenu variera d'année en année alors l'étudiant(e) peut se faire créditer ce cours plus d'une fois.

HIST 3121 Sujets spéciaux 2 (G) Cr.Hrs. 3

L'occasion d'étudier un thème choisi en histoire. Le contenu varie mais doit comprendre un travail en histoire sociale ou culturelle ou sur un sujet spécifique. Consulter le département d'histoire et le Guide d'inscription. Préalable: [avoir obtenu une note minimale de C dans six crédits en histoire] ou l'autorisation écrite de la professeure ou du professeur. Le contenu variera d'année en année alors l'étudiant(e) peut se faire créditer ce cours plus d'une fois. Donné au Université de Saint-Boniface.

HIST 3141 Histoire de la démocratie (G) Cr.Hrs. 3

Ce cours aborde un sujet au coeur de l'actualité: la démocratie et, plus spécialement la démocratisation des États dans le monde depuis le 19e siècle. Nous abordons les aspects théoriques de la démocratie et l'évolution de la mise en pratique de la théorie démocratique. Préalable: [avoir obtenu une note minimale de C dans six crédits en histoire] ou l'autorisation écrite de la professeure ou du professeur.

HIST 3301 Histoire du terrorisme contemporain (G) Cr.Hrs. 3

Étude d'un aspect particulier des conflits sociopolitiques qui ont marqué l'histoire contemporaine : le terrorisme. L'évolution historique de ce phénomène est traitée tant du point de vue de sa notion / définition(s), son / ses idéologie (s), ses objectifs ou buts, que de ses revendications, sa géographie et ses méthodes d'action. Préalable : une note minimale de C dans 6 crédits en Histoire ou l'autorisation écrite de la professeure ou du professeur.

HIST 3721 Histoire du Manitoba (C) Cr.Hrs. 6

(L'ancien 011.372) L'évolution politique, économique et sociale de la province depuis sa création à nos jours. Le cours sera précédé d'un bref aperçu de l'ère missionnaire dans l'Ouest canadien. Préalable: [une note minimale de C dans HIST 1440 (011.144) ou HIST 1441 (011.144)] ou l'assentiment du département. Donné au Université de Saint-Boniface.

HIST 3761 Sujets particuliers en histoire des États-Unis I (A) Cr.Hrs. 3

(Ancien 011.376) La matière de ce cours sera annoncé chaque année. Veuillez consulter le département d'histoire. L'étudiant(e) ne peut se faire créditer à la fois le HIST 3761 (011.376) et le HIST 3760 (011.376). Préalable: [une note minimale de C dans six crédits en histoire] ou l'assentiment du département. Le contenu variera d'année en année alors l'étudiant(e) peut se faire créditer ce cours plus d'une fois.

HIST 3771 Sujets particuliers en histoire des États-Unis II (A) Cr.Hrs. 3

(Ancien 011.377) La matière de ce cours sera annoncée chaque année. Veuillez consulter le département d'histoire. L'étudiant(e) ne peut se faire créditer à la fois le HIST 3771 (011.377) et le HIST 3770 (011.377). Préalable: [une note minimale de C dans six crédits en histoire] ou l'assentiment du département. Le contenu variera d'année en année alors l'étudiant(e) peut se faire créditer ce cours plus d'une fois.

HIST 3781 Études choisies en histoire du Canada I (C) Cr.Hrs. 3

(L'ancien 011.378) Le contenu de ce cours variera d'année en année. Il est construit en vue de donner une connaissance approfondie de certains sujets et thèmes particuliers de l'histoire du Canada. La description détaillée de ce cours sera disponible à l'avance au bureau du professeur. L'étudiant(e) ne peut se faire créditer à la fois le HIST 3781 (011.378) et le HIST 3780 (011.378). Préalable: [une note minimale de C dans six crédits en histoire] ou l'assentiment du département. Le contenu variera d'année en année alors l'étudiant(e) peut se faire créditer ce cours plus d'une fois. Donné au Université de Saint-Boniface.

HIST 3791 Études choisies en histoire du Canada II (C) Cr.Hrs. 3

(L'ancien 011.379) Le contenu de ce cours variera d'année en année. Il est construit en vue de donner une connaissance approfondie de certains sujets et thèmes particuliers de l'histoire du Canada. La description détaillée de ce cours sera disponible à l'avance au bureau du professeur. L'étudiant(e) ne peut se faire créditer à la fois le HIST 3791 (011.379) et le HIST 3790 (011.379). Préalable: [une note minimale de C dans six crédits en histoire] ou l'assentiment du département. Le contenu variera d'année en année alors l'étudiant(e) peut se faire créditer ce cours plus d'une fois. Donné au Université de Saint-Boniface.

HIST 3811 Famille, amour et mariage dans la société occidentale, 1500-1800 (E) Cr.Hrs. 6

(Ancien 011.381) Étude de la théorie et de la pratique du mariage dans l'Europe moderne, particulièrement dans un rapport avec les aspects démographiques, économiques, religieux et juridiques de la relation maritale. Préalable : une note minimale de C dans six crédits en histoire ou l'autorisation écrite de la professeure ou du professeur.

Faculté des arts-Philosophy**PHIL 1291 Pensée critique Cr.Hrs. 3**

Ce cours aide les étudiants à penser clairement et de manière critique, à présenter, à défendre et à évaluer des arguments. On discutera des bons et des mauvais raisonnements, des sophismes quotidiennes et de certaines formes de raisonnement telles que le syllogisme catégorique et des moyens et des manières de définir les mots. Les étudiants ne peuvent se faire créditer à la fois les cours PHIL 1291 (015.129) et un quelconque des cours suivants: PHIL 1290 ou PHIL 1320 (015.132) ou PHIL 1321 (015.132).

PHIL 1321 Introduction à la logique Cr.Hrs. 6

(Ancien 015.132) Ce cours a pour but d'aider les étudiants à penser clairement et de manière critique, à présenter, à défendre et à évaluer les arguments. Le cours traite de la logique catégorique, des sophismes non-formels, de la définition, de la logique symbolique moderne et de la méthode scientifique. L'étudiant(e) qui ont obtenu des crédits pour les cours PHIL 2430 (015.243) et PHIL 3750 (015.375) ne sont pas autorisés à suivre ce cours. L'étudiant(e) qui détient les crédits du PHIL 1321 (015.132) ne peut se faire créditer aucun des cours PHIL 1320 (015.132) ou PHIL 1290 (015.129) ou PHIL 1330 (015.133).

PHIL 1401 Introduction à l'éthique Cr.Hrs. 3

Introduction aux notions fondamentales de la morale et de l'éthique et présentation des théories morales occidentales les plus importantes pour notre appréciation de notre condition morale actuelle : la morale des vertus (Aristote), la morale religieuse (le catholicisme), la morale déontologique (Kant) et la morale utilitariste (Bentham et Mill). Études de problèmes moraux contemporains à partir de ces théories. On ne peut se faire créditer PHIL 1401 et aucun de l'ancien PHIL 2530, l'ancien PHIL 2531.

PHIL 1511 Introduction historique à la philosophie Cr.Hrs. 6

(L'ancien 015.151) Introduction aux grands penseurs de la civilisation occidentale des anciens grecs tels que Platon et Aristote jusqu'aux philosophes analytiques et (si possible) aux existentialistes contemporains. Introduction aux grandes questions telles que la nature de la réalité, l'existence de Dieu, la connaissance humaine et la moralité. La logique élémentaire sera aussi étudiée. L'étudiant(e) qui détient les crédits du PHIL 1511 (015.151) ne peut se faire créditer aucun des cours PHIL 1510 (015.151) ou PHIL 1200 (015.120) ou PHIL 1260 (015.126). Le cours PHIL 1510 (015.151) fait partie à la fois du groupe 1 et du groupe 2. Donné au Université de Saint-Boniface.

PHIL 2171 Sujets particuliers 1 Cr.Hrs. 3

Les sujets traités varient d'année en année. Préalable : une note minimale de C dans trois crédits de philosophie ou avoir complété un minimum de 30 crédits universitaires. Compte tenu du fait que le contenu de ce cours varie d'année en année, il peut être suivi plus d'une fois.

PHIL 2301 Philosophie politique Cr.Hrs. 6

(L'ancien 015.230) Analyse et évaluation des doctrines des grands penseurs politiques tels que Platon, Hobbes, Locke, Mill, Marx; leurs idéaux de justice, de liberté, de bonheur, d'égalité et d'épanouissement personnel, leurs théories sur la nature humaine et sur les fondements de la société. L'étudiant(e) ne peut se faire créditer à la fois le PHIL 2301 (015.230) et le PHIL 2300 (015.230). Préalable: après avoir complété et réussi 30 unités de cours universitaires. Donné au Université de Saint-Boniface.

PHIL 2631 Le rationalisme continental Cr.Hrs. 3

(Ancien 015.263) Étude des philosophes du continent: Descartes, Spinoza, Leibniz, qui ont perçu la raison plutôt que l'expérience comme la clé de toute connaissance de l'Univers. L'étudiant(e) ne peut se faire créditer à la fois le PHIL 2631 (015.263) et le PHIL 2630 (015.263). Préalable: [une note minimale de C dans six heures-crédits au niveau 1000 en philosophie] ou autorisation écrite du professeur.

PHIL 2641 L'empirisme britannique Cr.Hrs. 3

(Ancien 015.264) Revue et analyse des théories des grands empiristes britanniques: Locke, Berkeley et Hume, sur la nature et les fondements de la connaissance humaine et ses relations avec l'expérience. L'étudiant(e) ne peut se faire créditer à la fois le PHIL 2641 (015.264) et le PHIL 2640 (015.264). Préalable: [une note minimale de C dans six heures-crédits au niveau 1000 en philosophie] ou autorisation écrite du professeur.

PHIL 2661 Aristote Cr.Hrs. 3

(L'ancien 015.266) Une étude des idées les plus importantes d'Aristote sur la réalité, la connaissance, la morale et la politique. Étude des philosophies postclassiques: l'épicurisme et le stoïcisme. L'étudiant(e) ne peut se faire créditer à la fois le PHIL 2661 (015.266) et le PHIL 2660 (015.266). Préalable: [une note minimale de C dans six heures-crédits au niveau 1000 en philosophie] ou autorisation écrite du professeur. Donné au Université de Saint-Boniface.

PHIL 2701 Philosophie de la religion Cr.Hrs. 6

(L'ancien 015.270) Examen critique des raisons pouvant justifier l'attitude religieuse. Le cours portera entre autres sur l'existence de Dieu et sa nature, le mal, la raison et la foi, la signification du discours religieux, la révélation, les miracles, le mysticisme. L'étudiant(e) qui détient les crédits du PHIL 2701 (015.270) ne peut se faire créditer aucun des cours PHIL 2700 (015.270) ou PHIL 2730 (015.273). Donné au Université de Saint-Boniface.

PHIL 2741 Éthique et biomédecine Cr.Hrs. 3

(Ancien 015.274) Le cours examine quelques-unes des plus importantes questions d'éthique soulevées par les récents développements en biologie et en médecine. Les sujets à couvrir incluent: l'attribution de rares ressources médicinales limitées, la manipulation génétique; l'euthanasie vs la prolongation de la vie; l'avortement et l'infanticide ainsi que l'expérimentation sur des sujets humains. On ne peut se faire créditer à la fois le PHIL 2741 et aucun des cours suivants: PHIL 2290 (015.229) ou PHIL 2531 (015.253) ou PHIL 2740 (015.274). Préalable: avoir complété avec succès 30 heures de crédits universitaires.

PHIL 2751 Éthique et environnement Cr.Hrs. 3

(Ancien 015.275) Examen de certaines questions éthiques importantes en rapport avec la pollution de l'environnement et de l'épuisement des ressources. On étudiera (entre autres) : l'idéal des limites de la liberté et de l'environnement, la rareté et l'idéal de la justice, la croissance versus l'état de stabilité économique, les droits des animaux et l'éthique de la survie vs. l'éthique du bien être. On ne peut se faire créditer à la fois le PHIL 2751 et aucun des cours suivants: PHIL 2290 (015.229) ou PHIL 2531 (015.253) ou PHIL 2750 (015.275). Préalable: avoir complété avec succès 30 heures crédits universitaires.

PHIL 2781 Musique et comportement humain Cr.Hrs. 3

Examen critique de l'influence de la musique sur le comportement humain à partir des penseurs les plus marquants à ce sujet : Pythagore, Platon, Aristote, Philodème de Gadara, Nietzsche, Adorno et Bloom. Écoute d'extraits musicaux pour ancrer les notions dans la réalité musicale ancienne et contemporaine.

PHIL 2811 Philosophie de l'éducation Cr.Hrs. 3

Présentation des thèmes centraux à la philosophie de l'éducation : quels sont les traits désirables à acquérir, pourquoi le sont-ils et comment peut-on les acquérir. Le cours présente également différentes réponses à ces questions qu'apportent les théories de la nature humaine. On ne peut se faire créditer PHIL 2811 et aucun de l'ancien PHIL 2810 (ancien 015.281), l'ancien PHIL 3550 (ancien 015.355), l'ancien PHIL 3551. Préalable : avoir complété avec succès 30 crédits universitaires.

PHIL 2823 Philosophie de l'existence Cr.Hrs. 3

Présentation des principaux thèmes de ce courant philosophique et mise en relief de la vision particulière des auteurs étudiés, en particulier celle de Sören Kierkegaard, de Karl Jaspers, de Martin Buber, de Gabriel Marcel, de Jean-Paul Sartre et de Paul-Louis Landsberg. On ne peut se faire créditer PHIL 2823 et l'ancien PHIL 2820 ou PHIL 2821.

PHIL 2831 Éthique des affaires Cr.Hrs. 3

(Ancien 015.283) Le cours explore l'application de la théorie éthique dans les affaires. Les sujets discutés incluent normalement: les théories sur la justice, la responsabilité des corporations, l'éthique dans la publicité, la protection du consommateur et de l'environnement, les préférences à l'embauche. On ne peut se faire créditer à la fois PHIL 2831 et PHIL 2830 (015.283). Préalable: avoir complété avec succès 30 crédits universitaires.

PHIL 2841 Éthique de la guerre et de la paix Cr.Hrs. 3

(Ancien 015.284) Une étude des questions éthiques relatives à la guerre et à la recherche de la paix qu'on trouve traitées dans les oeuvres des plus grands philosophes et des penseurs politiques et militaires choisis. Les théories morales pertinentes telles que la non-violence, la guerre sainte, la guerre juste, les raisonnements éthiques qui sous-tendent les politiques de dissuasion seront examinées de manière critique dans le contexte historique et contemporain. On ne peut se faire créditer à la fois PHIL 2841 et PHIL 2840 (015.284).

PHIL 2861 Philosophie du droit Cr.Hrs. 3

(Ancien 015.286) Une introduction à la philosophie du droit et au système réglementaire en général. Les sujets abordés incluent: le concept de loi (la loi et la religion, la loi naturelle, et les lois des livres), la relation, s'il y a lieu, entre la loi et la moralité et les politiques du droit au Canada et ailleurs. On ne peut se faire créditer à la fois PHIL 2861 et PHIL 2860 (015.286).

PHIL 2871 La philosophie et le droit Cr.Hrs. 3

(Ancien 015.207) Examen de la philosophie du droit à partir des questions non traitées du cours PHIL 2861 (015.286). L'étudiant examinera des thèmes tels que: la culpabilité et la responsabilité; les théories du châtement; le droit à la dissidence; le raisonnement légal et l'éthique professionnelle. On ne peut pas se faire créditer à la fois PHIL 2871 et PHIL 2870 (015.287).

PHIL 2901 Philosophie de la démocratie Cr.Hrs. 3

A partir d'une réflexion portant sur l'émergence de la démocratie et de ses fondements, d'une réflexion portant sur son implantation de plus en plus universelle et d'une réflexion portant sur ce que la démocratie contient comme promesses et dangers, le cours, à l'aide des penseurs les plus importants pour approcher la démocratie, veut aider les étudiant(e)s à mieux comprendre philosophiquement le système politique dans lequel ils vivent.

PHIL 3223 Philosophie et littérature Cr.Hrs. 3

Les sujets abordés incluent : l'analyse de l'acte de la lecture, la structure fondamentale de l'œuvre littéraire, les qualités esthétiques de la nouvelle et du roman, la vérité et le mensonge en littérature, le rôle de la littérature dans l'éducation. Dans la deuxième partie, on propose une analyse philosophique des œuvres célèbres de Heinrich von Kleist, de Dostoïevski et d'Orwell. Préalable : avoir complété avec succès 30 crédits universitaires.

PHIL 3225 Anthropologie philosophique Cr.Hrs. 3

L'anthropologie philosophique naît du questionnement et de la réflexion portant sur la nature et le sens de la vie humaine. Au-delà de l'analyse proprement philosophique des traits caractéristiques de l'être humain, elle cherche à intégrer et à mettre en valeur les contributions des sciences humaines. Après avoir présenté le point de vue des principaux représentants de ce courant de pensée (Scheler, Plessner, Gehlen, Straus), ce cours propose une réflexion approfondie sur les principales dimensions de l'existence humaine. On ne peut se faire créditer PHIL 3225 et PHIL 3571. Préalable : avoir complété avec succès 30 crédits universitaires.

Faculté des arts-Political Studies

POLS 1503 Introduction à la politique 1 Cr.Hrs. 3

Introduction aux concepts fondamentaux à l'analyse des phénomènes politiques. Problèmes et enjeux associés à l'exercice de l'autorité et à la construction de la légitimité politique. Exploration des dynamiques politiques au sein des institutions politiques : démocraties libérales et régimes autoritaires. On ne peut se faire créditer POLS 1503 et POLS 1500 (019.150) ou l'ancien POLS 1501.

POLS 1505 Introduction à la politique II Cr.Hrs. 3

Aperçu des principales idéologies contemporaines. Évaluation de leur rôle dans les dynamiques politiques. Parmi les idéologies existantes, seront principalement abordées : libéralisme, néo-libéralisme, conservatisme, fascisme, néo-conservatisme, socialisme, anarchisme, féminisme. Préalable : POLS 1503. On ne peut se faire créditer POLS 1505 et POLS 1500 (019.150) ou l'ancien POLS 1501.

POLS 2003 Introduction à la politique comparée I Cr.Hrs. 3

Introduction à l'étude comparative de processus et dynamiques politiques internes aux états, dans différents contextes historiques, culturels et institutionnels. Méthodes, approches, typologies et concepts utilisés dans l'analyse comparée des dynamiques et processus politiques : révolutions sociales, contre-révolution, modernisation, démocratisation, industrialisation, formes variées d'action collective. On ne peut se faire créditer POLS 2003 et POLS 2000 (019.200).

POLS 2005 Introduction à la politique comparée II Cr.Hrs. 3

Introduction à l'étude comparative des institutions et des régimes politiques dans différents contextes historiques, culturels et institutionnels. Méthodes, approches, typologies et concepts utilisés dans l'analyse comparée des institutions et régimes politiques : démocraties libérales, régimes totalitaires, autoritaires et post-communistes. Préalable : POLS 2003. On ne peut se faire créditer POLS 2005 et POLS 2000 (019.200).

POLS 2043 Introduction à la politique globale I Cr.Hrs. 3

Introduction à l'analyse des actions et des interactions politiques au sein du système mondial. Analyse de la formation et des transformations des normes et du cadre institutionnel qui influencent les interactions entre les divers acteurs du système mondial : compétition, conflit et coopération. Analyse du processus d'institutionnalisation des asymétries de pouvoir au sein du système mondial sur la longue durée. On ne peut se faire créditer POLS 2043 et POLS 2040 (019.204) ou l'ancien POLS 2041.

POLS 2045 Introduction à la politique globale II Cr.Hrs. 3

Aperçu des grandes traditions théoriques pour l'étude des actions et des interactions politiques internationales : idéalisme, réalisme et marxisme. Aperçu des transformations contemporaines des structures et dynamiques du système mondial : Sécurité, guerre, droit et institutions internationales et émergence des acteurs transnationaux. Préalable : POLS 2043. On ne peut se faire créditer POLS 2045 et POLS 2040 (019.204) ou l'ancien POLS 2041.

POLS 2071 Introduction au système gouvernemental canadien Cr.Hrs. 6

(L'ancien 019.207) Une revue à la fois des institutions et des processus politiques canadiens, y compris les systèmes parlementaires et fédéral, les partis politiques et les groupes d'intérêt. L'étudiant(e) qui détient le crédits du POLS 2071 (019.207) ne peut se faire créditer aucun des cours POLS 2070 (019.207) ou l'ancien 019.156. Donné au Université de Saint-Boniface.

POLS 2513 Pensée politique classique Cr.Hrs. 3

Les grandes questions de la pensée politique analysées à travers la lecture critique des auteurs classiques depuis l'Antiquité jusqu'au XVIe siècle. Permanence, pertinence actuelle et discontinuités de la réflexion politique. Les auteurs, situés dans leur contexte historique, comprendront notamment Platon, Aristote, Cicéron, Saint Augustin, Saint Thomas d'Aquin et Machiavelli. On ne peut se faire créditer POLS 2513 et POLS 2510 (019.251) ou l'ancien POLS 2511.

POLS 2515 Pensée politique moderne Cr.Hrs. 3

Introduction à la genèse et au développement des grands courants de pensée des XVIIe, XVIIIe et XIXe siècles. Les idées libérales et leurs critiques situées dans leur contexte historique. Les concepts du libéralisme et les idées de l'égalitarisme social. Les auteurs étudiés incluront notamment Hobbes, Locke, Rousseau, Burke, Smith et Marx. Préalable : POLS 2513. On ne peut se faire créditer POLS 2515 et POLS 2510 (019.251) ou l'ancien POLS 2511.

POLS 2561 Questions d'actualité en politique canadienne Cr.Hrs. 6

(Ancien 019.256) Analyse des activités du gouvernement canadien dans certains domaines problématiques ainsi qu'une revue des différentes approches à ces problèmes. Préalable: un de [POLS 1501, POLS 1500 (019.150), POLS 1561] ou [POLS 1560 (019.156)] ou [POLS 1503 et POLS 1505], ou l'autorisation écrite de la professeure ou du professeur.

POLS 2571 Initiation à l'administration publique Cr.Hrs. 6

(L'ancien 019.257) Une revue des principes fondamentaux, du recrutement du personnel et de l'organisation ainsi que de la gestion fiscale au sein du gouvernement. L'étudiant ne peut se faire créditer à la fois le POLS 2571 (019.257) et le POLS 2570 (019.257). Donné au Université de Saint-Boniface.

POLS 3141 Sujets particuliers en politique 1 Cr.Hrs. 3

(Ancien 019.314) Contenu du cours variable d'année en année. Contacter le département pour une description de cours. On ne peut se faire créditer POLS 3141 et POLS 3140 (019.314). Le contenu variera d'année en année, il sera donc possible de se faire créditer ce cours plus d'une fois. Préalable : l'autorisation écrite de la professeure ou du professeur.

POLS 3151 Sujets particuliers en politique 2 Cr.Hrs. 3

(Ancien 019.315) Contenu du cours variable d'année en année. Contacter le département pour une description de cours. On ne peut se faire créditer POLS 3151 et POLS 3150 (019.315). Le contenu variera d'année en année, il sera donc possible de se faire créditer ce cours plus d'une fois. Préalable : l'autorisation écrite de la professeure ou du professeur.

POLS 3181 Droits humains dans le système mondial Cr.Hrs. 3

Analyse du développement des droits humains comme projet politique. Introduction aux chartes et instruments juridiques internationaux encadrant les droits humains. Analyse de leur développement, évolution et mise en application depuis 1945. Mise en relation du processus de mondialisation et de ses effets en termes d'insécurité des populations vulnérables. Analyse de situations de violation de droits humains (civils, politiques, économiques et sociaux) dans le contexte de la mondialisation au moyen d'études de cas. Préalable : Une note minimale de C dans POLS 2041 ou POLS 2040, ou dans POLS 2043 et POLS 2045, ou l'autorisation écrite de la professeure ou du professeur.

POLS 3211 Sociopolitique des conflits armés Cr.Hrs. 3

Analyse des causes (endogènes et exogènes), déroulement, conséquences et prévention des conflits armés à partir d'études de cas. Évolution des notions de conflit, de guerre et de sécurité. Transformations de la pratique et de la conduite des conflits armés depuis 1945. Préalable : Une note minimale de B dans POLS 2040 ou POLS 2041 ou POLS 2043 et POLS 2045.

POLS 3251 Économie politique internationale Cr.Hrs. 3

Étude des interrelations entre processus politiques, production et distribution de la richesse dans l'environnement international. Accent mis autant sur le développement historique, les perspectives théoriques majeures que sur les enjeux fondamentaux en économie politique internationale. On ne peut se faire créditer POLS 3251 et POLS 3250 (019.325). Préalable : une note minimale de C dans POLS 2040 (019.204) ou POLS 2041 ou POLS 2043 et POLS 2045 ou l'autorisation écrite de la professeure ou du professeur.

POLS 3563 Le Canada dans le système mondial Cr.Hrs. 3

Aperçu du rôle et de l'influence de l'État canadien au sein du système mondial depuis la Deuxième Guerre mondiale. Analyse des grandes mutations du système mondial et leurs effets sur la formulation et la conduite de la politique étrangère et de la défense canadienne. La participation canadienne au sein des institutions et forums multilatéraux en relation avec le processus de mondialisation. On ne peut se faire créditer POLS 3563 et POLS 3520 (019.352) ou POLS 3561. Préalables : une note minimale de C dans POLS 1500 (019.150) ou POLS 1501 ou dans POLS 1503 et POLS 1505 ou l'autorisation écrite de la professeure ou du professeur.

POLS 3621 Violence politique Cr.Hrs. 3

Causes et formes de la violence visant le changement politique, le contrôle de l'État, le renversement d'un régime ou la modification des frontières politiques existantes. Analyse de la violence politique mobilisée par les acteurs étatiques et non-étatiques tant à l'intérieur qu'à l'extérieur des frontières nationales. Manifestations extrêmes de la violence politique : Guérillas, terrorisme et terrorisme d'État, émeutes, violence à caractère ethnique et religieux. Préalable : Une note minimale de C dans POLS 1500 ou POLS 1501 ou dans POLS 1503 et POLS 1505.

POLS 3771 Organisations internationales: L'ONU et ses institutions spécialisées Cr.Hrs. 3

Étude du rôle et des fonctions joués par les organisations internationales au sein du système mondial. Analyse du système des Nations Unies et de ses diverses composantes en relation avec les mutations de la configuration des rapports de pouvoir au sein du système mondial. Apports et limites des mécanismes assurant le principe de sécurité collective et la résolution pacifique des différends. Préalable : Une note minimale de B dans POLS 2040 ou POLS 2041 ou POLS 2043 et POLS 2045.

POLS 3841 Les approches théoriques en relations internationales Cr.Hrs. 3 (Ancien 019.384) Étude des différentes approches théoriques utilisées dans l'analyse des relations internationales, ainsi que des méthodologies utilisées par les analystes de la politique internationale. On ne peut se faire créditer POLS 3841 et POLS 3840 (019.384). Préalable : une note minimale de C dans POLS 2041 ou POLS 2040 (019.204) ou dans POLS 2043 et POLS 2045, ou l'autorisation écrite de la professeure ou du professeur.

POLS 3881 Politique étrangère comparée Cr.Hrs. 3

Étude comparative des facteurs internationaux, régionaux et domestiques qui façonnent la formulation de la politique étrangère des États. Analyse des causes des similarités et différences dans la formulation de la politique étrangère des États à partir d'études de cas choisies. Préalable : Une note minimale de C dans POLS 2040 ou POLS 2041 ou POLS 2043 et POLS 2045.

POLS 3951 Méthodes de recherche en sciences politiques Cr.Hrs. 3

Introduction aux principales méthodes de recherche quantitative et qualitative utilisées dans l'étude des phénomènes politiques. Les méthodes abordées sont : conduite d'entrevues, analyse de contenu, études comparatives, questionnaires de sondage, échantillonnage, éthique de la recherche et analyse statistique de base. On ne peut se faire créditer POLS 3951 et POLS 3950 (019.395) ou l'ancien 019.390. Préalable : Une note minimale de C dans 6 crédits de sciences politiques de niveau 2000 ou l'autorisation écrite de la professeure ou du professeur.

Faculté des arts-Psychology

PSYC 1211 Introduction à la psychologie I Cr.Hrs. 3

(Ancien 017.121) Étude des processus fondamentaux sous-jacents à la psychologie tels que les bases biologiques des comportements, les processus sensoriels, la perception, les états de conscience, l'apprentissage et la mémoire. Description des méthodes de recherche propres à la psychologie scientifique. On ne peut se faire créditer PSYC 1211 et PSYC 1201 ou PSYC 1200 (017.120).

PSYC 1221 Introduction à la psychologie II Cr.Hrs. 3

(Ancien 017.122) Étude des connaissances utilisées par les psychologues pour aider l'être humain dans sa compréhension personnelle et ses interactions sociales. Exploration des motivations, de l'intelligence, de la personnalité et de la psychopathologie. Description des outils et des méthodes de travail propres à la psychologie appliquée. On ne peut se faire créditer PSYC 1221 et PSYC 1201 ou PSYC 1200 (017.120).

PSYC 2251 Introduction à la recherche en psychologie Cr.Hrs. 3

(Ancien 017.225) Étude de la psychologie comme discipline scientifique et description des méthodes de collecte et d'interprétation des données en psychologie. Cours obligatoire pour la majeure devant être suivi en deuxième année. Accompagné d'une séance de travaux dirigés hebdomadaire. On ne peut se faire créditer PSYC 2251 et PSYC 2250 (017.225). Préalable: une note minimale de C dans PSYC 1201 ou PSYC 1200 (017.120), ou dans PSYC 1211 (017.121) et PSYC 1221 (017.122), ou l'autorisation écrite de la professeure ou du professeur.

PSYC 2261 Introduction aux méthodes de recherche en psychologie Cr.Hrs. 3

(Ancien 017.226) Étude des concepts inductifs d'inférence et d'explication. Les schèmes de recherche en psychologie. Cours obligatoire pour la majeure devant être suivi en deuxième année. Accompagné d'une séance de travaux dirigés hebdomadaire. On ne peut se faire créditer PSYC 2261 et PSYC 2260 (017.226). Préalable : une note minimale de C dans PSYC 2251 ou PSYC 2250 (017.225). Reconnu aux fins des exigences en mathématiques pour l'obtention du baccalauréat.

PSYC 2291 Le développement de l'enfant Cr.Hrs. 3

(Ancien 017.229) Étude du développement psychologique normal de la période prénatale à la puberté. Présentation des méthodes de recherche utilisées dans l'étude de l'enfant. On ne peut se faire créditer à la fois PSYC 2291 (017.229) et PSYC 2290 (017.229). Préalable : une note minimale de C dans PSYC 1201 (017.120) ou PSYC 1200 (017.120), ou dans PSYC 1211 (017.121) et PSYC 1221 (017.122), ou l'autorisation écrite de la professeure ou du professeur.

PSYC 2361 Cerveau et comportement Cr.Hrs. 3

Étude de la relation entre le cerveau et les comportements. Apprentissage des éléments fondamentaux du système nerveux et comment ils s'intègrent pour assumer les sensations, le contrôle moteur, les émotions, le sommeil, l'apprentissage et la mémoire. On ne peut se faire créditer PSYC 2361 et aucun de PSYC 2360, PSYC 3530 (017.353) ou PSYC 3540 (017.354) quand l'intitulé est "Cerveau et comportement". Préalables : une note minimale de C dans PSYC 1200 (017.120) ou dans l'ancien PSYC 1201 ou une note minimale de C dans PSYC 1211 (017.121) et PSYC 1221 (017.122), ou l'autorisation écrite de la professeure ou du professeur.

PSYC 2411 Psychologie sociale 1 Cr.Hrs. 3

(Ancien 017.241) Introduction aux façons par lesquelles nous affectons les comportements des autres et sommes affectés par eux. Présentation des méthodes utilisées par les psychologues sociaux, des attitudes et du changement d'attitude, des croyances sociales et du jugement, de la conformité et de la persuasion. On ne peut se faire créditer PSYC 2411 et PSYC 2410. Préalables : une note minimale de C dans PSYC 1201 ou PSYC 1200 (017.120) ou dans PSYC 1211 (017.121) et PSYC 1221 (017.122), ou l'autorisation écrite de la professeure ou du professeur.

PSYC 2421 Psychologie Sociale II Cr.Hrs. 3

(L'ancien 017.242) Ce cours offre une introduction aux concepts de base relatifs à la psychologie sociale qui n'ont pas été abordés dans le cours de PSYC 2410 (017.241). Préalable: [une note minimale de C dans le PSYC 1200 (017.120) ou le PSYC 1201] ou [une note minimale de C dans tous les deux PSYC 1211 (017.121) et PSYC 1221 (017.122)] ou l'autorisation écrite du professeur.

PSYC 2441 Principes de modification du comportement Cr.Hrs. 3

(Ancien 017.244) Discussion des hypothèses fondamentales, des principes et des méthodes de modification du comportement à partir d'exemples tirés du comportement humain, normal et anormal. Projets de recherche supervisés dans des secteurs d'application précis ou recherche fondamentale sur le comportement. On ne peut se faire créditer PSYC 2441 et PSYC 2440. Préalables : une note minimale de C dans PSYC 1201 ou PSYC 1200 (017.120) ou dans PSYC 1211 (017.121) et PSYC 1221 (017.122), ou l'autorisation écrite de la professeure ou du professeur.

