> Senate
> Senate Chamber
> Room E3-262 Engineering Building WEDNESDAY, December 7, 2005
> 1:30 p.m.
> Regrets call 474-6892

AGENDA
I MATTERS TO BE CONSIDERED IN CLOSED SESSION

1. Report of the Senate Committee on Honorary Degrees

This report will be distributed to members of Senate at the meeting. Documentation will be available for examination by eligible members of Senate the day preceding the Senate meeting in the Office of the University Secretary, Room 312 Administration Building.

## II MATTERS RECOMMENDED FOR CONCURRENCE WITHOUT DEBATE

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## III MATTERS FORWARDED FOR INFORMATION

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Planning and Priorities Committee
IX REPORTS OF OTHER COMMITTEES OF SENATE, FACULTY AND SCHOOL COUNCILS
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4. Report of the Senate Committee on Admissions
a) re: Proposal from the Admissions Office(Enrolment Services) and University 1 to amendthe General Entrance Requirements of theUniversity and the Specific Subject Requirementsof University 1Page 183
b) re: Proposal from the Faculty of Agricultural andFood Sciences to amend its entrance requirementsfor students entering the Bachelor of Science(Agribusiness) programPage 195
c) re: Proposal from the Faculty of Human Ecology to amend its admission requirements, setting program-specific quotas ..... Page 196
d) re: Proposal from the Faculty of Physical Education and Recreation Studies to change the admission requirements for the undergraduate degree programs (Exercise and Sport Science, Recreation Management \& Community Development, Physical Education)
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X ADDITIONAL BUSINESS
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XI ADJOURNMENT
Please Call Regrets to 474-6892.
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## Preamble

1. The terms of reference for the Senate Committee on Curriculum and Course Changes (SCCCC) are found in Section 8.21 of the Senate Handbook. SCCCC is "to recommend to Senate on the introduction, modification or abolition of undergraduate programs, curricula or courses".
2. Since last reporting to Senate, the Senate Committee on Curriculum and Course Changes (SCCCC) met on October 5, 11, 13, and November 9, 2005 to consider curriculum and course changes from Faculties and Schools.

## Observations

1. General

In keeping with past practice most changes for departments totaling less than ten credit hours are forwarded to Senate for concurrence without debate. This is in accordance with the Senate's recommendation approved July 3, 1973, that course changes would cease to go to the SPPC when the resource implications are intrafaculty. Deans and Directors are to assess the resource implications to the respective units when course changes are proposed. Major changes in existing programs are to be referred to the SPPC for assessment of resource implications.
2. With the implementation of the new student enrolment information system Aurora, courses were assigned new course number designations. Many of the faculties are in transition using the new course numbering system. As such, this report consists of both the old and new course numbers. The 2006-2007 calendar will report all courses in the new numbering system.

## 3. Faculty of Agricultural and Food Sciences

In the process of working with the new Student Information System, a number of courses were identified as being in the current system which have not offered or appeared in calendars or registration guides for a considerable period of time. The following courses fall into this category and are recommended for deletion: In the Department of Animal Science: $\mathbf{3 5 . 4 1 3}$ Poultry Products, in the Department of Entomology: 38.204 Introduction Entomology, 38.419 Insect Ecology, and 38.426 Stored Product Entomology. Department of Plant Science recommends $\mathbf{3 9 . 1 1 0}$ General Plan Science and 39.309 Plant Breeding. The Department of Soil Science has one course, 40.305 Soils-Their Origin, Constitution and Distribution. The Agribusiness \& Agricuitural Economics Department is recommending that four courses be deleted: 61.205 Farm Business Management, 61.209 Introduction to Agricultural Policy, 61.310 Economics of Livestock Marketing, 61.413 Renewable Resources. Agriculture has one courses, 65.402 General Agriculture, while Food Science has ten courses: 78.102 Market Milk, 78.103 Quality Control,
78.104 Cheese Technology, 78.105 Communications, 78.106 Ice Cream Technology, 78.107 Judging Dairy Prod, 78.108 Butter Technology, 78.109 Diary Plant Service, 78.110 Plant Management, 78.111 Special Products, all of which are proposed for formal deletion.
61.100 Introduction to Agribusiness Management has, to date, been offered with a mandatory lab component. Students are now more proficient in computer usage than when the course was first introduced and, as such, the mandatory lab is not seen to be necessary and will be deleted effective 06R.

The Agricultural Diploma course 034.066 Materials Handling and Electrical Controls currently has a mandatory lab component. As the lab equipment is outdated and a viable lab component can no longer be offered, it is proposed that this second term course be deleted and re-introduced as BIOE.0710 Materials Handling and Electrical Controls without the lab as a 3 credit course. This course will be a restricted elective for diploma students.

Course 078.423 Food Research will be included in group 2 of the restricted electives for the Food Science Program. 078.420 Quality Control in Foods currently has a mandatory lab which is not being utilized and will be deleted effective 07R. Due to low subscription rates, 039.318 Greenhouse Crop Production will be deleted. 039.452 Crop Physiology will be deleted and reintroduced as PLNT 4AAA Physiology of Crop Plants for the 07R academic session in order to update the course to keep up to the current level of knowledge in this area.

The Faculty proposes the introduction of PLNT 4600 Issues in Agricultural Biotechnology as an additional course in the new Plant Biotechnology program effective in O7R. This course will be a requirement for all students in the B.Sc. (Agriculture) Plant Biotechnology program.

A modification of 039.457/PLNT. 4570 Research Methods in Plant Pathology is proposed to add "coverage of current molecular techniques" to the course description effective 07R. The Faculty proposes a modification to 039.458/PLNT. 4580 Molecular Plant-Microbe Interactions, part of the new Plant Biotechnology program that has not yet been offered. It will be offered in 07R without a lab component.
040.409 Chemical Analysis of Soils has not been offered for a number of years and will be deleted effective in the 07R session.

The Entomology Department has proposed a new first year course, ENTM 1000 The World of Bugs.

The Faculty of Agricultural and Food Sciences is currently working on developing minors within programs that will be available both to Agriculture students and those in other faculties. The Food Science and Plant Biotechnology programs have put forward proposals, which are outlined in the recommendation section of this report.

## 4. Faculty of Arts

## Anthropology

The Department of Anthropology is proposing the addition of two courses ANTH 2XXX Plagues and People and ANTH 3XXX Anthropology of Sex and Sexualities. These courses reflect the interests of new faculty.

## Asian Studies

The Program is proposing the addition of two courses ASIA 2XXX Premodern Chinese Literature in Translation and ASIA 2XYY Japanese Film. These courses reflect the research interest of faculty members. Modifications to List A Courses Acceptable for Asian Studies Credit have been submitted. These changes are a refection of the addition of courses ASIA 2XXX Premodern Chinese Literature in Translation and ASIA 2XYY Japanese Film being made in Asian Studies.

## Catholic Studies

The Program is proposing the addition of one new course, CATH 2XXX Special Topics in Catholic Studies. This course will allow the program to round out its course offerings. The topic of the course will change each year. The program is also proposing modifying the list of Approved Courses in Catholic Studies to reflect the addition of the following courses: CATH 2XXX Special Topics in Catholic Studies, 054.206 Medieval to Early Renaissance Art and Architecture, 054.207 Renaaissance to Baroque Art and Architecture, 054.313 Topics in Medieval Art and Architecture, 054.314 Topics in Renaissance and Baroque Art and Architecture, and 054.328 Early Byzantine Art and Architecture.

## Central and East European Studies

The Faculty has submitted modifications to the Honours Double Program and List B. These changes are a reflection of the deletion of 011.255 History of Ukraine and the addition of HIST.2AAA Introduction to Ukraine and HIST.2ABB Making of Modern Ukraine in the course offerings.

## Classics

The Department is proposing the deletion of CLAS 2600 Greek History and CLAS 2610 Roman History. These will be replaced with CLAS 2ABB Roman History: The Roman Republic, 753-30 BC, CLAS 2ACC Roman History: The Roman Empire, 30 BC-AD 337, CLAS 2XXX Greek History: Pre-Classical Greece, 1200479 BC, CLAS 2XYY Greek History: Classical Greece, 479-323 BC. The department is proposing the introduction of CLAS 3ABB Aegean and Italian Prehistory, CLAS 3ACC Hellenistic Civilization: History and Archaeology and CLAS 3ADD The World of Late Antiquity: History and Archaeology. Modification of CLAS 2460 Field Studies in Greek Archaeology and History and CLAS 2490 Field Studies in Roman Archaeology and History is being proposed. All these changes are a result of an increase in staff, and to better reflect teaching and research interest areas.

## Economics

Introduction of ECON 4AAA Evaluation of Economic Policy and Programs is being proposed by the department. This is an area of increasing importance in matters of public policy.

## French, Spanish and Italian - French

FREN 4XXX Études spécialisées is being proposed as a replacement for FREN 4600 Langue et littérature médiévales, which will be deleted. This change requires the modification of the Honours Single Program, to reflect FREN 4XXX Études spécialisées being proposed as a replacement for FREN 4600 Langue et littérature médiévales.

## French, Spanish and Italian - Spanish

To reflect the expertise of new faculty members in the Department, two new courses are being proposed. They are SPAN 1XXX Spanish for Native Speakers and SPAN 3XXX Dali, Lorca, Bunuel. Modifications in SPAN 1180 Introductory Spanish, SPAN 1260 Intermediate Spanish Language Review, SPAN 1270 Spanish Oral 1, SPAN 2200 Spanish American Culture and Civilization, SPAN 2510 Survey of Spanish Civilization, SPAN 2520 Introduction to Spanish Literature, SPAN 2530 Spanish American Literature 1, SPAN 2540 Spanish American Literature 2, SPAN 2550 Advanced Spanish Composition to reflect the change in pre-requisite requirements to SPAN 1XXX Spanish for Native Speakers. The General Major and Minor programs have changes to footnotes and the addition of Option 3 differentiating between students with native oral fluency in Spanish. The Advanced Major Program has changes to footnotes, changes to Years 3 and 4 of program requirements and addition of Option 3.

## French, Spanish and Italian - Italian/Italian Studies

This unit is proposing the deletion of ITLN 3330 Advanced Italian and replacing it with ITLN 3AAA Italian Through Literature and ITLN 3BBB Italian Through Film in order to diversify the Minor program and add more modern Italian courses to the proposed Major in Italian. Modifications to the Italian Studies General Major and Advanced Major Programs chart are being proposed. This includes the addition of 044.376, 044.377, ITLN 3AAA, and ITLN 3BBB and the deletion of 044.333, in the third year of the program. ITLN.3AAA Italian Through Literature, ITLN.3BB Italian Through Film, and 003.362 Latin Literature in Translation are proposed for inclusion on the list of Courses Acceptable for Italian Studies credit.

## German and Slavic Studies_German

The Department is proposing the deletion of GRMN 1110 Elementary German, GRMN 2110 Continuing German: Grammar Exercises Selected Texts, and GRMN 3520 German Literature in the 19th Century. The department is replacing GRMN 2230 A Survey of German Culture with GRMN 2AAA Introduction to German Culture 1 and GRMN 2ABB Introduction to German Culture 2. GRMN 2ACC Exploring German Literature will replace GRMN 2450 German Literature in the 20th Century. It will move from a 6-credit hour course to a 3-credit hour course to allow more flexibility in the undergraduate program. GRMN 2ADD

Independent Studies in German is being proposed to allow more flexibility in course offerings. GRMN 3AAA Deutsche Sprachpraxis 2 is proposed as a replacement for GRMN 3370 Deutsche Sprachpraxis 2. The course credit hours are being reduced from 6 to 3 . GRMN 3ABB Business German is proposed as a replacement for GRMN 3120 Business German. The course credit hours are being reduced from 6 to 3. GRMN 3ACC German Enlightenment and Classicism will replace GRMN 3570 German Literature in the 18th Century. The change in course title will provide students with a better idea of the course content. The credit hours are also being reduced from 6 to 3. GRMN 3ADD German Romanticism is proposed to replace GRMN 3510 German Romanticism. The course description has been updated. GRMN 3AEE Representations of the Holocaust is being proposed due to new faculty expertise in this area. New Faculty expertise has also led to the following courses being proposed for introduction: GRMN 3AFF Studies in Contemporary German Cinema, GRMN 3AGG Sex, Gender and Cultural Politics in the German-Speaking World, GRMN 3AHH History in Literature in GermanSpeaking Countries, GRMN 3AII German Representations of War and GRMN 3AJJ Independent Studies in German. The following two courses are being proposed to accommodate the re-establishment of the Pre-MA/MA program: GRMN 4AAA Senior Seminar in German Studies, GRMN 4ABB Introduction to German Language Structure. The course descriptions of the following are affected by the deletion of 008.111 and 008.211 and therefore need to be modified: GRMN 3210F Cours d'allemand commercial, GRMN 1120 Beginning German, GRMN 1120F Introduction a l'Allemand, GRMN 2100 Intermediate German, GRMN 2100F Allemand intermédiare, GRMN 2480 Special Topics in German 1, GRMN 2490 Special Topics in German 2, GRMN 3200 Deutsche Sprachpraxis 1, GRMN 3200F Deutsche Sprachpraxis 1, and GRMN 3380 Special Topics in German. The General Major, Minor, Honours Single and Honours Double Program charts are being modified to reflect the proposed course changes in the department.

## German and Slavic Studies - Slavic Studies

The department proposes deleting the following courses: RUSN 3810 Readings in Russian 1, RUSN 3820 Readings in Russian 2, UKRN 3860 Readings in Ukrainian 1 and UKRN 3870 Readings in Ukrainian 2. It is also proposing the introduction of UKRN 3XXX Ukrainian Poetry. These proposed changes are a result an addition of faculty members. Modifications are being made to the Russian Minor Program and Program Notes, and the General Ukrainian Major, Ukrainian Minor and Program Notes to reflect the course changes being proposed in the department. The department is also deleting List A (approved courses) for Russian and Ukrainian Programs, as courses will now be evaluated on an individual basis.

## Global Political Economy

The List of Suggested electives is being modified to included: ECON 2420 Economics of the Labour Process and Labour Relations, LABR 1270 Introduction to the Political Economy of Labour, LABR 1290 Introduction to the Canadian Labour Movement, and LABR 2420 Economics of the Labour Process and Labour Relations.

## History

The Department is proposing deleting HIST 2550W History of Ukraine (E) and replacing it with HIST 2AAAW Introduction to Ukraine (E) and HIST 2ABBW Making of Modem Ukraine (E). As a result of course deletions and additions in the Department of Classics, the program information will need to be updated. History course area designations are being modified, as a result of: (1) the deletion of the "Social" area from the area designations, and (2) other recommended changes to area designations requires modification of the following courses: HIST 1260W New Directions in History: Inquiries into the Cultural Basis of the Modern World (S), HIST 1270W New Directions in History: Inquiries into the Power Relations of the Modern World (S), HIST 1310W Canada-United States: Contemporary Problems in Perspective: Initial Problems (G), HIST 1320W Canada-United States: Contemporary Problems in Perspective: Current Problems (G), HIST.2180W The History of Catholicism to 1540 (S), HIST 2240W History of Antisemitism and the Holocaust (S), HIST 2280W Aboriginal History of Canada (C,S), HIST 2570W Nationalism in Modem Times (M,S), HIST 2580W A History of Fascism: The Politics and Culture of the Radical Right(S), HIST 2670W History of Capitalism (M,S), HIST 2680W A History of Socialism from the French Revolution to the Present (M,S), HIST 2690W The Common People in Industrial Society (S), HIST 2710 W Women in History (S), HIST 2900W Topics in Social History (S), HIST 2990W The History of Catholicism since 1540 (G,M,S), HIST 3130 Issues in Social History(S), HIST 3160 The Cultural History of Postwar Britain (S), HIST 3210 The History of Popular Radicalism in the Twentieth Century ( $G, M, S$ ), HIST 3550 Popular Culture, Crime and Punishment in England, 1550-1850 (E,S), HIST 3700 History of Working People and Labour Movements 1700 to the Present (M,S), HIST 3810 The Family, Love and Marriage in Western Society, 1500-1800 (S), HIST 3810F Famille, amour et mariage dans la société occidentale, 1500-1800 (S), HIST 3820 The Women's Movement 1850 to the Present (S), HIST 3910 The Ukrainians in Canada (C,S), HIST 3930 Minorities in the Modern World (S), HIST 4030 The History of Communism and Socialism since 1945 (S,M), HIST 4050 England in the Long Eighteenth Century (E,S), HIST 4310 Topics in Social History(S), HIST 4390 The History of White Attitudes and Policies towards Native Peoples in North America (S), and HIST 4890 Canadian Social History (C,S).

## Labour and Workplace Studies

The Labour and Workplace Studies Program is proposing the introduction of LABR 3XXX Workers, Employers and the State. This course will provide students with more in-depth topics central to the field that are introduced in first-year courses. Modifications to two courses are required due to changes in prerequisites due to changes in program requirements. These courses are: LABR 4510 Labour Studies Field Placement Seminar and LABR 4520 Labour Studies Field Placement. Several modifications are being made to the General Major, Advanced Major and Minor programs to reflect course and program changes. Modifications are being made to the List of Core Courses for Labour Studies and the List of Electives to reflect course and program changes.

It is being proposed that the name of the Labour and Workplace Studies Program revert to its original name of Labour Studies. The name "Labour Studies" is succinct and more accessible to electronic searches. The extra phrase "and Workplace Studies" is cumbersome and confusing while adding no useful information.

## Linguistics

Prerequisite list modifications are being proposed for LING 2850 Linguistic Anatomy and Physiology 2. An addition of LING 3840 Special Topics in ASL to the core courses list is being proposed. This addition was overlooked when the course was created a few years ago.

## Native Studies

Native Studies is proposing a modification to NATV 4260 Sacred Lands and Sacred Spaces of Indigenous Peoples, to add restriction of the course in Environment, and Geography 053.426. Modifications are also being proposed to the Native Studies Advanced Major. The total number of credit hours of courses offered by Native Studies in the advanced major is being increased to 21 from 18, and ECON 2350 is being deleted as a required for the Aboriginal Governance Stream.

## Psychology

The Department of Psychology is proposing the deletion of PSYC 3440 Perception and replacing it with PSYC 3XYY Perception and Attention. Psychology is also proposing the introduction of PSYC 3XXX Research in Cognitive Psychology to provide a hands-on research course in cognitive psychology. Modification of the course description for PSYC 3440F Perception is being proposed. A statement "cannot be held for credit with PSYC 3XYY Perception and Attention" will be added. The Program Chart notes will be updated to reflect the addition of PSYC $3 X Y Y$ Perception and Attention and PSYC 3XXX Research in Cognitive Psychology to Category D: Cognitive.

## Religion

To accommodate faculty expertise, two new courses are being proposed: RLGN 2XAA Approaches to the Qur'an (B) and RLGN 3XAA Images of the Prophet Muhammad: Classical and Contemporary Perspectives (B). RLGN 2XCC Issues in Science and Religion (C) is being proposed to replace RLGN 2500 Science and Religion (C).

## Ukrainian Canadian Heritage Studies

Modification to List C is being proposed. This is to accommodate the two new courses being introduced in History. They are: HIST 2AAAW Introduction to Ukraine (E) and HIST 2ABBW Making of Modern Ukraine (E).

## Women's Studies

Modifications to List A are being proposed. This includes the additions of the following courses: ANTH 2XXX Anthropology of Sex and Sexualities, 044.268 Littérature feminine française, 044.386 Études sur Beauvoir, GRMN 3AGG Sex, Gender and Cultural Politics in the German-Speaking World, 011.376 Problems in American History 1: Gender and Sexuality in 20th Century America, 011.357 History
of Women in Canada, 011.406 Gender History in Canada, and 019.324 Feminist Political Theory.

## St. Boniface College - Traduction

Modifications are being proposed to three courses to place restriction on holding credit for SPAN 1XXX being held with these courses. The courses being modifided are: 122.118 F Introduction à l'espagnol, 122.126F Espagnol intermédiaire, and 122.127F Espagnol oral 1.

## 5. School of Art

A number of courses have not been offered for several years but are still on the student information system. The following courses are to be formally deleted: 054.123 Letter\& Layout, 054.125 Foundation Sculpture, 054.220 Advanced Drawing 1, 054.225 Lettering 2, 054.227 Printmaking 1, 054.228 Graphic Design 1, 054.23019 \& 20 C Paint (Art History), 054.237 Italian Ron Sculpture (Art History), 054,238 Italian Ren Paint (Art History), 054.306 Silk Screen Workshop, 054.345 Advanced Printmaking, 054.347 Advanced Graphic Design, 054.364 Printmaking 2, 054.366 Graphic Design 2, 054.372 Silk Screen Work, 054.444 Artist Technique, 054.446 Illustration, 054.448 Sem Canadian Art I (Art History), 054.449 Sem Canadian Art 2 (Art History), 054.450 BFA Thesis, 054.451 Advanced Graphic Design 2, 054.454 Advanced Printing 2 (Studio), and 054.460 Sem Contemporary Art.

## 6. Faculty of Dentistry

The Faculty is proposing the deletion of 102.203 Removable Partial Denture Prosthesis and 102.204 Complete Denture Prosthesis. These courses would be replaced by RSTD.2XXX Removable Partial Denture Prosthodontics and RSTD.2XYY Complete Denture Prosthodontics.

## 7. Faculty of Education

The Faculty of Education is formalizing the arrangement of transferring credit for courses taken in the Certificate in Adult and Continuing Education towards receiving individual course credit in the Bachelor of Education Program. The courses are as follows: 129.157, 129.158, 129.156, and 129.159. The Faculty is formalizing the arrangement of transferring credit for courses taken in the Certificate in Teaching English as a Second Language towards receiving course credit in the Bachelor of Education Program. Students may use up to 6 credit hours of any of the courses to satisfy the complimentary course requirement of the After Degree B. Ed. Program. The courses are: 132.162, 132.164, 132.165, 132.186, 132.182, 132.166, and 132.184. The Faculty is formalizing the arrangement of transferring credit for courses taken in the Certificate in Teaching English as a Second Language towards receiving course credit in the Post Baccalaureate Diploma in Education Program. The courses are: 132.162, 132.164, 132.165, 132.186, 132.182, 132.166, and 132.184.

The Faculty of Education and the Faculty of Human Ecology are proposing the phasing out of the Bachelor of Human Ecology/Bachelor of Education Integrated Program. Final intake for this program would be the 2006-2007 academic session. The Senate Planning and Priorities Committee have reviewed and supports this recommendation.

## 8. Clayton H. Riddell Faculty of Environment, Earth, and Resources

## Environment \& Geography

ENVR 4ABC Ecotoxicological Risk Characterization, is being proposed to build upon new faculty expertise. ENVR 3XXX Environmental and Natural Resources Policy and ENVR 4XXX Advance Issues in Environmental Law and Policy have been offered as readings courses and it is being proposed that they become their own course. The Department is proposing modifying ENVR 3550 Environmental Analysis and ENVR 4550 Aquatic Chemistry. The pre-requisites for the course will be modified to reflect the deletion of 002.355 and 002.347 and the introduction of CHEM. $3 \times Y O$.

There are also modifications to the Environmental Science and Environmental Studies charts to incorporate the deletions of 007.123 and 007.124.

## Physical Geography

Physical Geography program chart will reflect the deletion of course 007.123.

## Geological Sciences

The department is proposing the introduction of GEOL 2XXX Introductory Mineralogy with Essential of Mineral Optics. This course will provide students with the necessary microscope experience for higher level courses. They are also proposing the introduction of GEOL 2YYY Optics and Spectroscopy of Minerals to replace the course 007.260 Optical Mineralogy and Petrography which is proposed to be deleted. The department is also proposing the deletion of courses 007.123 Physical and Historical Geology and 007.124 Earth and Planetary Science, both 6 hour courses which are now offered as 3 credit hour courses. This is to clean-up the course offerings. Modifications are being proposed in the following courses to accommodate the previously mentioned course additions and deletions: GEOL 1340 The Dynamic Earth, GEOL 1350 The Evolving Earth, GEOL 1360 Environmental Earth Science, GEOL 1370 The Earth in Space, GEOL 1440 Introduction of the Dynamic Earth, GEOL 2060 Introductory Geophysics, GEOL 2440 Structural Geology 1, GEOL 2570 Energy and Mineral Resources, GEOL 3310 Paleontology, GEOL 2250 Geology for Engineers, GEOL 2500 Introduction to Mineralogy, GEOL 2520 Igneous and Metamorphic Petrology, GEOL 2530 Introductory Sedimentary Petrology and Stratigraphy, GEOL 2770 Principles of Inorganic Geochemistry, GEOL 3110 Petrogenesis of Igneous Rocks, GEOL 3140 Gemology, GEOL 3290 Metamorphism, Structure and Tectonics, GEOL 3900 Sedimentology, GEOL 4280 Instrumental Techniques in Geology.

The Program Chart for Geology will show 007.123 and 007.124 are deleted and will no longer be offered. GEOL 2YYY will replace 007.260 in Year 2 of Major and

Honours programs. Footnote 8 has been added. It states "GEOL 1340 (or the former 007.123) is recommended for students wishing to take any Geological Sciences program. The course contains a lab component which will ease the student's transition to advanced level courses. The program chart for Geophysics will show 007.123 and 007.124 are deleted and will no longer be offered. GEOL 2XXX replaced 007.250 in Year 2 of Major and Honours programs. Footnote 8 has been added. It states "GEOL 1340 (or the former 007.123) is recommended for students whishing to take any Geological Sciences program. The course contains a lab component which will ease the student's transition to advanced level courses.

Calendar Entry for Degree Regulation for Section 2.1 will add "the Clayton H. Riddell Faculty of" to "Faculty of Environment, Earth, and Resources. A note will be added: Note: For students completing the Bachelor of Arts in Geography entry is based on a Minimum Performance Table found in section x.x.x. and section x.x.x. in this Chapter, respectively.

## 9. Faculty of Engineering

## Design Engineering

The design engineering group is proposing the introduction of ENG 1ABO Design in Engineering to take the place of $\mathbf{1 3 0 . 1 1 3}$ Introduction to Engineering and $\mathbf{1 3 0 . 1 4 0}$ Engineering Design, both of which are being deleted.

## Civil Engineering

As a result of changes in the common Preliminary Engineering Program, Civil Engineering is proposing the introduction ENG 1CC0 Introduction to Statics and deleting 130.135 Engineering Statics. To cover material from the deleted 130.140, Civil Engineering is introducing CIVL 2AAO Graphics for Civil Engineers. To reduce course credit hours from 4 to 3, Civil Engineering is proposing the introduction CIVL 2BBO Civil Engineering Geomatics and deletion of 023.282 Fundamentals of Geomatics.

## Electrical and Computer Engineering

As a result of changes in the common Preliminary Engineering Program, Electrical and Computer Engineering is proposing the introduction of ENG 1AAO Introductory Computer \& Electrical Engineering Techniques and the deletion of 130.118 Introduction to Electric Circuits.

## Mechanical and Manufacturing Engineering

As a result of changes in the common Preliminary Engineering Program, Mechanical and Manufacturing Engineering is proposing the introduction of ENG 1XXO
Introduction to Thermal Sciences and the deletion of 130.112 Thermal Sciences.

## 10. Faculty of Human Ecology

## Textile Sciences

The Department is proposing the modification of TXSC 3500 Textiles for the Healthcare Sector. When this course was proposed as part of the new Textile Sciences undergraduate program launched in September 2005, it was thought that it would include a laboratory session. However, it has turned out that the pedagogical structure of this course does not facilitate or require a lab.

## Human Nutritional Sciences

The Department is proposing the introduction of HNSC 4XXX Foods Option Practicum. This course is being offered in response to consultations with representatives from industry and governments.

## 11. Faculty of Medicine

The Faculty is proposing to delete 89.401 Pharmacology Conference and replace it with the course 89.4XXX Pharmacology Basics. This will allow Pre-master students who have completed a three year B.Sc. degree and who want to do Graduate Studies in Pharmacology, an opportunity to prepare to do so by taking this course..

## 12. Faculty of Nursing

Over the past year, the Faculty of Nursing has undertaken a review of the 4-year baccalaureate nursing program. The result of the review is a re-organization of the program and many course introductions, deletions, and modifications which will be implemented over the next several years. The Faculty is proposing introducing NURS 2XXX Health Promotion of Older Adults and their Families, to replace 49.215 Facilitation of Self Care which is being deleted. The introduction of NURS 2XXY Health Promotion of Child-Bearing and Child-Rearing Families is being proposed to replace two courses, 49.214 Health Promotion of Individuals and 49.327 Health Promotion in the Family, both of which are to be deleted. In order to fulfill changing professional expectations for entry level registered nurses, NURS 4XXY Clinical Nursing Practice 6 is being proposed. This course will include the community based project that is currently associated with NURS 4XXX Health Promotion in the Community. Therefore, NURS 4XXX Health Promotion in the Community is being introduced to replace $\mathbf{4 9 . 4 2 4}$ Health Promotion in the Community. The Faculty is proposing modifying NURS 3XXY Introduction to Legal and Ethical Foundations of Nursing Practice (previously 49.216 Introduction to Legal \& Ethical Foundations of Nursing Practice). The intent is to move it from the second year to the third year of the program. NURS 4XXZ Prevention of Iliness is being proposed as a replacement for 49.216 Prevention of Illness. There is a need to move it from a second year course to a fourth year courses. Deletion of 49.417 Issues \& Trends in Nursing and 49.419 Leadership in Nursing Practice is being proposed. Content will be taught in 49.431 Nursing Leadership: Practice and Issues. 49.428 Theories in Nursing Practice will no longer be offered. The content will be incorporated throughout the program.

Program changes include reducing the Humanities elective from 6 to 3 credit hours in year one. In year 3, an open elective will be removed and replaced with 030.121 Nutrition for Health and Changing Lifestyles in year 2. Also in year 3, an open elective will be replaced with a Department of Native Studies Elective. Term C will
be added to year 4. It will run May-July for the Clinical Practicum. This will be the final course of the program. Currently 12 credits of the 18 elective credits need to be at the 200 level or higher. It is proposed that six of the 12 credits of electives need to be at the 200 level or higher.

## 13. Faculty of Physical Education and Recreation Studies

The Faculty proposes that The Bachelor of Exercise and Sport Science degree name be changed to the Bachelor of Kinesiology degree. This will bring the program name in line with similar programs at other Canadian Universities.

## 14. Faculty of Science

## Actuarial Mathematics Program

The program is proposing a change in the Actuarial Mathematics Honours, Joint Mathematics - Actuarial and Joint Statistics- Actuarial programs by introducing higher performance criteria. In order to progress from year to year and to graduate, students will be required to have a 3.00 sessional grade point average and a grade of $\mathrm{C}+$ or better in each actuarial mathematics course.

## Biology Program

As the Faculty of Engineering has introduced its own course, 071.201 Biosystems for Engineers is proposed for deletion. Additionally, as part of a re-organization and restructuring of the introductory biology course, 071.125 Biology B and 071.125 F Biologie B are proposed for deletion. In their place, four three-credit hour courses will be introduced: BIOL 1AA0 Biology 1: Principles and Themes, BIOL 1AB0 Biology 2: Biological Diversity, Function and Interactions, BIOL 1AADF Biologie 1: Thèmes et principes, and BIOL 1ABOF Biologie 2: Fonction et interactions. As a result of this change, the former 071.125 will be replaced in all programs in the Faculty of Science with BIOL 1AA0 and BIOL 1AB0, with BIOL 1AB0 required for entrance (with grades as previously required in 071.125), and as a prerequisite to all courses that previously had 071.125 as a prerequisite.