PSYC 2481 Processus cognitifs Cr.Hrs. 3

(L'ancien 017.248) Une introduction aux processus langage, supérieurs dans une perspective de traitement de l'information. Les sujets abordés incluent l'attention, le développement cognitif, l'imagerie, le langage, la mémoire et la résolution de problèmes. Le cours sera basé sur de nombreuses références aux résultats expérimentaux récents. L'étudiant(e) ne peut se faire créditer à la fois le PSYC 2481 (017.248) et le PSYC 2480 (017.248). Préalable: [une note minimale de C dans le PSYC 1200 (017.120) ou le PSYC 1201 (017.120)] ou [une note minimale de C dans tous les deux PSYC 1211 (017.121) et PSYC 1221 (017.122)] ou l'autorisation écrite du professeur. Donnée au Université de Saint-Boniface.

PSYC 2491 Psychologie de l'anormal Cr.Hrs. 3

Étude de la théorie et de la recherche dans le domaine du comportement anormal de l'être humain. Discussion des formes principales des troubles psychologiques, leur prévention et leur traitement. On ne peut se faire créditer PSYC 2491 et aucun des PSYC 2490, l'ancien PSYC 3460, l'ancien PSYC 3461. Préalables : une note minimale de C dans PSYC 1200 (017.120) ou dans l'ancien PSYC 1201 ou une note minimale de C dans PSYC 1211 (017.121) et PSYC 1221 (017.122), ou l'autorisation écrite de la professeure ou du professeur.

PSYC 2531 Psychologie de la personnalité Cr.Hrs. 3

Étude de la théorie et de la recherche dans les principes qui gouvernent le développement de la personnalité. On ne peut se faire créditer PSYC 2531 et aucun de PSYC 2530, l'ancien PSYC 3451, l'ancien PSYC 3450. Préalables : une note minimale de C dans PSYC 1200 (017.120) ou dans l'ancien PSYC 1201 ou une note minimale de C dans PSYC 1211 (017.121) et PSYC 1221 (017.122), ou l'autorisation écrite de la professeure ou du professeur.

PSYC 3131 Psychologie de la santé Cr.Hrs. 3

Introduction au domaine de la psychologie de la santé. On y étudie comment les interactions complexes entre des facteurs environnementaux, psychologiques, neurologiques et immunitaires contribuent au maintien de la santé et, par conséquent, au développement des maladies. On ne peut se faire créditer PSYC 3131 et aucun de PSYC 3130 ou PSYC 3530 quand le titre est "Healthy Psychology". Préalables: une note minimale de C dans PSYC 1201 ou PSYC 1200 (017.120) ou dans PSYC 1211 (017.121) et PSYC 1221 (017.122) et une note minimale de C dans trois crédits de psychologie de niveau 2000.

PSYC 3151 Domaines d'application de la modification du comportement Cr.Hrs. 3

Descriptions détaillées des lignes directrices pour le design, la mise en pratique et l'évaluation des méthodes de modification du comportement. Possibilité de réaliser un projet de recherche supervisé dans des domaines d'application spécifique ou de recherche fondamentale sur le comportement. On ne peut se faire créditer PSYC 3151 et aucun des PSYC 3150, l'ancien PSYC 2451, l'ancien PSYC 2450. Préalable : une note minimale de C dans PSYC 2441 ou PSYC 2440 (017.244), ou l'autorisation écrite de la professeure ou du professeur.

PSYC 3311 Le développement de l'adolescent Cr.Hrs. 3

Étude du développement psychologique normal de la puberté au stade adulte, à l'aide des résultats de recherches scientifiques. On ne peut se faire créditer PSYC 3311 et aucun des PSYC 3310, l'ancien PSYC 2311, l'ancien PSYC 2310. Préalable : une note minimale de C dans PSYC 2291 ou PSYC 2290 (017.244), ou l'autorisation écrite de la professeure ou du professeur.

PSYC 3341 Design et analyse de données en recherche en psychologie Cr.Hrs. 3

Étude des méthodes visant à contrôler la validité interne des études en psychologie. L'échantillonnage aléatoire et stratifié, la distribution aléatoire, la configuration factorielle et les plans à mesures répétées sont discutés. Les méthodes d'analyse descriptive et d'analyse multivariée sont présentées. L'utilisation de logiciels statistiques est illustrée. On ne peut se faire créditer PSYC 3341 et PSYC 3340 ou l'ancien PSYC 4570 (017.457). Préalables : une note minimale de C dans PSYC 2251 ou PSYC 2250 (017.225) et dans PSYC 2261 ou PSYC 2260 (017.226) ou une note minimale de C dans l'ancien PSYC 2300 (017.230) ou l'autorisation écrite de la professeure ou du professeur.

PSYC 3351 Neurosciences du comportement Cr.Hrs. 3

Présentation des fondements de la neurobiologie du comportement. Accent mis sur les propriétés du traitement de l'information du système nerveux de façon à offrir un cadre de référence à la compréhension de thèmes tels la perception, l'attention, le sommeil et la vigilance, la motivation et l'apprentissage. On ne peut se faire créditer PSYC 3351 et PSYC 3350, PSYC 3331 ou PSYC 3330 (017.333). Préalables : une note minimale de C dans PSYC 1201 ou PSYC 1200 (017.120) ou dans PSYC 1211 (017.121) et PSYC 1221 (017.122), ou l'autorisation écrite de la professeure ou du professeur.

PSYC 3441 Perception Cr.Hrs. 3 (Ancien 017.344)

Survol des méthodes et des techniques qui traitent de l'interaction entre les informations sensorielles et les informations existantes au sein de l'organisme. La psychophysique, les constances perceptuelles, l'apprentissage perceptuel, l'adaptation et les distorsions. On ne peut se faire créditer PSYC 3441 (017.344) et PSYC 3160. Préalables: une note minimale de C dans PSYC 1201 ou PSYC 1200 (017.120) ou dans PSYC 1211 (017.121) et PSYC 1221 (017.122), ou l'autorisation écrite de la professeure ou du professeur.

PSYC 3481 Psychologie des relations interculturelles et intergroupes Cr. Hrs. 3

Étude des aspects psychologiques impliqués dans les relations entre individus ou groupes d'individus issus de cultures ou sous-cultures différentes. Définition des concepts de stéréotype, de préjugé et de discrimination et exploration de leurs sources d'influence respectives. Présentation des grandes théories qui visent à expliquer les conflits interculturels et intergroupes et celles qui visent à promouvoir de bonnes relations entre cultures. Préalable : une note minimale de C dans PSYC 1201 ou PSYC 1200 (017.120) ou dans PSYC 1211 (017.121) et PSYC 1221 (017.122), ou l'autorisation écrite de la professeure ou du professeur. On ne peut se faire créditer PSYC 3481 et INTL 4481.

PSYC 3511 Psychologie industrielle et organisationnelle Cr.Hrs. 3

Examen des modèles théoriques contemporains et de la recherche portant sur les aspects psychologiques impliqués dans le comportement en milieu de travail. Les thèmes abordés incluent la sélection du personnel, les processus de groupes, la satisfaction, la productivité et la culture organisationnelle. On ne peut se faire créditer PSYC 3511 et PSYC 3510 (017.351). Préalable: [une note minimale de C dans le PSYC 1200 (017.120) ou le PSYC 1201] ou [une note minimale de C dans tous les deux PSYC 1211 (017.121) et PSYC 1221 (017.122)] ou l'autorisation écrite du professeur.

PSYC 3531 Problèmes contemporains 1 Cr.Hrs. 3

(L'ancien 017.353) Le contenu de ce cours variera d'année en année, mais traitera généralement d'un sujet spécifique d'actualité concernant la psychologie, ou de l'analyse psychologique d'un problème d'intérêt public. L'étudiant(e) ne peut se faire créditer à la fois le PSYC 3531 (017.353) et le PSYC 3530 (017.353). Préalable: [une note minimale de C dans le PSYC 1200 (017.120) ou le PSYC 1201 (017.120)] ou [une note minimale de C dans tous les deux PSYC 1211 (017.121) et PSYC 1221 (017.122)] ou l'autorisation écrite du professeur. Le contenu variera d'année en année alors l'étudiant(e) peut se faire créditer ce cours plus d'une fois. Donné au Université de Saint-Boniface.

PSYC 3631 Mesure et évaluation en psychologie Cr.Hrs. 3

(L'ancien 017.363) Étude et application des principes de la mesure dans divers domaines psychologiques. On étudiera les concepts de validité, de constance, d'échelonnement, de variance, et on offrira une introduction à la construction et l'utilisation de différents tests psychologiques. L'étudiant(e) ne peut se faire créditer à la fois le PSYC 3631 (017.363) et le PSYC 3630 (017.363). Préalable: [une note minimale de C dans le PSYC 2300 (017.230)] ou [une note minimale de C dans tous les deux PSYC 2250 (017.225) et PSYC 2260 (017.226)] ou [une note minimale de C dans tous les deux PSYC 2251 (017.225) et PSYC 2261 (017.226)] ou l'autorisation écrite du professeur. Donné au Université de Saint-Boniface.

PSYC 3641 Introduction à la neuropsychologie Cr.Hrs. 3

(L'ancien 017.364) Un survol des connaissances actuelles touchant les relations entre le cerveau et les comportements humains. Les sujets suivants sont traités: organisation du système nerveux, les désordres neurologiques, effets des lésions cérébrales sur les comportements (agnosie, aphasie, apraxie, négligence, etc.) asymétrie cérébrale, applications cliniques. Préalable: [une note minimale de C dans le PSYC 1200 (017.120) ou le PSYC 1201 (017.120)] ou [une note minimale de C dans tous les deux PSYC 1211 (017.121) et PSYC 1221 (017.122)] ou l'autorisation écrite du professeur. Donné au Université de Saint-Boniface.

Faculté des arts-Religion

RLGN 1283 Le Christianisme ancien et médiéval (A) Cr.Hrs. 3

Étude des affirmations et des pratiques chrétiennes à partir de l'histoire du christianisme dès son début jusqu'à la fin du moyen âge. On ne peut se faire créditer RLGN 1283 et l'ancien RLGN 1281 (020.128).

RLGN 1285 Le Christianisme depuis la renaissance (A) Cr.Hrs. 3

Étude des affirmations et des pratiques chrétiennes à partir de l'histoire du christianisme de la Réforme protestante jusqu'au présent. On ne peut se faire créditer RLGN 1285 et l'ancien RLGN 1281 (020.128).

RLGN 1323 Introduction aux religions du monde I Cr.Hrs. 3

Aperçu de l'histoire, des grandes idées et pratiques des grandes religions du monde à partir de leur littérature et de leurs traditions: l'hindouisme, le bouddhisme, le sikhisme, le confucianisme et le taoïsme. On ne peut se faire créditer RLGN 1323 et RLGN 1321 ou RLGN 1320 (020.132).

RLGN 1325 Introduction aux religions du monde II (B) Cr.Hrs. 3

Un aperçu de l'histoire, les grandes idées et pratiques des grandes religions du monde à partir de leur littérature et les traditions: le judaïsme, le Christianisme, l'Islam et les traditions des Amériques et de l'Afrique. On ne peut se faire créditer RLGN 1325 et RLGN 1320 ou RLGN 1321 (020.132).

RLGN 1421 Éthique religieuse (C) Cr.Hrs. 3

(L'ancien 020.142) Un examen de la pensée éthique de représentants d'une ou de plusieurs traditions religieuses. Une attention spéciale est portée sur des sujets comme la nature du bien et de la vertu, la place des lois ou commandements, et en relation entre la religion et la moralité. L'étudiant(e) qui détient le crédits du RLGN 1421 (020.142) ne peut se faire créditer aucun des cours RLGN 1420 (020.142) ou l'ancien 020.245. Donné au Université de Saint-Boniface.

RLGN 2161 Introduction à l'Ancien Testament Cr.Hrs. 3

Un aperçu de l'histoire, de la littérature et des idées religieuses de l'Ancien Testament. On ne peut se faire créditer RLGN 2161 et RLGN 2231 (020.223) ou RLGN 2160 (020.216).

RLGN 2171 Introduction au Nouveau Testament Cr.Hrs. 3

Un aperçu de l'histoire, de la littérature et des idées religieuses du Nouveau Testament. On ne peut se faire créditer RLGN 2171, RLGN 2170 ou RLGN 2711 (020.271).

RLGN 2413 Les religions établies au Canada (C) Cr.Hrs. 3

Un aperçu historique des institutions et groupes religieux établis avant le 19e siècle, au Canada, notant comment ceux-ci répondent aux caractéristiques spéciales de la vie canadienne. On ne peut se faire créditer RLGN 2413 et RLGN 2410 ou RLGN 2411 (020.241).

RLGN 2415 Les nouvelles religions au Canada (C) Cr.Hrs. 3

Un aperçu historique et phénoménologique des nouvelles institutions et groupes religieux au Canada, visant comment ceux-ci répondent aux caractéristiques spéciales de la vie canadienne. On ne peut se faire créditer RLGN 2415 et RLGN 2410 ou RLGN 2411 (020.241).

RLGN 2591 La religion et les problèmes sociaux (C) Cr.Hrs. 3

(L'ancien 020.259) Les problèmes tels que l'ordre, la justice, la guerre, le changement social, la désobéissance civile, l'avortement et l'euthanasie seront considérés à la lumière des ressources d'une ou de plusieurs traditions religieuses. L'étudiant(e) ne peut se faire créditer à la fois le RLGN 2591 (020.259) et le RLGN 2590 (020.259). Donné au Université de Saint-Boniface.

RLGN 2681 Les femmes et les religions 1 (C) Cr.Hrs. 3

(Ancien 020.268) Le contenu de ce cours varie d'année en année. Toutefois, il traite, à travers divers modèles interprétatifs contemporains, de sujets d'intérêt courant en lien avec la compréhension et le rôle des femmes dans les différentes traditions religieuses. On ne peut pas se faire créditer RLGN 2681 et RLGN 2680 (l'ancien 020.268).

RLGN 3131 La religion et la pensée moderne (C) Cr.Hrs. 3

Étude des idées contenues dans certaines idéologies modernes telles que le marxisme, la théorie de l'évolution, les méthodes d'interprétation biblique, la psychologie moderne, l'athéisme et l'humanisme face à la religion. On ne peut se faire créditer à la fois le RLGN 3131 et RLGN 3251 (020.325) ou RLGN 3130 (020.313).

RLGN 3531 Problèmes contemporains 1 (C) Cr.Hrs. 3

(Ancien 020.353) Exploration de sujets particuliers d'intérêt courant en religion, de certains aspects de méthodologie, de l'étude de la religion ou d'une analyse de certains problèmes courants d'intérêt général, du point de vue religieux. Le contenu variera d'année en année, il sera donc possible de se faire créditer ce cours plus d'une fois. On ne peut se faire créditer RLGN 3531 et RLGN 3530 (020.353). Préalable: l'autorisation écrite de la professeure ou du professeur.

RLGN 3541 Problèmes contemporains 2 (C) Cr.Hrs. 3

(Ancien 020.354) Exploration de sujets particuliers d'intérêt courant en religion, de certains aspects de méthodologie de l'étude de la religion ou d'une analyse de certains problèmes courants d'intérêt général du point de vue religieux. Le contenu variera d'année en année, il sera donc possible de se faire créditer ce cours plus d'une fois. On ne peut se faire créditer RLGN 3541 et RLGN 3540 (020.354). Préalable: l'autorisation écrite de la professeure ou du professeur.

Faculté des arts-Sociology**SOC 1211 Introduction à la microsociologie Cr.Hrs. 3**

(L'ancien 077.121) Introduction systématique à la perspective sociologique: points de vue théorique, méthodes et domaines de recherche. On initiera l'étudiant(e) à l'étude de la socialisation, des groupes, de la famille, de l'école, des minorités, des rôles sexuels. L'étudiant(e) qui détient les crédits du SOC 1211 (077.121) ne peut se faire créditer aucun des cours SOC 1200 (077.120) ou SOC 1201 (077.120). Donné au Université de Saint-Boniface.

SOC 1221 Introduction à la macrosociologie Cr.Hrs. 3

(Ancien 077.122) Introduction systématique à la perspective sociologique: points de vue théoriques, méthodes et domaines de recherche. Initiation à la culture, à la stratification sociale, aux mouvements sociaux, à la population, aux institutions politiques, aux différents systèmes de la société. On ne peut se faire créditer SOC 1221 (077.122) et SOC 1201 (077.120). Préalable: une note minimale de C dans le SOC 1211 (077.121).

SOC 2221 Théories sociologiques classiques Cr.Hrs. 3

(Ancien 077.222) Aperçu de la théorie sociologique classique. Les principaux penseurs et les principales écoles de pensée en sociologie. On ne peut se faire créditer SOC 2221 et SOC 2220 (077.222). Préalables: une note minimale de C dans le SOC 1201 ou SOC 1200 (077.120) ou dans SOC 1211 (077.121) et SOC 1221 (077.122).

SOC 2261 Sociologie de la ville et du milieu urbain Cr.Hrs. 3

Étude des dimensions sociale et culturelle du phénomène urbain. Analyse de l'expérience urbaine, des formes de socialité et des inégalités sociales. On ne peut se faire créditer en même temps que SOC 2271. Préalables: une note minimale de C dans un des SOC 1201 ou SOC 1200 (ancien 077.120), ou les SOC 1211 (ancien 077.121) et SOC 1221 (ancien 077.122).

SOC 2291 Introduction aux méthodes de recherche Cr.Hrs. 6

(L'ancien 077.229) Ce cours initie l'étudiant aux méthodes quantitatives et qualitatives d'appréhension des phénomènes sociaux. Il traite des pré-supposés de l'enquête scientifique, de la conceptualisation des problèmes de recherche, de l'analyse statistique élémentaire et de l'utilisation d'un programme informatisé pertinent. L'étudiant(e) ne peut se faire créditer à la fois le SOC 2291 (077.229) et le SOC 2290 (077.229). Préalable: [une note minimale de C dans le SOC 1200 (077.120) ou le SOC 1201 (077.120)] ou [une note minimale de C dans tous les deux SOC 1211 (077.121) et SOC 1221 (077.122)]. Donné au Université de Saint-Boniface.

SOC 2311 Choix de problèmes sociaux Cr.Hrs. 3

(L'ancien 077.231) Analyse d'un ou de plusieurs problèmes sociaux contemporains (autres que le crime et la délinquance). On pourra examiner, par exemple, des problèmes tels que la pauvreté, la guerre, l'environnement, la consommation de drogues, la mortalité. Pour plus de détails sur le contenu du cours, consulter le guide d'inscription ou s'adresser au professeur. L'étudiant(e) ne peut se faire créditer à la fois le SOC 2311 (077.231) et le SOC 2310 (077.231). Préalable: [une note minimale de C dans le SOC 1200 (077.120) ou le SOC 1201 (077.120)] ou [une note minimale de C dans tous les deux SOC 1211 (077.121) et SOC 1221 (077.122)]. Le contenu variera d'année en année alors l'étudiant(e) peut se faire créditer ce cours plus d'une fois. Donné au Université de Saint-Boniface.

SOC 2321 La société canadienne et sa culture Cr.Hrs. 3

(L'ancien 077.232) Ce cours procède à une analyse sociologique des institutions canadiennes en adoptant, comme point de référence, des perspectives historiques, culturelles, économiques et politiques. L'étudiant(e) ne peut se faire créditer à la fois le SOC 2321 (077.232) et le SOC 2320 (077.232). Préalable: [une note minimale de C dans le SOC 1200 (077.120) ou le SOC 1201 (077.120)] ou [une note minimale de C dans tous les deux SOC 1211 (077.121) et SOC 1221 (077.122)]. Donné au Université de Saint-Boniface.

SOC 2331 Psychosociologie Cr.Hrs. 3

(L'ancien 077.233) Ce cours examine la relation entre individu, groupe et société en soulignant l'interaction comme étant le processus qui donne à la vie quotidienne sa forme, sa direction et sa signification. Les sujets discutés peuvent inclure: le soi, le processus de formation de l'identité, la motivation, le contrôle des émotions. L'étudiant(e) ne peut se faire créditer à la fois le SOC 2331 (077.233) et le SOC 2330 (077.233). Préalable: [une note minimale de C dans le SOC 1200 (077.120) ou le SOC 1201 (077.120)] ou [une note minimale de C dans tous les deux SOC 1211 (077.121) et SOC 1221 (077.122)]. Donné au Université de Saint-Boniface.

SOC 2371 Rapports ethniques Cr.Hrs. 3

(L'ancien 077.237) Une introduction aux dimensions sociologiques et socio-psychologiques des rapports ethniques au Canada. L'étudiant(e) ne peut se faire créditer à la fois le SOC 2371 (077.237) et le SOC 2370 (077.237). Préalable: [une note minimale de C dans le SOC 1200 (077.120) ou le SOC 1201 (077.120)] ou [une note minimale de C dans tous les deux SOC 1211 (077.121) et SOC 1221 (077.122)]. Donné au Université de Saint-Boniface.

SOC 2391 L'organisation sociale Cr.Hrs. 3

(Ancien 077.239) Étude des forces qui influencent la formation de l'ordre dans la société, son maintien et son changement, le contrôle social, le conflit de pouvoir, l'intégration. On ne peut se faire créditer SOC 2391 et SOC 2390 (077.239). Préalables: une note minimale de C dans SOC 1201 ou SOC 1200 (077.120) ou dans SOC 1211 (077.121) et SOC 1221 (077.122).

SOC 2461 La famille Cr.Hrs. 3

(L'ancien 077.246) Analyse sociologique des diverses formes et pratiques familiales dans les sociétés contemporaines, ainsi que de leur évolution à partir de formes plus anciennes. Sont également étudiés les rapports entre les formes familiales et le contexte social global. L'étudiant(e) ne peut se faire créditer à la fois le SOC 2461 (077.246) et le SOC 2460 (077.246). Préalable: [une note minimale de C dans le SOC 1200 (077.120) ou le SOC 1201 (077.120)] ou [une note minimale de C dans tous les deux SOC 1211 (077.121) et SOC 1221 (077.122)]. Donné au Université de Saint-Boniface.

SOC 2511 Criminologie Cr.Hrs. 3

(L'ancien 077.251) Introduction générale aux théories de comportement déviant et de criminologie. L'explication du crime en se référant aux facteurs physiques, psychologiques et sociaux. L'étudiant(e) ne peut se faire créditer à la fois le SOC 2511 (077.251) et le SOC 2510 (077.251). Préalable: [une note minimale de C dans le SOC 1200 (077.120) ou le SOC 1201 (077.120)] ou [une note minimale de C dans tous les deux SOC 1211 (077.121) et SOC 1221 (077.122)]. Donné au Université de Saint-Boniface.

SOC 2531 Sociologie du Manitoba Cr.Hrs. 6

(L'ancien 077.253) Une étude sociologique de la population du Manitoba avec un accent sur ses regroupements culturels et sa stratification sociale. Préalable: [une note minimale de C dans le SOC 1200 (077.120) ou le SOC 1201 (077.120)] ou [une note minimale de C dans tous les deux SOC 1211 (077.121) et SOC 1221 (077.122)]. Donné au Université de Saint-Boniface.

SOC 3331 Origines de la pensée sociologique Cr.Hrs. 3

Introduction systématique à la pensée sociologique, de ses origines philosophiques jusqu'au milieu du 19^e siècle. Examen de la pensée sociale qui deviendra la base de la théorie sociologique. Préalable: [une note minimale de C dans le SOC 1200 (077.120) ou le SOC 1201 (077.120)] ou [une note minimale de C dans tous les deux SOC 1211 (077.121) et SOC 1221 (077.122)] Et une note minimale de C dans SOC 2221. Donné au Université de Saint-Boniface.

SOC 3371 Sociologie du travail Cr.Hrs. 3

(L'ancien 077.337) Vue générale du monde du travail; particulièrement études des attitudes envers le travail, du classement et de l'organisation des occupations et professions, du choix des carrières, du chômage, et des relations du travail et des loisirs. L'étudiant(e) ne peut se faire créditer à la fois le SOC 3371 (077.337) et le SOC 3370 (077.337). Préalable: [une note minimale de C dans le SOC 1200 (077.120) ou le SOC 1201 (077.120)] ou [une note minimale de C dans tous les deux SOC 1211 (077.121) et SOC 1221 (077.122)]. Donné au Université de Saint-Boniface.

SOC 3391 Théories sociologiques contemporaines Cr.Hrs. 3

(Ancien 077.339) Comparaison systématique des théories sociologiques contemporaines. Évolution compétitive des diverses écoles en sociologie et surtout l'apport des théoriciens les plus importants. On ne peut se faire créditer SOC 3391 et SOC 3390 (077.339). Préalable : Une note minimale de C dans SOC 2220 (077.222) ou SOC 2221.

SOC 3471 Sociologie politique Cr.Hrs. 3

(L'ancien 077.347) Évaluation critique de la théorie et des recherches sociologiques relatives aux rapports de force dans la société. Ce cours traitera des divers aspects du pouvoir (économique, politique, idéologiques), des conflits de classe, de la socialisation, de l'origine, des fonctions et de l'évolution de l'État. L'étudiant(e) ne peut se faire créditer à la fois le SOC 3471 (077.347) et le SOC 3470 (077.347). Préalable: [une note minimale de C dans le SOC 1200 (077.120) ou le SOC 1201 (077.120)] ou [une note minimale de C dans tous les deux SOC 1211 (077.121) et SOC 1221 (077.122)]. Donné au Université de Saint-Boniface.

SOC 3581 Culture, médias et société Cr.Hrs. 3

Étude de l'influence des médias dans les sociétés contemporaines; analyse de la production, de la circulation et de la consommation de diverses formes médiatiques et de leurs impacts sur la vie sociale. Préalables: une note minimale de C dans un des SOC 1201 ou SOC 1200 (ancien 077.120), ou les SOC 1211 (ancien 077.121) et SOC 1221 (ancien 077.122); le SOC 2331 ou SOC 2330 (ancien 077.233) est recommandé.

SOC 3731 Société et éducation Cr.Hrs. 3

(L'ancien 077.373) Un examen critique des enjeux de l'éducation et leur impacte sur l'évolution de la société. On aborde des questions telles que: le curriculum; l'interaction au sein de la classe, compte tenu des caractéristiques socio-économiques des élèves (genre, ethnie, niveau de revenu et profession des parents, etc.). Le cours intéresse particulièrement les personnes qui se préparent à faire carrière en éducation. L'étudiant(e) ne peut se faire créditer à la fois le SOC 3731 (077.373) et le SOC 3730 (077.373). Préalable: [une note minimale de C dans le SOC 1200 (077.120) ou le SOC 1201 (077.120)] ou [une note minimale de C dans tous les deux SOC 1211 (077.121) et SOC 1221 (077.122)]. Donné au Université de Saint-Boniface.

SOC 3811 Sociologie de la sexualité et des rôles sexuels Cr.Hrs. 3

(L'ancien 077.381) Étude exploratoire des rapports entre les hommes et les femmes dans la société contemporaine. Ce cours examine le processus de construction sociale de la sexualité et des rôles sexuels, à travers une perspective historique de comparaison entre les cultures. L'étudiant(e) ne peut se faire créditer à la fois le SOC 3811 (077.381) et le SOC 3810 (077.381). Préalable: [une note minimale de C dans le SOC 1200 (077.120) ou le SOC 1201 (077.120)] ou [une note minimale de C dans tous les deux SOC 1211 (077.121) et SOC 1221 (077.122)]. Donné au Université de Saint-Boniface.

SOC 3871 Inégalités sociales Cr.Hrs. 3

(Ancien 077.387) Présentation des inégalités sociales dans la société capitaliste actuelle. Examen critique des explications proposées au sujet des diverses dimensions de l'inégalité sociale telles que: la classe sociale d'appartenance, les rôles sexuels et l'appartenance ethnique. Discussions au sujet de la pauvreté, de la répartition sociale, de la richesse, du chômage, de l'évolution des postes et des contextes de travail à l'ère de la mondialisation. Préalables: une note minimale de C dans SOC 1201 ou SOC 1200 (077.120) ou SOC 1211 (077.121) et SOC 1221 (077.122). On ne peut se faire créditer SOC 3871 et l'ancien SOC 3870 (077.387) ou SOC 3890.

Faculté des arts-Spanish

SPAN 1171 Introduction à l'espagnol I Cr.Hrs. 3

(Laboratoire requis) Ce cours est conçu pour des étudiants et des étudiantes ayant très peu ou n'ayant aucune connaissance de l'espagnol. Les étudiants et les étudiantes dont la langue maternelle est l'espagnol ou possédant des crédits d'espagnol 40 5 ou l'équivalent ne peuvent s'inscrire à ce cours sans permission spéciale. On ne peut se faire créditer SPAN 1171 et aucun des cours suivants : SPAN 1180 (044.118) ou l'ancien SPAN 1181 (ancien TRAD 1181 ou ancien 122.118). Ce cours n'est pas accessible aux étudiants qui ont déjà obtenu des crédits pour SPAN 1262 ou l'ancien SPAN 1260 (044.126) ou SPAN 1261 (ancien TRAD 1261 ou ancien 122.126) ou SPAN 1272 ou l'ancien SPAN 1270 (044.127) ou SPAN 1271 (ancien TRAD 1271 ou ancien 122.127) ou SPAN 1280 ou SPAN 1290.

SPAN 1181 Introduction à l'espagnol Cr.Hrs. 6

(Anciens 122.118 et TRAD 1181) Pour étudiants et étudiants n'ayant aucune connaissance de l'espagnol ou n'en ayant qu'une connaissance minime. Accent mis sur le vocabulaire, la grammaire et l'acquisition d'aptitudes orales et écrites au moyen d'exercices divers et de pratique au laboratoire. Activités de laboratoire alternant avec des séances de conversation en groupes. La participation active est une exigence du cours. On ne peut se faire créditer SPAN 1181 (TRAD 1181) et SPAN 1180 (044.118), SPAN 1190 ou SPAN 1280. Les étudiants et les étudiantes qui ont déjà obtenu crédit en SPAN 1261 (TRAD 1261 ou 122.126) ou SPAN 1260(44.126), en SPAN 1271 (TRAD 1271 ou 122.127) ou SPAN 1270 (044.127) ou en SPAN 1290 ne peuvent pas suivre ce cours. Les étudiantes et les étudiants dont l'espagnol est la langue maternelle et ceux qui possèdent déjà les crédits du cours d'espagnol de secondaire 12e année ou l'équivalent ne peuvent s'inscrire à ce cours.

SPAN 1191 Introduction à l'espagnol II Cr.Hrs. 3

(Laboratoire requis) Ce cours est destiné aux étudiants qui connaissent déjà l'alphabet et le système de son espagnols, qui ont une compréhension élémentaire de la langue, et qui maîtrisent une base de la communication et de l'écriture équivalentes à celle qui serait obtenue au cours SPAN 1171. Les étudiants ne peuvent obtenir de crédits pour SPAN 1191 et aucun des cours suivants : SPAN 1190, SPAN 1180 (044.118), ancien SPAN 1181 (ancien TRAD 1181 ou ancien 122.118). Ce cours n'est pas accessible aux étudiants qui ont déjà obtenu des crédits pour SPAN 1262 ou l'ancien SPAN 1260 (044.126) ou SPAN 1261 (ancien TRAD 1261 ou ancien 122.126) ou SPAN 1272 ou l'ancien SPAN 1270 (044.127) ou SPAN 1271 (ancien TRAD 1271 ou ancien 122.127) ou SPAN 1280 ou SPAN 1290. Préalable: SPAN 1171 ou l'autorisation écrite de la professeure ou du professeur.

SPAN 1263 Espagnol intermédiaire: grammaire et conversation 1 Cr. Hrs. 3

(Lab. requis) Ce cours est la première partie de l'espagnol intermédiaire. L'accent est mis sur le développement des compétences intermédiaires en lecture, écriture, expression orale et compréhension orale. Les principaux objectifs sont de renforcer les compétences de communication et de renforcer la sensibilisation sociale et culturelle du monde hispanophone. Ce cours n'est pas ouvert aux étudiants parlant couramment l'espagnol. On ne peut se faire créditer SPAN 1263 et aucun de SPAN 1262, SPAN 1280, SPAN 1290, l'ancien SPAN 1260 (044.126) ou l'ancien SPAN 1261 (ancien TRAD 1261, ancien 122.126). Préalables : une note minimale de C dans SPAN 1180 (044.118) ou l'ancien SPAN 1181 ou l'ancien TRAD 1181 (122.118) ou SPAN 1190 ou SPAN 1191 ou l'autorisation écrite de la professeure ou du professeur.

SPAN 1273 Espagnol intermédiaire: grammaire et conversation 2 Cr. Hrs. 3

(Lab. requis) Ce cours est la deuxième partie de l'espagnol intermédiaire. L'accent est mis sur le développement des compétences intermédiaires en lecture, écriture, expression orale et compréhension orale. Les principaux objectifs sont de renforcer les compétences de communication et de renforcer la sensibilisation sociale et culturelle du monde hispanophone. Ce cours n'est pas ouvert aux étudiants parlant couramment l'espagnol. On ne peut se faire créditer SPAN 1273 et aucun de SPAN 1272, SPAN 1271, SPAN 1280, SPAN 1290, l'ancien SPAN 1270 (044.127), l'ancien TRAD 1271 (122.127). Préalables : une note minimale de C dans SPAN 1263 ou SPAN 1262 ou l'ancien SPAN 1260 (044.126) ou SPAN 1261 ou l'ancien TRAD 1261 (122.126) ou l'autorisation écrite de la professeure ou du professeur.