## Chemistry-Microbiology Joint Program in Biochemistry

The requirements for the Honours and Major Cooperative options of the Biochemistry Joint program will be modified by requiring students to complete their first and second year course requirements and course 060.341 prior to beginning their first employment term. Course 060.341 will also be made a required course in year 3 of the Honours and Major Cooperative option programs in Biochemistry.

In order to reflect proposed course changes in Chemistry, course 002.347 is replaced by CHEM $3 X Y O$ Instrumental Analysis and CHEM 4XYO Bioanalytical Methods in the Chemistry-Microbiology Joint program in Biochemistry list of optional courses..

## Chemistry-Microbiology Joint Program in Biotechnology

In order to reflect proposed course changes in Chemistry, course 002.347 is replaced by CHEM 3XYO Instrumental Analysis and CHEM 4XYO Bioanalytical Methods in the Chemistry-Microbiology Joint program in Biotechnology.

## Botany

To reflect the teaching and research interests of new faculty, and as a part of an evolution sub-theme being developed within Botany and Zoology, BOTN 3AAO Evolutionary Biology is proposed for introduction. This course will be doublenumbered with the Zoology Course ZOOL 3AA0 Evolutionary Biology. The Honours and Major programs in Botany will be modified by making BOTN 3AA0 a required course in year 3 or 4 of each program, and reducing the number of required Botany courses accordingly.

## Chemistry

Course 002.347 Instrumental Methods of Analysis, a six credit hour course, will be deleted and replaced with two-three credit hour courses: CHEM 3XY0 Instrumental Analysis, and CHEM 4XY0 Bioanalytical Methods.
002.355 Environmental Analysis, currently double-numbered with a course in the department of Environment and Geography, will be deleted from the Chemistry department, but will continue to be offered by Environment and Geography.

The department is proposing the introduction of a cooperative option in the Chemistry Major and Honours programs. Accordingly, CHEM 3AB0 Work Term 1, CHEM 3BBO Work Term 2, CHEM 4AB0 Work Term 3, and CHEM 4BB0 Work Term 4 are proposed for introduction.
002.103 Carbon Chemistry in Nature and Society is being modified to add 002.090, the developmental chemistry course as an alternative prerequisite. To reflect the deletion of 002.347 and 002.355, the prerequisites in CHEM 4550 Aquatic Chemistry are being modified.

A number of modifications to the programs in Chemistry to reflect the changes noted above are also proposed.

## Computer Science

To reflect an emerging area of interest and to reflect the teaching and research interests of faculty COMP 4DM0 Introduction to Data Mining is proposed for introduction, in the Computer Science Program.

## Computer Science - Physics and Astronomy Joint Program

The Computer Science - Physics and Astronomy Joint Program is being modified to reflect the deletion of courses 016.237 and 016.341 in years two and three of the program respectively. PHYS 2AA0 and PHYS 2ABO will replace 016.237 in year two, and PHYS $3 X X 0$ and PHYS $3 X Y 0$ will replace 016.341 in year three of the program.

## Ecology Program

The Ecology Honours program will be modified to reflect the addition of BOTN/ZOOL 3AAO Evolutionary Biology to year three or four of the program. In addition, 022.400 and 001.413 will be deleted from year four of the program.

Courses ZOOL 4XX0 Applications of Population Ecology in Fisheries and Wildlife will be added and 022.481 will be deleted from the Ecology Approved Options List in the Honours and Major Ecology programs.

In the Ecology Honours, Major and Minor programs, ZOOL 3XXO Foundations of Population Ecology will be added to replace 022.348 which will be deleted.

## Genetics Program

The Genetics program proposes the addition of BOTN 4180 Molecular Genetics of Plant Development to the list of Optional Courses in the Genetics Program.

## Mathematics

The department proposes to allow students in the graduating year of the honours program to complete a minimum of 18 credit hours per regular session if they require 18 credit hours or less to graduate. In all other sessions, 24 credit hours are presently required in the Honours Mathematics program.

## Mathematics - Physics and Astronomy Joint Program

The Mathematics - Physics and Astronomy Joint Program is being modified to reflect the deletion of courses 016.341 and 016.369 in year three of the program. PHYS $3 X X 0$ and PHYS $3 X Y 0$ will replace 016.341, and PHYS 3AAO and PHYS $3 A B 0$ will replace 016.369. In year four of the program, PHYS 4XX0 will replace 016.438.

## Microbiology

Course MBIO 1220 Essentials of Microbiology is being modified by relaxing the restrictions on the course to allow it to be used to meet a program requirement in the Honours and Major programs in Microbiology. The department also proposes the inclusion of BOTN 3280 Medicinal and Hallucinogenic Plants on the Options List for all Microbiology programs.

## Physics and Astronomy

Course 016.237 Theoretical Physics is proposed for deletion, to be replaced by two-three credit hour courses PHYS 2AA0 Theoretical Physics 1, and PHYS 2ABO Theoretical Physics 2.

Course 016.341 Thermodynamics is proposed for deletion, to be replaced by twothree credit hour courses PHYS 3XX0 Classical Thermodynamics, and PHYS 3XYO Statistical Mechanics.

Course 016.369 Electromagnetism and Special Relativity is proposed for deletion, to be replaced by two-three credit hour courses PHYS 3AA0 Electro- and Magnetostatic Theory, and PHYS 3AB0 Electro- and Magnetodynamics and Special Relativity.
016.438 Quantum Physics 3, a six credit hour course will be deleted and replaced with the three credit hour PHYS 4XX0 Quantum Physics 3.

Course 016.458 Lasers and Modern Optics is proposed for deletion, to be replaced by two-three credit hour courses PHYS 4AAO Advanced Optics, and PHYS 4AB0 Lasers and Applications.

The Department is also proposing amendments to the Honours and Major programs in Physics and Astronomy to reflect the above noted changes.

## Psychology Program

With the introduction of courses PSYC 3XX0 Research in Cognitive Psychology and PSYC 3XYO Perception and Attention in the Faculty of Arts, it is proposed that the courses be added to the list of Category D Psychology courses in the B.Sc. Honours and Major programs in Psychology.

## Statistics

The Department proposes the modification of the Honours program in Statistics and Joint Honours programs in Statisitics and Actuarial Mathematics, and Statistics and Mathematics by no longer allowing 005.312 and 005.313 as substitutes for 005.347 and 005.348 , as they are not taught at the Honours level.

## Zoology

To reflect the teaching and research interests of new faculty, and as a part of an evolution sub-theme being developed within Botany and Zoology, ZOOL 3AA0 Evolutionary Biology is proposed for introduction, and 022.400 Principles and Processes of Evolution is proposed for deletion. The new course will be doublenumbered with the Botany Course BOTN 3AAO Evolutionary Biology. To reflect these changes, 022.400 will be deleted from year four and ZOOL 3AAO will be added to year 3 of the Zoology Honours and Major programs.

In an effort to update the curriculum and better reflect the teaching interests of Faculty, 022.348 Population Ecology, and 022.481 Fishery Biology and Management are being deleted, to be replaced with ZOOL 3XXO Foundations of Population Ecology, and ZOOL 4XXO Applications of Population Ecology in Fisheries and Wildife.

In order to better manage enrolments in high demand courses, 022.133 Anatomy of the Human Body will have a restriction added to the course description denying access to the course to students who have previously obtained credit in, or are currently registered in 022.253 Human Physiology 1 and 022.254 Human Physiology 2.

## 15. University 1

University 1 is proposing the deletion of 007.123 Physical and Historical Geology and 007.124 Earth and Planetary Sciences from the University 1 course list. Courses 007.134 The Dynamic Earth, 007.135 The Evolving Earth, 007.144 Introduction to the Dynamic Earth and 007.137 The Earth is Space will be added in their place. University 1 is proposing adding ENTM.1XY World of Bugs to the list of courses acceptable for credit in University 1.

As the Faculty of Engineering is deleting 130.113 Introduction to Engineering , 130.140 Engineering Design, 130.135 Engineering Statics, 023.282

Fundamentals of Geomatics Engineering, 130.118 Introduction to Electric Circuits, 130.112 Thermal Science and introducing ENG 1AB0 Design in Engineering, ENG 1CC0 Introduction to Statics, CIVL 2AA0 Graphics for Civil Engineers, CIVL 2BB0 Civil Engineering Geomatics, Eng 1AA0 Introductory Computer \& Electrical Engineering Techniques, ENG 1XXO Introduction to Thermal Sciences, University 1 wishes to remove the deleted courses and add the new courses to the list of courses acceptable for credit in University 1.

University 1 recommends changes to the requirements for course distribution in University 1. It is proposed that students will be required to take 6 credit hours from the Faculty of Arts, 6 credit hours from the Faculty of Sciences and 6 credit hours from Arts, Science or Clayton H. Riddell Faculty of Environment, Earth, and Resources, and 12 further credit hours from any other faculty of school that are on the list of courses acceptable for credit in University 1.

## Recommendations

The Senate Committee on Curriculum and Course Changes recommends that curriculum and course changes from the units listed below be approved by Senate:

## Faculty of Agricultural and Food Sciences

Faculty of Arts
School of Art
Faculty of Dentistry
Faculty of Education
Faculty of Engineering
Clayton H. Riddell Faculty of Environment, Earth, and Resources
Faculty of Human Ecology
Faculty of Medicine
Faculty of Nursing
Faculty of Physical Education and Recreation Studies
Faculty of Science
University 1
Respectfully submitted,
Professor B.L. Dronzek, Chair
Senate Committee on Curriculum and Course Changes
/nis

## Faculty of Agricultural and Food Sciences

## Agriculture

Courses to be deleted:
065.402 General Agriculture ..... -3
NET CHANGE IN CREDIT HOURS ..... -3
Animal Science
Courses to be deleted:
035.413 Poultry Products ..... $-3$
NET CHANGE IN CREDIT HOURS ..... -3
Entomology
Courses to be deleted:
038.204 Introduction Entomology ..... -3
035419 Insect Ecology ..... $-3$
038.426 Stored Product Entomology ..... -3
Courses to be introduced:
ENTM 1000 World of Bugs ..... $+3$
A survey of insect biology and life styles with emphasis on insect diversity and human-insectinteractions.
NET CHANGE IN CREDIT HOURS ..... -6
Plant ScienceCourses to be deleted:
039.110 General Plant Science ..... -3
039.309 Plant Breeding ..... $-3$
39.318 Greenhouse Crop Production -3
039.452 Crop Physiology ..... $-3$

Courses to be introduced:
PLNT 4AAA Physiology of Crop Plants +3
Concepts dealing with the physiological response of crop plants to the environment from the time of seed germination through to reproduction. Prerequisites:002.277 (060.277) or 002.236 (060.236); 039.350 or 001.201 and 001.202 or the former 001.230 (039.350 recommended). Students may not hold credit for PLNT 4AAA and the former 039.452.

PLNT 4600 Issues in Agricultural Biotechnology(3-O:O-O) +3
By lecture, group discussion, individual/group projects selected topics related to the introduction and application of modem 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 Plant Biotechnology.

Courses to be modified:
PLNT 4570 Research Methods in Plant Pathology 3 (0-0:3-L)
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 3 (3-0:0-0)
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

A proposal for a minor in Plant Biotechnology which would include: successful completion of PLNT 2530 Plant Biotechnology plus 15 additional credit hours from the following: PLNT 3170 Cytogenetics, PLNT 3520 Principles of Plant Improvement, PLNT 3570 Fundamentals of Plant Pathology, PLNT 4330 Intermediate Plant Genetics, 39.452 Crop Physiology or PLNT.4AAA Physiology of Crop Plants, PLNT 4540 Plant Genomics, 39.45SIPLNT. 4550 Developmental Plant Biology, PLNT 4560 Secondary Plant Metabolism, PLNT 4570 Research Methods in Plant Pathology, PLNT 4580 Molecular Plant-Microbe Interactions, PLNT.4XXX Issues in Agricultural Biotechnology.

## NET CHANGE IN CREDIT HOURS

## Soil Science

Courses to be deleted:
040.305 Soils and their Origin, Constitution and distribution ..... -3
040.409 Chemical Analysis of Soils ..... -3
NET CHANGE IN CREDIT HOURS ..... -6

## Agribusiness and Agricultural Economics

Courses to be deleted:
061.205 Farm Business Management -3
061.209 Introduction to Agricultural Policy -3
061.310 Economics of Livestock Marketing -3
061.413 Renewable Resources -3

Courses to be modified:
061.100 Introduction to Agribusiness Management (3)

ABIZ 1000 Introduction to Agribusiness Management (3-0:3-0) 3 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 .

## NET CHANGE IN CREDIT HOURS $-12$

## Food Science

Courses to be deleted:
78.102 Market Milk
78.103 Quality Control
$78.104 \quad$ Cheese Technology
78.105 Communications
78.106 Ice Cream Technology
78.107 Judging Dairy Products
$78.108 \quad$ Butter Technology
78.109 Dairy Plant Service
$78.110 \quad$ Plant Management
78.111 Special Products
(note - courses are very old - credit hours unknown)
Courses to be modified:
FOOD 4200 Quality Control in Foods ( $3-0 ; 0-0$ ) 3
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 .

A proposal for a minor in Food Science which would include: successful completion of 18 credit hours in Food Science (FOOD XXX) including FOOD 1000 Food Safety Today and Tomorrow and FOOD 2500 Food Chemistry. Students pursuing a minor would not be able to enrol in 2 courses which are restricted to students completing their Food Science degree: FOOD 4230 Food Research or FOOD 4120 Food Science Seminar.

## Biosystems Engineering

Courses to be deleted:
034.066 Materials Handling and Electrical Controls (3-L) -4

Courses to be introduced:
BIOE 0710 Materials Handling and Electrical Controls +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 034.071.

NET CHANGE IN CREDIT HOURS $-1$

## Faculty of Arts

## Department of Anthropology

Courses to be introduced:
ANTH 2XXX Plagues and People (C) +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 3XXX Anthropology of Sex and Sexualities (B) +3
Anthropological approaches to the study of human sexuality and the diversity of sexual expression and identification. Sex and sexualities are examined as social and cultural constructions, experiences, discourses, identities and practices taking place in specific local contexts and shaped by wider social processes including colonialism and globalization.
Prerequisite: a grade of " C " or better in one of:
076.120, 076.122, 076.152 , the former 076.109, 076.120 , or written consent of instructor.

## NET CHANGE IN CREDIT HOURS: +6 HOURS

## Asian Studies

Courses to be introduced:
ASIA 2XXX Premodem Chinese Literature in Translation +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 2XYY Japanese Film +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.

## NET CHANGE IN CREDIT HOURS: +6 HOURS

Modification to include ASIA 2XXX and ASIA 2XYY on List A Courses Acceptable for Asian Studies Credit.

Catholic Studies
Course to be introduced:

CATH 2XXX Special Topics in Catholic Studies +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 160.119 or written consent of Program Coordinator.

## NET CHANGE IN CREDIT HOURS: +3 HOURS

The List of Approved Courses in Catholic Studies is being modified to include the new proposed course CATH 2XXX Special Topics in Catholic Studies, as well as 054.206 Medieval to Early Renaissance Art and Architecture, 054.207: Renaissance to Baroque Art and Architecture, 054.313: Topics in Medieval Art and Architecture, 054.314: Topics in Renaissance and Baroque An and Architecture, 054.328 Early Byzantine Art and Architecture.

## Central and East European Studies

The chart for the Honours Double Program and for List B will be revised, deleting HIST 2550 and adding HIST 2AAA and HIST 2ABB.

## Classics

Courses to be deleted:
003.260 Greek History -6
003.261 Roman History -6

Courses to be introduced:
CLAS 2ABB Roman History: The Roman Republic, 753-30 BC +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. Students may not hold credit for CLAS 2ABB and the former 003.261.

CLAS 2ACC Roman History: The Roman Empire, 3OBC-AD 337 +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. Students may not hold credit for CLAS 2ACC and the former 003.261.

CLAS 2XXX Greek History: Pre-Classical Greece, 1200-479 BC +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. Students may not hold credit for CLAS 2XXX and the former 003.260.

## CLAS 2XYY Greek History: Classical Greece, 479-323 BC +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. Students may not hold creditfor CLAS 2XYY and the former 003.260.

## CLAS 3ABB Aegean and Italian Prehistory <br> $+3$

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.

## CLAS 3ACC Hellenistic Civilization: History and Archaeology +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.

CLAS 3ADD The Worid of Late Antiquity: History and Archaeology +3 The World of Late Antiquity: History and Archaeology (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.

Courses to be modified:
CLAS 2460 Field Studies in Greek Archaeology and History (6)
Offered as part of the Summer Evening Session, the course consists of three weeks on oncampus study followed by three weeks of travel to major sites and museums. Prerequisite: none, but one or more of 003.127, 003.128, 003.2XX, 003.2XY, or 3.267 recommended.

CLAS 249 Field Studies in Roman Archaeology and History (6)
Offered as part of the Summer Evening Session, the course consists of three weeks on oncampus study followed by three weeks of travel to major sites and museums. Prerequisite: none, but one or more of $003.127,003.128,003.2 \mathrm{AB}, 003.2 \mathrm{AC}$, or 3.268 recommended.

## NET CHANGE IN CREDIT HOURS: +9 HOURS

## Economics

Course to be introduced:

## ECON 4AAA Evaluation of Economic Policy and Programs +3

 Examination of government programs and policies, using cost-benefit analysis, costeffectiveness, program evaluation, decision-making under uncertainty, and emerging approaches. Case studies will draw upon poverty, health, transportation, environment, development and other areas. Prerequisite: written consent of department head.
## NET CHANGE IN CREDIT HOURS: + 3 HOURS

## French, Spanish and Italian - French

Course to be deleted:
FREN 4600 Langue et littérature médiévales

Courses to be introduced:
FREN 4XXX Études spécialisées +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.

## NET CHANGE IN CREDIT HOURS: +0 HOURS

Modification to Honours Single program chart, to include FREN 4XXX in year 4 and FREN 4600 in year 4.

## French, Spanish and Italian - Spanish

Courses to be introduced:
SPAN 1XXX Spanish for Native Speakers +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 1XXX and any of 044.118 (or 122.118), 044.126 (or 122.126) or 044.127 (or 122.127). Prerequisite: written consent of department head.

SPAN 3XXX Dali, Lorca, Bunuel +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 200 -level Spanish course or written consent of department head.

Courses to be modified:
SPAN 1180 Introductory Spanish (6)
A course designed for those with little or not 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 044.
118 and any of the 044.126 (or 122.126), 044.1XX or 122.118.
SPAN 1260 Intermediate Spanish Language Review (3)
Intensive language review for students who have completed 044.118 (or 122.118) or who have been granted prerequisite standing in 044.118 (or 122.118). Language stduey and practice in the classroom and language laboratory. Not open to students with native oral fluency. Students may not hold credit for 044.126 and any of the 044.1XX or 122.126. Prerequisite: a grade of " $C$ " or better in 044.118 (or 122.118), Senior 4 Spanish, or written consent of department head.

SPAN 1270 Spanish Oral 1 (3)
For students who do not have native oral fluency in Spanish and who wish to improve their understanding and correctness in spoken Spanish. Intensive oral practice in the classroom and language laboratory at the intermediate level discussing contemporary issues and topics relating to Hispanic current events, politics and culture. Not open to students with
native oral fluency. Students may not hold credit for both 044.127 and any of the 044.1XX or 122.127. Prerequisite: a grade of " C " or better in 044.126 (or 122.126) or written consent of department head.

SPAN 2200 Spanish American Culture and Civilization (3)
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 044.126 (or 122.126), 044.127 (or 122.127), 044.1XX, or written consent of department head.

SPAN 2510 Survey of Spanish Civilization (3)
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 044.126 (or 122.126), 044.127 (or 122.127), 044.1XX, or written consent of department head.

SPAN 2520 Introduction to Spanish Literature (3)
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 044.126 (or 122.126), 044.127 (or 122.127), 044.1XX, or written consent of department head.

SPAN 2530 Spanish American Literature 1 (3) Spanish American Literature from Colonial Times to Modernism. The chronicles, iyric poetry, and age of rebellion, romanticism, modernism, are studied through selections from the works of Major figures. Prerequisite: a grade of " C " or better in one of 044.126 (or 122.126), 044.127 (or 122.127), 044.1 XX , or written consent of department head.

SPAN 2540 Spanish American Literature 2 (3)
Spanish American Literature from Realism to Post-vanguardism. Realism, the novel of the Mexican revolution, post-modernist to post-vanguardist poetry, the contemporary narrative, are studied through selections from the works of Major figures. Prerequisite: a grade of " C " or better in one of 044.126 (or 122.126), 044.127 (or122.127), 044.1 XX , or written consent of department head.

SPAN 2550 Advanced Spanish Composition (3)
Designed to enhance the student's ability in writing Spanish. Emphasis on advanced grammatical concepts and clarity of expression. Prerequisite: a grade of " C " in one for 044.126 (or 122.126), 044.1XX, or written consent of department head.

## NET CHANGE IN CREDIT HOURS: +6 HOURS

Modified program chart as follows:
Added material
Deleted material

| UNIVERSITY 1 | YEAR 2 YEAR 3 | YEAR 4 |
| :---: | :---: | :---: |
| GENERAL MAJOR (OPTION 1) ${ }^{\text {I }}$ TOTAL: 30 CREDIT HOURS |  |  |
| 044.118 | $044.126,044.127^{+}$ -044.255 <br>  -9 credit hours from Spanish courses <br>  numbered at the 200 level ${ }^{2}$ <br>  -6 credit hours from Spanish courses <br>  numbered at the 300 level |  |
| GENERAL MAJOR (OPTION 2)ํ TOTAL: 30 CREDIT HOURS |  |  |
| $044.126 \text { and } 044.127^{+}$ | -044.255 12 credit hours from Spanish courses <br> -9 credit hours from Spanish courses  <br> numbered at the 300 level  <br> numbered at the 200 level $^{2}$  |  |
| GENERAL MAJOR (OPTION 3) ${ }^{2}$ TOTAL: 30 CREDIT HOURS |  |  |
| SPAN IXXX and 3 credit hours from Spanish courses numbered at the 20 level | -044.255$\frac{12 \text { credit hours from Spanish courses }}{\text { - } 9 \text { credit hours from Spanish courses }}$numbered at the 300 levelnumbered at the 200 level |  |
| ADVANCED MAJOR (OPTION 1)- TOTAL: 48-51 CREDIT HOURS |  |  |
| 044.118 |  | $044.328,044.329$ <br> 12 credit hours from 044.323, $044.326,044.327,044.367$ $044.368_{r}-044-3.71,044.37 \frac{1}{2}$ <br> 18 credit hours from Spanish courses numbered at the 300 level |
| ADVANCED MAJOR (OPTION 2)-1 TOTAL: 51 CREDIT HOURS |  |  |
| $044.126 \text { and } 044.127^{+}$ | -044.255 $-044.328,044.329$ <br> -9 credit hours from Spanish  <br> courses numbered at the 200 level  | 044.373, 044.3726, 044.327, <br> $044.367,044.368$ r-044.371, <br> 044.377 <br> 18 credit hours from Spanish courses numbered at the 300 level |
| ADVANCED MAJOR (OPTION 3) ${ }^{2}$ TOTAL: 51 CREDIT HOURS |  |  |
|  |  |  |
| MINOR (OPTION 1) ${ }^{1}$ TOTAL: 18 CREDIT HOURS |  |  |

MINOR (OPTION 3)2 TOTAL: 18 CREDIT HOURS
SPAN 1XXX and 3 credit hours 6 credit hours from Spanish 6 credit hours from Spanish
from Spanish courses numbered at courses numbered at the 200 level courses numbered at the 300 level the 200 level

## NOTES:




1 Options 1 and 2 are not open to students with native oral fluency In 5 panish. Students with natlve oral fluency in Spanish are advised io follow Option 3.
${ }^{2}$ Option 3 is open lo students with native oral fluency in Spanish. Such students may enter Spanish courges numbered at the 200 level with a grade of "C" or better in sPAN 1XXX.


## French, Spanish and Italian - Italian/Italian Studies

Course to be deleted:
ITLN 3330
Advanced Italian
$-6$

Courses to be introduced:
ITLN 3AAA Italian Through Literature +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 each of 044.209 and 044.210 or written consent of department head.

ITLN 3BBB Italian Through Film +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 044.208, or a grade of " $C$ " or better in each of 044.209 and 044.210 or written consent of department head.

## NET CHANGE IN CREDIT HOURS: + 0 HOURS

Revisions to Year 3 of the General Major and Revisions to Years 3 and 4 of the Advanced Major Programs. The addition of 6 credit hours from 044.376, 044.377, ITLN 3AAA, ITLN 3 BBB , and the deletion of 044.333

Revisions to List of "Courses Acceptable for Italian Studies", adding the two proposed courses: ITLN 3AAA and ITLN 3BBB and Classics 003.362 Latin Literature in Translation.

German and Slavic Studies - German

Courses to be deleted:
008.111 Elementary German -6
$008.211 \quad$ Continuing German: Grammar, Exercises, Selected Texts -6
008.223 A Survey of German Culture -6
$008.245 \quad$ German Literature in the 20th Century -6
008.321 Business German -6
008.337 Deutsche Sprachpraxis 2 -6
008.351 German Romanticism -3
008.352 German Literature in the 19th Century -6
008.357 German Literature in the 18th Century -6

Courses to be introduced:
GRMN 2AAA Introduction to German Culture $1 \quad+3$
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, ReUnification, and the European Union.

GRMN 2ABB
Introduction to German Culture 2
+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 2ACC Exploring German Literature +3 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, Jelinelc, 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. Conducted in German. Students may not hold credit for both GRMN 2ACC and the former 008.245. Prerequisite: a grade of " C " or better in 008.210 or written consent of department head.

GRMN 2ADD Independent Studies in German $+3$
The content of this class will vary from year to year depending on the needs and interests of instructors and students. Prerequisite: written consent of department head.

GRMN 3AAA Deutsche Sprachpraxis 2
$+3$
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. Students may not hold credit for both GRMN 3AAA and the former 008.337. Prerequisite: a grade of " C " or better in 008.320.

GRMN 3ABB Business German +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 3ABB and 008.321. Prerequisite: a grade of " C " or better in 008.210 or written consent of department head.

## GRMN 3ACC German Enlightenment and Classicism +3

 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 2ACC or written consent of department head.GRMN 3ADD German Romanticism +3
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 008.2AC or written consent of department head.

GRMN 3AEE Representations of the Holocaust +3
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. Prerequisite: a grade of "C" or better in GRMN 2ACC or written consent of department head.

GRMN 3AFF Studies in Contemporary German Cinema +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 3AGG Sex, Gender and Cultural Politics in the German-Speaking World +3 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. Prerequisite: a grade of "C" or better in GRMN.2ACC or written consent of department head.

GRMN 3AHH History in Literature in German-Speaking Countries +3
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.2ACC or written consent of department head.

GRMN 3All
German Representations of War $+3$ 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. 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 3AJJ Independent Studies in German +3
The content of this class will vary from year to year depending on the needs and interests of instructors and students. Prerequisite: written consent of department head.

GRMN 4AAA Senior Seminar in German Studies +3
Language of instruction: German. Introduces to 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 4ABB Introduction to German Language Structure +3 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.

Courses to be modified:
GRMN 3210F Cours d'allemand commercial (6)
Add restriction to newly introduced course, GRMN 3ABB
The following courses will have 008.111 and/or 008.211 removed from their course descriptions:
008.112 Beginning German (6)
008.112F Introduction a l'Allemand (6)
008.210 Intermediate German (6)
008.210 F Allemand intermédiaire (6)
008.248 Special Topics in German 1 (3)
008.249 Special Topics in German 2 (3)
008.320 Deutsche Spranchpraxis 1 (3)
008.320F Deutsche Spranchpraxis 1 (3)
008.338 Special Topics in German (3)

## NET CHANGE IN CREDIT HOURS: -3 HOURS

Revisions to General Major, Minor, Honours Single and Honours Double Programs as follows:

## Added material

Deleted material

### 8.14.3 German Program

For entry, continuation and graduation requirements for the General Degree and Honours Degree, see Section 4: Basic Faculty Regulations for the Three Programs Leading to a B.A.

## General Major Program

For entry to the Major, the prerequisite is a grade of " C " or better in 008.112 or 008.210, ene of-008.11.7, $008.712,008.210$, of 008.217 . 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 Program

For entry to the Minor, the prerequisite is a grade of " C " or better in 6 credit hours in German.ene of-008.177, 008.712,-008.210, or 009-274.

## Honours Program

For entry to the Honours program, see Section 4: Basic Faculty Regulations for the Three Programs Leading to a B.A.

| 8.14.4 German, Department Code: 008 |  |  |
| :--- | :--- | :--- |
| UNIVERSITY 1 | YEAR 2 | YEAR 3 |

## GENERAL MAIOR TOTAL: 30 CREDIT HOURS

| $\mathbf{0 0 8 . 1 1 2}$ or 008.210 ${ }^{\prime}$ | - GRMN 2AAA or GRMN 2ABB or GRMN 2ACC <br> -008.320 <br> - 15 additional credit hours in German |
| :---: | :---: |
| GENERAL MAJOR(OPTION-1)TOTAL:-30-CREEITHOURS |  |
| 008.717 | 008.210 ${ }^{+} 78$ eredit hoursin-Gefman |
| GENERAL AAJOR LOPTION \% TOTAL:-30 CREDIT-HOURS |  |
| 008.112 |  |


| 009.210-6r 008.21.7 | e 12 ereditheurs/n-German eoufser fumbered at the 200 level |
| :---: | :---: |
|  | a-17 aredit heurr in German courres fumbered at-the-300-level |

## MINOR TOTAL: 18 CREDIT HOURS

| 6 credit hours in German | 12 credit hours in German |
| :---: | :---: |
| AINOR-(ORTON-1)TOTAL: 18 CREDIT HOURS |  |
| 008.171 | $008.210^{+} 6$ eredithours-inGerman |
| AINOR (OPTION 2)TOTAL:-78-EREDT-HOURS |  |
| 608.117 |  |

HONOURS SINGLE $N O T$ CURRENTLY OFFFRED

| 008.112 or $008.210^{1}$ | * GRMN 2AAA or GRMN 2ABB <br> - GRMN 2ACC <br> - 008.320 <br> - 18 additional credit hours in German courses numbered at the 200, 300 or 400 level <br> - 30 credit hours in ancillary options | - GRMN 4AAA <br> - 9 additional credit hours in German courses numbered at the 400 level ${ }^{2}$ <br> - 6 additional credit hours in German courses numbered at the 300 or 400 level <br> - 6 credit hours in ancillary options |
| :---: | :---: | :---: |
| 008.270-0\%00.277 |  | - 18 - eredit hours in German fourf es-fumbered-at-the- 400 -tevel ${ }^{7}$ <br> - 6 heurs-aferedtin-zacillapy-options |

HONOURS DOUBLE NNOT CURRENTLY OFFERED


## German and Slavic Studies - Slavic Studies

Courses to be deleted:

Courses to be introduced:
UKRN 3XXX Ukrainian Poetry +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 052.131 or written consent of department head.