SPAN 2361 Espagnol commercial Cr.Hrs. 3

(Anciens 122.236 et TRAD 2361) Initiation au vocabulaire commercial et aux techniques d'écriture dans le domaine des affaires. Accent mis sur la composition appliquée au domaine commercial: rédaction de lettres, comptes rendus d'activités ou de réunion, etc. Préalable: une note minimale de C dans SPAN 1261 (TRAD 1261 ou 122.126), l'ancien SPAN 1260 (044.126), SPAN 1280, SPAN 1290 ou SPAN 1262 ou l'autorisation écrite de la professeure ou du professeur.

SPAN 2551 Espagnol : langue avancée et composition Cr.Hrs. 3

Le but de ce cours, destiné aux étudiantes et aux étudiants qui ont atteint une maîtrise de niveau intermédiaire de l'espagnol, est d'améliorer leur niveau de langue et l'habileté de leur expression écrite. On ne peut pas se faire créditer SPAN 2551 et SPAN 2550 (l'ancien 044.255). Préalable : Une note minimale de C dans SPAN 1261 ou SPAN 1262 ou SPAN 1280 ou SPAN 1290 ou l'ancien SPAN 1260 (044.126) ou l'ancien TRAD 1261 (122.126) ou l'autorisation écrite du professeur ou de la professeure.

SPAN 2571 El espanol a través del cine hispanoamericano Cr.Hrs. 3

(Anciens 122.257 et TRAD 2571) Les cultures espagnole et latino-américaine à partir d'oeuvres cinématographiques issues de ces cultures. Accent sur la discussion et l'expression orale. Préalable: une note minimale de C dans SPAN 1271 (TRAD 1271 ou 122.127), SPAN 1270 (044.127), SPAN 1280, SPAN 1290 ou SPAN 1272 ou l'autorisation écrite de la professeure ou du professeur.

SPAN 2573 Espagnol sujet spécial I Cr.Hrs. 3

Le contenu de ce cours varie en fonction des besoins et des intérêts des étudiants et des professeurs. La formule du tutorat peut être utilisée. Le contenu du cours varie d'année en année. Puisque les contenus varient d'année en année et que le cours se crée selon les besoins des étudiantes et des étudiants, les étudiantes et les étudiants pourraient suivre ce cours plus d'une fois. Préalable: Note minimale de "C" ou plus au cours d'espagnol TRAD 1261 ou le consentement écrit du professeur.

SPAN 2591 Femmes et culture en Espagne et en Amérique latine Cr. Hrs. 3

Panorama de la culture latino-américaine abordée à partir de la production féminine. Étude des oeuvres des femmes, de leurs conditions de production dans une perspective féministe et dans le cadre théorique des études culturelles. Panorama incluant divers pays et diverses époques, ainsi que différents types de production (littérature, cinéma, peinture et sculpture). Préalable: une note minimale de C dans SPAN 1262 (SPAN 1261, TRAD 1261 ou 122,126), l'ancien SPAN 1260 (044,126), SPAN 1280 ou SPAN 1290 ou l'autorisation écrite de la professeure ou du professeur.

SPAN 2671 Espagnol sujet spécial I Cr.Hrs. 3

Cours à contenu variant en fonction des besoins et des intérêts des personnes qui le suivent et de celles qui l'enseignent. La formule de tutorat peut être utilisée. Le contenu variera d'année en année alors l'étudiant(e) peut se faire créditer ce cours plus d'une fois. Préalable: une note minimale de C dans SPAN 1262 (SPAN 1261, TRAD 1261 ou 122,126), l'ancien SPAN 1260 (044,126), SPAN 1280 ou SPAN 1290 ou l'autorisation écrite de la professeure ou du professeur.

SPAN 3271 Espagnol sujet spécial II Cr.Hrs. 3

Cours au contenu variant en fonction des besoins et des intérêts des personnes qui le suivent et de celles qui l'enseignent. La formule du tutorat peut être utilisée. Cours dont le contenu varie d'année en année et pouvant donc être suivi plus d'une fois. Préalable : une note minimale de C à un cours d'espagnol de niveau 2000 ou l'autorisation écrite de la professeure ou du professeur.

SPAN 3341 Grammaire et syntaxe de l'espagnol Cr.Hrs. 3

Ce cours comprend une étude approfondie et détaillée de la grammaire et de la syntaxe de l'espagnol. On ne peut se faire créditer à la fois le SPAN 3341 et aucun des cours SPAN 3340, l'ancien SPAN 3280 (044.328). Préalable: Une note de > ou plus dans n'importe quel d'espagnol de niveau 2000 ou le consentement par écrit du professeur.

SPAN 3461 Littérature et civilisation d'Amérique latine Cr.Hrs. 3

(Anciens 122.316 et TRAD 3461) Initiation aux grands auteurs d'Amérique latine, ainsi qu'aux caractères spécifiques des sociétés latino-américaines : valeurs, pratiques culturelles, mais aussi politiques, commerciales et professionnelles. Préalable : une note minimale de C dans SPAN 1261 (TRAD 1261 ou 122.126) ou SPAN 1260 (044.126).

SPAN 3561 Cours avancé d'espagnol professionnel Cr.Hrs. 3

(Anciens 122.356 et TRAD 3561) Pratique de la traduction de l'espagnol vers le français vers l'espagnol à partir de textes pragmatiques à caractère professionnel. Préalable : une note minimale de C dans SPAN 2361 (122.236 ou TRAD 2361).

SPAN 3881 Violence, révolutions et dictatures dans la culture hispanophone Cr.Hrs. 3

Panorama de la culture latino-américaine suivant l'histoire de la violence. On étudiera les manifestations culturelles reliées aux événements qui ont marqué l'histoire de l'Amérique latine: révolutions, guérillas, dictatures. Le contenu du cours se centre sur les manifestations des artistes et d'autres producteurs culturels vis-à-vis de la violence (apologistes ou pacifistes?). Préalable: Avoir obtenu > ou plus dans au moins un cours d'espagnol de niveau 2000 ou le consentement écrit du professeur.

Faculté des arts-Theatre

THTR 1001 Initiation à l'improvisation théâtrale Cr.Hrs. 3

Ce cours vise à initier les étudiants aux aspects fondamentaux de l'improvisation théâtrale. É ce titre, il aborde différents aspects de l'improvisation comme l'expression des sentiments et du corps, la mise en scène, le jeu à partir d'un motif, la créativité, l'écoute du public, la capacité d'attention, l'initiative, la réceptivité, la spontanéité sur scène et l'utilisation des accessoires.

THTR 1021 Introduction à l'analyse du texte théâtral Cr.Hrs. 3

S'il est indéniable que le texte de théâtre a beaucoup progressé depuis une trentaine d'années, en revanche la pratique du théâtre demeure encore souvent marquée par la difficulté de saisir le texte comme tel, comme s'il fallait toujours s'en remettre à la représentation pour que le texte théâtral soit considéré comme un véritable objet d'études. Ce cours permettra à l'étudiant-e de combler cette lacune tout en l'initiant aux aspects les plus saillants du texte théâtral. On pourra ainsi se demander s'il existe une spécificité du texte de théâtre, si l'étude du théâtre peut se passer de la représentation ou du texte théâtral. Cette investigation permettra d'aborder des questions qui touchent aussi bien à l'organisation et à la structuration du texte théâtral, qu'à la fiction, l'espace, le temps, l'énoncé, l'énonciation, le personnage et l'action.

THTR 2521 Art théâtral et techniques de scène Cr.Hrs. 3

Ce cours vise à initier les étudiants aux équipements spécialisés de la scène. Il y sera question d'éclairage (théorie de la lumière et de la couleur, fonctionnement des projecteurs, maîtrise de la console d'éclairage, création d'un ensemble scénique homogène) et des principes de la sonorité (fonctionnement des divers appareils: lecteurs, microphones, amplificateurs, réverbérateurs, etc.). Ce cours abordera aussi la sonorité: théorie du son, éventail de bruitages, utilisation d'effets sonores et de musique dans un spectacle, enregistrement. Enfin, ce cours se penchera sur la question de la régie: direction technique et direction de production théâtrale.

THTR 2531 Le jeu corporel Cr.Hrs. 3

Ce cours vise à initier les étudiants aux diverses approches du corps comme langage scénique: les rapports entrent le langage et le geste, les fonctions de la gestuelle dans un jeu équilibré. Il sera aussi question des rapports entre le corps et l'espace, le corps et les rythmes. Il s'agira enfin de mettre l'accent sur les grandes tendances qui se dégagent des problématiques actuelles sur les rapports entre le corps et le jeu.

THTR 2541 L'expression orale au théâtre Cr.Hrs. 3

Étude de l'expression orale et de la communication sous leurs différents aspects. Étude des règles de la prononciation, de l'élocution et de la prosodie de français contemporain. Étude des diverses techniques de l'élocution théâtrale comme moyen de communication et comme moyen de l'art dramatique (registres tragique, dramatique et comique). Analyse des facteurs et des fonctions du langage et de la communication. Initiation aux techniques de lecture à première vue et aux textes à mémoriser. Initiation aux diverses techniques respiratoires et vocales.

THTR 2551 Improvisation théâtrale Cr.Hrs. 3

Ce cours reprend les grands principes de l'improvisation théâtrale proposés dans le THTR 1000 (Initiation à l'improvisation théâtrale), mais il les applique cette fois à nombre de thématiques, de situations et d'aspects différents du jeu improvisé. É ce titre, ce cours aborde et explore d'autres dimensions de l'improvisation théâtrale, tout en se fondant sur les acquis du cours l'improvisation de première année.

THTR 3521 Interprétation, voix et expression orale Cr.Hrs. 3

Étude de la voix sur le plan interprétatif et expressif. Les divers rapports entre la voix, l'expressivité individuelle, collective et le spectacle. Les rythmes de la voix (modulations, hésitations, accélérations...). Les rapports entre la voix, le corps et l'espace. Les principes de l'improvisation vocale et du jeu choral.

THTR 3531 Jeu et caméra Cr.Hrs. 3

Ce cours vise à initier les étudiants au rôle créateur de la caméra. É ce titre, les rapports entre le jeu de l'acteur et les différents types de cadrages relatifs au septième art seront abordés. En outre, il y sera question de compréhension et d'interprétation de scripts, ainsi que de nombreux aspects relatifs au jeu de l'acteur sur un plateau de tournage: scènes de combat, essayage de costumes, apprentissage d'accents étrangers, maniement d'armes, principes de jeu avec des animaux ou des doublures. Du reste, ce cours accordera une attention particulière à la question des auditions.

THTR 3541 Le jeu réaliste Cr.Hrs. 3

Connaissance théorique et pratique des techniques de jeu réaliste selon la méthode de Stanislavski et de l'Actors' Studio. Le rôle et les fonctions du corps, les techniques de l'identification et de l'incarnation; le rôle des émotions, l'écoute des partenaires de jeu, l'observation, la construction globale du personnage. Techniques et esthétiques du jeu réaliste.

THTR 3551 Clown et masques Cr.Hrs. 3

Ce cours vise à initier les étudiants aux aspects fondamentaux de l'art du clown et du rôle des masques dans l'engagement physique au théâtre. Aussi aborde-t-il les différents aspects du jeu du clown et de la pratique de jeu masqué (théâtre antique, Commedia dell'arte), comme la gestuelle, le langage, le mouvement, l'espace, l'utilisation des accessoires et l'importance de l'intégration du clown à la formation de l'acteur.

THTR 3561 Scénographie Cr.Hrs. 3

Introduction à la scénographie du point de vue historique et évolutif (du théâtre de l'Antiquité grecque au théâtre de la dérision). Introduction au travail d'agencement des moyens techniques et artistiques de la scénographique, en tenant compte des rapports entre le texte théâtral et l'espace de la scène. Mise en relief des différentes étapes de la conception scénographique (décors, costumes, jeu de lumières, effets scéniques, etc.). Réflexion sur le travail de scénographes réputés comme Walter Gropius, Yannis Kokkos et Wieland Wagner.

THTR 3571 Atelier de théâtre Cr.Hrs. 3

Cours d'initiation à la pratique théâtrale dans son ensemble: jeu, scénographie, mise en scène. Ce cours constitue une synthèse de tous les aspects de l'art dramatique en prévision de scènes devant la salle de classe et/ou pour des invitées à la fin du trimestre. Des aspects incontournables de l'art dramatique figureront au programme de ce cours: la concentration, l'écoute personnelle et collective, le monologue intérieur, la mémoire sensorielle et affective, l'analyse approfondie de scènes, la construction de personnages, le travail à l'extérieur des répétitions ainsi que le comportement lors de répétitions. Préalables: Avoir réussi l'un des deux cours consacrés à l'improvisation (THTR 1001, THTR 2551), 4 cours de 2e année et 2 cours de 3e année.

THTR 4521 Mise en scène Cr.Hrs. 3

Ce cours vise à initier les étudiants aux principes relatifs à la mise en scène. Les rapports entrent l'art de la mise en scène et certaines théories esthétiques seront abordés. Également de mettre l'accent sur les grandes tendances qui se dégagent des problématiques actuelles de la mise en scène. Ce cours propose aussi une réflexion critique sur la mise en scène comme forme d'interprétation qui mène à la création théâtrale.

THTR 4531 Mise en scène II Cr.Hrs. 3

Ce cours reprend les principes de Mise en scène 1 et les applique à la dramaturgie, à la scénographie, à différentes esthétiques historiques et au jeu de l'acteur. É ce titre, ce cours permet à l'étudiant de mieux connaître les ressources artistiques et pratiques à la disposition du metteur en scène. É travers une sé de travaux pratiques et de projets, l'étudiant pourra parachèver ses connaissances de la mise en scène. Tout en insistant sur les divers aspects de la mise en scène, ce cours accordera aussi une importance particulière à direction des acteurs.

THTR 4541 Jouer les genres théâtraux: comédie, tragédie et drame Cr. Hrs. 3

Cours de synthèse dans lequel les étudiants aborderont les techniques de jeu liées aux genres théâtraux: la comédie, la tragédie et le drame. É ce titre, une attention particulière sera apportée à l'action comique, tragique et dramatique sous le rapport des conflits et des renversements de situation, des rythmes vocaux (répliques, interaction entre comédiens), des didascalies, du contexte culturel des oeuvres dramaturgiques et du contexte théâtral en général. Ce cours permettra aussi d'aborder la question de la composition et de l'interprétation d'un personnage, en fonction de la compréhension du texte et des techniques de jeu.

THTR 4551 Atelier de théâtre et production Cr.Hrs. 3

L'objectif de ce cours consiste à produire une pièce de théâtre, soit une création collective, soit une oeuvre de répertoire. La contribution et l'implication des étudiant-e-s seront essentielles car ils devront prendre en charge, sous la supervision du professeur, les divers aspects d'une production théâtrale: publicité, décors, costumes, éclairages, bruitages jeu et, dans une moindre mesure, mise en scène. É ce titre, ce cours donne l'occasion aux étudiant-e-s de mettre en pratique ce qu'ils auront appris dans d'autres cours de la Spécialisation en études théâtrales; ce qui leur permettra d'acquérir à la fois une plus grande autonomie et une expérience indispensable dans le domaine des arts de la scène.

École de traduction: Traduction-2000 Level**TRAD 2071 Grammaire normative Cr.Hrs. 6**

(L'ancien 122.207) Dans le cadre d'une révision approfondie de la grammaire, apprentissage des particularités orthographiques du français. Les formes et les fonctions des parties du discours, en insistant sur le verbe et ses conjugaisons ainsi que sur les règles d'accord et de concordance à l'intérieur de la phrase simple et de la phrase complexe. Préalable: réussite de l'examen d'admission aux programmes de traduction ou avoir obtenu une note minimale de B dans FRAN 1091 (144.109) et FRAN 1111 (144.111).

TRAD 2101 Analyse et résumé de textes 1 Cr.Hrs. 3

(L'ancien 122.210) Apprentissage des techniques d'analyse et de résumé de textes pragmatiques français de façon à développer l'aptitude interprétative (extraction du sens) et les capacités expressives (reformulation). Textes, écrits ou audiovisuels, touchant à l'actualité et aux divers domaines avec lesquels le traducteur sera appelé à se familiariser. Préalable: réussite de l'examen d'admission ou une note minimale de B+ au FRAN 1111 (144.111)] ou l'autorisation écrite du professeur ou de la professeure. N.B. Ce cours, obligatoire dans le cadre du baccalauréat spécialisé, ne l'est pas pour le certificat de traduction. Toutefois, si l'examen d'admission révélait des lacunes par rapport à l'analyse ou au résumé, l'étudiante ou l'étudiant pourrait devoir suivre ce cours en plus de ceux prévus pour le certificat.

TRAD 2111 Informatique et traduction Cr.Hrs. 3

(Ancien 122.211) Introduction à l'usage des ordinateurs en traduction: banques de données terminologiques, dictionnaires électroniques, traduction assistée par ordinateur. Introduction à la traduction automatique. Internet pour les traducteurs. Préalable: réussite de l'examen d'admission ou l'autorisation écrite du professeur ou de la professeure.

TRAD 2151 Introduction à la traduction Cr.Hrs. 3

(Ancien 122.215) Initiation à la pratique de la traduction, à sa terminologie et aux méthodes de travail. Réflexion sur la responsabilité du traducteur vis-à-vis de ceux qu'il traduit (auteurs, représentants politiques, etc.) et de ses lecteurs. Préalable: réussite de l'examen d'admission ou l'autorisation écrite de la professeure ou du professeur.

TRAD 2301 Culture générale I Cr.Hrs. 3

(L'ancien 122.230) Cours autodidactique pluridisciplinaire. L'étudiant(e) établit son corpus à partir d'une liste de lecture et en accord avec le(la) responsable de son programme d'étude.

École de traduction: Traduction-3000 Level**TRAD 3011 Lexicologie comparée Cr.Hrs. 3**

(L'ancien 122.301) Étude des domaines abordés par la lexicologie et comparaison des structures lexicosémantiques de l'anglais et du français dans l'optique de la traduction. Ce cours abordera entre autres des notions telles que la contextualisation; la cooccurrence; les interférences linguistiques (anglicismes, gallicismes, faux amis); et la modulation lexicale en traduction. Préalable: avoir réussi l'examen d'admission ou obtenu l'autorisation du professeur ou de la professeure.

TRAD 3051 Syntaxe comparée Cr.Hrs. 3

(Ancien 122.305) Étude contrastive des structures syntaxiques de l'anglais et du français dans l'optique de la traduction. Apprentissage des techniques de transfert et particulièrement de la transposition syntaxique à l'aide de nombreux exercices pratiques. Correction des problèmes de syntaxe provenant d'interférences linguistiques: calques, mauvais emplois des prépositions, des temps, etc. On ne peut se faire créditer le TRAD 3051 (122.305) et l'ancien 044.363. Préalable: réussite de l'examen d'admission ou l'autorisation du professeur ou de la professeure.

TRAD 3101 Analyse et résumé de textes II Cr.Hrs. 3

(Ancien 122.310) Pratique des techniques d'analyse et de résumé à partir de textes français ou anglais. La reformulation en français sera l'occasion d'un exercice intellectuel proche de la traduction. Recherches documentaires visant non seulement à l'amélioration des connaissances générales, mais aussi à l'établissement de glossaires. Préalable: une note minimale de C dans le TRAD 2101 (122.210). N.B. Ce cours, obligatoire dans le cadre du baccalauréat spécialisé, ne l'est pas pour le certificat de traduction. Toutefois, si l'examen d'admission révélait des lacunes par rapport à l'analyse ou au résumé, l'étudiante et l'étudiant pourraient devoir suivre ce cours en plus de ceux prévus pour le certificat.

TRAD 3111 Laboratoire I Cr.Hrs. 3

(Ancien 122.311) Travaux pratiques dans des conditions semblables à celles d'un bureau de traduction (qualité du produit fini, gestion du temps, échéances, etc.). Révision des travaux par le professeur ou la professeure. Préalables: une note minimale de C dans TRAD 2101 (122.210) et TRAD 3101 (122.310) ou dans TRAD 3261 (122.326) et TRAD 3131 (122.313).

TRAD 3121 Lexicographie comparée Cr.Hrs. 3

(Ancien 122.312) Étude contrastive de dictionnaires unilingues et bilingues anglais/français. Lecture de manuels de lexicographie et comparaison de divers dictionnaires unilingues et bilingues. Préalable: réussite de l'examen d'admission ou l'autorisation écrite du professeur ou de la professeure.

TRAD 3131 Terminologie bilingue et documentation Cr.Hrs. 3

(Ancien 122.313) Initiation aux diverses méthodes d'acquisition de la documentation permettant une application à la traduction: utilisation des encyclopédies, des ouvrages et des revues spécialisées à des fins terminologiques. Apprentissage de l'utilisation des banques de données et établissement de fiches terminologiques. Préalables: une note minimale de C dans TRAD 2101 (122.210) et TRAD 3101 (122.310)] ou une note minimale de C dans TRAD 2151 ou l'autorisation écrite du professeur ou de la professeure.

TRAD 3141 Rédaction professionnelle comparée I Cr.Hrs. 3

(Ancien 122.314) Étude comparative de documents professionnels anglais et français afin de mettre en lumière les différences qui peuvent exister dans les méthodes de présentation ou d'expression en anglais et en français. Production de textes professionnels variés (lettres, procès-verbaux, curriculum vitae, etc.). Préalables: une note minimale de C dans les TRAD 3101(122.310) ou dans TRAD 2151 (122.215), ou l'autorisation écrite du professeur ou de la professeure.

TRAD 3261 Traduction générale (anglais-français) Cr.Hrs. 3

(Ancien 122.326) Mise en pratique des principes de traduction présentés dans le cours TRAD 2151 (122.215) (Introduction à la traduction) auquel il fait suite. Textes à traduire de nature générale et portant sur divers domaines de l'actualité et de la vie professionnelle. Préalable: une note minimale de C dans le TRAD 2151 (122.215).

TRAD 3271 General Translation (French-English) Cr.Hrs. 3

(Ancien 122.327) Apprentissage et application des règles de base de la traduction vers l'anglais de textes français d'intérêt général. Par une approche analytique du sens, découverte des principaux aspects du maniement du langage pour pouvoir saisir les idées d'un message et leur articulation, et les reformuler en exploitant les ressources de l'anglais. Préalable: une note minimale de C dans au moins un des cours suivants: le ENGL 2000 (004.200) ou le ENGL 2001 (004.200) ou le TRAD 2101 (122.210) ou le TRAD 2151 (122.215).

TRAD 3281 Sujets particuliers Cr.Hrs. 3

(Ancien 122.328) Contenu variable en fonction des besoins et des intérêts des étudiants et des professeurs. Préalable: un cours (3 crédits) de niveau 2000 avec une note minimale de C ou l'autorisation de la professeure ou du professeur.

TRAD 3301 Culture générale II Cr.Hrs. 3

(Ancien 122.330) Cours autodidactique pluridisciplinaire. L'étudiante ou l'étudiant établit son corpus à partir d'une liste de lecture et en accord avec le ou la responsable de son programme d'étude. Préalable: une note minimale de C dans le TRAD 2301 (122.230).

École de traduction: Traduction-4000 Level

TRAD 4011 Atelier de traduction professionnelle Cr.Hrs. 3

(Ancien 122.401) Travaux pratiques de traduction en atelier où la simulation des conditions réelles de travail devra permettre d'améliorer sa productivité sous le rapport du temps et de la qualité. Préalable: une note minimale de C dans TRAD 3261 (122.326) ou TRAD 3271 (122.327) et une note minimale de C dans TRAD 3131 (122.313), ou l'autorisation écrite du professeur ou de la professeure.

TRAD 4031 Analyse du discours I Cr.Hrs. 3

Le discours comme réseau de relation, fait de langage et fait social. Son inscription dans le schéma de la communication. Initiation à la théorie de communication. La notion de littérarité selon plusieurs modèles théoriques, notamment la théorie de réception et le modèle marxiste. Application à l'analyse de textes littéraires et pragmatiques. On ne peut se faire créditer le TRAD 4031 et l'ancien TRAD 4021 (122.402). Préalable: l'autorisation écrite du professeur ou du chef de département de français ou de traduction.

TRAD 4033 Analyse du discours II Cr.Hrs. 3

Le discours comme réseau de relation, fait de langage et fait social. Son inscription dans le schéma de la communication. Initiation à la théorie de communication. La notion de littérarité selon plusieurs modèles théoriques, notamment la sémiotique et les perspectives psychoanalytiques. Application à l'analyse de textes littéraires et pragmatiques. On ne peut se faire créditer le TRAD 4033 et l'ancien TRAD 4021 (122.402). Préalable: l'autorisation écrite du professeur ou du chef de département de français ou de traduction.

TRAD 4051 Révision Cr.Hrs. 3

(L'ancien 122.405) Principes de la révision. Vérification et amélioration de textes traduits. Exercices comparatifs et raisonnés pour développer les facultés analytiques, le sens critique et l'habileté à manier la langue d'arrivée. Préalable: une note minimale de C dans le TRAD 3261 (122.326) ou l'autorisation écrite du professeur ou de la professeure.

TRAD 4061 Terminologie appliquée Cr.Hrs. 3

(Ancien 122.406) Travaux pratiques destinés à renforcer l'efficacité et la qualité des recherches documentaires et terminologiques exigées par la traduction de textes spécialisés. Préalable: une note minimale de C dans le TRAD 3131 (122.313).

TRAD 4071 Mémoire de traduction Cr.Hrs. 3

(Ancien 122.407) Travail indépendant réparti sur deux sessions ou plus, sous la direction d'un professeur ou d'une professeure. Recherche documentaire et terminologique à des fins traductionnelles. Traduction commentée d'un texte de 3000 mots répondant aux exigences de la profession, accompagnée d'une analyse textuelle et d'un lexique élaboré à partir du texte à traduire. Une note de réussite ou d'échec sera attribué à ce cours. Préalables: une note minimale de C dans TRAD 3261 (122.326) ou TRAD 3271 (122.327) et dans TRAD 3131 (122.313). N.B. Ce cours devrait se faire à la toute fin du programme de l'étudiante ou de l'étudiant. Il faut avoir conservé une moyenne de B pour pouvoir s'inscrire au mémoire.

TRAD 4081 Sous-titrage Cr.Hrs. 3

(Ancien 122.408) Survol des processus traductologiques et des techniques du sous-titrage. Volet pratique sur la traduction cinématographique à l'aide des sous-titres. Préalable: une note minimale de C dans un des cours suivants: le TRAD 4251 (122.425), TRAD 4091 (122.409) ou le TRAD 4281 (122.428).

TRAD 4091 Gestion d'un service de traduction Cr.Hrs. 3

(Ancien 122.409) Principes de base de la gestion appliquée à un service de traduction. Gestion et la coordination des équipes en réseau Internet, tant sur le plan national qu'international. Préalable: une note minimale de C dans le TRAD 2151 (122.215) et TRAD 3261 (122.326) ou TRAD 3271 (122.327). N.B. É l'intention des finissants et des finissantes du baccalauréat spécialisé ou du certificat de traduction, mais ouvert à d'autres avec l'autorisation écrite de la professeure ou du professeur.

TRAD 4101 Mémoire de terminologie Cr.Hrs. 3

(Ancien 122.410) Travail de recherche supervisé en terminologie de l'École de traduction. Recherche thématique sur un sujet et élaboration de fiches terminologiques. Approfondissement de ses compétences dans la manipulation des bases de données terminologiques, leur mise à jour et leur enrichissement. Préalables: une note minimale de B dans TRAD 3131 (122.313) ou TRAD 4061 (122.406). N.B. Ce cours devrait se faire à la toute fin du programme de l'étudiante ou de l'étudiant. Il faut avoir conservé une moyenne de B pour pouvoir s'inscrire au mémoire.

TRAD 4111 Laboratoire II Cr.Hrs. 3

(Ancien 122.411) Travaux pratiques dans des conditions semblables à celles d'un bureau de traduction (qualité du produit fini, présentation, gestion du temps, relations interpersonnelles, etc.). Traduction des textes appartenant à des domaines de spécialité ou qui présentent un degré de difficulté plus élevé. Préalable : une note minimale de C dans TRAD 3111 (122.311).

TRAD 4141 Rédaction professionnelle comparée 2 Cr.Hrs. 3

(L'ancien 122.414) Étude comparative de documents professionnels anglais et français. Rédaction, en français, de documents professionnels tels que rapports, documents journalistiques ou juridiques. Préalable: une note minimale de C dans le TRAD 3141 (122.314). Donné au Université de Saint-Boniface.

TRAD 4231 Translation in the Social Sciences Cr.Hrs. 3

(Ancien 122.423) Révision et pratique des principes de la traduction vers l'anglais à partir de textes français appartenant au domaine des sciences sociales. Etablissement de dossiers documentaires et de fiches terminologiques bilingues. Préalable: une note minimale de C dans le TRAD 3271 (122.327) et TRAD 3131 (122.313).

TRAD 4241 Legal Translation Cr.Hrs. 3

(L'ancien 122.424) Révision et pratique des principes de la traduction vers l'anglais à partir de textes français appartenant au domaine juridique. Etablissement de dossiers documentaires et de fiches terminologiques dans ces domaines. Préalable: une note minimale de C dans le TRAD 3271 (122.327) et TRAD 3131 (122.313).

TRAD 4251 Literary Translation Cr.Hrs. 3

(Ancien 122.425) Révision et pratique des principes de la traduction vers l'anglais à partir de textes littéraires français. Analyse du style et des modes d'expression et recherche d'équivalences en langue d'arrivée. Préalable: une note minimale de C dans le TRAD 3271 (122.327).

TRAD 4261 Initiation à l'interprétation Cr.Hrs. 3

(L'ancien 122.426) Initiation à la traduction orale français-anglais et anglais-français. Développement de l'expression orale dans ces deux langues. Préalables: une note minimale de C dans le TRAD 3261 (122.326) et le TRAD 3271 (122.327). Donné au Université de Saint-Boniface.

TRAD 4263 Théories de la traduction Cr.Hrs. 3

Étude des courants théoriques contemporains dans le domaine de la traduction, allant des sourcistes aux ciblistes. Accent particulier mis sur les approches intermédiaires, qui font ressortir la place du traducteur, des institutions, etc. dans le modèle. Préalable: réussite d'au moins deux cours de traduction de niveau 3000.

TRAD 4271 Scientific and Technical Translation Cr.Hrs. 3

(L'ancien 122.427) Révision et application des principes de la traduction vers l'anglais à partir de textes appartenant aux domaines scientifiques et techniques. Etablissement de dossiers documentaires et terminologiques dans ces domaines. Préalable: une note minimale de C dans le TRAD 3271 (122.327) et TRAD 3131.

TRAD 4273 Traduction biomédicale et pharmaceutique Cr.Hrs. 3

Analyse et traduction de différents genres de textes dans le domaine biomédical et pharmaceutique. Accent mis sur les systèmes notionnels, terminologiques et phraséologiques propres au domaine et sur le développement d'une démarche d'exploitation de connaissances spécialisées. Préalable: une note minimale de C dans TRAD 3261 (122.326) et TRAD 3131 (122.313).

TRAD 4281 Adaptation publicitaire Cr.Hrs. 3

(L'ancien 122.428) Initiation à l'adaptation et à la traduction de textes publicitaires. Apprentissage des méthodes de modulation intralinguistique et interlinguistique de l'énoncé publicitaire en fonction de facteurs linguistiques, affectifs et sociaux. Préalable: une note minimale de C dans TRAD 3261 (122.326) ou TRAD 3271 (122.327).

TRAD 4361 Traduction spécialisée (anglais-français) Cr.Hrs. 3

(L'ancien 122.436) Révision et application des principes de la traduction vers le français à partir de textes pragmatiques anglais appartenant à divers domaines de spécialisation. Préalable: une note minimale de C dans le TRAD 3261 (122.326) et TRAD 3131 (122.313).

TRAD 4371 Specialized Translation (French-English) Cr.Hrs. 3

(L'ancien 122.437) Révision et application des principes de la traduction vers l'anglais de textes pragmatiques français appartenant à divers domaines de spécialisation. Préalable: une note minimale de C dans le TRAD 3271 (122.327) et TRAD 3131.

TRAD 4381 Traduction en sciences sociales (anglais-français) Cr.Hrs. 3

(Ancien 122.438) Familiarisation avec le langage propre aux sciences sociales et qui tient compte de méthodes de recherche et d'analyse bien définies, tant en anglais qu'en français et auquel on aura recours chaque fois que le texte de départ l'exigera, tout en enrichissant sa culture générale. Préalable: une note minimale de C dans TRAD 3261 (122.326) et TRAD 3131 (122.313).

TRAD 4391 Traduction juridique (anglais-français) Cr.Hrs. 3

(L'ancien 122.439) Révision et application des principes de la traduction vers le français de textes juridiques anglais appartenant à divers aspects du droit: textes législatifs, règlements, textes de jurisprudence, de doctrine, contrats. Préalable: une note minimale de C dans le TRAD 3261 (122.326) et TRAD 3131 (122.313).

TRAD 4401 Traduction littéraire (anglais-français) Cr.Hrs. 3

(L'ancien 122.440) Application des principes de la traduction vers le français à des textes littéraires. Analyse des procédés stylistiques anglais et recherche d'équivalences en français. Pratique de la rédaction expressive. Préalable: une note minimale de C dans le TRAD 3261 (122.326).

TRAD 4411 Traduction scientifique et technique (anglais-français) Cr. Hrs. 3

(L'ancien 122.441) Révision et application des principes de la traduction vers le français à partir de textes appartenant aux domaines scientifiques et techniques. Établissement de dossiers documentaires et terminologiques dans ces domaines. Préalable: une note minimale de C dans le TRAD 3261 (122.326) et TRAD 3131. Donné au Université de Saint-Boniface.