## NET CHANGE IN CREDIT HOURS: -9 HOURS

The modification to Russian Minor program and program "Notes" as follows:
Change Year 2 from " 12 credit hours in Russian courses or courses selected from List A below" to "12 credit hours in Russian Courses". Program notes have the additional statement "With written consent from the department head, courses offered by other departments may be approved for credit", also delete 052.381, 052.382. List A: Approved Courses for Russian is deleted in its entirety.

The modifications to General Ukrainian Major and Ukrainian Minor Programs and program notes are as follows: In Year two for major and minor programs delete "or courses selected from List A below". Program notes have the additional statement "With written consent from the department head, courses offered by other departments may be approved for credit", also delete 052.386, 052.387. List A: Approved Courses for Ukrainian is deleted in its entirety.

## Global Political Economy

The List of Suggested Electives is being modified. The following courses are being added: 018.242 (Cross-listed with 153.242), 153.127, 153.129, and 153.242 (Cross-listed with 018.242).

## History

Course to be deleted:
011.255W History of Ukraine (E) -6

Courses to be introduced:
HIST 2AAAW Introduction to Ukraine (E) +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. Students may not hold credit for both HIST 2AAA and the former 011.255.

HIST 2ABW Making of Modern Ukraine (E) +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. Students may not hold credit for both HIST 2ABB and the former 011.255.

Courses to be modified:
Course Areas - changes are being made to the following courses, a result of: (1) the deletion of "Social" area from the area designations, and (2) other recommended changes to area designations. Areas are as follows:

A: The Americans
B: Asian
C: Canadian
D: Ancient and Medieval
E: European
G: General
M: Modern World
011.126W New Directions in History: Inquiries into the Cultural Basis of the Modem World (G) (3)
011.127W New Directions in History: Inquiries into the Power Relations of the Modem World
(G) (3)
011.131W Canada-United States: Contemporary Problems in Perspective: Initial Problems
(C) (3)
011.132W Canada-United States: Contemporary Problems in Perspective: Current

Problems (C) (3)
011.218 W The History of Catholicism to 1540 (G) (3)
011.224W History of Antisemitism and the Holocaust (E) (6)
011.228W Aboriginal History of Canada (C) (6)
011.257W Nationalism in Modem Times (M) (3)
011.258W A History of Fascism: The Politics and Culture of the Radical Right(E) (3)
011.267W History of Capitalism (M) (3)
011.268W A History of Socialism from the French Revolution to the Present (M) (3)
011.269W The Common People in Industrial Society(G) (6)
011.271W Women in History(G) (6)
011.290W Topics in Social History(G) (6)
011.299W The History of Catholicism since 1540 (G) (3)
011.313 Issues in Social History(G) (3)
011.316 The Cultural History of Postwar Britain (E) (6)
011.321 The History of Popular Radicalism in the Twentieth Century (M) (6)
011.355 Popular Culture, Crime and Punishment in England, 1550-1850 (E) (3)
011.370 History of Working People and Labour Movements 1700 to the Present (G) (6)
011.381 The Family, Love and Marriage in Western Society, 1500-1 800 (E) (6)
011.381F Famille, amour et manage dans la société occidentale,1500-1800 (E) (6)
011.382 The Women's Movement, 1850 to the Present (G) (6)
011.391 The Ukrainians in Canada (C) (3)
011.393 Minorities in the Modem World (M) (3)
011.403 The History of Communism and Socialism since 1945 (M) (6)
011.405 England in the Long Eighteenth Century ( $E$ ) (6)
011.431 Topics in Social History (G) (6)
011.439 The History of White Attitudes and Policies towards Native Peoples in North America (C) (6)
011.489 Canadian Social History (C) (6)

## NET CHANGE IN CREDIT HOURS: +0 HOURS

Program information will be changed from "At most, 12 credit hours at the 100-level in History may count for a B.A. General, B.A. Advanced, or B.A. Honours degree credit. Courses 076.236 offered by the Department of Anthropology, and 003.260 and 003.261 offered by the Department of Classics count for credit towards a General Major, Advanced Major, Honours Single or Honours Double in History, 003.260 and 003.261 also count for credit towards a Minor in History." to "At most, 12 credit hours at the 100 -level in History may count for a B.A. General, B.A. Advanced, or B.A. Honours degree credit. Courses 076.236 offered by the Department of Anthropology, and CLAS 2XXX, CLAS 2XYY, CLAS 2ABB and CLAS 2ACC offered by the Department of Classics count for credit towards a General Major, Advanced Major, Honours Single or Honours Double in History, CLAS 2XXX, CLAS 2XYY, CLAS 2ABB and CLAS 2ACC also count for credit towards a Minor in History. "

## Labour and Workplace Studies

Courses to be introduced:
LABR 3XXX Workers, Employers and the State +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. Prerequisite: a grade of "C" or better in one of the following: 153.127 and 153.129 (the former 153.128); or 153.242 or 018.242.

Courses to be modified:
LABR 4510 Labour Studies Field Placement Seminar (3)
A Seminar to be taken concurrently with 153.452 in which each student will relate theory and practice. Students may not hold credit for both LABR 4510 and either the former 153.481 or 153.482 . Prerequisite: formal declaration of the Labour Studies Advanced Major and written consent of the Labour Studies coordinator.

LABR 4520 Labour Studies Field Placement (6)
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. Students may not hold credit for both LABR 4520 and either the former 153.481 or 153.482. Prerequisite: formal declaration of the Labour Studies Advanced Major Degree Program and written consent of the Labour Studies coordinator.

## NET CHANGE IN CREDIT HOURS: +3 HOURS

Change Program name to "Labour Studies". Labour Studies is succinct and more accessible to electronic searches. The extra phrase, "and Workplace Studies," is cumbersome and confusing while adding no useful information.

Modifications to the General Major, Advanced Major and Minor programs Modifications to the "List of Core Courses for Labour Studies" Modifications to the "List of Electives"

| UNIVERSITY 1 | YEAR 2 YEAR 3 YEAR 4 |
| :---: | :---: |
| GENERAL MAJOR TOTAL: 30 CREDIT HOURS |  |
| 153.127 and 153.129 | Option 1 <br> - Labour Studies 153.242 (or Economics 018.242) <br> - Labour Studies 153.370 (or History 011.370) or Labour Studies <br> 153.351 (or Economics 018.351 ) and 12 credit hours from the list of electives below; <br> 의 <br> Option 2 <br> - Labour Studies 153.242 (or Economics 018.242) <br> - Labour Studies LABR $3 X X X$ and 15 credit hours from the list of electives below <br> - Labour and-Worlflace-Studies-153.242-(er Ecenomier 018.242) <br> e either-Labour-and Workplaee-Studier-1.53.370 (or-Histery 071.370 ) or Labour-2ad Workplace Studies 753.357 for-Eenomier 018 -351 <br> - 77 credilhours framt the-list-afelectiver below |
| ADVANCED MAJOR TOTAL: 54 CREDIT HOURS |  |
| 153.127 and 153.129 | Option 1 $\frac{\text { Labour Studies } 153.242 \text { (or Econornics 018.242), } 153.301,153.307,153.370 \text { (ar History 011.370), }}{153.451^{1}, 153.452^{1}}$ |
| MINOR TOTAL: 18 CREDIT HOURELabour Studies 153.351 (or Economics 018.351 ) and 15 credit hours from the list of electives below; |  |
| . | or <br> Option 2 <br> - Labour Studies 153.242 (or Economics 018.242), 153.301, 153.307, 153.370, 153.451¹, 153.4521 <br> * Labour Studies LABR 3XXX and 18 credit hours from the list of electives below <br> - Labour and Worteplace-Stuties-153.242 (or Econoffier-018.242)r Labeuf-and Whorleplace Studies 753.357-ier Eexnomies-078.351) <br>  <br>  <br> -12 ereditheur fram the-list-af eleetivar-below |

Added material
Deleted materiat

List of Core Courses for Labour and-Workplace Studies
Labour and-Warkplaee Studies
153.127 Introduction to the Political Economy of Labour ..... 3
153.128* Introduction to Labour Institutions and Problerns ..... 3
153.129 Introduction to the Canadian Labour Movement ..... 3
153.242 Economics of the Labour Process and Labour Relations ..... 6 (same as Economics 018.242)
7.53.244 Eforemieand Secial-Measurement for-Ecomemits ..... 3
018.377 or Socialegy 077.229)
153.301 Labour Law ..... 3
153.307 Labour Relations and Occupational Health and Safety ..... 3Law
LABR Workers, Employers and the State ..... $\underline{3}$
3XXX
153.351 Industrial Relations (same as Economics 018.351) ..... 6
153.370 History of Working People and Labour Movements 17006 to the Present ( $\mathrm{M}, \mathrm{S}$ ) (same as History 011.370)
153.451 Labour Studies Field Placement Seminar ..... 3
153.452 Labour Studies Field Placement ..... 6

- No longer offered


## List of Electives

The following courses may be selected to fulfill the requirements for a degree in Labour and Worliplaee-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 and-Worleplace-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
018.228 Social Welfare and Human Resources 6
018.235 Community Economic Development 3
018.236 Women in the Canadian Economy 6
018.250 Labour and Technology (same as Labour and-Workplace 3
Studies 153.245)
018.317 Introduction to Quantitative Methods in Economics 3
018.330 Canadian Economic History 6
018.336 Labour Economics 6
018.351 Industrial Relations (same as Labour and-Werfelace 6 Studies 153.351)
078.366 Economic ldeas and Social Institutions 6

History
011.267 History of Capitalism (M,S) 3
011.268 A History of Socialism from the French Revolution to the 3 Present $(M, S)$
011.269 The Common People in Industrial Society (5) 6
011.271 Women in History (5) 6
011.272 The World Since 1945 (G,M) 6
011.297 Modern Canada: 1921 to the Present (C) 6
011.297F Le Canada mod erne: de 1921 à nos jours (C) (CUSB) $\quad$ b
011.305 Canada since 1945 (C) 6
011.321 The History of Popular Radicalism in the Twentieth 6 Century ( $G, M, 5$ )
011.357 History of Women in Canada (C) 6
011.370 History of Working People and Labour Movements 17006 to the Present ( $M, S$ ) (same as Labour and-Wortfplace Studies 153.370)
011.373 A History of Western Canada (C) 6
011.403 The History of Communism and Socialism since 19456
$(5, M)(H)$
Labour and Wortplaze-Studies
153.244 Economic and Social Measurement 3
153.245 Labour and Technology 3
(same as Economics 018.250)
153.301 Labour Law 3

153:303 Labour and the Bargaining Process 3
153.306 Workplace Health and Safety 3
153.307 Labour Relations and Occupational Health and Safety 3
153.308* Workers' Self Management 6
153.311 Special Studies in Labour Studies 3
153.312 Special Studies in Labour Studies 3
153.313 Employment Legisiation and the Protection of Workers 3
153.314 Pensions and Benefits 3
153.315 Labour Adjustment 3
153.320 Workers' Self-Management 3

LABR Workers, Employers and the State 3
3XXX
153.351 Industrial Relations (same as Economics 018.351) 6
153.370 History of Working People and Labour Movements 17006 to the Present ( $\mathrm{M}, 5$ ) (same as History 011.370 )
Native Studies
032.332 Aboriginal Organizations 3

Philosophy
015.229 Ethics and Society 6
015.283 Business Ethics 3
015.371 Critiques of Contemporary Society 6

Political Studies
019.457 Public Organizational Management ( H ) 6
019.465 The State in the Economy (H) 6
019.487* Government and Public Sector Unionism (H) 3

Psychology
017.351 Organizational Psychology 3
017.360 Environmental Psychology 3

Sociology
077.229 Introduction to Research Methods 6
077.337 Sociology of Work 3
077.337F Sociologie du travail (CUSB) 3
077.347 Political Sociology 3
077.347 F Sociologie politique (CUSB) 3
077.382 Qualitative and Historical Methods in Sociology 3
077.387 Social Inequality 3
077.387F Inégalités sociales (CUSB) 3

Women's Studies
156.250 Race, Class and Sexuality 3
156.355 Feminist Community Organizing: Theories and Practices 3
I.H. Asper School of Business (Faculty of Management)

Business Administration
027.203 Administrative Theory 3
027.208 Introduction to Management and Organization Theory 3
027.244 Human Resource Management 3
027.303 Contemporary Social Issues in Business 3
027.343 Selected Topics in Industrial Relations 3
027.345 Labour and Employment Relations (or the former 3
027.442 Compensation 3
027.448 Collective Bargaining and Administration ..... 3
027.452 Comparative Industrial Relations and Human Resource ..... 3Management
Interdepartmental Courses
098.300 Aboriginal Business Context: Influences and Impacts 3
098.409 Aboriginal Business Leadership 3

* No longer offered


## Linguistics

Courses to be modified:
LING 2850 Linguistic Anatomy and Physiology 2 (3)
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 126.120 and 126.138, or written consent of instructor.

## NET CHANGE IN CREDIT HOURS: + 0 HOURS

## List of "Core Courses"

126.384 will be added to the list of core courses. Adding it to the list had been overlooked when the course was created.

## Native Studies:

Course to be modified:
NATV 4260 Sacred Lands and Sacred Spaces of Indigenous Peoples (3)
Students will increase their understanding of the importance and significance of Sacred Lands and Sacred Spaces to International Indigenous Peoples. Experiential learning, seminar and a field component may be included depending on instructor. Consult the Department of Native Studies for details. Also offered as 053.426 by Environment, Earth and Resources. Students may not hold credit for both NATV 4260 and 053.426 . Prerequisite: written consent of department head.

## NET CHANGE IN CREDIT HOURS: +0 HOURS

## Modification to Native Studies Aboriginal Governance Stream - Advanced Major Program

Year 2 has an increase of credit hours in courses offered by Native Studies from 18 to 21. Remove 018.235 from Economics courses required. In the notes, the reference to 018.235 is removed in footnote 1.

## Psychology

Course to be deleted:

Completion of the entire CTESL is not required to receive individual course credit.
The shelf life for granting of credit in the B.Ed. program will be six years.
Students may use of to 6 credit hours of any of the above courses to satisfy the complimentary course requirement of the After Degree B. Ed. Program.

Students who complete the following CTESL courses are eligible for Post Baccalaureate Diploma transfer credit as follows:

CETSL course
39.301 Principles and procedures of Second Language Teaching
39.302 Teaching ESL Vocabulary and Pronunciation
39.303 Teaching ESL Grammar
39.304 Practicum in Second Language
Teaching
39.305 Content-based Second Language Instruction
39.306 Computers in Second Language
Teaching
39.308 Teaching ESL Literacy

PBDE transfer

### 132.162 Principles and Procedures of Second Language Teaching (3)

132.164 Teaching ESL Vocabulary and Pronunciation (3)
132.165 Teaching ESL Grammar (3)
132.186 Practicum in Teaching English as a Second Language (3)
132.182 Language and Content Instruction of ESL/Bilingual Students (3)
132.166 Computers in Second Language Teaching (3)
132.184 Recent Developments in CTL (3)

Completion of the entire CTESL is not required to receive individual course credit.
The shelf life for the granting of credit in the PBDE program shall be no more than nine years old at point of PBDE program completion date.

In order to receive University level credit as outlined above, the student must have achieved a minimum grade of C and be admitted to the PBDE program.

## Bachelor of Human Ecology/Bachelor of Education Integrated Program

This program will be discontinued. The final intake for this program will be 2006-2007 academic year.

## Clayton H. Riddell Faculty of Environment, Earth, and Resources

## Environment \& Geography

Courses to be introduced:

$$
\text { ENVR 4ABC Ecotoxicological Risk Characterization }+3
$$

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: one of ENVR 2180, BOTN 2180, ZOOL 2180 or AGRI 2180

ENVR 3XXX Environmental and Natural Resources Policy +3
This course provides an introduction to legal and policy processes and an overview of Canadian law relating to the environment and natural resources, The course provides a general introduction to legal principles and the legal and policy processes related to the environment and natural resources; reviews important laws governing environmental protection and management; and provides an overview of the law governing the ownership and disposition of natural resources. Prerequisite: ENVR. 2000 or permission of the instructor.