TRAD 4421 Version commerciale et économique (anglais-français) Cr. Hrs. 3

(L'ancien 122.442) Révision et application des principes de la traduction vers le français de textes pragmatiques spécialisés dans les domaines du commerce et de l'économie. Établissement de lexiques bilingues et enrichissement des connaissances dans ce domaine de spécialisation. Pratique de rédaction dans le style commercial. Préalable: une note minimale de C dans le TRAD 3261 (122.326) et TRAD 3131 (122.313).

TRAD 4501 Initiation à la localisation Cr.Hrs. 3

(L'ancien 122.450) Utilisation de divers outils informatiques indispensables à la localisation et à l'adaptation de logiciels pour des publics très variés. Réflexion sur le rôle du traducteur au sein de l'équipe linguistique et technique. Préalable: une note minimale de C dans TRAD 2111 (122.211) et TRAD 3261 (122.326) ou TRAD 3271 (122.327) ou l'autorisation du professeur ou de la professeure.

TRAD 4531 Traduction militaire Cr.Hrs. 3

Le cours portera sur l'étude des textes relatifs aux différents aspects de la vie militaire (différents corps d'armes: terre, air, marine), les grades militaires, les armes, l'histoire militaire, le rôle de l'armée dans la société moderne. Préalable: une note minimale de B dans TRAD 2111 (122.211) et TRAD 2151 (122.215) et TRAD 3261 (122.326) et TRAD 3271 (122.327) et TRAD 4411 (122.441).

École d'administration des affaires-Accounting(ACC)**ACC 1101 Introduction à la comptabilité financière Cr.Hrs. 3**

(Ancien 009.110) (Laboratoire requis) Analyse des termes, des principes et des concepts utilisés dans la préparation et la présentation d'états financiers. On ne peut se faire créditer ACC 1101 et ACC 1100.

ACC 1111 Introduction à la comptabilité de management Cr.Hrs. 3

(Ancien 009.111) (Laboratoire requis) L'importance des méthodes comptables dans la gestion de l'information utilisées par la direction d'une entreprise. Préalable: ACC 1101 ou ACC 1100 (ou 009.110) avec une note minimale de D. On ne peut se faire créditer ACC 1111 et ACC 1110 (009.111). Préalables ou concomitants: un de ECON 1201, ECON 1200 (018.120), ECON 1011 ou ECON 1010 avec une note minimale de D et ECON 1021 ou ECON 1020 avec une note minimale de D.

ACC 2011 Comptabilité intermédiaire-Actifs Cr.Hrs. 3

(Ancien 009.201) Cadre théorique de la comptabilité relatif aux principes et procédures d'analyse et mesure des actifs. Analyse comptable approfondie des postes de l'actif: encaisse, créances, stocks, placements, immobilisations corporelles et incorporelles et amortissement. Préalable: ACC 1101 (ou l'ancien 009.110) avec une note minimal de C+.

ACC 2021 Comptabilité intermédiaire - Capitaux propres et passifs Cr. Hrs. 3

(Ancien 009.201) Cadre théorique de la comptabilité relatif aux capitaux propres avec une considération du traitement comptable des passifs É court et É long termes, régimes de retraite, locations impôts sur les bénéfices, actions, droits, etc. Modifications comptables. Préalable: ACC 2011 (ou l'ancien 009.201) avec une note minimale de D.

ACC 3041 Compatibilité de coûts Cr.Hrs. 3

Utilité de la comptabilité de management et prise de décision, concepts de coûts. systèmes de coûts, budgets, contrôle budgétaire, gestion décentralisée. analyse de la performance financière. Préalable: ACC 1111 (ou l'ancien 009.111).

ACC 3051 Comptabilité fiscale Cr.Hrs. 3

(Ancien 009.305) Structure et notions du système fiscal canadien. Importance accordée aux pratiques fiscales courantes. Préalable: ACC 1101 ou ACC 1000 (009.110) (C+). On ne peut se faire créditer ACC 3051 et ACC 3050.

ACC 4011 Vérification Cr.Hrs. 3

(Ancien 009.401) Étude de la philosophie et des notions de la vérification, des responsabilités légales et éthiques d'un vérificateur, des techniques de base de la vérification, y compris l'échantillonnage statistiques et l'établissement d'organigrammes, et de la vérification de gestion. Préalables: ACC 2011 ou ACC 2010 (009.201 (D)) et ACC 2021 ou ACC 2020 (009.202 (D)), ou l'autorisation du chef de département. On ne peut se faire créditer ACC 4011 et ACC 4010 (009.401).

ACC 4031 Théorie comptable Cr.Hrs. 3

Évolution de la théorie comptable, processus de normalisation et influence du milieu sur son cheminement, étude des modèles de mesure des bénéfices, théorie d'agence, hypothèse de l'efficacité des marchés de capitaux, etc. Contenu variable d'année en année selon les besoins des étudiantes et des étudiants, et selon la spécialité du professeur ou de la professeure. On ne peut se faire créditer le ACC 4031 et le ACC 4030 (009.403). Préalables: [ACC 2011 ou ACC 2010 (D)(009.201)] et [FIN 2201 ou FIN 2200(D) (009.220)] . Préalable ou concomitant: ACC 2021 ou ACC 2020 (D)(009.202).

École d'administration des affaires-Actuarial Studies(ACT)

ACT 2321 Mathématiques financières Cr.Hrs. 3

(Ancien 010.232) Étude de l'intérêt composé et des rentes discrètes et continues; équations de valeur, analyse de fonds; détermination de taux de rendement; construction de tables. On ne peut se faire créditer ACT 2321 et ACT 2320 et ACT 3320 (010.232 et le 010.332). Préalable: MATH 1500 ou MATH 1501 (136.150) ou MATH 1520 (ou 136.152), ou l'équivalent.

École d'administration des affaires-Entrepreneurship/Small Business(ENTR)

ENTR 4511 Entrepreneurship et création d'entreprises Cr.Hrs. 3

(Ancien 118.451) Ce cours porte sur la création d'entreprise. Lancement d'une entreprise; caractéristiques de l'entrepreneur; plan d'entreprise; définition du projet; détermination du marché; fonctions administratives; problèmes particuliers au lancement d'une entreprise, aide gouvernementale. On ne peut se faire créditer ENTR 4100 (ou 118.410). Préalable: ACC 1101, ACC 1100 (009.110) et MKT 2211 ou MKT 2210 (118.221) (D), et [GMGT 2030 (ou 027.203) (D) ou GMGT 2061 (D) ou GMGT 2060 (D) ou (GMGT 2081 (D)) ou GMGT 2080 (ou 027.208) (D)].

École d'administration des affaires-Finance(FIN)

FIN 2201 Gestion financière Cr.Hrs. 3

(Ancien 009.220) (Laboratoire requis) Introduction aux principes de la gestion financière de l'entreprise en particulier dans le choix du financement, le choix de l'investissement et de la gestion des fonds. Préalables: ACC 1101 ou ACC 1100 (009.110) avec une note minimale de D, un de MATH 1501, MATH 1500 ou MATH 1520 avec une note minimale de C, STAT 1001 ou STAT 1000 (005.100) avec une note minimale de C, un de ECON 1201, ECON 1200 (018.120), ECON 1011 ou ECON 1010 avec une note minimale de C et ECON 1021 ou ECON 1020 avec un note minimale de C.

FIN 3451 Finance Internationale Cr.Hrs. 3

(Ancien 009.345) Introduction à l'étude des aspects internationaux du financement d'une compagnie et des marchés internationaux de capitaux. Préalable: FIN 2201 (ancien 009.220) avec une note minimale de C+.

École d'administration des affaires-General Management(GMGT)

GMGT 1011 Les entreprises et la société Cr.Hrs. 3

Analyse de la nature, du rôle, de l'impact et de l'importance des entreprises dans la société. Les activités internes des entreprises (ex. finances, marketing, opérations) seront discutées, mais la majorité du cours étudiera des relations entre les entreprises et les parties prenantes clés dans l'environnement externe (y inclut les gouvernements, les propriétaires, les clients, les communautés, les fournisseurs, et les générations à venir). Le étudiant et les étudiantes examineront les contextes institutionnels variés (ex. économiques, politico-légaux, et socioculturels) et appliqueront la pensée critique aux relations entre entreprises et la société, avec considération des modèles alternatifs de gestion. Accent sur les sujets sociaux contemporains en management (ex. le développement durable, la responsabilité sociale des entreprises). On ne peut se faire créditer à la fois le GMGT 1010.

GMGT 2011 Business Communications and Critical Thinking Cr.Hrs. 3

(Lab required) An introduction to theoretical, cultural and ethical bases of effective communication. Students will develop interpersonal, oral and written communication skills at individual, group and organizational levels and will also develop analytical, problem-solving, rhetorical and critical thinking abilities required in organizational and business settings. Recommend that GMGT 2011 be taken in their first 30 credit hours. Not to be held for credit with GMGT 2010 or GMGT 2001 or GMGT 2000.

GMGT 2061 Management et théorie des organisations Cr.Hrs. 3

Analyse des principaux concepts qui sous-tendent la formation des organisations et leur gestion interne. L'accent est mis sur l'analyse des différentes approches théoriques relatives à la théorie des organisations et au management. On ne peut se faire créditer le GMGT 2061 et GMGT 2081 ou GMGT 2031.

GMGT 2071 Introduction au comportement organisationnel Cr.Hrs. 3

(L'ancien 027.207) Analyse de l'impact du comportement humain sur l'organisation formelle et informelle. Les sujets traités sont le leadership, les groupes de travail, les conflits au sein de l'organisation et la communication. On ne peut se faire créditer le GMGT 2071 et GMGT 2070 ou GMGT 2030.

GMGT 2081 Introduction au management et à la théorie de l'organisation Cr.Hrs. 3

(L'ancien 027.208) Analyse des principaux concepts régissant la formation d'organisations et leur gestion interne. L'accent est mis sur l'analyse de différentes approches théoriques concernant l'organisation et sa gestion. L'étudiant (e) ne peut se faire créditer à la fois le GMGT 2080 (ou 027.208) et le GMGT 2030 (ou 027.203). Donné au Collège de St. Boniface.

GMGT 2121 Les entreprises et le gouvernement Cr.Hrs. 3

(L'ancien 027.212) Analyse des rapports entre le gouvernement et les entreprises au niveau de la conception, de la modification et de la mise en place des politiques gouvernementales affectant l'entreprise. Analyse des moyens dont disposent les entreprises pour influencer la prise de décision des gouvernements. Donné au Collège de St. Boniface. Préalable: ECON 1200 ou ECON 1201 ou 018.120) (D).

GMGT 2141 Introduction aux communications Cr.Hrs. 3

(L'ancien 027.214) Communication orale dans le milieu des affaires. Rédaction de documents écrits venant appuyer les activités d'écoute et de parole. Apprentissage des connaissances grammaticales, syntaxiques et lexicales. Apprendre à s'exprimer en public. Donné au Collège de St. Boniface.

GMGT 3301 Droit commercial Cr.Hrs. 3

(L'ancien 027.330) Sommaire historique du droit, organisation des tribunaux, constitution du Canada, attributions législatives du gouvernement fédéral et des assemblées provinciales. Notions juridiques et problèmes actuels: l'organisation des entreprises, la rédaction des contrats, le mandant et le mandataire, les effets négociables, les débits et les procédures de faillite. Donné à l'Université de St. Boniface.

GMGT 3561 Séminaire en management Cr.Hrs. 3

(L'ancien 027.356) Analyse de la gestion d'organisation: Réflexion critique sur des sujets d'actualité pertinents. L'étudiant(e) ne peut se faire créditer à la fois le GMGT 3561 (ou 027.356) et le GMGT 3020 (ou 027.302) ou le GMGT 3560. Préalable: GMGT 2061 (D) ou GMGT 2060 (D) ou GMGT 2081 (D) ou GMGT 2080 (ou 027.208) (D) et GMGT 2071 (D) ou GMGT 2070 (ou 027.207) (D).

GMGT 3581 Éthique et responsabilité sociale Cr.Hrs. 3

(Ancien 027.358) Le rôle social de l'entreprise. L'environnement interne et externe de l'entreprise; les problèmes sociaux et les activités de responsabilité sociale; l'éthique professionnelle du gestionnaire contemporain, la comptabilité sociale; les groupes défavorisés; etc. Préalable: GMGT 2071 (027.207).

GMGT 4011 Gestion stratégique des organisations Cr.Hrs. 3

(L'ancien 027.401) Étude de la gestion stratégique des organisations. L'étude de cas permettra à l'étudiante ou à l'étudiant d'intégrer les connaissances acquises tout en mettant l'accent sur les questions qui entourent l'élaboration des stratégies et la gestion des politiques établies. Ce cours ne sera suivi qu'à la fin du programme ou avec l'autorisation écrite du professeur ou de la professeure. Donné au Collège de St. Boniface.

GMGT 4121 Commerce International Cr.Hrs. 3

(Ancien 027.412) Étude des échanges internationaux à travers les politiques économiques internationales, les ententes régionales, les tarifs commerciaux, les institutions internationales et le financement des échanges.

GMGT 4151 Gestion des organisations sans but lucratif Cr.Hrs. 3

(Ancien 027.415) Description et analyse de la dynamique des organismes sans but lucratif (OSBL) : leur environnement spécifique, leur fonctionnement interne et leurs modes d'intervention dans la communauté. Approfondissement de la compréhension de la spécificité du secteur tertiaire, ce qui rend apte à y intervenir efficacement soit en tant que gestionnaires, soit en tant que bénévoles. Préalables : GMGT 2061 ou GMGT 2060, GMGT 2081 ou GMGT 2080 (027.208), GMGT 2071 ou GMGT 2070 (027.207), HRIR 2440 ou HRIR 2441 (027.244). On ne peut pas obtenir de crédits à la fois pour GMGT 4151 et GMGT 4150.

GMGT 4211 Séminaire en gestion et capitalisme Cr.Hrs. 3

Étude des institutions, des évolutions et des débats associés au capitalisme moderne et de leurs implications pour la gestion. Exploration d'autres perspectives de gestion et des interactions bidirectionnelles dans le contexte d'enjeux plus vastes. Cours conçu de manière à présenter une diversité de perspectives afin de ne pas en privilégier une par rapport aux autres. On ne peut se faire créditer le GMGT 4211 et le GMGT 4210. Préalables: GMGT 1011 (D) ou GMGT 1010 (D) ou GMGT 2121 (d) ou GMGT 2120 (D).

GMGT 4551 Développement d'habiletés de gestionnaire Cr.Hrs. 3

(L'ancien 027.455) Développement de certaines habiletés nécessaires au succès professionnel. Les principaux apprentissages sont: la gestion du stress, la communication orale, la négociation, la recherche d'emploi, les techniques de créativité et d'innovation, la gestion des relations vie privée/vie professionnelle. Donné au Collège de St. Boniface. Préalable: GMGT 2070 (ou 027.207) (D).

École d'administration des affaires-Human Resources/Industrial Relations(HRIR)**HRIR 2441 Gestion des ressources humaines 1 Cr.Hrs. 3**

(L'ancien 027.244) Introduction au système de gestion des ressources humaines. Les sujets abordés ont trait à: la planification, l'analyse de postes, la formation, la gestion de la diversité, la gestion des carrières. l'évaluation du rendement, l'acquisition des ressources humaines, les modes de reconnaissance et la problématique de la gestion des ressources humaines dans un contexte en constant changement. On ne peut se faire créditer à la fois le HRIR 2441 et le HRIR 2440. Donné au Collège de St. Boniface.

HRIR 3511 Gestion des ressources humaines 2 Cr.Hrs. 3

(L'ancien 027.351) La planification des tâches, la structuration des rôles et du travail, la coordination et la réalisation des activités feront l'objet d'un apprentissage théorique associé au développement d'habiletés. Donné au Collège de St. Boniface. Préalable: HRIR 2440 (ou 027.244) (D).

HRIR 3541 Gestion des équipes de travail Cr.Hrs. 3

(L'ancien 027.354) Initiation à la gestion des équipes de travail en mettant l'accent sur les dimensions humaines et administratives du travail en équipe. Donné au Collège de St. Boniface. Préalable: GMGT 2070 (ou 027.207) (D).

HRIR 4411 Dotation et développement des ressources humaines Cr. Hrs. 3

(L'ancien 027.441) Le cours est une analyse approfondie et pratique des problèmes de dotation et de développement des ressources humaines au sein des organisations. É travers ce cours, les étudiant(e)s développeront leurs habiletés d'intervention dans des domaines tels que la planification des emplois, le recrutement et la sélection, l'évaluation de la performance, l'analyse des besoins de formation, l'implantation et le contrôle d'un programme de formation, etc. Préalable: HRIR 2440 (ou 027.244) (D).

HRIR 4421 Rémunération Cr.Hrs. 3

(L'ancien 027.442) Ce cours est une analyse des principaux concepts et des systèmes de rémunération incluant: stratégie, équité salariale, compétitivité, reconnaissance des contributions individuelles, incitatifs de performance, avantages sociaux, politiques gouvernementales, rôle des syndicats dans la rémunération, incidences et gestion du processus de rémunération. Préalable: HRIR 2440 (ou 027.244) (D).

HRIR 4481 La négociation collective Cr.Hrs. 3

(L'ancien 027.448) Ce cours est une analyse des éléments et enjeux de la négociation collective et de la gestion des conventions collectives et une analyse du cadre juridique des négociations publiques et privées. Le système canadien de relations industrielles est comparé à d'autres systèmes nationaux. Préalable: HRIR 3450 (ou 027.345) ou l'ancien 027.341 (D).

HRIR 4511 Gestion de la diversité Cr.Hrs. 3

(L'ancien 027.451) La gestion de la diversité du point de vue historique, social, légal et opérationnel. L'influence de la diversité de la main-d'oeuvre sur les politiques, les pratiques et les procédures de l'organisation. Modèle du développement organisationnel pluraliste relié à un ensemble de systèmes sociaux. Donné au Collège de St. Boniface. Préalable: HRIR 2440 (ou 027.244) (D).

HRIR 4521 Relations industrielles et gestion des ressources humaines comparées Cr.Hrs. 3

(Ancien 027.452) Perspective internationale des relations industrielles (RI) et de la gestion des ressources humaines (GRH) par l'analyse et l'étude comparée des systèmes de relations industrielles et des pratiques de gestion des ressources humaines dans certains pays ainsi que des développements actuels. Théories et questions pertinentes à cette matière. On ne peut se faire créditer le HRIR 4521, le HRIR 4520 (ancien 027.345 ou 027.341). Préalable recommandé mais non obligatoire: le HRIR 3451 (ancien 027.345) ou l'ancien 027.341.

HRIR 4531 Gestion du changement Cr.Hrs. 3

(L'ancien 027.453) Changement et développement organisationnel: processus de changement, agent de changement. Domaines d'intervention: changements dans l'environnement et l'organisation, processus sociaux, culture d'entreprise, techno-structure, qualité de vie au travail. Dilemmes et perspectives. Donné au Collège de St. Boniface. Préalable: HRIR 2440 (ou 027.244) (D).

HRIR 4541 Innovations en gestion des ressources humaines Cr.Hrs. 3

(L'ancien 027.454) Présentation des nouveaux courants en gestion des ressources humaines; examen de ses fondements, présentation des modèles d'implantation et en analyse critique. Préalable: HRIR 2441 (HRIR 2440 ou 027.244).

École d'administration des affaires-International Business(INTB)

INTB 2201 Introduction au management international Cr.Hrs. 3

(Ancien 027.220) Acquisition de connaissances et de savoir-faire relatifs à la gestion, au maintien et au contrôle du flux international de personnes, d'informations, de fonds, de biens ou de services, à des fins commerciales, entrepreneuriales ou caritatives.

INTB 3001 Gestion interculturelle Cr.Hrs. 3

Mise en évidence de l'influence de facteurs culturels sur les pratiques de gestion et la vie des entreprises. Présentation des dimensions de la culture de chaque pays étudié (religion, valeurs, normes, histoire, etc.) et développement d'outils pour faciliter l'adaptation des employés étrangers dans ces pays et le développement d'une communication interculturelle efficace avec leurs ressortissants. On ne peut se faire créditer INTB 3001 et GMGT 3521 ou INTB 4501. Préalable: GMGT 2071 (ou l'ancien 027.207).

INTB 4501 Cultures du monde Cr.Hrs. 3

(L'ancien 027.450) Un aperçu des principales cultures du monde. Étude des relations entre la culture d'un peuple et ses rapports économiques internationaux. Donné au Collège de St. Boniface.

INTB 4581 Problèmes contemporains en gestion internationale Cr.Hrs. 3

(Ancien 027.458) Étude des thèmes relatifs aux problèmes et aux défis que pose la gestion dans un contexte international. Le contenu du cours peut varier d'une année à l'autre en fonction de l'actualité, des besoins et des intérêts de la clientèle étudiante. Préalable : INTB 2201 (027.220) ou GMGT 4121 (027.412) ou l'autorisation écrite de la professeure ou du professeur.

École d'administration des affaires-Management Info Systems(MIS)

MIS 2001 Les systèmes d'information de gestion Cr.Hrs. 3

(Ancien 009.200) (Laboratoire requis) Introduction aux systèmes d'information dans les organisations, au développement et à l'acquisition des systèmes et à la gestion des systèmes d'information. On ne peut se faire créditer ACC 1101 et ACC 1100 Préalable: ACC 1101 ou ACC 11000 (009.110) avec une note minimale de D, ou l'autorisation écrite du professeur.

École d'administration des affaires-Marketing(MKT)

MKT 2211 Principes de marketing Cr.Hrs. 3

(L'ancien 118.221) Analyse des problèmes précis de marketing, l'accent étant mis sur l'analyse de différentes façons de maximiser les bénéfices dans le processus de la distribution des biens et des services; le marketing et la société. Donné au Collège de St. Boniface.

MKT 3221 Recherche en marketing Cr.Hrs. 3

(Ancien 118.322) Étude de la planification et de la mise en oeuvre de la recherche comme exigence pour prendre des décisions éclairées en marketing. On ne peut se faire créditer MKT 3221 et MKT 3220 (118.322). Préalables: le MKT 2211 (ancien 118.221) ou le MKT 2210 et le STAT 2000 ou STAT 2001 (ancien 005.200).

MKT 3231 Comportement du consommateur Cr.Hrs. 3

(L'ancien 118.323) Étude de l'influence de l'environnement et de l'influence individuelle sur le comportement du consommateur. Donné au Collège de St. Boniface. Préalable: MKT 2210 (ou 118.221) (D).

MKT 3291 Publicité Cr.Hrs. 3

Analyse du rôle et de la gestion de la publicité dans le cadre du plan marketing. Théorie de la communication et la formulation de messages publicitaires, établissement du budget, la sélection des médias et l'analyse de l'efficacité de la publicité. Donné au Collège de St. Boniface. Préalable: 18.221 (D).

MKT 3301 Marketing international Cr.Hrs. 3

(Ancien 118.330) Analyse comparée des structures, des fonctions et des processus de marketing dans des environnements sociaux, culturels et économiques variés. Diagnostic de l'environnement externe et élaboration des stratégies de marketing mix international. Préalable : MKT 2211 (ancien 118.221).

MKT 4211 Gestion du marketing Cr.Hrs. 3

(Ancien 118.421) Examen des stratégies et des tactiques marketing que les managers utilisent pour leurs produits et services à différents niveaux du cycle de vie du produit. Utilisation des analyses qualitatives et quantitatives pour développer la pensée critique essentielle à la prise de décision en marketing. Ne peut être pris qu'en dernière année du programme. On ne peut se faire créditer le MKT 4211 et le MKT 4210. Préalables: [(MKT 3221 (D) ou le MKT 3220 (118.332) (D) ou le MKT 3231 (D) ou le MKT 3230 (ancien 118.323) (D)] et un cours additionnel de marketing niveau 3000 ou 4000 (D) et [ACC 1111 (D) ou ACC 1110 (ancien 009.111) (D)]. Prérequis ou concomitant: seulement un des deux cours suivants: (MKT 3221 ou le MKT 3220 (ancien 118.332) (D) ou MKT 3231 ou le MKT 3230 (ancien 118.323) (D).

MKT 4271 Administration des ventes Cr.Hrs. 3

(L'ancien 118.427) Analyse de l'administration de la vente personnelle, y compris l'analyse la fonction-vente, la supervision de la force de vente et la gestion des ventes. Donné au Collège de St. Boniface. Préalable: MKT 2210 (ou 118.221) (D).

École d'administration des affaires-Supply Chain Mangement(M-SCI)**MSCI 2151 Introduction aux sciences de la gestion Cr.Hrs. 3**

(Ancien 164.215) Introduction aux techniques et modèles des sciences de la gestion. Les sujets traités incluent la programmation linéaire, les problèmes d'affectation et de transport, la théorie de la décision et les files d'attente. On ne peut se faire créditer le MSCI 2151, le MSCI 2150, 164.215, 021.215 ou le ABIZ 2520. Préalables: [MATH 1520 (ou 136.152) (C) ou MATH 1501 (C) ou MATH 1500 (ou 136.150) (C) ou l'équivalent et STAT 1001 (C) ou STAT 1000 (ou 005.1100) (C) ou l'équivalent.

MSCI 3401 Sciences de la gestion 2 Cr.Hrs. 3

(Anciens 027.340 et 164.340) Modèles de la recherche opérationnelle utilisés dans l'analyse de problèmes de gestion. Les sujet traités incluent les réseaux, les problèmes d'inventaire du point de vue déterministe, la programmation dynamique, la théorie des jeux. On ne peut se faire créditer MSCI 3401 et MSCI 3400 et l'ancien 027.340 et 164.340. Préalables: MSCI 2151, MSCI 2150 (164.215) ou l'autorisation écrite de la professeure ou du professeur.

École d'administration des affaires-Supply Chain Mangement Operations(OPM)**OPM 2601 Principes de gestion des opérations et de la production Cr. Hrs. 3**

(Anciens 027.260 et 164.260) Étude des notions de base en gestion des opérations et de la production, systèmes de production, conception de système, analyse et contrôle. Préalable ou concomitant: STAT 1001 (ou 005.100) ou l'équivalent.

OPM 4611 Gestion de projets Cr.Hrs. 3

Étude de la gestion de projets. Définition et contexte d'application de la gestion de projets. Techniques, approches et outils de gestion d'un projet en fonction de la structure organisationnelle de l'entreprise et des contraintes de temps, de coût et de qualité. Préalable:GMGT 2081, GMGT 2080 (024.207) et OPM 2601, OPM 2600 (027.260/164.260).

École d'administration des affaires-Supply Chain Management (SCM)**SCM 2161 Gestion de la chaîne logistique et des opérations Cr.Hrs. 3**

Étude de la gestion de la chaîne logistique (GCL) et des opérations. Positionne la gestion des opérations comme un domaine d'étude fondamental à l'intérieur de la GCL. Se focalise sur l'approche processus et la conception de système. L'étudiant (e) qui détient les crédits du SCM 2161 ne peut se faire créditer aucun des cours OPM 2601 (ancien 027.260) ou OPM 2600 (ancien 164.260) ou SCM 2160.

Faculté des sciences-Biology**BIOL 1001 Biologie : Les fondements de la vie Cr.Hrs. 3**

(Ancien 071.100) Étude de certains principes unificateurs de la vie. Attention particulière à la biologie cellulaire, à la bioénergétique, à la division cellulaire, à la génétique et à l'évolution. Ne peut être utilisé dans un programme de majeure ou de spécialisation. On ne peut se faire créditer BIOL 1001 et BIOL 1000 (071.100) et BIOL 1020 ou BIOL 1021 (071.125, 071.201). Préalable : Mathématiques 40S ou le cours Mathematic Skills (50%) enseigné par la Division de l'éducation permanente.

BIOL 1011 Biologie : La diversité biologique et ses interactions Cr.Hrs. 3

(Ancien 071.101) Introduction à la diversité (les procaryotes, les protistes, les champignons, les plantes et les animaux), à la forme et à la fonction des plantes et des animaux ainsi qu'aux principaux concepts de l'écologie. Ne peut être utilisé dans un programme de majeure ou de spécialisation. On ne peut se faire créditer BIOL 1011 et BIOL 1010 (071.101) et BIOL 1030 ou BIOL 1031 (071.125, 071.201). Préalable : Mathématiques 40S ou le cours Mathematic Skills (50%) enseigné par la Division de l'éducation permanente.

BIOL 1021 Biologie I: Thèmes et Principes Cr.Hrs. 3

(Labo requis) (Ancien 071.102) Les principes unificateurs à la base de la biologie dont la biologie cellulaire, la bioénergétique, la division cellulaire, la génétique et l'évolution. Pour ceux et celles qui veulent suivre un programme de sciences biologiques avec majeure ou spécialisation. On ne peut se faire créditer BIOL 1021 et BIOL 1020, BIOL 1001, BIOL 1000 (071.100), BIOL 2590 (034.259), 71.123, 071.125 ou 071.201. Préalables : une note minimale de C dans Biologie 40S (ou l'équivalent), BIOL 1000 ou BIOL 1001 et un cours de Mathématiques 40S (ou l'équivalent) et un de Chimie 40S ou Physique 40S (ou l'équivalent). Si BIOL 1001 (BIOL 1000) sert de préalable au BIOL 1021 (BIOL 1020), on ne peut se faire créditer BIOL 1001 et BIOL 1021 dans le cadre d'un programme.

BIOL 1031 Biologie II: Diversité Biologique, Fonction et Interaction Cr. Hrs. 3

(Labo requis) Introduction à la biodiversité dont les eucaryotes, les protistes, les champignons, les plantes et les animaux, la forme et la fonction des plantes et des animaux et les principes de base de l'écologie. Pour ceux et celles qui veulent suivre un programme de sciences biologiques avec majeure ou spécialisation. On ne peut se faire créditer BIOL 1031 et BIOL 1030 et BIOL 1011, BIOL 1000 (071.101) ou BIOE 2590 (034.259) ou 071.125, 071.123, 071.201. Préalable : une note minimale de C dans BIOL 1021 ou BIOL 1020. NOTE : BIOL 1031 est préalable au cours de biochimie (CHEM 2361) et aux cours plus avancés de microbiologie, et à la plupart des cours de sciences biologiques. Il prépare aussi aux études en agriculture, en sciences alimentaires, en dentisterie, en écologie humaine, en médecine, en optométrie, en pharmacie, en sciences vétérinaires, en éducation physique et en sciences.

BIOL 1411 Anatomie du corps humain Cr.Hrs. 3

(Labo requis) Discussions sur la micro-anatomie et la macro-anatomie incluant les changements qui se produisent de la conception à la vieillesse. Bien que ce cours fasse partie des cours au choix dans un programme en arts ou en sciences, il ne peut rencontrer les exigences de la spécialisation ni du programme de majeure en sciences biologiques. Aucun préalable n'est requis pour ce cours mais le cours de biologie du niveau secondaire est vivement recommandé. On ne peut se faire créditer BIOL 1411 et BIOL 1410.

BIOL 1413 Physiologie du corps humain Cr.Hrs. 3

(Labo requis) (Ancien ZOO 1331, 022.133) Étude des fonctions de tous les systèmes ainsi que des mécanismes de normalisation homéostatique. Bien que ce cours fasse partie des cours au choix dans un programme en arts ou en sciences, il ne peut satisfaire aux exigences de la spécialisation ni du programme de majeure en sciences biologiques. On ne peut se faire créditer BIOL 2411 (ou équivalent - ZOO 2530, BIOL 2410, ZOO 2531, 022.253) et BIOL 2421 (ou équivalent - ZOO 2540, BIOL 2420, ZOO 2541, 022.254). Préalable : une note minimale de C dans un de BIOL 1411 (ZOO 1320, 022.132), BIOL 1410, BIOL 1030, BIOL 1031 ou l'ancien 071.125. Ce préalable ne s'applique pas au programme de baccalauréat en sciences infirmières.

BIOL 2201 Les invertébrés Cr.Hrs. 3

(Labo requis) (Anciens ZOOL 2601 et 022.260) Étude phylogénétique et biologique des invertébrés insistant sur les taxa et les groupes qui ont une importance phylogénétique particulière. On ne peut se faire créditer BIOL 2201 et BIOL 2200 (ZOOL 2601, ZOOL 2600, 022.260). Préalable : une note minimale de C dans BIOL 1031 ou BIOL 1030 (071.125). Donné seulement au Université de Saint-Boniface.

BIOL 2231 L'évolution et la structure morphologique des chordés Cr.Hrs. 6

(Labo requis) (Anciens ZOOL 2501 et 022.250) Étude de l'histoire évolutive de la structure et des adaptations des chordés basée sur les animaux fossilisés et sur les animaux vivants. Établissement des bases pour l'étude des groupes majeurs de chordés. On ne peut se faire créditer BIOL 2231 et BIOL 2210 et ZOOL 2501 (022.250) ou ZOOL 2320 (022.232). Préalable : une note minimale de C dans BIOL 1031 ou BIOL 1030 (071.125).

BIOL 2261 Les champignons et les lichens Cr.Hrs. 3

(Labo requis) Une introduction aux champignons et aux lichens. L'accent est mis sur les groupes taxinomiques majeurs, leur organisation et leurs structures, leurs cycles de vie, leur identification et leur importance écologique générale. On ne peut se faire créditer BIOL 2261 et BIOL 2260 et BOTN 2210 ou 001.321. Préalables : BIOL 1011 ou BIOL 1010 (071.101) ou 71.123 avec une note minimale de B; ou BIOL 1031 ou BIOL 1030 (071.125) avec une note minimale de C. Donné seulement au Université de Saint-Boniface.

BIOL 2301 Principes d'écologie Cr.Hrs. 3

(Labo requis) (Anciens BOTN 2371, ZOOL 2371, 001.237 et 022.237) Principes d'écologie au niveau de l'individu, de la population, de la communauté et de l'écosystème. Également offert à la Faculté de sciences de l'agriculture et de nutrition de l'Université du Manitoba sous la cote AGECE 2370. On ne peut se faire créditer BIOL 2301 et BIOL 2300 (ZOOL 2371, ZOOL 2370, 022.237, BOTN 2371, BOTN 2370, 001.237) et AGECE 2370 (065.237) ou BIOL 2390 (ZOOL 2290, 022.229, BOTN 2280, 001.228). Préalable : une note minimale de C dans BIOL 1031 ou BIOL 1030 (071.125). Préalable ou concomitant : une note minimale de D dans STAT 1001 ou STAT 1000 (005.100).

BIOL 2381 Introduction à la toxicologie Cr.Hrs. 3

Un survol des principes généraux à la base des effets des substances toxiques sur les systèmes biologiques, tout en prenant en considération l'histoire, l'étendue et les applications de la toxicologie, les mécanismes d'action des toxines et certains types majeurs de toxines. On ne peut se faire créditer le BIOL 2381 et BIOL 2380 et BIOL 2382 (BOTN 2190, ZOOL 2190, 001.219, 022.219), ENVR 2190 (128.219) ou AGRI 2190 (065.219). Préalables: une note minimale de C dans BIOL 1031 ou BIOL 1030 (071.125) et un de CHEM 1311 ou CHEM 1310 (002.131) ou CHEM 1320 (002.132) avec une note minimale de C.

BIOL 2411 Physiologie du corps humain I Cr.Hrs. 3

(Ancien ZOOL 2531 ou 022.253) Étude des principaux mécanismes de contrôle du corps (systèmes nerveux et endocrinien) ainsi que des systèmes musculaire et reproducteur. On ne peut se faire créditer le BIOL 2411 et le BIOL 2410 ou l'ancien ZOOL 2531 ou ZOOL 2530 (ou 022.253), ou le ZOOL 3530 (ou 022.353). Préalable : une note minimale de C dans le BIOL 1031 ou BIOL 1030 (ou 071.125) ou une note minimale de C+ dans BIOL 1001 ou BIOL 1000 (ou 071.100) et BIOL 1011 ou BIOL 1010 (ou 071.101) ou une note minimale de C dans le BIOL 1412 ou l'ancien ZOOL 1330 (ou 022.133).

BIOL 2421 Physiologie du corps humain II Cr.Hrs. 3

(Anciens ZOOL 2541 et 022.254) Étude de la régulation homéostatique par les systèmes effecteurs du corps (cardiovasculaire, respiratoire, digestif, rénal et immunitaire). On ne peut se faire créditer BIOL 2421 et BIOL 2420 (ZOOL 2541, 022.254). Préalable : une note minimale de D dans BIOL 2411 ou BIOL 2410 (ZOOL 2531, ZOOL 2530, 022.253) ou un D dans BIOL 3460 (ZOOL 3530, 022.353) ou l'autorisation écrite de la professeure ou du professeur.

BIOL 2501 Génétique I Cr.Hrs. 3

(Labo requis) (Anciens BOTN 2461 et 001.246) Principes de l'hérédité, de la gamétogénèse et des fondements cytologiques de la transmission héréditaire chez les plantes et les animaux. Concepts de dominance et d'interaction génétique, de détermination du sexe, de la transmission des caractères liés au sexe et des gènes liés, variations chromosomiques, génétique des populations et code génétique. On ne peut se faire créditer BIOL 2501 et BIOL 2500 (BOTN 2461, BOTN 2460, 001.246) ou PLNT 2520 (039.252). Préalable : une note minimale de C dans BIOL 1031 ou BIOL 1030 (071.125). NOTE : Ce cours ne peut pas être reconnu en microbiologie (MBIO).

BIOL 2521 Biologie cellulaire Cr.Hrs. 3

(Anciens ZOOL 2281 et 022.228) Étude de la fonction des organites cellulaires conjointement avec leur structure microscopique ou leur ultrastructure, en insistant sur l'ensemble de la vie cellulaire en tant que système dynamique. On ne peut se faire créditer BIOL 2521 et BIOL 2520 (ZOOL 2281, ZOOL 2280, 022.228). Préalable : une note minimale de C dans BIOL 1031 ou BIOL 1030 (071.125).

BIOL 3291 Plantes médicinales et hallucinogènes Cr.Hrs. 3

BIOL 3291 Plantes médicinales et hallucinogènes Cr.Hrs.3 Un survol botanique et historique des plantes médicinales, hallucinogènes et toxiques utilisées dans diverses cultures. On ne peut se faire créditer BIOL 3291 et BIOL 3290. Préalables: Minimum de 30 heures crédits universitaires ou le consentement du Département. Donné seulement à l'Université de Saint-Boniface.

BIOL 3301 Biologie évolutive Cr.Hrs. 3

(Labo requis) (Ancien BOTN 3001 ou ZOOL 3001) Introduction aux sujets principaux et aux méthodes de recherche en biologie évolutive. Les sujets incluent : génétique évolutive, adaptation, spéciation et reconstruction de l'histoire de l'évolution. On ne peut se faire créditer BIOL 3301 et BIOL 3300 (ZOOL 3001, ZOOL 3000, BOTN 3001, BOTN 3000, 022.400). Préalables: une note minimale de C dans BIOL 2501 ou BIOL 2500 (BOTN 2461, BOTN 2460, 001.246) ou PLNT 2520 (039.252) et un cours parmi les suivants (avec une note minimale de C) : BIOL 2240 (BOTN 2110, 001.211), BIOL 2261 ou BIOL 2260 (BOTN 2210, 001.221), BIOL 3260 (BOTN 2290, 001.229), BIOL 2210 (ZOOL 2320, 022.232), BIOL 2231 (ZOOL 2501, 022.250), BIOL 2201 ou BIOL 2200 (ZOOL 2601, ZOOL 2600, 022.260), ou l'autorisation du professeur ou de la professeure. Donné seulement au Université de Saint-Boniface.

BIOL 3501 Génétique 2 Cr.Hrs. 3

BIOL 3501 Génétique 2 Cr.Hrs.3 (Labo requis) Ce cours est le complément du cours d'introduction à la génétique BIOL 2501 (ou BOTN 2461, BOTN 2460, 001.246) et présente les divers aspects de la liaison génique et la recombinaison génique, la fonction des gènes, l'allélisme, les mutations et la réparation, l'utilisation des bactéries et des virus comme outils génétique, les bases de la génétique du développement et l'hérédité extranucléaire. On ne peut se faire créditer le BIOL 3501 et BIOL 3500. Préalable : une note minimale de C dans un de BIOL 2501 ou BIOL 2500 (BOTN 2461, BOTN 2460, 001.246) ou PLNT 2520 (039.252, 039.209). Préalable ou concomitant : un de CHEM 2371 ou CHEM 2370 (002.237), MBIO 2371 ou MBIO 2370 (060.237), CHEM 2780 (002.278) ou MBIO 2780 (060.278) ou le consentement du département.

BIOL 3561 Histologie Animale Comparée Cr.Hrs. 3

(Anciens ZOOL 3061 et 022.306) Étude de l'organisation cellulaire et tissulaire des animaux, de la morphologie cellulaire, de la spécialisation, des types de tissus et de l'organisation cellulaire et tissulaire de tous les systèmes. Accent mis sur les mammifères, mais des études comparatives avec d'autres groupes animaux seront aussi incluses. On ne peut se faire créditer BIOL 3561 et BIOL 3560 (ZOOL 3061, ZOOL 3060, 022.306, 022.347). Préalable : une note minimale de C dans BIOL 1031 ou BIOL 1030 (071.125). Préalable conseillé : un de BIOL 2210 (ZOOL 2320, 022.232), BIOL 2231 (ZOOL 2501, 022.250), BIOL 2521 ou BIOL 2520 (ZOOL 2281, ZOOL 2280, 022.228).

Faculté des sciences-Chemistry**CHEM 1301 Université I Chimie : La structure et la modélisation chimique Cr.Hrs. 3**

(Ancien 002.130) Structure et modèles atomiques et leurs applications à la chimie, y inclus une étude des états solide, liquide et gazeux des substances chimiques et des mélanges. On ne peut se faire créditer CHEM 1301 et CHEM 1300 (002.130). Préalables : Mathématiques 40S (Mathématiques appliquées ou Précalcul), et Chimie 40S (ou son équivalent), ou CHEM 0900 (002.090)(P) ou CHEM 1000 (002.100) avec une note minimale de B. NOTE : Ceux et celles qui s'inscrivent à CHEM 1301 et qui n'ont pas réussi CHEM 0900 doivent subir un test diagnostique durant la première semaine de cours. On conseille fortement à ceux et celles qui obtiennent moins de 60 % dans ce test de suivre CHEM 0900 avant CHEM 1301. CHEM 0900 est un cours de rattrapage en chimie offert occasionnellement à l'Université du Manitoba.

CHEM 1311 Université I Chimie : Une introduction à la chimie physique Cr.Hrs. 3

(Lab. requis) (Ancien 002.131) La thermochimie, la thermodynamique chimique, la cinétique chimique. On ne peut se faire créditer le CHEM 1311 et CHEM 1310 (002.131). Préalable : une note minimale de C dans CHEM 1301 ou CHEM 1300 (002.130).

CHEM 2211 Introduction à la chimie organique I : Structure et fonction Cr.Hrs. 3

(Ancien 002.221) Introduction aux concepts de réactivité organique et de liaison chez les molécules organiques. Préparation et propriétés de molécules organiques renfermant un groupe fonctionnel. On ne peut se faire créditer CHEM 2211 et CHEM 2210 (002.221) et CHEM 1320 (002.132). Préalable : une note minimale de C dans CHEM 1311 ou CHEM 1310 (002.131).

CHEM 2221 Introduction à la chimie organique II : Réactivité et synthèse Cr.Hrs. 3

(Ancien 002.222) Introduction à la réactivité des composés organiques et à la spectroscopie organique. L'application de l'interchangeabilité des groupes fonctionnels dans les synthèses de composés. On ne peut se faire créditer CHEM 2221 et CHEM 2220. Préalable : une note minimale de C dans CHEM 2211 ou CHEM 2210 (002.221).

CHEM 2281 Chimie physique : Étude microscopique de la matière Cr.Hrs. 3

(Ancien 002.228) Approche basée sur le plan moléculaire pour comprendre les propriétés physiques de la matière. Introduction aux principes de la mécanique quantique, de la structure électronique et de la liaison, de la spectroscopie moléculaire. On ne peut se faire créditer CHEM 2281 et CHEM 2280. Préalables : une note minimale de C dans CHEM 1311 ou CHEM 1310 (002.131); et une note minimale de C dans un de PHYS 1031, PHYS 1030 (016.103), PHYS 1071 ou PHYS 1070 (016.107), et 6 crédits de niveau 1000 en mathématiques (de préférence Calcul), à l'exception de 136.100, MATH 1010 (136.101), MATH 1190, MATH 1191 (136.119), MATH 1020 (136.102), et FA 1020 (054.102).

CHEM 2291 L'énergétique et la dynamique chimique : Description macroscopique Cr.Hrs. 3

(Ancien 002.229) Laboratoire requis. L'énergétique chimique, l'entropie et la deuxième loi de la thermodynamique, la dynamique chimique. On ne peut se faire créditer CHEM 2291 et CHEM 2290. Préalables : une note minimale de C dans CHEM 1311 ou CHEM 1310 (002.131) et une note minimale de C dans un de PHYS 1031, PHYS 1030 (016.103), PHYS 1071 ou PHYS 1070 (016.107), et 6 crédits de niveau 1000 en mathématiques (de préférence Calcul) à l'exception de 136.100, MATH 1010 (136.101), MATH 1191, MATH 1190 (136.119), MATH 1020 (136.102) et FA 1020 (054.102).

CHEM 2361 Biochimie I : Les molécules biochimiques et une introduction à l'énergie métabolique Cr.Hrs. 3

(Labo requis)(Ancien 002.236) Introduction aux différents types moléculaires rencontrés en biochimie ainsi qu'au concept d'énergie métabolique comme produit du catabolisme nécessaire à la biosynthèse. Aussi offert par le Département de microbiologie sous la cote MBIO 2361. On ne peut se faire créditer CHEM 2361 et CHEM 2360 (002.236), CHEM 2770 (002.277), CHEM 2860 (002.286), MBIO 2361, MBIO 2360 (060.236), ou MBIO 2770 (060.277). Préalables: une note minimale de C+ dans CHEM 1311 ou CHEM 1310 (002.131) et une note minimale de C dans BIOL 1031 ou BIOL 1030 (071.125). N. B.: CHEM 2361 ne peut être reconnu aux fins des 12 crédits requis en chimie pour les étudiantes et les étudiants inscrits à Université 1 avant 2007-2008. Pour les personnes qui suivent les nouveaux règlements du baccalauréat général (2008-2009), CHEM 2361 peut faire partie des 18 crédits de chimie ou de microbiologie de niveau avancé.

CHEM 2371 Biochimie II : Catabolisme, synthèse et les voies d'information Cr.Hrs. 3

(Lab. requis) (Ancien 002.237) Introduction aux processus métaboliques cellulaires de base incluant la production et l'utilisation de l'énergie métabolique, la dégradation et la synthèse des molécules biochimiques, la synthèse de l'ADN, de l'ARN et des protéines et la régulation de ces processus. Aussi offert par le Département de microbiologie sous la cote MBIO 2371. On ne peut se faire créditer CHEM 2371 et CHEM 2370 (002.237), CHEM 2780 (002.278), MBIO 2371, MBIO 2370 (060.237) ou MBIO 2780 (060.278). Préalables : une note minimale de C dans un de CHEM 2361, CHEM 2360 (002.236), MBIO 2361 ou MBIO 2360 (060.236) et dans CHEM 2211 ou CHEM 2210 (002.221). N. B. : CHEM 2371 ne peut être reconnu aux fins des 12 crédits requis en chimie pour les étudiantes et les étudiants inscrits à Université 1 avant 2007-2008. Pour les personnes qui suivent les nouveaux règlements du baccalauréat général (2008-2009), CHEM 2371 peut faire partie des 18 crédits de chimie ou de microbiologie de niveau avancé.

CHEM 2401 Chimie inorganique: structure et applications Cr.Hrs. 3

Revue de la liaison chimique, de la structure et de la réactivité à travers le tableau périodique des éléments. La revue sera illustrée par des exemples liant la chimie inorganique à la science des matériaux et à la biochimie. Pour le laboratoire, des composés inorganiques simples seront préparés et analysés. On ne peut se faire créditer CHEM 2401 et CHEM 2400 et CHEM 2381 ou 2380. Préalable: une note minimale de C dans CHEM 1311 ou CHEM 1310 (002.131)

CHEM 2471 Introduction à la chimie analytique Cr.Hrs. 3

(Ancien 002.247) Un cours de chimie analytique quantitative fournit une formation utile à presque tous les scientifiques. Ce cours outille les étudiants et étudiantes avec les principes théoriques à la base des méthodes analytiques, avec l'habileté de planifier et d'exécuter des expériences, et ensuite d'interpréter les résultats. On ne peut se faire créditer CHEM 2471 et CHEM 2470. Préalables : une note minimale de C dans CHEM 1311 ou CHEM 1310 (002.131) et un cours de 3 crédits de Mathématiques à l'exception de l'ancien 136.100, MATH 1010, MATH 1190, MATH 1191, MATH 1020 ou FA 1020.

CHEM 3571 Chimie biophysique Cr.Hrs. 3

Application de la chimie physique aux problèmes biologiques avec l'emphase sur l'interprétation quantitative. Les sujets comprennent la cinétique enzymatique, la bioénergétique, les processus de transport ainsi que la spectroscopie. On ne peut se faire créditer CHEM 3571 et CHEM 3570. Préalables : CHEM 2361, CHEM 2360, MBIO 2361 ou MBIO 2360 (060.237) et MATH 1501 ou MATH 1500 (ou l'équivalent). CHEM 2281 ou CHEM 2280 est recommandé.

CHEM 4361 Signalisation et régulation de l'expression génétique Cr.Hrs. 3

(Ancien 002.436) Biochimie de la réponse cellulaire aux stimuli externes, en mettant l'accent sur les animaux. Les récepteurs à la surface des cellules, les ligands, la signalisation au noyau, la phosphorylation, la protéolyse, la transcription et les gradients dans le typage cellulaire. On ne peut se faire créditer CHEM 4361 et CHEM 4360. Préalable : une note minimale de C dans un de CHEM 2371, CHEM 2370 (002.237), MBIO 2371 ou MBIO 2370 (060.237) (ou 002.235, 060.235). Donné seulement au Université de Saint-Boniface.

CHEM 4371 Glycobiologie et activation des protéines Cr.Hrs. 3

(Ancien 002.437) Le rôle des biomolécules contenant des glucides en biochimie et leur importance dans la connaissance des maladies génétiques. L'importance de la protéolyse limitée dans l'activation des biomolécules. On ne peut se faire créditer CHEM 4371 et CHEM 4370 et 002.449. Préalable : une note minimale de C dans un de CHEM 2371, CHEM 2370 (002.237), MBIO 2371 ou MBIO 2370 (060.237) (ou 002.235, 060.235). Donné seulement au Université de Saint-Boniface.

CHEM 4621 Biochimie des acides nucléiques Cr.Hrs. 3

(Ancien 002.462) La structure des acides nucléiques; synthèse et détermination des séquences. Interactions avec les protéines et les médicaments. On ne peut se faire créditer CHEM 4621 et CHEM 4620. Préalable : une note minimale de C dans un de CHEM 2371, CHEM 2370 (002.237), MBIO 2371 ou MBIO 2370 (060.237) (ou 002.235, 060.235).

CHEM 4631 Biochimie des protéines Cr.Hrs. 3

(Ancien 002.463) Les structures et fonctions des protéines, leurs propriétés physiques et chimiques et les méthodes utilisées pour les étudier. On ne peut se faire créditer CHEM 4631 et CHEM 4630. Préalable : une note minimale de C dans un de CHEM 2371, CHEM 2370 (002.237), MBIO 2371 ou MBIO 2370 (060.237) (ou 002.235, 060.235).

CHEM 4711 Projet de recherche en chimie ou biochimie Cr.Hrs. 6

Un projet de recherche dans n'importe quel aspect de la chimie ou de la biochimie, choisi en consultation avec l'administrateur du cours ou un superviseur approprié de la Faculté. Des rapports écrits et des présentations orales à la fin du projet sont nécessaires. Cours normalement offert seulement lors de leur dernière année du programme de chimie. On ne peut se faire créditer CHEM 4711 et CHEM 4710, MBIO 4531 ou MBIO 4530 (60.453). Préalable : autorisation écrite du professeur ou de la professeure.

Faculté des sciences-Computer Science

COMP 1011 Introduction à l'informatique I Cr.Hrs. 3

(Ancien 074.101) Introduction à la programmation par un langage procédural évolué. On ne peut se faire créditer plus d'un cours parmi les suivants: le COMP 1010 et les anciens 074.112, 074.121, 074.123 ou 074.125. Donné seulement au Université de Saint-Boniface. Préalable: N'importe quel cours de mathématiques de 12e année ou de niveau 40S, ou l'équivalent.

COMP 1013 Programmation informatique pour scientifiques et ingénieurs Cr.Hrs. 3

(Laboratoire requis) Une introduction à la programmation informatique propre à la résolution de problèmes en science et en génie. Les étudiants développent des algorithmes pour le traitement numérique, l'analyse statistique et les opérations sur des matrices. On ne peut se faire créditer COMP 1013 et aucun des COMP 1012, COMP 1010, COMP 1011. Préalables : Mathématiques 40S (précalcul) ou l'ancien Mathématiques 40S (300). Concomitant : MATH 1500 ou MATH 1501 (ou équivalent).

COMP 1021 Introduction à l'informatique II Cr.Hrs. 3

(Lab. requis) (Ancien 074.102) Introduction à la programmation orientée objet, aux structures de données informatiques et à l'algorithmique. On ne peut se faire créditer COMP 1021 et COMP 1020. Préalable: COMP 1011 ou COMP 1010 (074.101) ou Informatique 40S (avec une note minimale de 75%) et Mathématiques (précalcul) 40S ou MATH 0401.

COMP 1261 Introduction aux services informatiques modernes I Cr.Hrs. 3

(Ancien 074.126) Entre autres, l'accent est mis sur le traitement de texte, les chiffriers, les systèmes pour la gestion de données et le traitement graphique. Ce cours ne demande aucune connaissance préalable en informatique. On inscrit(e) à un programme de majeure ou de spécialisation en Informatique ne peut s'inscrire à ce cours. On ne peut se faire créditer à la fois le COMP 1260.

COMP 2061 Structures discrètes et programmation Cr.Hrs. 6

(Labo requis) (Ancien 074.206F) Introduction aux éléments de la représentation, de l'organisation et de la manipulation des données dans les systèmes informatisés. Méthodes permettant de concevoir et d'utiliser des logiciels d'envergure. On ne peut se faire créditer à la fois le 074.206 et le COMP 2140 (074.214). Préalables: COMP 1021 or COMP 1020 (074.102) (ou l'ancien 074.123), un de MATH 1301 ou MATH 1300 (ou 136.130) (C) ou MATH 1310 (ou 136.131) (ou les anciens 010.114 ou 013.146), et un de MATH 1501 ou MATH 1500 (ou 136.150), MATH 1510 (ou 136.151), l'ancien 136.153, ou MATH 1690 (ou 136.169) (C). Donné seulement au Université de Saint-Boniface.

COMP 2191 Introduction au calcul scientifique Cr.Hrs. 3

(Ancien 074.219) Informatique appliquée présentant des concepts tels que l'approximation par polynômes, la résolution d'équations non linéaires, les systèmes linéaires, la simulation et la géométrie analytique. On ne peut se faire créditer à la fois COMP 2191 et COMP 2190. Préalables : COMP 1021 ou COMP 1020 (074.102) (C) ou 074.123, et un de MATH 1501 (C), MATH 1500 (136.150) (C), MATH 1510 (136.151) (C), MATH 1520 (136.152) (C), MATH 1530 (ancien 136.153) (C) ou MATH 1690 (136.169) (C). Préalable ou concomitant: un de MATH 1301, MATH 1300 (136.130) ou MATH 1310 (136.131).

Faculté des sciences-Mathematics

MATH 0401 Habiletés mathématiques Cr.Hrs. 0

Ce cours a été conçu principalement, mais non exclusivement, en fonction des besoins d'étudiants et d'étudiantes se préparant à suivre des cours d'informatique, de mathématiques, de statistiques ou de physique de niveau universitaire, sans avoir réussi le préalable normal, Mathématiques 40S. Apprentissage de l'application des outils mathématiques à des situations élémentaires, puis computationnellement plus compliquées. Leçons magistrales comportant une révision de concepts fondamentaux, des exemples, des résolutions de problèmes pratiques, des applications et de la rétroaction. Ce cours ne comporte aucun crédit universitaire; il n'est pas conçu pour remplacer le Mathématiques 40S comme condition d'admission à l'Université du Manitoba ou à l'Université de Saint-Boniface, mais servant de préalable alternatif lors de l'inscription à certains cours de niveau 1000; un résultat de C (60%) est requis au MATH 0401. Préalable : l'autorisation du chef du secteur des sciences mathématiques. Selon le niveau de réussite au test de dépistage en mathématiques administré à l'Université, l'étudiante ou l'étudiant peut être contraint de suivre ce cours avant d'être autorisé à s'inscrire à des cours ayant le préalable Mathématiques 40S.

MATH 1191 Sujets choisis en mathématiques Cr.Hrs. 6

(Ancien 136.119) Ce cours offre aux étudiants de diverses facultés un aperçu des mathématiques modernes. Les sujets étudiés sont tirés des systèmes de nombres, de la géométrie et de la combinatoire. Ce cours est terminal et ne peut être reconnu comme préalable à aucun autre cours universitaire en mathématiques. Ce cours ne peut pas être reconnu aux fins d'un programme spécialisé ou général, majeure ou mineure en sciences mathématiques. L'inscription est interdite à tout étudiant ayant obtenu une note de C ou mieux dans un quelconque cours de mathématiques, à l'exception des cours MATH 1010 (136.101) ou MATH 1020 (FA 1020, 136.102, 054.102). Ce cours ne peut pas être suivi en même temps qu'un autre cours de mathématiques, à l'exception des cours MATH 1010 ou MATH 1020 (FA 1020). Aucun préalable.

MATH 1201 Éléments de mathématiques discrètes Cr.Hrs. 3

(Laboratoire requis) (Ancien 136.120) Suites et séries, trigonométrie, nombres complexes, algèbre de polynômes, approximation des zéros de fonctions, équations aux différences. On ne peut se faire créditer le MATH 1201 et le MATH 1200 ou MATH 1210. L'inscription est interdite à tout étudiant ayant obtenu des crédits de niveau 2000 ou plus en mathématiques, à moins que le cours MATH 1201 soit obligatoire dans le programme de l'étudiant. Préalable : Mathématiques 40S (précalcul) ou l'ancien Mathématiques 40S (300) avec une note minimale de 60 %, ou une note minimale de C dans MATH 1001 (136.100) ou le cours Mathematical Skills offert par la Continuing Education Division de l'Université du Manitoba, ou le MATH 0401 Habiletés mathématiques offert à l'Université de Saint-Boniface.

MATH 1211 Techniques d'algèbre classique et linéaire Cr.Hrs. 3

(Laboratoire requis) Introduire une variété de concepts algébriques pratiques et d'outils nécessaires pour l'étude du calcul et des mathématiques avancées de l'ingénieur. L'emphase est mise sur le développement d'une méthodologie et d'outils algébriques nécessaires pour la réussite d'études plus avancées dans les mathématiques de l'ingénieur. Ce cours s'adresse uniquement aux étudiants en génie et en géophysique. On ne peut se faire créditer MATH 1211 et aucun des MATH 1210, MATH 1200 (136.120), MATH 1201, MATH 1300 (136.130), MATH 1301, MATH 1310 (136.131). Préalable : une note minimale de 60% dans Mathématiques 40S (précalcul) ou l'ancien Mathématiques 40S (300) ou une note minimale de 60% dans le cours Mathematical Skills offert par la Extended Education Division de l'Université du Manitoba ou le cours MATH 0401 Habiletés mathématiques offert à l'Université de Saint-Boniface.

MATH 1301 Géométrie vectorielle et algèbre linéaire Cr.Hrs. 3

(Ancien 136.130) Introduction aux vecteurs, aux matrices, aux systèmes d'équations linéaires et à la géométrie à trois dimensions. On ne peut se faire créditer MATH 1301 et MATH 1310 (136.131), MATH 1680 (136.168) ou MATH 1210 (136.121). Préalable : Mathématiques 40S (précalcul) ou l'ancien Mathématiques 40S (300) avec une note minimale de 60 %, ou une note minimale de C dans le MATH 1001 (136.100) ou le cours Mathematical Skills offert par la Continuing Education Division de l'Université du Manitoba, ou le cours Habiletés mathématiques offert à l'Université de Saint-Boniface.

MATH 1501 Introduction au calcul Cr.Hrs. 3

(labo requis) (Ancien 136.150) Différentiation et intégration des fonctions élémentaires avec application à la théorie des extrêmes, aux taux de changements ainsi qu'aux aires et aux volumes. On ne peut se faire créditer le MATH 1501 (ancien 136.150) et les MATH 1510 (ancien 136.151), MATH 1520 (ancien 136.152), l'ancien 136.153, MATH 1680 (ancien 136.168), MATH 1690 (ancien 136.169). Préalable : Mathématiques 40S (précalcul) ou l'ancien Mathématiques 40S (300) avec une note minimale de 60 %, ou une note minimale de C dans l'ancien 136.100 ou le cours Mathematical Skills offert par Extended Education de l'Université du Manitoba, ou le cours Habiletés mathématiques offert à l'Université de Saint-Boniface.

MATH 1701 Calcul II Cr.Hrs. 3

(Ancien 136.170) Théories et techniques d'intégration, tracés de courbes, calculs de volume, de longueur d'arc, d'aires et des dérivées partielles. On ne peut se faire créditer MATH 1701 (136.170) et MATH 1690 (136.169), MATH 1710 (136.171) ou MATH 1730 (136.173). Préalable : MATH 1501 (136.150), MATH 1510 (136.151), MATH 1520 (136.152), MATH 1530 (136.153) ou MATH 1680 (136.168).

MATH 2301 Algèbre linéaire II Cr.Hrs. 3

(Ancien 136.230) Suite de MATH 1301 (136.131 ou 013.146). Espaces vectoriels à dimensions finies; transformations linéaires et matrices; vecteurs réels et valeurs réelles. La diagonalisation et ses applications. Espaces avec produits scalaires. On ne peut se faire créditer MATH 2301 et MATH 2300, l'ancien MATH 2350 (136.235), MATH 2352 ou MATH 3130. Préalables : une note minimale de C dans MATH 1301, MATH 1300 (136.130) ou MATH 1310 (136.131) (ou 013.146), et un de MATH 1501, MATH 1500 (136.150), MATH 1510 (136.151), MATH 1520 (136.152), MATH 1530 (136.153) ou MATH 1690 (136.169).

MATH 2451 Mathématiques combinatoires Cr.Hrs. 6

(Ancien 136.245) Introduction à certains sujets d'intérêt courant en mathématiques combinatoires : les techniques d'énumération, les graphiques, les dessins de blocs et les généralisations, les récursions linéaires. On ne peut se faire créditer MATH 2451 et MATH 2450 (136.245). Préalables : une note minimale de "C" dans un cours d'introduction aux sciences mathématiques, à l'exception de MATH 1000 (136.100), MATH 1010 (136.101), MATH 1020 (136.102), FA 1020 (054.102), et MATH 1191 ou MATH 1190 (136.119), ou l'autorisation écrite du directeur du Département des sciences mathématiques.

MATH 2501 Introduction à la théorie des nombres Cr.Hrs. 3

(Ancien 136.250) Étude de la divisibilité, de la factorisation unique, des congruences linéaire et quadratique et du théorème de Fermat. On ne peut se faire créditer MATH 2501 et MATH 2500. Préalable : une note minimale de C dans un cours d'introduction en sciences mathématiques à l'exception de MATH 1000 (136.100), MATH 1010 (136.101), MATH 1020 (136.102), FA 1020 (054.102) et MATH 1191 ou MATH 1190 (136.119), ou l'autorisation écrite du directeur du Département des sciences mathématiques.

MATH 2551 Géométrie moderne Cr.Hrs. 6

(Ancien 136.255) Approche moderne à la géométrie à l'aide de transformations géométriques. Sujets variés, tels isométries, symétries, similarités, inversion circulaire et groupes. On ne peut se faire créditer MATH 2551 et MATH 2550 (136.255). Préalables : une note minimale de C dans MATH 1690 (136.169) ou un de MATH 1501, MATH 1500 (136.150), MATH 1510 (136.151), MATH 1520 (136.152), MATH 1530 (136.153); aussi, un de MATH 1301, MATH 1300 (136.130), MATH 1310 (136.131), MATH 1701, MATH 1700 (136.170), MATH 1710 (136.171) ou MATH 1730 (136.173).

MATH 2601 Mathématiques numériques I Cr.Hrs. 3

(Ancien 136.260) Techniques élémentaires de solution numérique de problèmes mathématiques : solution d'équation; différences finies; interpolation, systèmes d'équations; différentiation numérique; intégration numérique. On ne peut se faire créditer le MATH 2601 et le MATH 2600, MATH 2120. Préalables : MATH 1301 ou MATH 1300 (ancien 136.130) ou MATH 1310 (ancien 136.131), MATH 1690 (ancien 136.169), MATH 1701 ou MATH 1700 (ancien 136.170), MATH 1710 (ancien 136.171) ou ancien 136.173, et COMP 1011 ou COMP 1010 (ancien 074.101) ou son équivalent, ou l'autorisation écrite du professeur.

MATH 2701 Calcul III A Cr.Hrs. 3

(Ancien 136.270) Calcul des variables multiples. On ne peut se faire créditer le MATH 2701 et le MATH 2751 (ancien 136.275) ou les anciens 006.277, 006.228, 006.243, 013.239 ou 013.234. Préalables : le MATH 1301 (ancien 136.130) ou MATH 1311 (ancien 136.131) (ou l'ancien 013.146) et un des MATH 1691 (ancien 136.169), MATH 1701 (ancien 136.170), MATH 1711 (ancien 136.171) ou MATH 1731 (ancien 136.173) (ou les anciens 013.149, 013.159 ou 006.126).

MATH 2711 Calcul III B Cr.Hrs. 3

(Ancien 136.271) Analyse, suites et séries. On ne peut se faire créditer le MATH 2711 et le MATH 2751 (ancien 136.275), ou les anciens 006.237, 006.238, 006.244, 013.249 ou 013.234. Préalable : un de MATH 1690 (ancien 136.169), MATH 1701 (ancien 136.170), MATH 1711 (ancien 136.171) ou MATH 1731 (ancien 136.173) (ou les anciens 013.149, 013.159, ou 006.126) et un de MATH 1201 (ancien 136.120) ou MATH 2201 (ancien 136.220). Concomitant : MATH 1301 (ancien 136.130) ou le MATH 1311 (ancien 136.131) (ou l'ancien 013.146).