ENVR 4XXX Advanced Issues in Environmental Law and Policy +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: ENVR. $3 X X X$ or permission of the instructor.

Courses to be modified:
ENVR 3550-Environmental Analysis (3)L
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 3XYO or the former 002.347 or the former 002.355. Prerequisite: a grade of C in ENVR 2550 (CHEM 2550) or CHEM 2470 or permission of the department.

ENVR 4550-Aquatic Chemistry (3)
An examination of biogechemical 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. Offered in 2006-07 and in alternate years thereafter. Not to be held with CHEM 4550 (002.455). Prerequisite: a grade of $C$ in one of ENVR 3550 (128.355) (or the former CHEM 3550 (002.355)) or CHEM $3 X Y 0$ (or the former CHEM 2347 (022.347) or permission of the department.

## NET CHANGE IN CREDIT HOURS $\mathbf{+ 9}$

## Program Chart

Environmental Science and Environmental Studies both have removed 007.123 and 007.124 in footnote 3 since these courses are being deleted by the Department of Geological Sciences.

## Physical Geography

Physical Geography program chart will reflect the deletion of course 007.123.

## Geological Sciences

Courses to be deleted:
007.123 Physical and Historical Geology -6)
$007.124 \quad$ Earth and Planetary Science -6)
$007.260 \quad$ Optical Mineralogy and Petrography -3
Courses to be introduced:
GEOL 2XXX Introductory Mineralogy with Essential of Mineral Optics $\quad+3 \mathrm{~L}$
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 or the former 007.250. Prerequisite: 40S Chemistry, CHEM 0900, or equivalent and one of GEOL 1340 or GEOL 1440 (or the former 007.123, 007.124, 007.134, or 007.144) or consent of department. CHEM 1300 is highly recommended.

GEOL 2YYY Optics and Spectroscopy of Minerals +3L
Use of the petrographic microscope; microscopic recognition of common rock-forming minerals; Introduction to spectroscopic techniques in geosciences (including optical, vibrational and Iuminescence techniques). Not to be held with the former 007.260. Corequisite: GEOL 2500 or GEOL $2 X X X$ or consent of department.

Courses to be modified:
GEOL 1340 The Dynamic Earth (3)
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, GEOL 2250 or the former 007.123, $007.124,007.127,007.132$, or 007.133 . Recommended for students intending to proceed in further courses in the Geological Sciences.

GEOL 1350 The Evolving Earth (3)
An introduction to interpretation of the geologic record, with a survey of the Earth's origin and evolution, its life, and resources through time. Not to be held with the former 007.123, 007.126, or 007.133. Prerequisite: one of GEOL 1340, GEOL 1440, GEOL 2250 (or the former 007.124, 007.127 or 007.132).

GEOL 1360 Environmental Earth Science (3)
An integrated approach to environmental Earth Science. The effect of Earth's internal processes on the external processes in the atmosphere and hydrosphere. Topics include: the water cycle, weather, climate and climate development, pollution. Not to be held with the former 007.132. Prerequisite: one of GEOL 1340, GEOL 1440, or GEOL 2250 (or the former 007.123, $007.124,007.126$, or 007.133).

GEOL 1370 The Earth in Space (3)
An introduction to astronomy and its emphasis on the Planet Earth and its place in the solar system. The Earth's oceans and atmosphere are covered and compared to those of the Earth's
nearest neighbours and to some moons of the outer planets. Not to be held with the former 007.124. Prerequisite: one of GEOL 1340, GEOL 1440, or GEOL 2250 (or the former 007.123, 007.125, 007.132, or 007.133).

GEOL 1440 Introduction of the Dynamic Earth (3)
A non-laboratory 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. Not to be held with GEOL 1340, GEOL 2250 (or the former 007.123, 007.124, 007.126, $007.127,007.132$, or 007.133).

GEOL 2060 Introductory Geophysics (3)L
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 GEOL 1440 (or the former 007.123, 007.124, 007.132, or 007.133), three credit hours from MATH 1300, MATH 1310, MATH 1500, MATH 1510, MATH 1520, MATH 1530, and three credit hours from PHYS 1020 or PHYS 1050; or consent of department.

GEOL 2440 Structural Geology 1 (3)
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 or GEOL 1440 (or the former 007.123, 007.124, 007.132, or 007.133).

GEOL 2570 Energy and Mineral Resources (3)
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 to be held with the former 007.255 or 007.256. Not for credit in a Major or Honours program in Geological Sciences. Prerequisite: one of GEOL 1340 or GEOL 1440 (or the former 007.123, 007.124, 007.132, or 007.133).

## GEOL 3310 Paleontology (3)

The study of fossils: invertebrate paleontology, with an introduction to paleontologic principles, vertebrate paleontology, and paleobotany. Prerequisite: GEOL 1340 or GEOL 1440 (or the former 007.123, 007.124007 .132 or 007.133), or consent of department.

GEOL 2250 Geology for Engineers (4)L
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 , GEOL 1440 , or the former $007.123,007.124,007.126,007.132$ or 007.133.

GEOL2500 Introduction to Mineralogy (3)
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. Not to be held with GEOL 2XXX or the former 007.207 or 007.262 . Prerequisite: 40 Chemistry or CHEM 0090 and one of 007.123 (C), 007.124 (C), 007.134 (C), or 007.144 (or the former 007.132 or 007.133 ) (C) or consent of department 002.130 is highly recommended.

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). Not to be held with the former 130.118.Prerequisites: A minimum grade of $60 \%$ in pre-calculus Mathematics 40S, or the former Mathematics 40S, Physics 40S, and Calculus 40S.

ENG 1XXX Introduction to Thermal Sciences (2-2T:0-0)3 or (0-0:2-2T) +3 Properties of pure substances; First Law for Closed Systems; First Law for Open Systems; Second Law; Examples of Power Cycles and Refrigeration Cycles. Not to be held with former 130.112. Prerequisites: A minimum grade of $60 \%$ in pre-calculus Mathematics 40 s , or the former Mathematics 40s, Physics 40s, and Chemistry 40s.

## NET CHANGE IN CREDIT HOURS

## Civil Engineering

Course to be deleted:
023.282

Fundamentals of Geomatics Engineering -3

Courses to be introduced:
CIVL 2AAO Graphics for Civil Engineers (1-2T:0-0) +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.2BBO Fundamentals of Geomatics Engineering.

CIVL 2BBO Civil Engineering Geomatics (2-2L:0-0) +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. Co-requisite: CIVL.2AAO Graphics for Civil Engineers.

NET CHANGE IN CREDIT HOURS

## Faculty of Human Ecology

## Textile Sciences

Course to be modified:
TXSC 3500 Textiles for the Healthcare Sector
This course covers the recent developments of a range of technical textiles for the healthcare sector, including implantable textiles, barrier fabrics, and smart textiles. Prerequisites: 064.261; 028.205 or any 200 -level or 300 -level research method course; and 002.222.

Human Nutritional Sciences

Course to be introduced:

This course involves supervised application of food quality, safety, and management principles in a commercial or government setting. Requirements include 360 hours of work related to the field experience. Pre-requisites: Completion of 84 credit hours in Human Nutritional Sciences Foods Option including HNSC 3260, HNSC 3330, FOOD 4150 and one of GMGT 2O30, GMGT 2070 and GMGT 2O8O. Application required. Limited enrolment

## Faculty of Medicine

Course to be deleted:
089.401

Pharmacology Conference
-6
Course to be introduced:
089.4XXX Pharmacology Basics +6

General mechanism of action of the important groups of drugs and factors which control and modify their effects. Overview of use and side effects of drugs. Not to be hled with the former 89.210 .

NET CHANGE IN CREDIT HOURS

## 0

## Faculty of Nursing

Courses to be deleted: 2007/08
49.214 Health Promotion of Individuals -4
$49.215 \quad$ Facilitation of Self Care $\quad-3$
$49.327 \quad$ Health Promotion in Families $\quad-3$
Courses to be deleted: 2008/09
49.216 Introduction to Legal \& Ethical Foundations of Nursing Practice -3
49.424 Health Promotion in the Community -4

Courses to be deleted: 2009/10
49.217 Prevention of illness -3
$49.417 \quad$ Issues \& Trends in Nursing $\quad-3$
$49.419 \quad$ Leadership in Nursing Practice $\quad-3$
$49.424 \quad$ Health Promotion in the Community $\quad-3$
$49.428 \quad$ Theories in Nursing Practice $\quad-3$
Courses to be introduced 2006/07:
NURS 2XXX Health Promotion of Older Adults and their Families +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 2XXY Health Promotion of Child Bearing \& Child Rearing Families +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.
Pre-requisite: 022.132, 022.133, 049.126 and 049.128. Pre-or co-requisite 049.212.
Courses to be introduced 2008/09:
NURS 4XXX Health Promotion in the Community +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. Relevant theories and research about group process will be incorporated $n$ the analysis of community health issues.

NURS 4XXY Clinical Nursing Practice $6 \quad+3$
Students will apply relevant concepts, theories, and research in primary health care, population health, and prevention of illness. The focus is on nursing practice at the aggregate level with a focus on the development of skills necessary to work effectively with at risk populations and communities. Pre-requisites: 49.218; 49.219; 49.330 49.332. Co-requisites: NURS 4XXZPrevention of Illness and NURS 4XXXHealth Promotion In the Community.

Courses to be modified 2007/08:
NURS $3 X X X$ Introduction to Legal and Ethical Foundations of Nursing Practice (3) This course will examine the legal and ethical foundations that guide nursing practice. The processes of critical analysis and reasoning will be applied to common legal and ethical dilemmas. Not to be held with the former 049.216.

Courses to be modified 2008/09:
NURS 4XXZ Prevention of IIIness (3)
This course focuses on the nurse's role in the prevention of dysfunction and the early detection of health risks in the individual, family and community. Issues and research relevant to illness prevention are incorporated. Not to be held with the former 049.21ф. 7

Proposed Program:

## Year 1 (30 Credits)

022.132 Anatomy of the Human Body (3)
022.133 Physiology of the Human Body (3)
049.126 Human Growth \& Development (3)
049.128 Introduction to Nursing (3)
060.122 Essentials of Microbiology (3)

## Humanities Elective (3)

Science ( 6 credit hours of courses offered by the Faculty of Science)
Social Science ( 6 credits of):
017.120 Introduction to Psychology OR
077.120 Introduction to Sociology OR
076.121 Human Origins \& Antiquity and
076.122 Cultural Anthropology

Year 2 (31 Credits)
005100M Statistical Analysis 1(3)
049.212 Nursing Health Assessment (4)
049.213 Nursing Skills Laboratory (2)
049.218 Clinical Nursing Practice 1 (3)
049.219 Clinical Nursing Practice II (3)
049.222 Pharmacology in Nursing (3)
30.121 Nutrition for Health and Changing Lifestyles (3)
049.2XX "Health Promotion of Child Bearing \& Child Rearing Families" (6)
049.2XY "Health Promotion of Older Adults and their Families" (4)

Year 3 (29 Credits)
049.321 Nursing Research Methods (3)
049.328 Nursing Skills Laboratory (2)
049.329 Health Restoration in Nursing (6)
049.330 Clinical Nursing Practice III (3)
049.331 Health Maintenance in Nursing (6)
049.332 Clinical Nursing Practice IV (3)
049.3XX Introduction to Legal and Ethical Foundations of Nursing Practice (3)

Department of Native Studies Elective (3) (Selected options available)
032.122 The Native Peoples of Canada, Part 1
032.124 The Native Peoples of Canada, Part 2
032.202 The Metis of Canada
033.222 Native Societies and the Political Process
032.245 Images of Indian People in North American Society
032.324 Native Medicine and Health
032.336 Aboriginal Women of Canada

Year 4 (39 Credits)
Term A (16cr)**
049.425 Palliative Nursing Care (3)
049.426 Nursing Care in Mental Health and Illness (3)
049.427 Clinical Nursing Practice V (4)

Electives (6)

## Term B (13cr)**

049.4XX Clinical Nursing Practice VI (3)

### 49.4XY Health Promotion in the Community

049.4XZ Prevention of IIIness (3)
049.431 Nursing Leadership: Issues \& Practices

## Term C

May - July (10 Credits)
049.429 Clinical Practicum, 12 weeks

Regarding Electives:
Six credits of the 12 credits of electives need to $b$ at the 200 level or higher.
**Students may begin year 4 with Term A or Term B. The Senior Practicum is the final course of the program.

## Transition

Students admitted in 2005 (06R) will have the option of completing the old program, assuming full-time study, or may transfer into the new program. Students admitted prior to 2005 must complete the requirements of the current program. Students studying part-time or on a leave of absence will be considered on a case-by-case basis. The following are recommended guidelines for the last years courses in the current program will be offered;
Year 2-2006.2007
Year 3-2007-2008
Year 4-2008-2009

## Faculty of Physical Education and Recreation Studies

The name of the Bachelor of Exercise and Sport Science degree be changed to the Bachelor of Kinesiology degree effective October 2006.

## FACULTY OF SCIENCE

## Actuarial Mathematics Programs

In the Actuarial Mathematics Honours, Joint Mathematics - Actuarial and Joint Statistics Actuarial programs, the following will be added to the General Calendar:

To continue in the Honours program, i.e., to proceed from Year 2 to Year 3 and from Year 3 to Year 4, and to successfully complete Year 4 of the Honours program and to graduate with the Honours degree, a student must have a sessional Grade Point Average of 3.00 or better, and a grade of "C+" or better in each Actuarial Mathematics course in the program.

## Biology Program

Courses to be deleted:
071.201 Biosystems for Engineers -3L
071.125 Biology B -6L

Courses to be introduced:
071.1AA Biology 1: Principles and Themes +3L

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 $071.100,034.259$, or the former 071.125, 071.123 or 071.201. Recommended prerequisites: Biology 40S, and one of Chemistry 40 S (or 002.090), or Physics 40 ( or 016.090).
071.1AB Biology 2: Biological Diversity, Function and Interactions . +3L

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 071.101, 034.259, or the former 071.125, 071.123 or 071.201. Prerequisite: 071.1AA (C).

NOTE: 071.1 AB is a prerequisite to further courses in Microbiology and to most courses in Botany and Zoology. It is also intended for students proceeding to Agricultural and Food Sciences, Dentistry, Human Ecology, Medicine, Optometry, Pharmacy, Veterinary Science, Physical Education and Science.
071.125 will be replaced in all programs in the Faculty of Science with 071.1AA and 071.1AB; with 071.1AB required for entrance (with grades as previously required in 071.125), and as a prerequisite to all courses that previously had 071.125 as a prerequisite.

## NET CHANGE: -3 credit hours

## Chemistry-Microbiology Joint Program in Biochemistry

## New Program Wording:

## Honours Biochemistry Cooperative Option

The course and grade requirements for entry and continuation in the Cooperative Option are the same as that for the regular Honours program. Each academic term in the third and subsequent years must comprise 15 credit hours. Students are required to complete the first and second year requirements of the program and 060.341 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.

## Major Biochemistry Cooperative Option

The course and grade requirements for entry and continuation in the Cooperative Option are the same as that 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 060.341 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.

The addition of 060.341 will be added to the program charts in the calendar for the Honours and Major Cooperative Options. A note will be added to 060.341 on the list of Optional Courses stating that is 'Required in the Honours and Major Cooperative Options'.
002.347 is replaced with CHEM 3XYO Instrumental Analysis and CHEM 4XYO Bioanalytical Methods in the list of optional courses for all Biochemistry Programs.