MATH 2721 Calcul à plusieurs variables Cr.Hrs. 3

(Ancien 136.272) Calcul différentiel et intégral à plusieurs variables. On ne peut se faire créditer MATH 2721 et MATH 2720 (136.272), MATH 2751, MATH 2750 (136.275), 136.270, MATH 2110 (136.211) ou MATH 2130. Préalables : MATH 1301, MATH 1300 (136.130) ou MATH 1310 (136.131) (ou l'ancien 013.146) et un de MATH 1690 (136.169), MATH 1701, MATH 1700 (136.170), MATH 1710 (136.171) ou MATH 1730 (136.173).

MATH 2731 Suites et séries Cr.Hrs. 3

(Ancien 136.273) Analyse, suites et séries. On ne peut se faire créditer MATH 2731 et MATH 2730, MATH 2750 (136.275), 136.271, MATH 2132 ou MATH 2100 (136.210). Préalables : un de MATH 1690 (136.169), MATH 1701, MATH 1700 (136.170), MATH 1710 (136.171) ou MATH 1730 (136.173). Concomitant : MATH 1301, MATH 1300 (136.130) ou MATH 1310 (136.131).

MATH 2801 Équations différentielles ordinaires et leurs applications I Cr. Hrs. 3

(Ancien 136.280) Introduction à la théorie des équations différentielles ordinaires. Techniques pratiques de solution, principalement en ce qui a trait aux équations du premier ordre et aux équations linéaires d'ordre plus élevé. Systèmes linéaires. Applications à des problèmes en sciences ou à d'autres domaines. On ne peut se faire créditer le MATH 2801 et le MATH 2800 ou le MATH 2132 ou le MATH 2100 (ancien 136.210). Préalable : MATH 1301 ou MATH 1300 (ancien 136.130) ou MATH 1310 (ancien 136.131). Concomitant : MATH 2721, MATH 2720 ou MATH 2750.

MATH 3601 Mathématiques numériques II Cr.Hrs. 3

(Ancien 136.360) Différentiation numérique; quadrature Gaussienne; lissage à l'aide de splines; méthodes numériques pour les problèmes à valeurs initiales et problèmes aux frontières; transformations; problèmes où interviennent les systèmes de grande taille, pars ou mal conditionnés. On ne peut se faire créditer à la fois avec le MATH 3600 (ou 136.360). Préalables: MATH 2600 ou MATH 2601 (ou 136.260) (C); MATH 2800 ou MATH 2801 (ou 136.280) (C); MATH 2720 ou MATH 2721 (ou 136.272) (C) et MATH 2730 ou MATH 2731 (ou 136.271) (C), ou MATH 2750 (ou 136.275) (C); et le COMP 1010 ou COMP 1011 (ou 074.101) (C); ou le consentement du professeur.

MATH 3821 Introduction à la modélisation mathématique Cr.Hrs. 3

(Ancien 136.382) Introduction aux principes et aux techniques entourant le design, le développement, la résolution, l'expérimentation et la révision de modèles mathématiques de phénomènes du « vrai monde », à l'aide d'études de cas. On ne peut se faire créditer MATH 3821 et MATH 3820. Préalables : MATH 2600 ou MATH 2601, puis MATH 2800 ou MATH 2801 (136.280) (C). Préalable ou concomitant : STAT 1001 ou STAT 1000.

MATH 3911 Sujets choisis en mathématiques I Cr.Hrs. 3

(Ancien 136.391) Sujets d'intérêt courant en mathématiques appliquées, selon les besoins et intérêts des étudiants et des étudiantes et du professeur ou de la professeure incluant notamment des sujets spécialisés non abordés dans les autres cours offerts par le secteur. Préalables : autorisation écrite du professeur ou de la professeure. Donné seulement au Université de Saint-Boniface.

MATH 4921 Sujets choisis en mathématiques Cr.Hrs. 3

(L'ancien 136.492) Sujets d'intérêt courant en mathématiques ou en mathématiques appliquées, selon les besoins et intérêt des étudiants et professeurs, incluant notamment des sujets spécialisés non disponibles dans les autres cours offerts par le secteur. Préalable: autorisation par le chef du secteur des sciences mathématiques. Donné seulement au Collège universitaire de Saint-Boniface. L'étudiant(e) ne peut se faire créditer à la fois le MATH 4921 et le MATH 4920.

Faculté des sciences-Microbiology

MBIO 1011 Microbiologie I Cr.Hrs. 3

(Labo requis) Le cours traitera de la définition et de l'histoire de la microbiologie, des concepts pratiques de la microbiologie, de la structure des cellules procaryotes, de l'expression des gènes spécifiques aux procaryotes, du transfert de l'information génétique, du rôle des microbes dans l'environnement incluant le corps humain, ainsi que des applications de la microbiologie dans la production des aliments et dans la biotechnologie. On ne peut se faire créditer MBIO 1011 et MBIO 1010 et MBIO 2101, MBIO 2100 (060.210), MBIO 2111, ou MBIO 2110 (060.211). Préalable ou concomitant : BIOL 1021.

MBIO 2021 Microbiologie II Cr.Hrs. 3

(Labo requis) Le cours traitera de la croissance bactérienne, de la réplication de l'ADN, des processus de la transcription et de la traduction ainsi que leurs rôles dans la régulation de l'expression génétique. Les familles des bactéries et de virus animaux, leurs modes de reproduction, leurs pouvoirs pathogènes seront discutés. L'introduction aux mutations et au transfert de gènes bactériens sera également discutée. On ne peut se faire créditer MBIO 2021 et MBIO 2020 et MBIO 2111 ou MBIO 2110 (060.211). Préalables : MBIO 1011 ou MBIO 1010 et un des suivants : CHEM 1311, CHEM 1310 ou CHEM 1320 (002.132).

MBIO 2361 Biochimie I : Les molécules biochimiques et une introduction à l'énergie métabolique Cr.Hrs. 3

(Labo requis)(Ancien 060.236) Introduction aux différents types moléculaires rencontrés en biochimie ainsi qu'au concept d'énergie métabolique comme produit du catabolisme nécessaire à la biosynthèse. Aussi offert par le département de chimie sous la cote CHEM 2361. On ne peut se faire créditer MBIO 2361 et MBIO 2360 (060.236), MBIO 2770 (060.277), CHEM 2361, CHEM 2360 (002.236), CHEM 2770 (002.277) ou CHEM 2860 (002.286). Préalables: une note minimale de C+ dans CHEM 1311 ou CHEM 1310 (002.131) et une note minimale de C dans BIOL 1031 ou BIOL 1030 (071.125). N. B. : MBIO 2361 ne peut être reconnu aux fins des 12 crédits requis en chimie pour les étudiantes et les étudiants inscrits à Université 1 avant 2007-2008. Pour les personnes qui suivent les nouveaux règlements du baccalauréat général (2008-2009), MBIO 2361 peut faire partie des 18 crédits de chimie ou de microbiologie de niveau avancé.

MBIO 2371 Biochimie II : Catabolisme, synthèse et les voies d'information Cr.Hrs. 3

(Labo requis) (Ancien 060.237) Introduction aux processus métaboliques cellulaires de base incluant la production et l'utilisation de l'énergie métabolique, la dégradation et la synthèse des molécules biochimiques, la synthèse de l'ADN, de l'ARN et des protéines et la régulation de ces processus. Aussi offert par le département de chimie sous la cote CHEM 2371. On ne peut se faire créditer MBIO 2371 et MBIO 2370 (060.237) et MBIO 2780 (060.278), CHEM 2371, CHEM 2370 (002.237), ou CHEM 2780 (002.278). Préalables : une note minimale de C dans un de MBIO 2361, MBIO 2360 (060.236), CHEM 2361 ou CHEM 2360 (002.236) et dans CHEM 2211 ou CHEM 2210 (002.221). NOTE : MBIO 2371 ne peut être reconnu aux fins des 12 crédits requis par le département de chimie pour les étudiantes et étudiants inscrits à Université 1 avant 2007-2008. Pour les personnes qui suivent les nouveaux règlements du baccalauréat général (2008-2009), MBIO 2371 peut faire partie des 18 crédits de chimie ou de microbiologie de niveau avancé.

MBIO 3011 Mécanismes des maladies microbiennes Cr.Hrs. 3

(Ancien 060.301) Étude des relations hôtes-parasites. Introduction à la réponse immunitaire, à la pathogénie microbienne, aux maladies virales, à la microbiologie clinique, à la santé publique et aux agents antimicrobiens. On ne peut se faire créditer MBIO 3011 et MBIO 3010. Préalables : une note minimale de C dans MBIO 2021 ou MBIO 2020 (MBIO 2100, MBIO 2101, 060.210). Concomitant : un de MBIO 2361, MBIO 2360 (060.236), CHEM 2361 ou CHEM 2360 (002.236).

MBIO 3031 Microbiologie III Cr.Hrs. 3

(Labo requis) Ce cours présentera une introduction à la croissance microbienne et aux approches génomiques utilisées pour l'analyse du métabolisme microbien. En utilisant ses outils, la physiologie de la paroi cellulaire microbienne, le transport, la mobilité ainsi que le métabolisme microbien en relation avec la production d'ATP, la respiration, la fermentation et la fixation du carbone seront discutés. On ne peut se faire créditer MBIO 3031 et MBIO 3030 et MBIO 2101 ou MBIO 2100 (060.210). Préalables : une note minimale de C dans MBIO 2021 ou MBIO 2020 ou l'autorisation du professeur et une note minimale de C dans un de MBIO 2371, MBIO 2370 (060.237), CHEM 2371 ou CHEM 2370 (002.237).

MBIO 3411 Biologie moléculaire Cr.Hrs. 3

(Ancien 060.341) Traitement rigoureux des bases de la biologie moléculaire moderne reliées à la maladie moléculaire, aux manipulations génétiques et cellulaires, ainsi qu'aux contrôles cellulaires. On ne peut se faire créditer MBIO 3411 et MBIO 3410. Préalables : une note minimale de C dans un de MBIO 2371, MBIO 2370 (060.237), CHEM 2371, CHEM 2370 (002.237), MBIO 2780 (060.278) ou CHEM 2780 (002.278) et un des cours suivants (avec une note minimale de C) : MBIO 2021, MBIO 2020, (MBIO 2111, MBIO 2110, 060.211), BIOL 2521 ou BIOL 2520 (ZOO 2281, ZOO 2280, 022.228), ou BIOL 2501 ou BIOL 2500 (BOTN 2461, BOTN 2460, 001.246).

MBIO 3451 Régulation des processus biochimiques Cr.Hrs. 3

(Ancien 060.345) Mécanismes de régulation de l'activité enzymatique, incluant l'allostérie, le contrôle de certaines routes biosynthétiques ou dégradatives sélectionnées, ainsi que la régulation de l'expression génétique. On ne peut se faire créditer MBIO 3451 et MBIO 3450. Préalables : une note minimale de C dans MBIO 2021 ou MBIO 2020 (MBIO 2111, MBIO 2110, 060.211) ou l'autorisation écrite de la professeure ou du professeur, et une note minimale de C dans un de MBIO 2371, MBIO 2370 (060.237), CHEM 2371 ou CHEM 2370 (002.237).

MBIO 3461 Biochimie membranaire et cellulaire Cr.Hrs. 3

(Labo requis) (Ancien 060.346) Isolement, fractionnement, structure et fonction des membranes cellulaires et des composés subcellulaires. Mise en évidence du rôle central joué par ces éléments dans la biochimie des processus cellulaires. On ne peut se faire créditer MBIO 3461 et MBIO 3460. Préalables : une note minimale de C dans un de MBIO 2371, MBIO 2370 (060.237), CHEM 2371 ou CHEM 2370 (002.237).

MBIO 3981 Stage professionnel 1 Cr.Hrs. 1

Stage professionnel dans une entreprise, une industrie ou une agence gouvernementale pour les étudiantes et étudiants inscrits au programme coopératif de la majeure conjointe en microbiologie et en biochimie. La rédaction d'un rapport final, résumant le travail accompli durant le stage de quatre mois, est exigée. Note : réussite ou échec. Préalable : MBIO 2370 ou MBIO 2371 ou CHEM 2370 ou CHEM 2371.

MBIO 3991 Stage professionnel 2 Cr.Hrs. 1

Stage professionnel dans une entreprise, une industrie ou une agence gouvernementale pour les étudiantes et étudiants inscrits au programme coopératif de la majeure conjointe en microbiologie et en biochimie. La rédaction d'un rapport final, résumant le travail accompli durant le stage de quatre mois, est exigée. Note : réussite ou échec.

MBIO 4011 Immunologie Cr.Hrs. 3

(Labo requis) (Ancien 060.401) Étude des antigènes, des anticorps, des réactions antigènes-anticorps, de l'immunogénétique, de la régulation de la réponse du système immunitaire, du complément, des réactions d'hypersensibilité, de l'auto-immunité, des déficiences immunitaires, de l'immunologie des greffes et des tumeurs. On ne peut se faire créditer MBIO 4011 et MBIO 4010 (060.401) et MBIO 4020 (060.402) ou l'ancien 060.444. Préalable : une note minimale de C dans MBIO 3011 ou MBIO 3010 (060.301).

MBIO 4411 Virologie Cr.Hrs. 3

Analyse détaillée des propriétés fondamentales des virus, de la taxonomie virale ainsi que des façons dont les virus se reproduisent. Examen des méthodes expérimentales utilisées en virologie et des façons dont les virus provoquent des maladies. On ne peut se faire créditer MBIO 4411 et MBIO 4010 et MMIC 7010 (097.701). Préalables : une note minimale de C dans MBIO 3011 ou MBIO 3010 (060.301) et dans MBIO 3411 ou MBIO 3410 (060.341). Donné seulement à l'Université de Saint-Boniface.

MBIO 4531 Projet de recherche en microbiologie Cr.Hrs. 6

MBIO 4531 Projet de recherche en microbiologie. Cr. Hrs. 6 Un projet de recherche choisi en consultation avec l'administrateur du cours ou un superviseur approprié de la faculté. Un rapport écrit à mi-parcours et un rapport oral et écrit à la fin du projet sont exigés. Ce cours est offert uniquement aux étudiant(e)s dans leur dernière année du programme de majeure conjointe en biochimie-microbiologie, d'un programme avec honneur en microbiologie, ou d'un programme de génétique. On ne peut se faire créditer le MBIO 4531 et aucun des cours MBIO 4530, CHEM 4710, CHEM 4711 (002.471). Donné seulement à l'Université de Saint-Boniface.

MBIO 4541 Transduction de l'énergie biologique Cr.Hrs. 3

(Ancien 060.454) Biochimie des processus biologiques comportant l'inter-conversion des différentes formes d'énergie comme la phosphorylation oxydative, le transport dans les membranes et les processus de contractions. On ne peut se faire créditer MBIO 4541 et MBIO 4540. Préalables : une note minimale de C dans MBIO 2021 ou MBIO 2020 (MBIO 2111, MBIO 2110, 060.211) et une note minimale C dans un de MBIO 2371, MBIO 2370 (060.237), CHEM 2371 ou CHEM 2370 (002.237), ou l'autorisation écrite de la professeure ou du professeur. MBIO 3031 (MBIO 3030) est recommandé.

MBIO 4581 Technologie de l'ADN recombinant Cr.Hrs. 3

(Ancien 060.458) Techniques d'isolement de plasmides, la digestion de l'ADN par les enzymes (endonucléases) de restriction, le clonage, la détermination de la séquence des nucléotides dans l'ADN, la transformation de l'ADN, le transfert de gènes. On ne peut se faire créditer MBIO 4581 et MBIO 4570 (060.457). Préalable : une note minimale de C dans MBIO 3411 ou MBIO 3410 (060.341). Donnée seulement au Université de Saint-Boniface.

MBIO 4601 Génétique moléculaire des procaryotes Cr.Hrs. 3

(Labo requis) (Ancien 060.460) Étude détaillée de la réplication, de l'expression, de la mutagénèse de la réparation de l'ADN ainsi que des éléments génétiques transposables des bactéries et des virus. On ne peut se faire créditer MBIO 4601 et MBIO 4600 et les anciens 060.452 ou 060.456. Préalables : une note minimale de C dans MBIO 2021 ou MBIO 2020 (MBIO 2111, MBIO 2110, 060.211) et une note minimale de C dans un de MBIO 2371, MBIO 2370 (060.237), CHEM 2371 ou CHEM 2370 (002.237). BIOL 2501 ou BIOL 2500 (BOTN 2461, BOTN 2460, 001.246) est recommandé. Donnée seulement au Université de Saint-Boniface.

MBIO 4981 Stage professionnel 3 Cr.Hrs. 1

Stage professionnel dans une entreprise, une industrie ou une agence gouvernementale pour les étudiantes et étudiants inscrits au programme coopératif de la majeure conjointe en microbiologie et en biochimie. La rédaction d'un rapport final, résumant le travail accompli durant le stage de quatre mois, est exigée. Note : réussite ou échec.

MBIO 4991 Stage professionnel 4 Cr.Hrs. 1

Stage professionnel dans une entreprise, une industrie ou une agence gouvernementale pour les étudiantes et étudiants inscrits au programme coopératif de la majeure conjointe en microbiologie et en biochimie. La rédaction d'un rapport final, résumant le travail accompli durant le stage de quatre mois, est exigée. Note : réussite ou échec.

Faculté des sciences-Physics

PHYS 1021 Physique générale I Cr.Hrs. 3

(Labo requis) (Ancien 016.102) Ce cours d'initiation à la physique ne requiert pas de calcul et traite de certains thèmes tirés de la mécanique et de la thermodynamique avec des exemples tirés des sciences biologiques et physiques. Ce cours, de même que le PHYS 1030 (ou 016.103), est particulièrement conseillé aux étudiants désireux d'avoir une vue d'ensemble de la physique ou qui ont l'intention d'entreprendre des études dans les sciences de la santé. Il peut aussi servir comme cours de base pour un programme de spécialisation en physique ("B+" ou mieux) ou de majeure en physique ("B" ou mieux). On ne peut se faire créditer à la fois le PHYS 1020 (ou 016.102) avec le PHYS 1050 ou PHYS 1051 (ou 016.105), le PHYS 1410 (ou 016.141), ou le PHYS 1420 (ou 016.142). Préalables: Soit Physique 40S, PHYS 0900 (ou 016.090) (avec Pass) ou l'équivalent, et soit le cours de Mathématiques précalcul 40S, ou une note de 70% dans les cours de Mathématiques appliquées 40S, ou l'équivalent. Il est fortement recommandé aux étudiants d'obtenir une note de 70% dans les cours de Mathématiques précalcul 40S et de Physique 40S.

PHYS 1031 Physique générale II Cr.Hrs. 3

Laboratoire requis. (Ancien 016.103) Découvrez comment la physique est à la base de toute la haute technologie du monde dans lequel on vit et comment on y vit. Apprenez à utiliser des concepts physiques simples et intuitifs, qu'on peut décrire avec peu de mathématiques et sans calcul différentiel et intégral, pour comprendre divers sujets tels que la production d'électricité, les causes de l'effet de serre, ce qui fait briller un diamant, les lasers, la chirurgie LASIK pour les yeux et le fonctionnement de l'œil humain. Comme PHYS 1021 (016.102), cours particulièrement conseillé pour avoir une vue d'ensemble de la physique ou avant d'entreprendre des études en sciences de la santé. Ce cours ne peut être reconnu aux fins des programmes de spécialisation ou de majeure en physique. On ne peut se faire créditer PHYS 1031 et PHYS 1030, PHYS 1410 (016.141) ou PHYS 1420 (016.142) (ou 016.120). Préalable : une note minimale de C dans un de PHYS 1021, PHYS 1020 (016.102), PHYS 1051 ou PHYS 1050 (016.105) (ou 016.118).

PHYS 1051 Physique I : La mécanique Cr.Hrs. 3

(Labo requis) (Ancien 016.105) Une introduction, basée sur le calcul, à la mécanique classique. Les sujets suivants seront traités: les vecteurs, la dynamique et la cinématique du mouvement de translation. La cinématique de la rotation, l'énergie, le travail, le moment linéaire, les collisions, le mouvement oscillatoire. Ce cours est destiné particulièrement aux étudiants qui voudraient poursuivre leur programme d'études dans les sciences physiques ou en ingénierie. On ne peut se faire créditer à la fois le PHYS 1050 (ou 016.105) et le PHYS 1020 ou PHYS 1021 (ou 016.102) ou PHYS 1410 (ou 016.141) ou le PHYS 1420 (ou 016.142) (et les anciens 016.118, 016.120 ou 016.127). Préalables: Mathématiques pré-calcul 40S (ou l'équivalent) et Physique 40S (ou l'équivalent) ou le PHYS 0900 (ou 016.090) (avec "Pass"). Il est fortement recommandé que l'étudiant obtienne une moyenne de 80% dans les Préalables de mathématiques précalcul 40S et de Physiques 40S. Préalables ou concomitants: Un de MATH 1500 ou MATH 1501, MATH 1510, MATH 1520, l'ancien 136.153 ou MATH 1690.

PHYS 1071 Physique II : La physique des ondes et la physique moderne Cr.Hrs. 3

(Laboratoire requis) (Ancien 016.107) Au cœur des communications modernes, les ondes et les oscillations sont la clé de la compréhension du monde qui nous entoure, des échelles subatomiques jusqu'au cosmos lui-même en passant par la biologie, le débit de la circulation, la bourse et les changements climatiques. Découvrez le mystérieux monde quantique, les bases de la dernière nanotechnologie et dans quelles circonstances les particules sont des ondes et les ondes, des particules. Explore le modèle de l'atome de Bohr et découvrez le principe d'incertitude de Heisenberg. Ce cours fait appel au calcul différentiel et intégral pour traiter les concepts sous-jacents du génie et de la physique modernes. Destiné, comme PHYS 1051 (016.105), à ceux et celles qui veulent suivre un programme d'études en sciences physiques. On ne peut se faire créditer PHYS 1071 et PHYS 1410 (016.141) ou PHYS 1420 (016.142). Préalables : un de PHYS 1051, PHYS 1050 (016.105) (ou 016.118) (C), PHYS 1021 ou PHYS 1020 (016.102) (B), et une note minimale de C dans un de MATH 1501, MATH 1500 (136.150), MATH 1510 (136.151), MATH 1520 (136.152) ou MATH 1530 (136.153). Concomitant : un de MATH 1701, MATH 1700, MATH 1690 ou MATH 1710 (ou 136.173).

PHYS 1301 Énergie et environnement Cr.Hrs. 6

(Ancien 016.130) Ce cours présente les particularités physiques générales de notre environnement. On insistera sur certains problèmes d'actualité, à savoir l'atmosphère, le cosmos, la structure de la matière et de l'énergie, les sources d'énergie, l'application des principes de la physique à la technologie moderne, etc. Le cours comportera des projections de films et des démonstrations. La participation aux discussions et aux choix des sujets à traiter est encouragée. Ce cours est conçu pour les étudiants de toutes les facultés et n'exige aucune connaissance des mathématiques ou de la physique. Il ne peut faire partie des programmes de Mineure ou de Majeure en Physique. On ne peut se faire créditer à la fois le PHYS 1300.

PHYS 2251 Introduction à la physique moderne Cr.Hrs. 3

(Ancien 016.225) Un cours d'introduction en physique atomique et nucléaire. Théorie cinétique des gaz, théorie de la relativité, effets de quantum, physique atomique, physique nucléaire. Ce cours n'est pas disponible aux étudiants qui auraient préalablement obtenu des crédits ou qui sont concurremment inscrits dans le cours PHYS 2380 (ou 016.238) (ou les anciens 016.250 ou 016.230)). Ce cours n'est pas disponible aux étudiants dans les programmes de spécialisation ou de majeure en Physique. On ne peut se faire créditer à la fois le PHYS 2250. Préalables: Un de: PHYS 1070 ou PHYS 1071 (ou 016.107) (C), ou PHYS 1020 ou PHYS 1021 (ou 016.102) (C+) et PHYS 1030 ou PHYS 1031 (ou 016.103)(C+) (ou l'ancien 016.121) (C+), (ou les anciens 016.127 (C); et un de MATH 1500 ou MATH 1501 (ou 136.150) (C), MATH 1510 (ou 136.151) (C), MATH 1520 (ou 136.152) (C), l'ancien 136.153 (C) ou MATH 1690 (ou 136.169) (C). Préalables ou concomitants: MATH 1200 ou MATH 1201 et un de MATH 1690, MATH 1700 ou MATH 1701, MATH 1710 ou l'ancien 136.173. Donné seulement au Université de Saint-Boniface.

PHYS 2261 Optique Cr.Hrs. 3

(Labo requis) (Ancien 016.226) Étude de la réfraction, de la réflexion, des systèmes de lentilles simples et des systèmes optiques, de la dispersion, de l'achromatisme. Vue élémentaire de la diffraction, de l'interférence et de la polarisation. On ne peut se faire créditer PHYS 2261 et PHYS 2260. Préalables : un de PHYS 1071, PHYS 1070 (016.107) ou PHYS 2152 (avec une note minimale de C) ou les deux cours PHYS 1021 (PHYS 1020 ou 016.102) et PHYS 1031 (PHYS 1030 ou (016.103) (avec une note minimale de C+) et un de MATH 1501, MATH 1500 (136.150), MATH 1510 (136.151), MATH 1520 (136.152), MATH 1530 (136.153) ou MATH 1690 (136.169). Prérequis ou concomitants : un de MATH 1301, MATH 1300 (136.130) ou MATH 1310 (136.131) et un de MATH 1690, MATH 1701, MATH 1700 (136.170), MATH 1710 (136.171) ou 136.173.

PHYS 2271 Éléments de physique pour les sciences biologiques A Cr. Hrs. 3

(Ancien 016.227) Ce cours introduit les éléments de physique ayant un rapport direct avec les sciences biologiques. En particulier, le transfert d'énergie par rayonnement, les effets de surface, la conduction thermique, les phonèmes de diffusion, les phonèmes de transport ainsi que l'utilisation de matériaux radioactifs. On ne peut se faire créditer à la fois le PHYS 2270. Préalable: PHYS 1070 ou PHYS 1071 (ou 016.107) (C) ou PHYS 1030 ou PHYS 1031 (ou 016.103) (C) ou le consentement du département. Donné seulement au Université de Saint-Boniface.

PHYS 2281 Éléments de physique pour les sciences biologiques B Cr. Hrs. 3

(Ancien 016.228) Ce cours traite des propriétés physiques des solides, des liquides et des gaz ainsi que des phénomènes de radiation et de la radioactivité. L'accent sera mis sur les aspects ayant un rapport direct avec les sciences biologiques. On ne peut se faire créditer à la fois le PHYS 2280. Préalable: PHYS 1070 ou PHYS 1071 (ou 016.107) (C) ou PHYS 1030 ou PHYS 1031 (ou 016.103) (C) ou le consentement du département. Donné seulement au Université de Saint-Boniface.

Faculté des sciences-Statistics**STAT 1001 Analyse statistique de base I Cr.Hrs. 3**

(Ancien 005.100) Une introduction aux principes fondamentaux de la statistique et aux procédures utilisées en analyse de données. Les sujets traités incluent: la cueillette des données, l'affichage et l'élagage des données, les relations entre variables, les distributions échantillonnables, l'estimation et les tests de signification, l'inférence pour les moyennes. On ne peut se faire créditer à la fois le STAT 1000 (005.100) et le STAT 2220 (005.222). Préalable: Un cours de mathématiques 40S ou l'équivalent. Donné seulement au Université de Saint-Boniface.

STAT 2001 Analyse statistique de base II Cr.Hrs. 3

(Labo requis) (Ancien 005.200) Étude des procédures d'estimation et de tests d'hypothèses pour les moyennes et les proportions dans les contextes d'échantillonnage à une, deux ou plusieurs variables. Introduction à l'analyse de variance, à la régression et à la corrélation. Les méthodes nonparamétriques, la conception d'expériences, les modèles probabilistes. On ne peut se faire créditer STAT 2001 et les anciens 005.120, 005.201, 005.211, 005.221, 005.231, 005.241, ou 005.250. Préalable : STAT 1001 ou STAT 1000 (ou 005.100) (ou 005.101, 005.210).

École de service social**SWRK 1311 Introduction à l'analyse de la politique de bien-être social Cr.Hrs. 3**

Étude de la politique de bien-être social en tant que produit fini d'idéologies. Introduction à quelques éléments de l'idéologie et comparaison des systèmes idéologiques concurrents. Analyse de l'interaction des visions économiques, politiques et ethniques de la société et de leurs manifestations en tant que réponses sociétales aux besoins humains et aux services sociaux. On ne peut se faire créditer le SWRK 1310 (ou 047.131) et (ancien 047.130).

SWRK 2051 Théorie et organisation communautaire Cr.Hrs. 3

Étude de concepts tels que le conflit et le pouvoir qui ramènent la pratique du travail social à la nature des relations humaines de second niveau. Application de ces concepts à la dynamique en vigueur au sein des communautés et des organisations et entre celles-ci. On ne peut se faire créditer le SWRK 2050 (047.205) Préalable : première moitié de SWRK 2091

SWRK 2071 Dynamique des petits groupes Cr.Hrs. 3

Explication des normes de groupe, des valeurs et des buts qui influencent la prise de décision et les modèles de communication dans les groupes. Influence du rôle des membres et des styles de leadership sur le développement et le fonctionnement du groupe. On ne peut se faire créditer le SWRK 2071 (SWRK 2070 et l'ancien 047.207).

SWRK 2081 Habiletés en communication interpersonnelle Cr.Hrs. 3

Acquisition d'une gamme essentielle d'habiletés interpersonnelles pour communiquer efficacement et pour établir et maintenir des relations tant dans des situations individuelles que de groupe. Accent sur l'apprentissage expérientiel utilisant une variété de techniques.

SWRK 2091 Comportement humain et pratique du travail social Cr. Hrs. 6

Application d'une théorie générale des systèmes à l'étude de la situation de la personne dans une famille et dans son environnement avec examen subséquent des implications pour la pratique du travail social. Critique de modèles variés du développement humain. Sessions d'information sur des dimensions du comportement qui s'avèrent critiques par rapport à la pratique du travail social.

SWRK 2101 Perspectives sur les transitions de la vie et de l'individu Cr.Hrs. 3

Examen de l'impact du cours transitoire de la vie sur le bien-être psychosocial des individus. Concentration sur les crises et les impasses problématiques qui surgissent aux moments décisifs avec leurs implications pour l'intervention en travail social. Préalable : première moitié de SWRK 2091. On ne peut se faire créditer SWRK 2101 (SWRK 2100/047.210) et l'ancien 047.206.

SWRK 2111 Émergence de l'État-providence canadien de bien-être social Cr.Hrs. 3

Examen et comparaison des systèmes de bien-être social de trois sociétés modernes. Analyse des facteurs économiques, politiques, sociaux, religieux, géographiques, démographiques et cataclysmiques influençant les modèles variés de la prestation sociale quant à leur signification par rapport au système canadien de bien-être social. On ne peut se faire créditer le SWRK 2110 (ou 047.211) et (ancien 047.130). Préalable : SWRK 1311

SWRK 2651 Aspects sociaux du vieillissement Cr.Hrs. 3

Examen des aspects sociaux du vieillissement. Accent sur la compréhension du processus de vieillissement dans toute transition de vie impliquant une adaptation à l'interaction entre l'environnement social et l'environnement physique. On ne peut se faire créditer le SWRK 2651 et le REC 2650 (or 123.265) ou IDES 2650 (or 051.265) ou HMEC 2650 ou REC 2650 (047.265).

SWRK 3101 L'enquête systématique en travail social Cr.Hrs. 3

Lien entre les méthodes systématiques de recherche scientifique et la pratique du travail social, la construction théorique pour la pratique, la collecte d'information et de données descriptives pour le processus décisionnel pour la compréhension des matériaux techniques de la recherche et introduction aux enjeux et aux défis de sdevs de recherche. On ne peut se faire créditer le SWRK 3100 (ancien 047.310)

SWRK 3111 Perspectives sur la déviance Cr.Hrs. 3

(Ancien 047.310) Étude des problèmes humains à l'aide de plusieurs modèles analytiques communément appliqués dans la pratique du travail social. On se peut se faire créditer SWRK 3111, SWRK 3110 et l'ancien 047.310. Préalable : première moitié de SWRK 2091.

SWRK 3131 L'État canadien contemporain du bien-être social Cr.Hrs. 3

Étude du bien-être social dans la société canadienne menant à une évaluation des approches actuelles à la lumière des transformations des conditions économiques et sociales et des besoins mouvants. On ne peut se faire créditer le SWRK 3131 et l'ancien 047.301. Préalable : SWRK 1311.

SWRK 3141 Introduction à la pratique du travail social Cr.Hrs. 3

Introduction à la perspective écologique ou à d'autres approches généralistes sur lesquelles se fondent les cadres opératoires de la pratique du travail social et le rôle des travailleuses sociales et des travailleurs sociaux professionnels. Accent mis sur les valeurs et les connaissances dans le contexte d'une approche rationnelle de résolution de problème incluant ainsi la définition même du problème, la consultation, le contrat, l'intervention et l'évaluation. On ne peut se faire créditer le SWRK 3140 (ancien 047.314). Préalable ou concomitant : SWRK 1311 ou SWRK 1310 (ou 047.131), SWRK 2081 ou SWRK 2080 (ou 047.208) et SWRK 2091 ou SWRK 2090 (ou 047.209).