## Chemistry-Microbiology Joint Program in Biotechnology

002.347 is replaced with CHEM 3XYO Instrumental Analysis and CHEM 4XYO Bioanalytical Methods in year 4 of the Joint Honours Program in Biotechnology.

## Botany

Course to be introduced:
001.3AA Evolutionary Biology
(3) L

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. This course is also given in Zoology as 022.3AA. Not to be held with the former 022.400. Prerequisites: 001.246 and any one of $001.211,001.221,001.229,022.232,022.250 \mathrm{~F}, 022.260$, or consent of department.
Revised program in Botany:
4.5.3 Botany, Department Code: 001

| UNIVERSITY 1 | YEAR 2 YEAR 3 | YEAR 4 |
| :---: | :---: | :---: |
| HONOURS ${ }^{3} 120$ CREDIT HOURS |  |  |
| 071.125,002.130,002.131 | $\begin{aligned} & 001.201,001.202,001.237 \text { 001.301, 001.307,001.357 } \\ & (022.237 \text { or } 065.237)^{2}, 001.246, \\ & 022.228 \text { and } \end{aligned}$ | 001.319,001.460 |
|  | Either: 002.221 plus 002.236 and 0.02.237 (060.236 and 060.237); or 002.277 and 002.278 (060.277 and 060.278) |  |

In University 1 or Year 2 the following must be completed:
3 credit hours of Mathematics or Physics from 136.120, 136.130', 136.150', 016.102 or 016.105
001.211
005.100, 005.200

6 credit hours from the Faculty of Arts, which should include the required "W course.
Note: 001.101 may also be selected to fulfil the " $W^{*}$ requirement.

| 30 Houfs | 30 Hours 30 Hours | 30 Hours |
| :---: | :---: | :---: |
| FOUR YEAR MAJOR ${ }^{1,4} 120$ CREDIT HOURS |  |  |
| 071.125, 002.130, 002.131, | 001.201, 001.202, 001.237 001.301, 001.307 ( 022.237 or 065.237$)^{2}, 001.246$, 022.228 | 001.319 |

In University 1 or Year 2:
3 credit hours of Mathematics or Physics from $136.120,136.130^{1}, 136.150^{1}, 016.102$ or 016.105
001.211
$005.100,005.200$
6 credit hours from the Faculty of Arts, which should include the required "W" course.
Note: 001.101 may also be selected to fulfil the " $W$ " requirement.
THREE YEAR GENERAL
Minimum of 12 hours of Botany courses at the 200, 300 and (or) 400 level

## MINOR

$071.125 \quad$ Minimum of 12 hours of Botany courses at the 200, 300 and (or) 400 level
JOINT BOTANY-ZOOLOGY HONOURS AND FOUR YEAR MAJOR ECOLOGY PROGRAMS See Section 4.8 Ecology Programs

## NOTES:

1136.131 may be taken in place of $136.130 ; 136.151,136.152,136.153,136.168$ of 136.169 may be taken in place of 136.150.
2001.237 ( 022.237 or 065.237 ) has 005.100 as corequisite.

3 The courses in this program will satisfy the universily mathematics requirement.
4 IMPORTANT: The four year Major program need not be completed in the manner prescribed in the chart above. The chart indicates orle possible arrangement of the re quired cousses and is meant to be a guide around which students can plan their program with a view to satisfying the prerequisites of the required courses.

## NET CHANGE +3 credit hours

## Chemistry

Courses to be deleted:
002.347 Instrumental Methods of Analysis -6L
002.355 Environmental Analysis -3L

Courses to be introduced:
CHEM 3XYO Instrumental Analysis +3L
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 128.355 or the former 002.347 or the former 002.355. Prerequisite: 002.247 (C).

## CHEM 4XYO <br> Bioanalytical Methods <br> $+3 \mathrm{~L}$

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 " in 002.3 XY or 128.355 or the former 002.355 .

CHEM 3ABO Work Term 1
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 3BBO Work Term 2 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 4ABO Work Term 3 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 4BB0 Work Term 4 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).

Courses to be modified:
CHEM 1030 Carbon Chemistry in Nature and Society
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 the former 002.125. Prerequisite: 002.100 or 002.130 or Chemistry 40 S (or equivalent) or 002.090.

CHEM $4550 \quad$ Aquatic Chemistry
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. Offered in 2006-2007 and in alternate years thereafter. This course is also taught in Environmental Science as 128.455 Prerequisite: a grade of ' $C$ ' in one of 002.3 XY (or the former 002.347), or 128.355 (or the former 002.355) or permission of the department.

## Addition of a Cooperative Option

To be added to the Department of Chemistry's Program information section of the Calendar:

## 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 their third 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 002.247 and either 002.228 or 002.229) 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 (eg. to proceed from Year 2 to Year 3), a student must have an annual Grade Point Average of 2.50 and in addition, must have a 3.00 average on all Chemistry courses during that session and a grade of "C+" or better in each Chemistry course. Each academic term in the third and subsequent years must comprise a minimum of 12 credit hours.

Students will apply for openings in the Cooperative Option in September of their third year in the Honours program. They will be notified of their provisional acceptance in the program by October. 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. The first work term can be taken in January or May. 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.

## 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 their third 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 regular Major program. Students are required to complete 24 credit hours of Chemistry (including 002.247 and either 002.228 or 002.229 ) before they begin their first employment term.

To continue in and graduate from the Major program, a student must have a sessional Grade Point Average of 2.00 in the regular session. To graduate with the Major degree, students must present a grade of "C" or better on the 57 credit hours of Chemistry required in the degree. See the general faculty regulations for B.Sc. (Major) Cooperative Option in Section 3.4.

Students will apply for openings in the Cooperative Option in September of their third year in the Major program. They will be notified of their provisional acceptance in the program by October. 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. The first work term can be taken in January or May. 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.

Modified program charts for Chemistry:

| UNIVERSITY 1 | YEAR 2 | YEAR 3 | YEAR 4 |
| :---: | :---: | :---: | :---: |
| HONOURS 123 CREDIT HOURS |  |  |  |
| $002.130(\mathrm{~B}), 002.131(\mathrm{~B})$, <br> $016.105(\mathrm{C})($ or $016.102(\mathrm{C}+$ ) $)$ and <br> $016.107(\mathrm{C}), 136.150^{\prime}(\mathrm{C})$, <br> $136.170(\mathrm{C})^{1,1}$ <br> Plus 6 credit hours of electives | At least 15 credit hours from: 002.221, 002.222, 002.228, $002.229,002.237$ ( 060.237 ), $002.238,002.247,002.286$ (002.236) ${ }^{5}$ <br> Plus 136.120, 136.130 ${ }^{12,2}$ <br> Plus 9 credit hours of electives ${ }^{4}$ which may include 6 credit hours of Chemistrys | At least 18 credit hours from: any of 002.221, 002.222, 002.228, 002.229, 002.237 (060.237, 002.238, 002.247, 002.286 (002.236) ${ }^{5}$, not yet taken, and 002.336, 002.337, 002.338, 002.339, 002.358, 002.3XY, $002.4 X Y, 002.457,002.468$, 002.469 <br> Plus 12 credit hours of electives ${ }^{4}$ which may include 6 credit hours of Chemistry ${ }^{5}$ | 002.460 and 002.471 <br> Plus sufficient credit hours from Chemistry courses not yet taken ${ }^{5}$ to total a minimum of 63 credit hours <br> Plus sufficient electives ${ }^{4}$ to tatal a minimum of 33 credit hours |

In University 1 or Year 2 the following must be completed:
6 credit hours from the Faculty of Arts, which should include the required "W" course.


HONOURS COOPERATIVE OPTION 123 CREDIT HOURS

| $002.130(B)$, 002.131(B), | At least 15 credit hours from: | At least 18 credit hours from: any 002.460 and 002.471 |  |
| :---: | :---: | :---: | :---: |
| $016.105(\mathrm{C})$, (or 016.102( $\mathrm{C}+$ ) ) and | 002.221, 002.222, 002.228, | of 002.221, $002.222,002.228$, | Plus sufficient credit hours from Chemistry courses not yet taken ${ }^{5}$ to total a minimum of 63 credit hours |
| 016.107(C) | 002.229, 002.237 (060.237), 002.238, 002.247, 002.286 | $002.229,002.237$ ( 060.237 ), 002.238, 002.247, 0.02.286 |  |
| $136.150^{\prime}(\mathrm{C}), 136.170(\mathrm{C})^{1.2}$ | $(002.236)^{5}$ | (002.236) ${ }^{5}$, not yet taken, and |  |
| Plus 6 credit hours of electives | Plus 136.120, 136.130 ${ }^{1,2}$ | $002.336, ~ 002.337, ~ 002.338$, $002.339, ~ 002.358, ~ 002.3 X Y, ~$ | Plus sufficient electives ${ }^{4}$ to total a minimum of 33 credit hours |
|  | Plus 9 credit hours of electives ${ }^{4}$ which may include 6 credit hours of Chemistry ${ }^{5}$ | 002.4XY, 002.457, 002.468, 002.469 |  |
|  | of Chemistry ${ }^{\text {a }}$ | Plus 12 credit hours of electives ${ }^{4}$ which may include 6 credit hours of Chemistry ${ }^{5}$ |  |

$002.3 \mathrm{AB}, 002.3 \mathrm{BB}, 002.4 \mathrm{AB}$ and/or 002.4 BB

In University 1 or Year 2 the following must be completed:
6 credit hours from the Faculty of Arts, which should include the required "W" course.

| 30Hours | 30 Hours | 30 Hours | 33 Hours |
| :---: | :---: | :---: | :---: |
| FOUR YEAR MAJOR7 120 CREDIT HOURS |  |  |  |
| $002.130(\mathrm{C}+$ ), 002.131( $\mathrm{C}+$ ), 016.105 (or 016.102 ) and 016.107, 136.1501, 136.170 | At least 15 credit hours from: $002.221,002.222,002.228$, $002.229,002.237$ ( 060.237 ), $002.238,002.247,002.286$ $(002.236)^{5}$ <br> Plus 136.120, 136.130 ${ }^{1,2}$ <br> Plus 9 credit hours of electives ${ }^{4}$ which may include 6 credit hours of Chemistry ${ }^{5}$ | At least 18 credit hours from: any of 002.221, 002.222, 002.228, 002.229, 002.237 ( 060.237 ), 002.238, 002.247, 002.286 (002.236) ${ }^{5}$, not yet taken, and 002.336, 002.337, 002.338, 002.339, 002.358, 002.3XY, 002.4XY, 002.457, 002.468, 002.469 <br> Plus 12 credit hours of electives ${ }^{4}$ which may include 6 credit hours of Chemistry ${ }^{5}$ | 002.460 <br> Sufficient credit hours from Chemistry courses not yet taken ${ }^{6}$ to total a minimum of 57 credit hours <br> Plus sufficient electives 4 to total a minimum of 30 credit hours |

In University 1 or Year 2 the following must be completed: 6 credit hours from the Faculty of Arts, which should include the required "W" course.


In University 1 or Year 2 the following must be completed:
6 credit hours from the Faculty of Arts, which should include the required "W" course.
$002.3 \mathrm{AB}, 002.3 \mathrm{BB}, 002.4 \mathrm{AB}$ and/or 002.4 BB

## NOTES: <br> 1136.151, 136.152 or 136.153 may be taken in place of $136.150 ; 136.131$ may be taken In place of $136.130 ; 136.171$ or 136.173 may be taken in place of 136.170; 136.169 may be taken in place of 136.150 and 136.170. <br> 2 Other combinations of mathematics courses may be acceplable with the approval of the department head. <br> 3 The courses required in this program will satisfy the university mathematics requirement. <br> 4 Electives chosen during Years 2, 3 and 4 must include at least nine credit hours of Science courses other than Chemistry at the 200 level or higher. <br> 5 5tudents must complete a minimum of six credit hours in each of the following subject areas: <br> Analytical: 002.247, 002.3XY, 002.4XY <br> Inorganic: 002.238, 002.338, 002.457, 002.468 <br> Organic: 002.221, $002,222,002.339,002.358,002.458,002.469$, <br> and three credit hours of Biochemistry: 002.286 (002.236 may be used with an appropriale Biology prerequisite) <br> and nine credit hours of Physical/Polymer: 002.228, 002.229, 002.336, 002.337, 002.349, 002.464, 002.465 <br> 6 IMPORTANT: The faur year Major program need not be completed in the manner prescribed in the chan above. The chart indicates one possible arrengement of the re quired courses and is meant to be a guide around which students can plan their program. <br> (Letters in brackets indicate minimum prerequisite standing for further study.)

## The changes are:

1. 002.286 (or 002.236) may be taken in Year 2, 3 or 4 in the Honours and Major programs.
2. The credit hours in Year 2 from the specified courses changes from "at least 12 credit hours" to "at least 15 credit hours" in the Honours and Major programs.
3. Footnote 5 is modified: under Biochemistry category comment " 002.286 ( 002.236 may be used with an appropriate Biology prerequisite)" is added and the Analytical category changes from "002.247, 002.347" to " 002.247, CHEM 3XYO , CHEM 4XYO".
4. A cooperative option is added to the Honours and Major programs.

## Computer Science

Course to be introduced:
074.4DM Introduction to Data Mining Introduction to data mining concepts and their applications. consent of department.

Prerequisite: 074.338 or

## Net Change in credit hours: + $\mathbf{3}$

## Computer Science - Physics and Astronomy Joint Program

Modified Program chart as follows:
4.7.6 Computer Science - Physics \& Astronomy Joint Program Department Code: 074P

| UNIVERSITY 1 | R 2 | YEAR 3 | YEAR 4 |
| :---: | :---: | :---: | :---: |
| JOINT HONOURS ${ }^{1} 120$ CREDIT HOURS |  |  |  |
|  |  |  | 15 credit hours of 300 and 400 level Honours Physics courses, with at least 6 credit hours at the 400 level <br> Plus 12 credit hours of 300 or 400 level courses from Computer Science, with at least 9 credit hours at the 400 level by the end of Year 4 <br> Plus 3 credin hours of electives |
|  |  |  |  |
| NOTES: |  |  |  |
| 1 The courses required in this program will satisfy the Universily mathernatics requirement. |  |  |  |
| 2016.103 is not suitable for entry to the Honours and four year Major program. Students must also take 016.107 if they have already taken 016.103. Students can hold credil for both 016.103 and 016.107. |  |  |  |
| 3136.131 may be taken in place of 136.130 ; $136.150,136.151$ or 136.152 may be taken in place of $136.353 ; 136.170$ or 136.171 may be laken in place of 136.173; 136.169 may be taken in place of 136.153 and 136.173. |  |  |  |
| 4 As there are no electives in Year 2 of the program, students should complete the University 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. <br> 5 The corequisite of 136.272 is waived for students in this program. |  |  |  |

## Ecology Program

## Modified program chart as follows:

4.8.2 Ecology Program, Department Code: 001E

| UNIVERSITY 1 | YEAR 2 | YEAR 3 | YEAR 4 |
| :--- | :--- | :--- | :--- |
| JOINT HONOURS ${ }^{4} 120$ CREDIT HOURS |  |  |  |
| $071.125,002.130,002.131$ | $001.201,001.202,001.237$ | 001.301 or $022.354^{3}, 001.307$, |  |
|  | $\left(022.237\right.$ or $065.237{ }^{2}$, | 022.375 |  |
|  | $001.246,022.228,022.232$, |  |  |
|  | 022.260 |  |  |

Either: 002.277 and 002.278
(060.277 and 060.278); or
002.221 plus 002.236 and
002.237 ( 060.236 and 060.237 )

In University 1 or Year 2 the following must be completed: plus 001.3AA/022.3AA, 001.342 (022.345), 001.354, and 3 credit hours of Mathematics or Physics from 136.120, 022.3 XX which may be taken in Year 3 or 4 $136.130^{\prime}, 136.150^{\prime}, 016.102$ or 016.105
005.100 and 005.200

6 credit hours from the Faculty of Arts, which should include the required " W " course."

Plus additional courses from the approved option list for a total of 30 credit hours in each of Year 2, 3 and 4. Included in these additional courses must be a minimum of 12 credit hours at the 400 level in Botany and/or Zoology in Year 3 or 4

|  |  |  |
| :---: | :---: | :---: |
| JOINT FOUR YEAR MAJOR ${ }^{4.5} 120$ CREDIT HOURS |  |  |
| 071.125, 002.130, 002.131 | $\begin{aligned} & \text { 001.201, 001.202, 001.237, } \\ & \text { (022.237 or } 065.23 刀^{2}, \\ & 001.246,022.228, ~ 022.232 \text {, } \\ & 022.260 \end{aligned}$ | 001.301 or $022.354^{3}, 001.307$ <br> Plus 001.342 ( 022.345 ), 001.354 and 022.3XX which may be taken in Year 3 or 4 |

In University 1 or Year 2 the following must be completed:
3 credit hours of Mathematics or Physics from 136.120, $136.130^{1}, 136.150^{1}, 016.102$ or 016.105.
005.100 and 005.200

6 credit hours from the Faculty of Arts which should include the required "W" course.

Either: 002.277 and 002.278 ( 060.277 and 060.278 ); or 002.221 plus 002.236 and 002.237 (060.236 and 060.237);

Plus an additional 30 credit hours to be chosen from the approved option list, a minimum of 12 credit hours of which must be at the 400 level in Botany and/or Zoology
JOINT FOUR YEAR MAJOR ${ }^{4,5}$ COOPERATIVE OPTION 120 CREDIT HOURS

| $071.125,002.130,002.131$ | $001.201,001.202,001.237$ | 001.301 or $022.354^{3}, 001.307,001.498 / 022.498$, |  |
| :--- | :--- | :--- | :--- |
|  | $(022.237$ or 065.237$) 2$, | $001.398 / 022.398$, | $001.499 / 022.499$ |

$\begin{array}{lll}(022.237 \text { or } 065.237) 2, & 001.398 / 022.398, & 001.499 / 022.499 \\ 001.246,022.228,022.232, & 001.399 / 022.399 & \end{array}$
022.260

In University 1 or Year 2 the following must be completed:
3 credit hours of Mathematics or Physics from 136.120, $136.130^{1}, 136.150^{\prime}, 016.102$ or 016.105
005.100 and 005.200

6 credit hours from the Faculty of Arts which could include the required "W" course.

Plus 001.342 ( 022.345 ), 001.354 and 022.3 XX which may be taken in Year 3 or 4

Plus an additional 30 credit hours to be chosen from the approved option list, a minimum of 12 credit hours of which must be at the 400 level in Botany and/or Zoology

## MINOR

$$
001.237 \text { for } 022.237 \text { or } 065.237,001.354 \text { and } 022.3 \mathrm{XX}
$$

Plus a minimum of 9 credit hours from the following list: 001.211, 001.221, 001.229, 001.301, 001.307, 001.325, 001.326, $001.327,001.342,001.358,001.401,001.405,001.465,022.310,022.338,022.345,022.350,022.354,022.358$, $022.361,022.420,022.421,022.422,022.423,022.424,022.425,022.42 \mathrm{~B}, 022.484,022.488$.

NOTE: 071.125, 001.201, 001.202, 001.211, 001.301 (or 039.350), 002.131, 002.132, 002.221, 002.237 (or 002.278), $005.100,005.200,022.232,022.253,022.260,022.310,022.353$ and 022.375 are listed as prerequisites for same courses.

## NOTES:

1 136.151, 136.152, 136.153, 136.168 or 136.169 may be taken in place of $136.150 ; 136.131$ may be taken in place of 136.130. 2001.237 ( 022.237 ar 065.237) has 005.100 as corequisite.

3 For students who completed 022.253 and 022.254 before entering the Honours ar four year Major program, the 022.354 requirement will be waived if they received a minimum grade of " $B$ " in 022.254 and complete and pas5 the laboratory component of 022.354.
4 The courses in this program will satisfy the university mathernatics requirement.
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.

## Genetics Program

BOTN 4180 Molecular Genetics of Plant Development is added to the list of Optional Courses.

## Mathematics

Honours Program Change: The Department of Mathematics will allow students in their graduating year to complete a minimum of 18 credit hours per regular session if they require 18 credit hours or less to graduate. In all other regular sessions, 24 credit hours are required.

## Mathematics - Physics and Astronomy Joint Program

Modified Program Chart as follows:

| 4.12:6 Mathematics Ehysics andAstronomy Joint Pros am Depathent Code 136P |  |  |  |
| :---: | :---: | :---: | :---: |
| The Departments of M thematiss and Physits and Astonomy offer a oint Honours program for students wishing in-depth study in both Mathematics and Physics. |  |  |  |
| UNIVERSITY 1 | YEAR 2 | YEAR 3 | YEAR 4 |
| JOINT HONOURS ${ }^{4} 132$ CREDIT HOURS |  |  |  |
| $136.130^{1}(\mathrm{~B}), 136.151^{1}(\mathrm{~B})$ and $136.171^{1}$ (B) (or 136.169 ( $B$ ) ), 016.105 (B) (or $016.102(B+1)^{2}$ and 016.107 (B), 005.100, 074.101 | $\begin{aligned} & 016.226,016.238,016.260, \\ & 016.261,016.265^{3}, 136.220, \\ & 136.235,136.275,136.280 \end{aligned}$ | $\begin{aligned} & 136.323,136.335 \text { (or } 136.330 \\ & \text { and } 136.331 \text { ), } 136.370 \text { or } \\ & 136.371,136.376,016.3 \mathrm{XX}, \\ & 016.3 X Y, 016.365,016.3 \mathrm{AA}, \\ & 016.3 \mathrm{AB}, 016.338 \end{aligned}$ | $136.380,136.481^{7}$ <br> Plus 9 credit hours of 300 or 400 level Mathematics courses, of which 3 credit hours must be at the 400 level |
| Plus 6 credit hours from the Faculty of Arts, which should include the required " $W$ " course ${ }^{5}$ |  |  | 016.343, 016.366, 016.4XX <br> Plus 3 credit hours from 300 and 400 level Physies Honours courses |
| 30 Hours | 33 Hours | 36 Hours | 33 Hours |

```
NOTES:
1 136.131 may be taken in place of 136.130;136.150,136.152 or 136.153 may be taken in place of 136.151; 136.170 or 136.173 may be taken in place
of 136.171.
2016.103 is not suitable for entry to the program. Students must also take 016.107 if they have already taken 016.103. Students can hold credil for both
016.103 and 016.107.
3 The corequisite of 016.237 is waived, It is recommended that students audit 016.237 in second year.
4 The courses required in this program will satisiy the University mathematics requirement.
5 As there are no electives in Year 2 of the program, students should complete the university written English requirement in University I. If not completed in
University l, a 'W' course must be completed prior to Year 3 in addition to the required Year 2 courses.
6 The prerequisite of 016.2AB is walved.
7 The prerequisite of 136.3a1 has been waived for students who have completed 016.369 and 016.338 or the former 016.370.
(Letters in brackels indicate minimum prerequisite standing for further study.)
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## Microbiology

Course to be modified:
MBIO 1220 Essentials of Microbiology
A review of 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 3010
NOTE: MBIO 1220 is intended for students planning to enter the Faculty of Nursing or other health care or related programs, but may be used as an elective in an Arts or Science program. It may also be used to meet a program requirement for the Honours and Major programs in Microbiology.

Program Modification:
BOTN 3280 Medicinal and Hallucinogenic Plants will be added to the Options List for all Microbiology Programs.

## NET CHANGE IN CREDIT HOURS: 0

## Physics and Astronomy

Courses to be deleted:
016.237 Theoretical Physics -6
016.341 Thermodynamics -6
016.369 Electromagnetism and Special Relativity -6
016.438 Quantum Physics 3 -6
016.458 Lasers and Modern Optics -6

Courses to be introduced:
PHYS 2AAO Theoretical Physics 1 $+3$
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: 016.107, and one of $136.169,136.170,136.171,136.173$ (or the former 006.126, 013.149 or 013.159 ).

PHYS 2AB0 Theoretical Physics 2
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: 016.2AA.

PHYS 3XX0 Classical Thermodynamics +3
An introduction to the laws of classical equilibrium thermodynamics and their applications. Not to be held with the former 016.341. Prerequisite: 016. 2AB, or the former 016.237.

PHYS 3XYO Statistical Mechanics +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: 016.238 and 016.3XX.

PHYS 3AAO Electro - and Magnetostatic Theory
$+3$
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: 016.260 and 016.2AB (or the former 016.237), or consent of department.

## PHYS 3AB0 Electro - and Magnetodynamics and Special Relativity <br> +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. Prerequisites: 016.3AA.

PHYS 4XX0 Quantum Physics 3 +3
Sequel to 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: 016.2AB (or the former 016.237) and 016.338.

PHYS 4AAO Advanced Optics +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: 016.226 and 016.3AB (or the former 016.369).

PHYS 4ABO Lasers and Applications +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: 016.226 and 016.338 .

## Net Change in Credit Hours $\mathbf{- 3}$ credit hours

Modified Program Chart as follows:
4.14.3 Physics and Astronamy, Department Code: 076

| UNIVERSITY 1 |
| :--- |

HONOURS ${ }^{1,7} 120$ CREDIT HOURS

| Plus 6 credit hours from the Fac of Arts, which should include th required "W" course ${ }^{6}$ | $\begin{aligned} & 016.226,016.2 \mathrm{AA}, 016.2 \mathrm{AB}, \\ & 016.238,016.260,016.261, \\ & 016.265,136.272^{\mathrm{a}} \end{aligned}$ | $\begin{aligned} & 016.3 \mathrm{XX}, 016.3 \mathrm{XY}, 016.343, \\ & 016.365,016.3 \mathrm{AA}, 016.3 \mathrm{AB}, \\ & 016.338 \end{aligned}$ <br> Plus 3 credit hours of electives with one of the following strongly recommended: 016.322, 016.357, 016.366 and courses from Computer Science, Chemistry, Geological Sciences and Mathematics. | $016.4 \times X, 016.451^{4}, 016.452^{4}$ <br> Plus 9 credit hours from 016.357, <br> 016.366, 016.425, 016.456, <br> 01016.4AA, $016.4 \mathrm{AB}, 016.462_{1}$ <br> 016.463 |
| :---: | :---: | :---: | :---: |
|  | Choose 1 of : | Students who choose Option B may also want to consider 016.318 |  |
|  | Option A (Astronomy): 016.207 | 016.318 | 016.423, 016.424 |
|  | Option B (Physics); 6 credit hours to be chosen from 136.273", 136.280 or courses in Computer Science, Chemistry or Geophysics | 136.313 | 016.467, 136.370 |


|  |  | prognam requirements continue on next page |
| :---: | :---: | :---: |
| FOUR YEAR MAJOR ${ }^{7.9} 120$ CREDIT HOURS |  |  |
| $016.105\left(\mathrm{C}+\right.$ ) (or 016.1022 (B)) $\quad 016.226,016.2 \mathrm{AA}_{6} 016.2 \mathrm{AB}_{4}$ and $016.107(\mathrm{C}+), 136.150^{1.5}$ and $016.23 \mathrm{~B}, 016.260,136.120$, | $016.261,016.265,016.3 \mathrm{XX}$, $016.3 X Y, 016.338,136.272^{\text {® }}$ | $\begin{aligned} & 016.343,076.365,136.313, \\ & 136.370 \end{aligned}$ |

$136.170^{3,5} \quad 136.130^{3}$

Plus 6 credit hours from the Facul ty of Arts, which should include the required " $W$ " course

NOTES:
Astronomy courses may be used in place of some of the above courses with permission of the department. Consult the department advisor for details.

1 Students must achleve a minimum grade of "C" in all Honours Physies and Astronomy courses that are either required in the program or required as prerequisites to other Physics and Astronomy courses laken In the Honours program.
2016.103 is not suitable for entry to the Honours and four year Major progam. Students must also take 016.107 if they have already taken 016 . 103 . Students can hold
credil for both 016.103 and 016.107.
3136.131 may be taken in place of $136.130 ; 136.151,136.152$ or 136.153 may be taken in place of $136.150 ; 136.171$ or 136.173 may be taken in plate of 136.170;
136.169 may be taken in place of 136.150 and 136.170.

4 Other Honours Physics and Astronomy or Honours Mathematics courses may be substituted for one of 016.451 or 016.452 with permission of the department. 5 A minimum grade of " C " and an average of " $\mathrm{C}+$ " is required on these two Mathematics courses.
6 As there are no electives in Year 2 of the program, students should complete the University written English requirement in University 1 . If not completed in University 1, a "W" course must be compleled prior to Year 3 in addition to the required Year 2 courses.

7 The courses required in this program will satisfy the University mathematics requirement.
8136.275 may be taken in lieu of 136.272 and 136.273.
gIMPORTANT: The four year Major program need nol be completed in the manner prescribed in the chart above. The chart indiates the recommended arrangement of the required courses and is meant to be a guide around which students can plan their program
(l.etters in brackets refer to minimum prerequisfte standing required for further study.)

## Psychology Program

Courses PSYC 3XX0 Research in Cognitive Psychology, and PSYC 3XY0 Perception and Attention are added to the list of Category D Psychology courses in the B.Sc. Honours and Major programs in Psychology.

## Statistics

## Modified Program charts as follows:

4.16.3 Statistics, Department Code: 005

| UNIVERSITY 1 YEAR 2 | YEAR 3 YEAR 4 |
| :---: | :---: |
| HONOURS ${ }^{1} 120$ CREDIT HOURS |  |
| $005.100,136.169$ (or $136.150^{2}$ and 136.230, 136.272 and 136.273 (or $136.170^{2}$ ), $136.130^{2} \quad 136.275$ ) | $005.305,005.347$ and 005.348 $005.414,005.452,005.453$ <br> $005.350,005.360,136.374$  |
| Plus sufficient credit hours of elec- Plus sufficient credit hours of electives to total 30 credit hours tives to total 30 credit hours ${ }^{3}$ |  |
| The following courses must be taken in University 1 or Year 2 $074.101,005.200 \text { (B), } 136.120$ <br> 6 credit hours from the Faculty of Arts, which should include the required "W" course | Plus 18 credit hours from 005.301, 005.317, 005.318, 005.338, $005.349,005.458,005.459,005.460,005.462,005.463,005.469$, 005.470 with at least 9 credit hours from 005.417, 005.458, 005.459, $005.460,005.462,005.463,005.469$ and 005.470 <br> Plus 12 credit hours ${ }^{3}$ |



### 476.4 Statistics -Actuarial Mathematics Joint Program; Depatment Code: 005A

The Departmentof Statistics and the Wären Centrefor Actuarial Studles and Research offer a Joint Honours program for students wisfingiln depth study in Statisticsiand Actuaridil Maltiematics.

## Entry Requirements:

Recommended Electives:
To enter the Honours program students must have satisfied the Faculty 010.405, 010.406, Accounting and Finance 009.110, 009.220, of Science requirements for entry to the program, and have completed 009.341; Business Administration 027.200; Economics 018.120, 005.100, 136.130 and either 136.169, or 136.150 and 136.170 or any 018.245.
equivalent with a minimum grade of " B " in each of 005.100 and
136.169 (or a " B " average in 136.150 and 136.170).

| UNIVERSITY 1 | YEAR 2 | YEAR 3 | YEAR 4 |
| :--- | :--- | :--- | :--- |
| JOINT HONOURS ${ }^{3} 120$ CREDIT HOURS |  |  |  |
| 136.169 (or $136.150^{1}$ and | $005.200^{4}, 010.212,136.275$ (or | $005.305,005.347$