SWRK 3151 Formation à la pratique du terrain I Cr.Hrs. 12

Première expérience de formation pratique sur le terrain au cours de laquelle l'étudiant ou l'étudiante aura l'occasion d'assumer une responsabilité dans son engagement pour le travail social, la consultation, la planification, l'intervention, l'évaluation et l'application concrète de la théorie apprise en classe. Les heures requises sont calculées sur une base de 28 semaines, 2 jours par semaine, 7.5 heures par jour pour un total de 420 heures. Ces heures comprennent la participation aux activités de stage et l'évaluation de la performance. Ces heures incluent aussi les réunions et les entrevues formatives avec la personne qui supervise le stage sur une base individuelle ou en groupe de sessions. En plus, il y aura 13 sessions obligatoires d'ateliers d'application d'habiletés de 3 heures chacune aux deux semaines pendant les semestres pour un total de 39 heures. Préalables: SWRK 1311 et SWRK 2081 et SWRK 2091 et SWRK 4141. Concomitant: SWRK 4201.

SWRK 4051 Sujets spéciaux Cr.Hrs. 3

Lectures dirigées ou études concentrées sur un aspect particulier du service social selon l'intérêt de l'étudiant ou de l'étudiante. Préalable : l'autorisation écrite de la professeure ou du professeur. On ne peut se faire créditer le SWRK 4051 et SWRK 4050 (ou 47.450).

SWRK 4071 Problèmes sociaux et pratique du travail social Cr.Hrs. 3

Étude en profondeur des situations à problèmes. Exploration des voies par lesquelles d'autres disciplines envisagent ou abordent le problème et le renforcement des habiletés d'intervention chez l'étudiant ou l'étudiante. Préalables : SWRK 3041 (SWRK 3040/047.304), SWRK 3121 (SWRK 3120/047.312), SWRK 4201/SWRK 3151 (SWRK 4200/SWRK 3150; 047.420/047.315) ou l'autorisation écrite de la professeure ou du professeur.

SWRK 4081 Enjeux actuels en bien-être social Cr.Hrs. 3

Étude d'un champ particulier du bien-être social en vue d'améliorer les politiques et les pratiques. L'étudiante ou l'étudiant aura à choisir un séminaire parmi de nombreux autres qui sont offerts. Ceux-ci peuvent varier d'une année à l'autre.

SWRK 4121 Formation à la pratique du terrain II Cr.Hrs. 12

Seconde expérience de formation pratique sur le terrain construite à partir du cours 3151. Occasion d'apporter une contribution professionnelle soutenue dans des situations nécessitant une intégration des valeurs, connaissances et aptitudes au niveau débutant du praticien professionnel. Les heures requises sont calculées sur la base de 28 semaines, 2 jours par semaine, 7.5 heures par jour pour un total de 420 heures. Ces heures incluent aussi les réunions et les entrevues formatives avec la personne qui supervise le stage sur une base individuelle ou en groupe de sessions. En plus, il y aura 13 sessions obligatoires d'ateliers d'application, d'habiletés de 3 heures chacune aux deux semaines pendant les deux semestres pour un total de 39 heures. Préalables: SWRK 3151 et SWRK 4201. Concomitant: SWRK 4301.

SWRK 4131 Habiletés en communication interpersonnelle avancée Cr.Hrs. 3

Cours expérientiel pour la compréhension de soi et la vigilance à soi pour produire une utilisation consciente et disciplinée de soi dans la communication et les relations professionnelles. Préalables : SWRK 2081 (SWRK 2080/047.208) et l'autorisation écrite de la professeure ou du professeur.

SWRK 4201 Champs d'intervention et de pratique du travail social I Cr. Hrs. 6

Séminaire d'enseignements des habiletés requises dans la pratique du travail social soit en contexte de stage ou d'intervention pratique. Insistance sur la pratique en termes de planification des changements (le système client), les politiques et les réseaux d'interrelations (le système services). Les séminaires peuvent varier d'une année à l'autre et sont organisés pour couvrir une variété de terrains ou de cadres d'interventions pratiques. Préalables : SWRK 1311 ou SWRK 1310, SWRK 2081 ou SWRK 2080, SWRK 2091 ou SWRK 2090 et SWRK 3141 ou SWRK 3140. Concomitant : SWRK 3151.

SWRK 4211 Les perspectives féministes de la pratique du travail social et de la politique du bien-être social Cr.Hrs. 6

(Ancien 047.421) Analyse de la pratique du travail social et de la politique de bien-être social selon la perspective féministe. Accent mis sur l'imbrication synergique de l'intervention sociale avec les politiques dans le contexte du bien-être social et avec des concepts superposés tels que : potentialisation, pratique écologique, oppression et pratique en contexte de diversité culturelle. On ne peut se faire créditer le SWRK 4211 (ou 047.421) et SWRK 4071 (ou 047.417) ou SWRK 4210(ou 047.420) et SWRK 4191 (ou 047.419). Préalables : SWRK 1311, SWRK 2081, SWRK 2091 et SWRK 3141.

SWRK 4221 Peuple autochtone et pratique du travail social Cr.Hrs. 6

Analyse de la pratique du travail social et de la politique de bien-être social à partir d'une perspective autochtone. Insistance sur l'imbrication entre la pratique du travail social, les politiques sociales et des concepts superposés tels que : potentialisation, pratique écologique et pratique en contexte de diversité culturelle. On ne peut se faire créditer SWRK 4220 (047.412) et SWRK 4160 (047.416) ou SWRK 4180 (047.418). Préalables : SWRK 1311 (SWRK 1310/047.131), SWRK 2081 (SWRK 2080/047.208), SWRK 2091 (SWRK 2090/047.209) et SWRK 3141 (SWRK 3140/047.314).

SWRK 4301 Champs d'intervention et de pratique du travail social II Cr. Hrs. 6

Séminaire d'enseignement des habiletés requises dans la pratique du travail social soit en contexte de stage ou d'intervention pratique. Insistance sur la pratique en termes de planification des changements (le système client), les politiques et les réseaux d'interrelations (le système services). Les séminaires peuvent varier d'une année à l'autre et sont organisés pour couvrir une variété de terrains ou de cadres d'interventions pratiques. Préalables : SWRK 1311 (SWRK 1310/047.131), SWRK 2081 (SWRK 2080/047.208), SWRK 2091 (SWRK 2090/047.209), SWRK 3141 (SWRK 3140/047.314), 6 crédits de SWRK 4201 (SWRK 4200/047.420) et SWRK 3151 (SWRK 3150/047.315). Concomitant : SWRK 4121 (SWRK 4120/047.412)

Faculté d'éducation-education(EDSB)**EDSB 5011 L'éducation bilingue, l'immersion et l'acquisition précoce d'une langue seconde Cr.Hrs. 3**

(Ancien 120.501) Étude du développement linguistique de l'enfant tout en considérant un grand nombre de facteurs socioaffectifs et cognitifs qui influencent le développement linguistique, facteurs permettant de réfléchir à toute la question de l'immersion et d'appliquer ces connaissances à la situation qui existe au Manitoba.

EDSB 5031 Histoire de l'éducation française au Manitoba Cr.Hrs. 3

(Ancien 120.503) Les fondements de l'éducation française au Manitoba. Examen, dans une perspective historique, des événements majeurs, de nature sociologique et politique, qui ont marqué le développement de l'éducation française au Manitoba. On ne peut se faire créditer le EDSB 5031 (ancien 120.503) et l'ancien 116.503.

EDSB 5041 Théories d'Apprentissage en Situation d'Immersion Cr.Hrs. 3

(Ancien 120.504) Étude des connaissances théoriques concernant les processus, les mécanismes et les facteurs reliés à l'apprentissage d'une langue seconde. Développement d'une compréhension plus englobante de l'expérience pratique en immersion. Préalable: le EDSB 5011 (ancien 120.501) ou le EDSB 5021 (ancien 120.502).

EDSB 5051 L'Intégration des Matières en Situation d'Immersion Cr.Hrs. 3

(Ancien 120.505) Familiarisation avec les principes de l'intégration des matières et les stratégies d'intégration de la lecture et de l'écriture dans l'enseignement des mathématiques, des sciences naturelles et des sciences humaines. Contenu du cours adapté au contexte de l'immersion.

EDSB 5061 Théories d'Apprentissage en Milieu Minoritaire Cr.Hrs. 3

(Ancien 120.506) Familiarisation avec les recherches en éducation compensatoire et bilingue et dégageant des implications en regard de l'apprentissage en milieu minoritaire.

EDSB 5071 Difficultés dans l'Enseignement du Langage Écrit Cr.Hrs. 3

(Ancien 120.507) Familiarisation avec les principes et les méthodes de prévention des difficultés d'apprentissage du langage écrit en tenant compte du contexte franco-manitobain.

EDSB 5081 Stage et Séminaires de Recherche-Action Cr.Hrs. 6

(Ancien 120.508) Utilisation du processus et des méthodes de recherche-action en vue de la résolution de problèmes éducatifs pratiques. Cours qui exige un minimum de 150 heures consacrées au stage de recherche. Pour s'inscrire à ce cours, il faut être en fonction dans le milieu éducatif.

Faculté d'éducation-3000 Level(EDUB)**EDUB 3011 Pratique du Microenseignement Cr.Hrs. 3**

(Ancien 063.301) Étude du comportement de l'enseignante ou de l'enseignant. Utilisation de vidéos fournissant le décor pour la pratique contrôlée de quelques-uns des éléments de l'enseignement, en particulier de l'analyse et de l'application des techniques suivantes : l'exposition, l'interrogation, la discussion et la démonstration. On ne peut se faire créditer le EDUB 3011 (ancien 063.301) et le EDUB 3161 (ancien 063.316).

EDUB 3013 Microenseignement et pratiques pédagogiques Cr.Hrs. 3

Réflexions sur la mise en pratique d'habiletés d'enseignement par l'analyse de leçons, d'activités ou de cours.

EDUB 3021 Sujets Particuliers en Sciences Humaines Cr.Hrs. 3

(Ancien 063.302) Étude de sujets choisis dans le domaine de l'enseignement des sciences humaines.

EDUB 3031 La Lecture au Secondaire Cr.Hrs. 3

(Ancien 063.303) Étude des habiletés de base en lecture et des relations de celles-ci avec les divers contenus disciplinaires du niveau secondaire. Examen de divers outils susceptibles de contribuer au développement des habiletés en lecture ainsi que diverses techniques d'évaluation.

EDUB 3101 Méthodologie de la lecture à l'élémentaire I Cr.Hrs. 3

(Ancien 063.310) Étude de l'apprentissage et de l'enseignement de la lecture à l'élémentaire dans les écoles franco-manitobaines et les écoles d'immersion. Compréhension en lecture, analyse des structures textuelles, lecture à voix haute et analyse du mot. Survol des habiletés préalables à la lecture et de quelques techniques d'évaluation de la lecture.

EDUB 3161 Stages et séminaires III Cr.Hrs. 3

(Ancien 063.316) Choix d'expérience initiale ou d'enrichissement dans un des domaines suivants : niveau scolaire primaire ou intermédiaire, situation en éducation spécialisée ou expérience dans un service communautaire relié de façon ponctuelle à l'éducation totale. Aspects théoriques et pratiques traités en ateliers d'initiation et en discussions de groupes. Une note de réussite ou d'échec sera attribuée pour ce cours. On ne peut se faire créditer le EDUB 3161 (ancien 063.316) et le EDUB 3011 (ancien 063.301).

EDUB 3171 Stages Et Séminaires Iii Cr.Hrs. 3

(Ancien 063.317) Cours qui fournira de multiples occasions de rédiger différents genres de textes en français. Composition, transcription et révision de textes. Familiarisation avec le processus de l'écrit qui peut être adapté et appliqué aux niveaux primaire, élémentaire et secondaire.

EDUB 3211 Enseignement du Français au Primaire d'Immersion Cr.Hrs. 3

(Ancien 063.321) Enseignement du français langue seconde au primaire. Étude des principes de la communication orale et écrite dans la salle de classe, de la nouvelle pédagogie dans l'enseignement de la lecture et de l'écrit et de l'intégration des savoirs et des matières. Concomitant : EDUB 2201 (ancien 063.220).

EDUB 3251 Sujets Particuliers - Curriculum et Pédagogie Cr.Hrs. 3

(Ancien 063.325) Étude de sujets choisis en enseignement et apprentissage en immersion.

EDUB 3261 L'Acquisition et l'Apprentissage du Français en Contexte d'Immersion Cr.Hrs. 3

(Ancien 063.326) Cours théorique. Familiarisation avec les théories explicatives de l'acquisition et l'apprentissage d'une langue seconde et les approches pédagogiques qui en découlent. On ne peut se faire créditer le EDUB 3261 (ancien 063.326) et l'ancien 063.319.

EDUB 3271 Développement Langagière en Immersion Française à l'Élémentaire Cr.Hrs. 3

(L'ancien 063.327) Étude des aspects pratiques de l'enseignement en situation d'immersion à l'élémentaire. Sensibilisation aux méthodes et aux techniques susceptibles de développer les compétences en français langue seconde. On ne peut se faire créditer l'ancien 063.327 ou l'ancien 063.320. Préalable: EDUB 3261 (063.326) ou l'ancien 063.319.

EDUB 3281 Développement Langagière en Immersion Française Cr. Hrs. 3

(Ancien 063.328) Étude des aspects pratiques de l'enseignement en situation d'immersion au secondaire. Sensibilisation aux méthodes et aux techniques susceptibles de développer les compétences en français langue seconde. Préalable: EDUB 3261 (ancien 063.326) ou l'ancien 063.319.

EDUB 3291 Principes et pratiques de l'évaluation des apprentissages Cr. Hrs. 3

Ce cours permettra aux étudiantes et aux étudiants de comprendre les approches et les principes permettant d'évaluer la progression des apprentissages et le degré d'acquisition des compétences des élèves.

EDUB 3311 Perfectionnement du français Cr.Hrs. 3

Approfondissement des notions de la grammaire des particularités orthographiques du français. Étude des outils et des stratégies à l'auto-correction. Bref aperçu des anglicismes, de la cohérence textuelle et des stratégies de lecture et d'écriture. *Ce cours de perfectionnement ne compte pas pour le baccalauréat en éducation. Les cours additionnels pour le perfectionnement linguistique sont au-delà des 60 crédits du baccalauréat en éducation.

EDUB 3313 Perspectives Autochtones en Contexte Scolaire Cr.Hrs. 3

Introduction aux perspectives culturelles autochtones et métisses en contexte scolaire dimensions historique, anthropologique, éthique et pédagogique. Développement de compétences professionnelles relatives à l'enseignement dans un environnement autochtone et métis.

EDUB 3991 Étude Individuelle Cr.Hrs. 3

(Ancien 063.399) Étude individuelle et recherche dirigées vers un sujet d'intérêt.

EDUB 3993 Étude Individuelle Cr.Hrs. 3

(Ancien 081.399) Étude individuelle et recherche dirigées vers un sujet d'intérêt

Faculté d'éducation-4000 Level(EDUB)

EDUB 4011 Stages pratiques Cr.Hrs. 9

(Ancien 063.401) Période d'application, en milieu scolaire, des connaissances acquises, sous la surveillance du personnel de la Faculté et de l'école qui reçoit le ou la stagiaire. Une note de réussite ou d'échec sera attribuée pour ce cours.

EDUB 4013 Stages Cr.Hrs. 3

(Ancien 081.401) Période d'application, en milieu scolaire, des connaissances acquises, sous la surveillance du personnel de la Faculté et de l'école qui reçoit le ou la stagiaire.

EDUB 4021 Didactique - Élémentaire Cr.Hrs. 6

(Ancien 081.402) Étude des programmes actuels au niveau élémentaire et des méthodes pratiques d'enseignement.

EDUB 4023 Didactique - Élémentaire Cr.Hrs. 6

(Ancien 081.402) Étude des programmes actuels au niveau élémentaire et des méthodes pratiques d'enseignement.

EDUB 4051 Méthodologie générale Cr.Hrs. 3

(Ancien 063.405) Étude des fondements et de l'application de la méthodologie.

EDUB 4061 Didactique en anglais (secondaire) Cr.Hrs. 3

(Ancien 063.406) Étude des programmes et des méthodes d'enseignement en anglais au niveau secondaire.

EDUB 4071 L'enseignement du français de base au secondaire Cr.Hrs. 3

(Ancien 063.407) Étude de l'enseignement et de l'apprentissage du français langue seconde aux niveaux intermédiaire et secondaire. Familiarisation avec l'approche communicative en tenant compte du programme d'études et des ressources disponibles au Manitoba.

EDUB 4081 Didactique en géographie (secondaire) Cr.Hrs. 3

(Ancien 063.408) Étude des programmes et des méthodes d'enseignement en géographie au niveau secondaire.

EDUB 4091 Didactique en langues vivantes (secondaire) Cr.Hrs. 3

(Ancien 063.409) Étude des programmes et des méthodes d'enseignement en langues vivantes au niveau secondaire.

EDUB 4101 Didactique en histoire (secondaire) Cr.Hrs. 3

(Ancien 063.410) Étude des programmes et des méthodes d'enseignement en histoire au niveau secondaire.

EDUB 4103 Didactique en biologie (secondaire) Cr.Hrs. 3

(Ancien 081.410) Étude des programmes et des méthodes d'enseignement en biologie au niveau secondaire.

EDUB 4113 Didactique en chimie (secondaire) Cr.Hrs. 3

(Ancien 081.411) Étude des programmes et des méthodes d'enseignement en chimie au niveau secondaire.

EDUB 4123 Didactique en informatique (secondaire) Cr.Hrs. 3

(Ancien 081.412) Étude des programmes et des méthodes d'enseignement en informatique au niveau secondaire.

EDUB 4131 Didactique en théâtre (secondaire) Cr.Hrs. 3

(Ancien 063.413) Étude des programmes et des méthodes d'enseignement en théâtre au niveau secondaire.

EDUB 4133 Didactique en sciences générales (secondaire) Cr.Hrs. 3

(Ancien 081.413) Étude des programmes et des méthodes d'enseignement en sciences générales au niveau secondaire.

EDUB 4141 Didactique en art (secondaire) Cr.Hrs. 3

(Ancien 063.414) Étude des programmes et des méthodes d'enseignement en art au niveau secondaire.

EDUB 4151 Didactique en sciences de l'écologie humaine II Cr.Hrs. 3
(Ancien 081.415) Étude des programmes et des méthodes d'enseignement en sciences de l'écologie humaine au niveau secondaire.

EDUB 4161 Didactique en éducation physique (secondaire) Cr.Hrs. 3
(Ancien 081.416) Étude des programmes et des méthodes d'enseignement en éducation physique au niveau secondaire.

EDUB 4171 Didactique en physique (secondaire) Cr.Hrs. 3
(Ancien 081.417) Étude des programmes et des méthodes d'enseignement en physique au niveau secondaire.

EDUB 4181 Didactique en mathématiques (secondaire) Cr.Hrs. 3
(Ancien 081.418) Étude des programmes et des méthodes d'enseignement en mathématiques au niveau secondaire.

EDUB 4201 Didactique du/en français au secondaire Cr.Hrs. 3
Cours axé sur des questions didactiques soulevées par les programmes d'études de français langue première et ceux de français langue seconde - immersion établis, pour les niveaux 7^e années à Secondaire 4, par la Division du Bureau de l'éducation française, du ministère d'Éducation, Citoyenneté et Jeunesse Manitoba.

EDUB 4203 Didactiques: l'approche transdisciplinaire Cr.Hrs. 6
Elaboration d'une unité d'enseignement menant à une synthèse de la formation initiale.

Faculté d'éducation-5000 level (EDUB)

EDUB 5201 Lectures dirigées en curriculum, en enseignement et en apprentissage 1 Cr.Hrs. 3
(Ancien 132.520) Lectures et recherches traitant de domaines particuliers de l'étude du curriculum.

EDUB 5231 Courant Actuels en Curriculum, en Enseignement et en Apprentissage 2 Cr.Hrs. 3
(Ancien 132.523) Approfondissement de thèmes choisis qui ont fait l'objet d'études dans le EDUB 5221 (ancien 132.522).

EDUB 5261 Introduction aux fondements de la lecture Cr.Hrs. 3
(Ancien 132.526) Étude de la nature de la lecture par rapport à diverses composantes du développement humaine telles que le langage, la vue, l'ouïe, la cognition et la motivation. On ne peut se faire créditer le EDUB 5261 (l'ancien 132.526) et l'ancien 063.566.

EDUB 5271 Enseignement de la lecture Cr.Hrs. 3
(Ancien 132.527) Étude des fondements du programme d'enseignement de la lecture; objectifs du programme, conditions d'apprentissage, démarches et matériel pédagogiques et évaluation des apprentissages. On ne peut se faire créditer le EDUB 5271 (l'ancien 132.527) et l'ancien 063.567.

EDUB 5321 Séminaire sur les Arts Langagiers 1 Cr.Hrs. 3
(Ancien 132.532) Séminaire de recherche et de lecture, qui comprend une analyse approfondie des fondements théoriques de l'étude et de l'enseignement des arts langagiers à l'élémentaire et de la recherche qui sous-tend ces fondements. Réflexion sur la portée pratique de ces théories dans l'enseignement en ce qui a trait à la communication orale, à l'écoute et à la création dramatique. On ne peut se faire créditer le EDUB 5321 (l'ancien 132.532) et l'ancien 063.572.

EDUB 5221 Courants actuels en curriculum, en enseignement et en apprentissage 1 Cr.Hrs. 3
(Ancien 132.522) Étude de la théorie qui sous-tend les courants actuels et les problématiques émergentes dans le domaine et de leurs applications pratiques.

EDUB 5331 L'enseignement de la langue et de la littérature dans les matières Cr.Hrs. 3
Étude des pratiques d'enseignement de l'écriture et de ses rapports avec la communication orale et la lecture. Examen attentif des démarches pédagogiques, des techniques d'évaluation, du matériel existant et des méthodologies de l'enseignement de l'épellation, de l'écriture et de la composition écrite. On ne peut se faire créditer le EDUB 5331 (l'ancien 132.533) et l'ancien 063.575.

EDUB 5341 Fondements de la littérature Cr.Hrs. 3
(Ancien 132.532 / 132.534) Étude de la nature de la littérature par rapport aux dimensions du développement humain et de l'enseignement telles que le langage, la vision, l'audition, la cognition, la motivation et l'objectif de l'enseignement. On ne peut se faire créditer EDUB 5341 et EDUB 5261 (ancien 132.526) et l'ancien 063.566.

EDUB 5361 Fondements de la Littérature Cr.Hrs. 3
(Ancien 132.536) Étude de la nature et de la psychologie de la littérature enfantine à l'élémentaire. Aperçu du matériel existant, établissement de critères d'évaluation de ce matériel et résultats des recherches portant sur l'élaboration, le niveau d'intérêt et l'utilisation du matériel. On ne peut se faire créditer le EDUB 5361 (ancien 132.536) et l'ancien 063.544.

EDUB 5371 Littérature pour Adolescents et Adolescentes Cr.Hrs. 3
(Ancien 132.537) Étude de la nature et de la psychologie de la littérature destinée aux élèves de la 7^e à la 12^e année. Aperçu du matériel existant, établissement de critères d'évaluation de ce matériel et résultats des recherches portant sur l'élaboration, le niveau d'intérêt et l'utilisation du matériel. On ne peut se faire créditer le EDUB 5371 (ancien 132.537) et l'ancien 063.545.

EDUB 5351 Problématiques Actuelles en Langue et en Littérature Cr. Hrs. 3
(Ancien 132.535) Étude de sujets particuliers qui vise à faire connaître les courants actuels en enseignement de la langue et de la littérature.

EDUB 5431 Développements Récents en Curriculum: Humanités Cr. Hrs. 3
Examen des courants théoriques et des applications pratiques récents ou en émergence dans ce domaine.

EDUB 5471 Courants Actuels en Curriculum: Mathématiques et Sciences Naturelles Cr.Hrs. 3
(Ancien 132.547) Examen des courants théoriques et des applications pratiques récents ou en émergence dans ce domaine.

EDUB 5531 Théorie et pratique de l'enseignement du français Cr.Hrs. 6
(Ancien 132.533) Étude de la théorie actuelle et des nouvelles pratiques de l'enseignement du français langue seconde. Examen attentif de l'analyse des procédures pédagogiques et de la tâche d'enseignement. Initiation à la recherche dans le domaine de l'enseignement d'une langue seconde. On ne peut se faire créditer le EDUB 5531 (l'ancien 132.553) et l'ancien 063.512.

EDUB 5533 Théorie et Pratique de l'Enseignement du Français Langue Seconde Cr.Hrs. 3
Ce cours fournit une mise à jour des théories et des pratiques de l'enseignement et de l'apprentissage en français langue seconde (immersion et français de base).

EDUB 5535 L'utilisation des médias en enseignement du français de base Cr.Hrs. 3
Appréciation critique des médias, et ce, à partir d'une étude approfondie du sujet. Utilisation des médias pour appuyer des thèmes explorés en situation de salle de classe et développement des stratégies pédagogiques qui en découlent.

EDUB 5537 Théorie et Pratique des Arts Visuels et l'Enseignement du Français de Base Cr.Hrs. 3

Examen des approches et des méthodes récentes dans l'enseignement des arts visuels et application des théories apprises au moyen d'exercices pratiques et de projets. Familiarisation avec le langage plastique et développement d'un esprit critique face aux diverses disciplines en arts visuels dans la classe de français de base. Ce cours favorisera l'expression artistique individuelle.

EDUB 5539 L'enseignement du français de base et les TIC Cr.Hrs. 3

Liens entre l'apprentissage, la pédagogie et les TIC. Mise à l'essai et évaluation des logiciels éducatifs. Utilisation pédagogique des logiciels comme Word, Excel, et Power Point. Développement des compétences techniques avec un certain nombre de logiciels. Intégration des compétences théoriques et techniques dans la création des activités pédagogiques. Consultation et évaluation de sites Web. Création d'un plan de site Web pour une unité d'apprentissage. Cours en ligne.

EDUB 5541 Enseignement du français Cr.Hrs. 6

(L'ancien 132.554) Revue critique du programme d'études : buts et objectifs, divers aspects de la discipline du français, théorie et pratique de l'enseignement, recherche et évaluation des techniques méthodologiques pour un meilleur enseignement du français. On ne peut se faire créditer le EDUB 5541 (l'ancien 132.544) et l'ancien 063.515.

EDUB 5543 Les arts dramatiques et l'enseignement du français de base Cr.Hrs. 3

Exploration de l'art dramatique comme approche dans la classe de français langue seconde. Familiarisation avec le langage du domaine et la documentation récente. Ateliers pratiques reliés aux divers aspects de l'art dramatique pertinents à l'enseignement des compétences langagières.

EDUB 5545 French Immersion for Teachers Intermediate C/D Cr.Hrs. 3

Ce cours de perfectionnement linguistique vise les enseignantes et enseignants du français langue seconde, ou des personnes qui se destinent à l'enseignement du français langue seconde, et qui veulent se perfectionner en français grâce à l'approche communicative.

EDUB 5547 French Immersion for Teachers Advanced/Perfectionnement Cr.Hrs. 3

Ce cours de perfectionnement linguistique vise les enseignantes et enseignants du français langue seconde, ou des personnes qui se destinent à l'enseignement du français langue seconde, et qui veulent se perfectionner en français grâce à l'approche communicative.

EDUB 5761 Courants Actuels en Enseignement des Mathématiques Cr. Hrs. 3

(Ancien 132.576) Lectures et recherches sur l'enseignement des mathématiques (sujets particuliers).

EDUB 5771 Diagnostic et intervention en enseignement des mathématiques à l'élémentaire Cr.Hrs. 3

(Ancien 132.577) Méthodes diagnostiques et ressources orthopédagogiques en enseignement des mathématiques à l'élémentaire. On ne peut se faire créditer le EDUB 5771 (ancien 132.577) et l'ancien 081.558.

Faculté d'éducation-7000 Level (EDUB)

EDUB 7071 Ouvrages marquants de recherche en lecture Cr.Hrs. 3

(Ancien 132.707) Examen, analyse et synthèse critiques des ouvrages marquants de recherche en lecture dans les domaines de la psychologie, de la psycholinguistique, de la sociologie et de la pédagogie de la lecture. On ne peut se faire créditer le EDUB 7071, EDUB 7070 et l'ancien 063.713.

EDUB 7111 Recherche sur l'acquisition de la langue et le la littératie Cr. Hrs. 3

(Ancien 132.711) Exploration des problématiques propres à l'acquisition de la langue et de la littératie susceptibles d'intéresser les enseignantes et enseignants sur le plan professionnel. Les participantes et participants feront une analyse critique des théories qui sous-tendent l'acquisition de la langue et de la littératie, de la recherche publiée et d'observations en salle de classe. Ils auront l'occasion d'effectuer leur propre recherche sur l'acquisition de la langue et de la littératie dans un milieu éducatif. On ne peut se faire créditer le EDUB 7111 (ancien 132.711) et l'ancien 063.756.

EDUB 7161 L'enseignante et l'enseignant de langue en tant que chercheurs Cr.Hrs. 3

(Ancien 132.716) Examen de paramètres caractéristiques des enseignantes et des enseignants en tant que chercheurs dans le contexte de leur propre salle de classe. Trois principes fondamentaux guident les participantes et participants: voix, conversation et communauté. Sous cet angle particulier, les enseignantes et enseignants de langue effectuent une recherche en salle de classe dans le but de comprendre la langue et l'enseignement par l'entremise des élèves interrogés dans le domaine du curriculum. On ne peut se faire créditer le EDUB 7161 (EDUB 7160) et l'ancien 132.716 ou 063.761.

EDUB 7181 La recherche en rédaction Cr.Hrs. 3

(Ancien 132.718) Analyse critique de la recherche et des méthodes de recherche en rédaction et en pédagogie. Regard particulier sur les études classiques, l'histoire, les courants actuels et la recherche ainsi que les méthodes d'évaluation en rapport avec l'étude et l'enseignement de la rédaction. On ne peut se faire créditer le EDUB 7181 ou EDUB 7180 (ou 132.718) et l'ancien 063.763.

EDUB 7191 Recherches sur le rôle de la langue dans l'apprentissage Cr. Hrs. 3

(Ancien 132.719) Analyse critique des résultats de la recherche afin de comprendre la façon dont la langue peut faciliter l'apprentissage dans tous les domaines scolaires. Regard sur le rôle que joue la langue pour faciliter l'apprentissage des matières. Examen particulier de la recherche portant sur l'expression orale, la lecture et l'écriture en tant qu'outils servant à l'apprentissage. On ne peut se faire créditer EDUB 7191 et l'ancien 063.764

EDUB 7201 La littératie et l'élaboration de politiques Cr.Hrs. 3

(Ancien 132.720) Un séminaire portant sur l'élaboration de politiques en littératie et leurs effets sur notre conceptualisation d'un curriculum littéraire et nos définitions de la littératie. Regard particulier sur le concept de fonctionnalité en littératie et les politiques sur l'enseignement de la littératie. On ne peut se faire créditer le EDUB 7201 (ancien 132.720) et l'ancien 063.765.

EDUB 7341 Sujets particuliers en curriculum: humanités et sciences humaines Cr.Hrs. 3

(Ancien 132.734) Lecture et recherche sur des sujets d'importance dans le domaine du curriculum en humanités et en sciences humaines.

EDUB 7361 Sujets particuliers en curriculum: Mathématiques et sciences naturelles 1 Cr.Hrs. 3

(Ancien 132.736) Lecture et recherche sur des sujets d'importance pour le développement du curriculum dans ces domaines spécialisées.

Faculté d'éducation- 3000 Level (EDUA)

EDUA 3011 Mesure et Évaluation Cr.Hrs. 3

(Ancien 043.301) Théorie et application pratique dans la préparation, l'utilisation et l'interprétation de tests composés par les instituteurs et les institutrices; utilisation et interprétation de divers types de tests standards; techniques de statistiques connexes.

EDUA 3021 Principes de Programmation Scolaire Cr.Hrs. 3

(Ancien 116.302) Analyse des principes fondamentaux qui gouvernent l'élaboration des programmes scolaires et étude de l'application de ces principes à certains programmes actuels.

EDUA 3051 Troubles Particuliers de L'Apprentissage Cr.Hrs. 3

(Ancien 043.305) Initiation à l'étude de certains troubles perçus dans le développement des élèves. Étude du rôle de l'enseignante ou de l'enseignant dans le dépistage de ces troubles et application de programmes particuliers de rééducation.

EDUA 3061 Informatique En Éducation I Cr.Hrs. 3

(Ancien 043.306) Applications pédagogiques des ordinateurs. Exploitation des logiciels, des progiciels et des didactiques applicables à l'enseignement.

EDUA 3071 Développement du Langage chez le Jeune Enfant Cr.Hrs. 3

(Ancien 043.307) Étude des expériences sensorimotrices et des étapes de la communication prélinguistique et linguistique allant de l'expression vocale au développement syntaxique. Appréciation de l'importance de l'environnement linguistique et de la cognition dans le développement, l'acquisition et l'apprentissage de la langue première. Analyse particulière du développement d'une langue seconde aux niveaux préscolaire et primaire en immersion. Il est préférable mais non obligatoire de suivre le EDUA 2011 (ancien 043.201) au préalable.

EDUA 3201 Diversité culturelle dans les écoles Cr.Hrs. 3

Les écoles accueillent un grand nombre d'élèves provenant de groupes sociaux marginalisés selon, entre autres, leur race, leur ethnie, leur langue maternelle, leur religion, leur orientation sexuelle ou leur statut socioéconomique. Étude de la question de la diversité culturelle, prise dans un sens large, dans le contexte de l'enseignement. Acquisition des connaissances ainsi que des attitudes et des stratégies nécessaires pour favoriser l'équité et la qualité des apprentissages des élèves, peu importe leurs antécédents, leurs particularités ou leurs circonstances.

EDUA 3303 Intégration et identité professionnelles Cr.Hrs. 3

Développement de l'habileté à faire le lien entre la pratique et la théorie et à mettre en oeuvre une gestion efficace de sa pratique pédagogique.

EDUA 3313 Perspectives autochtones en contexte scolaire Cr.Hrs. 3

Introduction aux perspectives culturelles autochtones et métisses en contexte scolaire : dimensions historique, anthropologique, éthique et pédagogique. Développement de compétences professionnelles relatives à l'enseignement dans un environnement autochtone et métis.

EDUA 3323 La pratique réflexive dans la formation professionnelle Cr. Hrs. 3

Analyse d'expériences vécues lors du stage pratique menant à une prise de conscience de son propre style d'enseignement.

EDUA 3993 Éducation française en contextes minoritaire et d'immersion Cr.Hrs. 3

Étude des aspects historique, démographique, culturel, linguistique, identitaire et des approches pédagogiques qui encadrent le phénomène de l'éducation française en milieu minoritaire au Manitoba (écoles d'immersion et écoles françaises).

Faculté d'éducation-5000 level (EDUA)**EDUA 5011 Introduction à L'Administration Scolaire Cr.Hrs. 3**

(Ancien 129.501) Étude des concepts, des tâches et des processus de l'administration tels qu'ils s'appliquent à l'éducation. On ne peut se faire créditer le EDUA 5011 (ancien 129.501) et l'ancien 116.501.

EDUA 5021 Principes d'Élaboration de Curriculum Cr.Hrs. 3

(Ancien 129.502) Étude des différentes approches d'élaboration de curriculum, des facteurs qui en influencent le processus d'élaboration et des aspects de l'implantation. Participation de l'enseignant ou de l'enseignante à l'élaboration du curriculum. On ne peut se faire créditer le EDUA 5021 (ancien 129.502) et l'ancien 116.502.

EDUA 5031 Gestion des établissements scolaires Cr.Hrs. 3

(Ancien 129.503) Étude des modes fondamentaux d'organisation et du rôle de l'administration au sein d'un établissement scolaire. Attention particulière accordée à la prise de décision, à la communication, à la planification et à l'évaluation. On ne peut se faire créditer le EDUA 5031 (ancien 129.503) et l'ancien 116.503.

EDUA 5041 Administration du personnel scolaire Cr.Hrs. 3

(Ancien 129.504) Étude des rapports de l'administratrice ou de l'administrateur avec le personnel, en mettant l'accent sur la politique de gestion, le perfectionnement et la motivation du personnel. On ne peut se faire créditer le EDUA 5041 (ancien 129.504) et l'ancien 116.504.

EDUA 5061 Principes de la supervision en enseignement Cr.Hrs. 3

(Ancien 129.506) Étude des modèles théoriques d'enseignement et de supervision et de leur application dans la pratique. On ne peut se faire créditer le EDUA 5061, EDUA 5060 (ancien 129.506) et l'ancien 116.506.

EDUA 5071 Comportement organisationnel en éducation Cr.Hrs. 3

(Ancien 129.507) Étude des théories et des recherches en sciences du comportement et en sciences sociales qui ont trait au comportement des individus et des groupes dans une structure organisationnelle. Analyse de la portée de ces théories et recherches par rapport à l'administration des établissements scolaires. On ne peut se faire créditer le EDUA 5071 (ancien 129.507) et l'ancien 116.507.

EDUA 5081 Courants Actuels en Administration Scolaire 1 Cr.Hrs. 3

(Ancien 129.508) Étude des fondements théoriques et de l'application pratique des développements récents et des nouveaux courants en administration scolaire.

EDUA 5091 Courants Actuels en Administration Scolaire 2 Cr.Hrs. 3

(Ancien 129.509) Prolongement de l'étude de certains sujets abordés dans le EDUA 5081 (ancien 129.508) en vue d'approfondir les études entreprises dans ces domaines.

EDUA 5101 Questions importantes en administration scolaire Cr.Hrs. 3

(Ancien 129.510) Étude de sujets d'importance en administration scolaire. Le contenu variera d'année en année, il sera donc possible de se faire créditer ce cours plus d'une fois. On ne peut se faire créditer le EDUA 5101 (EDUA 5100) (ancien 129.510) et l'ancien 116.510.

EDUA 5241 Problèmes en rapport avec l'éducation interculturelle Cr. Hrs. 3

(Ancien 129.524) Étude de problèmes particuliers auxquels les minorités culturelles font face dans le milieu scolaire. On ne peut se faire créditer le EDUA 5241 et les anciens 129.524 ou 116.531.

EDUA 5251 Regards sur l'éducation des minorités au Canada Cr.Hrs. 3

(Ancien 129.525) Un examen de la nature du développement social au Canada dans le cadre d'une société multiraciale. Étude des questions de relations intergroupes, de politiques en matière d'immigration, de cohésion ethnique, et de tensions découlant de l'intégration versus l'assimilation en rapport avec l'histoire de l'éducation au Canada. On ne peut se faire créditer EDUA 5251 et l'ancien 116.503.

EDUA 5481 Techniques de counselling Cr.Hrs. 3

(Ancien 129.548) Acquisition de techniques de counselling telles que l'attention et l'écoute, le reflet du contenu et des émotions, la rétroaction et la révélation de soi, la focalisation et le résumé. On ne peut se faire créditer le EDUA 5481, les anciens 129.548, 129.556 ou 043.516. Préalable ou concomitant: EDUA 5501 (129.550) ou l'ancien 043.509. Une note de réussite ou échec sera attribuée pour ce cours.

EDUA 5491 Stage en counselling Cr.Hrs. 3

(Ancien 129.549) Situation réelle de counselling où les étudiantes et les étudiants auront l'occasion, sous la supervision de professionnels compétents et avec l'appui de leur professeur ou de leur professeure, de mettre en pratique les techniques de counselling qu'ils ont apprises. On ne peut se faire créditer le EDUA 5491 et les anciens 129.549 ou 043.516. Préalables ou concomitants: EDUA 5501 (129.550) (ou 043.509) et EDUA 5481 (129.548). Une note de réussite ou échec sera attribuée pour ce cours.

EDUA 5501 Théories de counselling scolaire Cr.Hrs. 3

(Ancien 129.550) Étude de la philosophie et des théories du counselling. Sujets importants en orientation et en counselling scolaires. On ne peut se faire créditer le EDUA 5501 (ancien 129.550) et l'ancien 043.509.

EDUA 5511 Counselling à l'élémentaire Cr.Hrs. 3

(Ancien 129.551) Examen du rôle et des fonctions de la conseillère ou du conseiller dans une école élémentaire. Préalable ou concomitant: EDUA 5501 (129.550) (ou 043.509). On ne peut se faire créditer EDUA 5511 et l'ancien 043.510

EDUA 5521 Counselling et éthique Cr.Hrs. 3

(Ancien 129.552) Introduction au code de déontologie des conseillères et des conseillers. Discussion des problématiques morales en lien avec les sujets suivants: consentement libre et éclairé, confidentialité, tenue des dossiers, respect des limites, formation et compétence, supervision clinique, multiculturalisme et diversité. Possibilité de mettre en pratique des modèles de prise de décision. On ne peut se faire créditer le EDUA 5521 (EDUA 5520) et l'ancien 129.552.

EDUA 5531 Counselling au secondaire Cr.Hrs. 3

(Ancien 129.553) Étude du counselling au secondaire. Rôle et fonctions de la conseillère ou du conseiller à l'école secondaire. Étude des divers services offerts par le conseiller: Éducation, orientation, personnel, etc. On ne peut se faire créditer EDUA 5531 et les anciens 129.553 ou 043.511. Préalable ou concomitant: le EDUA 5501 (ancien 129.550) (ou 043.509).

EDUA 5541 Counselling de Groupes Cr.Hrs. 3

(Ancien 129.554) Étude des groupes, de l'animation de groupe et de l'acquisition des compétences connexes, particulièrement en ce qui a trait à la fonction de la conseillère ou du conseiller en milieu scolaire. On ne peut se faire créditer le EDUA 5541 et l'ancien 043.512. Préalable ou concomitant: le EDUA 5501 (ancien 129.550) ou l'ancien 043.509.

EDUA 5551 Psychologie des Relations Humaines Cr.Hrs. 3

(Ancien 129.555) Étude des relations interpersonnelles. Approche de type laboratoire visant à augmenter la sensibilité personnelle des étudiantes et des étudiants aux autres personnes. Cours qui s'adresse particulièrement au personnel enseignant, administratif et professionnel en milieu scolaire. On ne peut se faire créditer le EDUA 5551 (ancien 129.555) et l'ancien 043.515.

EDUA 5571 Éducation familiale Cr.Hrs. 3

(Ancien 129.557) Étude de la sexualité humaine et des relations familiales, axée sur les résultats de la recherche, les ressources et les méthodes pédagogiques, le développement, ainsi que la collaboration avec les membres de la famille et la collectivité. On ne peut se faire créditer le EDUA 5571 (ancien 129.557) et l'ancien 043.517.

EDUA 5581 Orientation de carrières Cr.Hrs. 3

(l'ancien 129.558) Étude et application des théories sous-tendant l'orientation de carrières, le choix de carrière et la prise de décision; évaluation et conception de programmes de connaissance de soi aux fins de prises de décision dans une contexte de counselling. On ne peut se faire créditer le EDUA 5581 et les anciens 043.513 ou 043.545.

EDUA 5591 Information sur les carrières Cr.Hrs. 3

(Ancien 129.559) Étude du marché du travail, de la situation locale de l'emploi, et de la formation; analyse de l'information sur les carrières; évaluation et conception de centres d'information sur les carrières; étude de l'éducation qui mène vers le choix d'une carrière. On ne peut se faire créditer EDUA 5590 et les anciens 129.559, 043.514 ou 043.546.

EDUA 5601 Introduction à l'éducation inclusive Cr.Hrs. 6

(Ancien 129.560) Survol des préoccupations dans le domaine de l'éducation inclusive. Étude des barrières à l'inclusion en ce qui concerne les lois, la pédagogie, les attitudes et les organisations, de même que les modalités d'inclusion exemplaires. On ne peut se faire créditer le EDUA 5601 (ancien 129.560) et l'ancien 043.518.

EDUA 5631 Évaluation et programmation en éducation inclusive Cr.Hrs. 6

(Ancien 129.563) Étude des modalités d'évaluation basées sur le curriculum et sur le fonctionnement de la classe en vue de guider l'instruction des élèves éprouvant des difficultés d'apprentissage et de comportement en contexte d'inclusion. On ne peut se faire créditer le EDUA 5631 (ancien 129.563) et l'ancien 043.536. Préalable ou concomitant: le EDUA 5601 (ancien 129.560) ou l'ancien 043.518 ou l'équivalent.

EDUA 5661 Gestion des programmes d'orthopédagogie et de soutien Cr.Hrs. 3

(Ancien 129.563) Étude des modalités d'évaluation basées sur le curriculum et sur le fonctionnement de la classe en vue de guider l'instruction des élèves éprouvant des difficultés d'apprentissage et de comportement en contexte d'inclusion. On ne peut se faire créditer le EDUA 5631 (ancien 129.563) et l'ancien 043.536. Préalable ou concomitant: le EDUA 5601 (ancien 129.560) ou l'ancien 043.518 ou l'équivalent.

EDUA 5671 Stratégies pour l'organisation de classes et d'écoles inclusives Cr.Hrs. 3

(Ancien 129.567) Étude de l'organisation et de la mise en oeuvre à l'échelle de l'école de mécanismes de soutien visant à favoriser l'accès à ces écoles, l'apprentissage, la socialisation, le comportement, les rapports avec la famille, la participation de professionnels de la santé et les services communautaires. Analyse des stratégies d'organisation visant à améliorer la consultation, la coopération, la collaboration et le perfectionnement professionnel. On ne peut se faire créditer le EDUA 5671 (ancien 129.567) et l'ancien 043.540. Préalable ou concomitant: le EDUA 5601 (ancien 129.560) (ou 043.518) ou l'équivalent et le EDUA 5631 (129.563) (ou 043.536) ou l'équivalent.

EDUA 5681 Promotion d'un comportement responsable en milieu scolaire Cr.Hrs. 3

(Ancien 129.568) Étude des besoins des enfants ayant des problèmes de comportement en milieu scolaire. Analyse de la conceptualisation des troubles du comportement, des procédures d'identification et d'évaluation de ces troubles, ainsi que des stratégies d'intervention. Conception des stratégies d'intervention appropriées en milieu scolaire. On ne peut se faire créditer le EDUA 5681 (ancien 129.568) et le EDUA 5680 et l'ancien 043.542.

EDUA 5701 Psychologie sociale de l'éducation Cr.Hrs. 3

(Ancien 129.570) Examen des facteurs sociaux qui influencent le rendement et l'adaptation de l'élève à l'école. Importance accordée au fonctionnement des petits groupes et aux interactions en classe, ainsi qu'à l'analyse de la structure sociale de l'école et du rôle social de l'enseignant et de l'enseignante. On ne peut se faire créditer le EDUA 5701 (EDUA 5700) (ancien 129.570) et l'ancien 043.508.

EDUA 5731 Courants Actuels en Psychologie de l'Éducation 1 Cr.Hrs. 3

(Ancien 129.573) Examen des courants théoriques et des applications pratiques récents ou en émergence dans ce domaine. Le contenu variera d'année en année, il sera donc possible de se faire créditer ce cours plus d'une fois. On ne peut se faire créditer EDUA 5731 (EDUA 5730) et l'ancien 129.573.

EDUA 5741 Courants actuels en psychologie de l'éducation 2 Cr.Hrs. 3

(Ancien 129.574) Étude des fondements théoriques et des applications pratiques de développements récents et de nouveaux courants dans ce domaine.

EDUA 5751 Psychologie de l'Enseignement en Contexte Scolaire Cr. Hrs. 3

(Ancien 129.575) Étude des théories fondamentales d'apprentissage telles qu'elles sont appliquées à l'enseignement en salle de classe et utilisées dans l'élaboration des programmes. Analyse du traitement de l'information cognitive et des aspects comportemental, développemental et psychosocial. On ne peut se faire créditer le EDUA 5751 (ancien 129.5751) et l'ancien 43.543. Préalable: le EDUA 1801 (ancien 129.180), le PSYC 1201 (ancien 017.120), l'ancien 043.202 ou l'équivalent.

EDUA 5761 Psychologie de l'Enseignement en Contexte Scolaire Cr. Hrs. 3

(Ancien 129.576) Conçu principalement, mais non exclusivement, à l'intention des enseignantes, des enseignants et du personnel scolaire. Étude critique des fondements théoriques et des modèles d'enseignement principaux. Intégration et application d'approches et de stratégies d'enseignement existantes ou nouvelles. On ne peut se faire créditer le EDUA 5761 (ancien 129.576) et l'ancien 043.544. Préalable: le EDUA 1801 (ancien 129.180) ou le PSYC 1201 (ancien 017.120), l'ancien 043.202 ou l'équivalent.

EDUA 5801 Introduction à la recherche en éducation Cr.Hrs. 3

(Ancien 129.580) Étude de l'investigation scientifique dans le domaine de l'éducation. Examen des méthodes de recherche et d'analyse statistique dans le contexte éducatif. Cours particulièrement recommandé aux étudiantes et aux étudiants qui s'intéressent à l'évaluation et à la mise en application des résultats de la recherche. On ne peut se faire créditer le EDUA 5801 (ancien 129.580) et l'ancien 043.503.

EDUA 5811 Théories de Construction de Tests Cr.Hrs. 3

(Ancien 129.581) Étude des problèmes reliés à l'analyse d'items, à la validité, à la fidélité et à l'utilisation des tests dans le processus d'évaluation en milieu scolaire. Considération des tests normatifs et critériés. On ne peut se faire créditer le EDUA 5811 (ancien 129.581) et l'ancien 043.504.

EDUA 5851 Application de l'Informatique en Éducation 2 Cr.Hrs. 3

(Ancien 129.585) Cours avancé sur l'utilisation de logiciels d'apprentissage dans les classes ordinaires et dans l'enseignement aux élèves ayant des difficultés d'apprentissage. On ne peut se faire créditer le EDUA 5851 (ancien 129.585) et l'ancien 043.526. Préalable: le EDUB 5761 (ancien 132.576) ou l'ancien EDUB 5281 (ancien 081.528) ou l'autorisation du titulaire du cours, ou l'ancien 043.306.

EDUA 5901 Éducation et Processus du Développement 1 Cr.Hrs. 3

(Ancien 129.590) Survol du processus du développement de la conception à la puberté. Importance accordée aux fondements biologiques, au développement cognitif et aux aspects sociaux du comportement dans leurs rapports avec le processus éducatif. On ne peut se faire créditer le EDUA 5901 (ancien 129.590) et l'ancien 043.506.

EDUA 5911 Éducation et Processus de Développement 2 Cr.Hrs. 3

(Ancien 129.591) Étude de la croissance et du développement à l'âge postérieur à la puberté. Attention particulière accordée à leurs effets sur l'apprentissage au niveau secondaire. On ne peut se faire créditer le EDUA 5911 (ancien 129.591) et l'ancien 043.507.

EDUA 5921 Le Jeu Chez l'Enfant Cr.Hrs. 3

(Ancien 129.592) Examen du rôle du jeu dans l'apprentissage chez l'enfant, en incluant la perspective historique. Discussion du jeu en tant que partie intégrante du développement de l'enfant. Distinction entre les activités ludiques et non ludiques, considération des attributs conceptuels, perceptuels, linguistiques et physiques du jeu. On ne peut se faire créditer le EDUA 5921 (ancien 129.592) et l'ancien 043.529.

EDUA 5931 Observation du Comportement de l'Enfant Cr.Hrs. 3

(Ancien 129.593) Étude des techniques d'observation qualitatives qui peuvent être utilisées en milieu scolaire pour mieux comprendre le comportement de l'enfant, ses modes de penser et ses motivations. On ne peut se faire créditer le EDUA 5931 (ancien 129.593) et l'ancien 043.530.

Faculté d'éducation- 7000 Level (EDUA)**EDUA 7011 Administration scolaire en tant que champ d'étude et d'application Cr.Hrs. 3**

(l'ancien 129.701) Aperçu de l'administration scolaire. Importance particulière accordée à quelques-unes des grandes traditions intellectuelles du domaine de l'administration scolaire et analyse de certaines forces qui influencent la pratique de l'administration. On ne peut se faire créditer le EDUA 7011 (ancien 129.701) et l'ancien 116.731.

EDUA 7021 La politique en éducation Cr.Hrs. 3

(Ancien 129.702) Étude des caractéristiques politiques des organismes scolaires: répartition des pouvoirs dans la communauté, gouvernement local, changements politiques et rôle des divers systèmes de valeurs en éducation. On ne peut se faire créditer le EDUA 7021 (129.702) et l'ancien 116.702.

EDUA 7031 Le financement scolaire Cr.Hrs. 3

(Ancien 129.703) Étude des dimensions économiques et financières de l'éducation. Analyse des coûts et des dépenses, des sources et des types de revenus, de la productivité et de l'efficacité, de la planification et du budget. On ne peut se faire créditer le EDUA 7031 et l'ancien 116.703.

EDUA 7041 Aspects légaux en éducation Cr.Hrs. 3

(Ancien 129.704) Étude des questions légales dans le monde de l'éducation. On ne peut se faire créditer le EDUA 7041 (EDUA 7040) (ancien 129.704) et l'ancien 116.704.

EDUA 7051 Perspectives théoriques de l'administration scolaire Cr. Hrs. 3

(Ancien 129.705) Étude des tendances en matière de théorie organisationnelle et de pensée administrative ainsi que de la portée de celles-ci sur l'étude et l'administration d'organisations scolaires. On ne peut se faire créditer le EDUA 7051 (ancien 129.705) et l'ancien 116.705.

EDUA 7061 Planification organisationnelle et développement éducatif Cr.Hrs. 3

Revue des diverses approches à la planification et au développement éducatif. Importance particulière accordée au développement systématique des organismes d'enseignement. On ne peut se faire créditer les EDUA 7061 et l'ancien 116.709 ou 129.706.

EDUA 7071 Analyse des Organismes D'Enseignement Cr.Hrs. 3

(Ancien 129.707) Application de méthodes d'analyse organisationnelle aux établissements d'enseignement. On ne peut se faire créditer le EDUA 7-071 et l'ancien 129.707 ou 116.710.

EDUA 7081 Principes d'organisation et de mise en application du curriculum Cr.Hrs. 3

(Ancien 129.708) Revue des approches de modification et d'application du curriculum. Importance particulière accordée aux approches systématiques de modification des programmes en éducation. On ne peut se faire créditer le EDUA 7081 et l'ancien 116.706.

EDUA 7091 Séminaire - Problèmes administratifs en éducation Cr.Hrs. 3

(Ancien 129.709) Application de concepts théoriques à des situations concrètes. On ne peut se faire créditer le EDUA 7091 et l'ancien 116.706 ou 129.709.

EDUA 7101 Sujets particuliers en administration scolaire 1 Cr.Hrs. 3

(Ancien 129.710) Lecture sur des sujets d'importance en administration scolaire.

EDUA 7111 Sujets particuliers en administration scolaire 2 Cr.Hrs. 3

(Ancien 129.711) Recherche-action sur des sujets d'importance en administration scolaire. Le contenu de ce cours variera d'année en année, il sera donc possible de se faire créditer ce cours plus d'une fois. On ne peut se faire créditer EDUA 7111 (EDUA 7100) et l'ancien 129.711

EDUA 7211 Éducation et société Cr.Hrs. 3

(Ancien 129.721) Étude du rapport qui existe entre l'éducation et la société. Regard particulier sur l'appartenance ethnique, la famille, le statut socioéconomique et le rôle que joue l'école en tant qu'agent de socialisation dans un contexte canadien. On ne peut se faire créditer le EDUA 7211 et l'ancien 116.736

EDUA 7231 Critique sociale en éducation Cr.Hrs. 3

(Ancien 129.752) Examen critique de l'éducation. Regard particulier sur les diverses perspectives qui remettent en question une interprétation traditionnelle de l'éducation et de la scolarisation. On ne peut se faire créditer EDUA 7231 et EDUA 7230(129.723) et l'ancien 116.738.

EDUA 7241 Valeurs en éducation Cr.Hrs. 3

(Ancien 129.724) Étude de la place occupée par les valeurs en éducation. Approfondissement de la notion de valeur et de son omniprésence dans le domaine de l'éducation, ainsi que des approches, des tendances et des questions relatives aux valeurs en éducation. On ne peut se faire créditer EDUA 7241 et l'ancien 116.732.

EDUA 7281 Séminaire sur l'éducation interculturelle 2 Cr.Hrs. 3

(Ancien 129.728) Analyse critique des approches et de la recherche en éducation interculturelle. On ne peut se faire créditer EDUA 7281 (EDUA 7280) et l'ancien 116.725.

EDUA 7511 Séminaire sur des sujets d'actualité en counselling Cr.Hrs. 3

(Ancien 129.751) Progrès d'ordre professionnel, théorique et scientifique. Questions actuelles importantes. Problèmes sociaux particuliers en counselling. On ne peut se faire créditer EDUA 7511 et l'ancien 043.703.

EDUA 7521 Séminaire - Stage en counselling Cr.Hrs. 6

(Ancien 129.752) Expérience supervisée en counselling individuel et de groupe, Analyse de cas au moyen d'enregistrement sonore et vidéo. Exige un minimum de 180 heures de stage. Une note réussite ou échec sera attribuée pour ce cours. On ne peut se faire créditer EDUA 7521 (ancien 129.752) et aucun de EDUA 7520, tendon 043.704. Préalable: EDUA 5481 ou EDUA 5480 (129.548) (S) et l'autorisation du professeur. Préalable ou concomitant: EDUA 7550 ou EDUA 7551 ou l'ancien 129.755 (C+).

EDUA 7531 Groupes en counselling: théorie et pratique Cr.Hrs. 6

(Ancien 129.753) Étude de théories, de fondements logiques, d'objectifs et recherches. Acquisition d'une compréhension expérientielle du travail en groupe par la participation aux activités en salle de classe. Acquisition de techniques d'animation de counselling de groupe au moyen d'expériences de counselling de groupe au moyen d'expériences de counselling de groupes sous supervision. On ne peut se faire créditer EDUA 7531 et l'ancien 043.718. Préalables: EDUA 5541 (129.554) (ou 043.512) et EDUA 5481 (129.548).

EDUA 7541 Programmes d'orientation de carrières Cr.Hrs. 3

(Ancien 129.754) Cours destiné aux conseillères et aux conseillers qui souhaitent approfondir leurs connaissances des programmes d'orientation de carrières. Examen et évaluation de programmes et de diverses techniques de counselling. Elaboration de programmes innovateurs qui répondent aux besoins de ceux et celles qui ont recours aux services de counselling. On ne peut se faire créditer le EDUA 7541 et l'ancien 132.754 ou 043.719.

EDUA 7551 Théories en counselling Cr.Hrs. 3

(Ancien 129.755) Objectifs du counselling, évaluation des résultats du counselling, théories de la personnalité et du counselling. On ne peut se faire créditer le EDUA 7551 (EDUA 7550) et l'ancien 129.755 ou 043.705.

EDUA 7561 Counselling et diversité en milieu scolaire Cr.Hrs. 3

Étude des enjeux de la diversité pour la pratique en counselling en contexte scolaire. Analyse des considérations éthiques, théoriques et pratiques de la diversité qui influencent la nature et l'efficacité du counselling auprès d'une clientèle issue de divers milieux. On ne peut pas se faire créditer EDUA 7561 et EDUA 7560.

EDUA 7601 Séminaire en éducation inclusive Cr.Hrs. 6

(Ancien 129.760) Forum de discussions sur des sujets reliés à divers handicaps. Étude en profondeur de problèmes reliés aux besoins professionnels particuliers des étudiants et des étudiantes. On ne peut se faire créditer le EDUA 7601 (ancien 129.760) et l'ancien 043.705.

EDUA 7611 Séminaire sur l'éducation des enfants aux prises avec des troubles de comportement Cr.Hrs. 3

(Ancien 129.761) Cours à l'intention des enseignants et des enseignantes, et des conseillers et des conseillères scolaires. Études des connaissances théoriques et des outils nécessaires à l'élaboration et à la mise en oeuvre des programmes éducatifs pour les élèves aux prises avec des troubles de comportement. On ne peut se faire créditer le EDUA 7611 et l'ancien 043.707 (129.761). Préalable ou concomitant: EDUA 5601 (ancien 129.560) (ou 043.518) ou EDUA 5681 (ancien 129.568) (ou 043.542).

EDUA 7651 Stage en éducation inclusive Cr.Hrs. 6

Un minimum de 200 heures de stage supervisées s'inscrivant dans un contexte d'éducation inclusive. Des séminaires sont prévus afin de créer un cadre qui facilite l'étude dirigée et la discussion. Préalable: 18 crédits au niveau 5000 en éducation inclusive ou l'équivalent. On ne peut se faire créditer EDUA 7651 et les anciens 129.764 ou 043.706. Une note réussite ou échec sera attribuée pour ce cours.

EDUA 7741 Sujets particuliers en psychologie de l'éducation I Cr.Hrs. 3
(Ancien 129.774) Lecture et recherche sur des sujets d'importance en psychologie de l'éducation. Le contenu variera d'année en année, il sera donc possible de se faire créditer ce cours plus d'une fois. On se peut se faire créditer EDUA 7741 (EDUA 7740) et l'ancien 129.774.

EDUA 7751 Sujets particuliers en psychologie de l'éducation 2 Cr.Hrs. 3
(Ancien 129.775) Lecture et recherche sur des sujets d'importance en psychologie de l'éducation.

EDUA 7761 Techniques d'entrevue avec les enfants et les adolescents et adolescentes Cr.Hrs. 3

Étude des principes et des méthodes d'entrevue et de counselling auprès d'enfants, d'adolescents et d'adolescentes, de parents, d'enseignants et d'enseignantes, ou de toute autre personne intervenant auprès de l'enfant. Intégration de la théorie et de la pratique relatives au processus de communication et d'observation diagnostique et thérapeutique en situation naturelle auprès de l'enfant. On ne peut se faire créditer le EDUA 7761 et l'ancien 129.776 ou 043.717. Préalable: le EDUA 5821 (ancien 129.582 ou 043.505), le EDUA 5551 (ancien 129.555 ou 043.515), ou le EDUA 5481 (ancien 129.548) et le EDUA 5491 (ancien 129.549, 129.556 ou 043.516).

EDUA 7801 Méthodes de recherche en éducation Cr.Hrs. 3
(Ancien 129.780) Étude des devis expérimentaux et des techniques de collecte de données dans la recherche éducative dans le milieu: devis quasi expérimentaux, enquête et techniques d'observation, simulation, analyse du contenu et sociométrie. On ne peut se faire créditer le EDUA 7800 et EDUA 7801 et l'ancien 043.709. Préalable: le EDUA 5801 (ancien 129.580) ou l'ancien EDUA 6801 (ancien 129.680) ou 043.610 ou l'autorisation écrite de la professeure ou du professeur.

EDUA 7841 Méthodes de recherche qualitative en éducation Cr.Hrs. 3
(Ancien 129.784) Introduction aux méthodes de recherche qualitative. Discussion de l'éthique de la recherche et des théories qui sous-tendent la recherche qualitative. Cours axé sur les démarches à suivre pour effectuer une recherche, y compris la méthodologie et la collecte et l'analyse de données. On ne peut se faire créditer EDUA 7841 et EDUA 7840 (129.784). Préalable : EDUA 5801 (ancien 129.580) ou l'ancien 043.503 ou l'équivalent.

Maîtrise en Études canadiennes

CDSB 7011 Le Canada: Peuple et Territoire Cr.Hrs. 6
Le Canada se définit par son vaste territoire et son extraordinaire diversité sociale et économique. Étude de la présence millénaire des divers groupes autochtones; le dualisme canadien; l'immigration massive menant à la création d'une société multiculturelle et multilingue; les régionalismes; la situation de la femme canadienne; l'évolution du fédéralisme canadien; l'état de la famille canadienne et ses variantes régionales et de certains autres thèmes pertinents.

CDSB 7021 Le Canada : Identités, mythes, images Cr.Hrs. 6
Exploration en profondeur des diverses identités canadiennes en tentant de suivre l'évolution des images que les Canadiennes et les Canadiens se sont faites d'eux-mêmes au cours des siècles. Examen des mythes qui se sont développés chez les divers peuples canadiens depuis les débuts en retraçant leurs racines dans un passé plus ou moins lointain. Examen de l'historiographie nationale comme élément qui façonne l'identité canadienne.

CDSB 7031 Problèmes méthodologiques en études canadiennes Cr. Hrs. 3
Cours qui aide à définir et à mener à terme un mémoire de maîtrise ou tout autre travail de recherche majeur en études canadiennes. Accent sur les approches interdisciplinaires appliquées aux problèmes canadiens et l'élaboration d'une recherche concrète dans ce domaine. Cette recherche peut être le mémoire de maîtrise.

CDSB 7041 Textes canadiens de base Cr.Hrs. 3
Un certain nombre d'oeuvres sont indispensables à une connaissance approfondie du Canada. Familiarisation avec le plus grand nombre d'oeuvres possibles tirées de ce " canon "; évaluation de ces oeuvres de façon critique. On aura à présenter virtuellement une analyse critique d'une demi-douzaine d'oeuvres canadiennes, choisies en consultation avec la personne responsable du cours.

CDSB 7051 Francophonies canadiennes et internationales Cr.Hrs. 3
Ce cours en ligne explore l'émergence de la francophonie institutionnelle et le rôle du Canada dans ce processus. Il traite des enjeux sociaux, culturels, économiques et politiques de la francophonie à l'échelle régionale, nationale et internationale ainsi que des défis contemporains de la francophonie dans le contexte de la mondialisation, des enjeux identitaires et socioéconomiques chez les francophones en situation minoritaire.

CDSB 7061 Peuples autochtones du Canada : Amérindiens, Inuit et Métis Cr.Hrs. 3
Ce cours en ligne permettra de saisir la diversité des peuples autochtones du Canada, de comprendre les défis auxquels ils font face et d'analyser les rapports qu'ils entretiennent avec les autres composantes de la société canadienne et le reste du monde. L'accent sera mis sur leurs aspirations, leurs perspectives, leurs revendications, leurs réussites et leur contribution à la formation de l'identité canadienne.

CDSB 7071 L'état canadien : mondialisation et flux migratoires Cr.Hrs. 3
Ce cours en ligne propose une approche interdisciplinaire pour étudier les enjeux multiples qui entourent le sujet des flux migratoires au Canada dans le contexte de la mondialisation de l'économie et des communications. Il s'agira également de saisir l'histoire des phénomènes migratoires en tenant compte des facteurs politiques, économiques et sociaux et d'explorer les effets de l'immigration sur les expressions culturelles (arts et littérature).

CDSB 7081 Droits de la personne et histoire sociale au Canada Cr.Hrs. 3
Ce cours en ligne propose une approche interdisciplinaire qui permettra de saisir les enjeux sociaux, culturels, économiques et politiques qui jalonnent l'histoire de la reconnaissance et de l'exercice des droits de la personne dans la société canadienne. La reconnaissance et l'exercice des droits de la personne, plus particulièrement au Canada, seront abordés dans la perspective de leur impact social tout au long de cette évolution.

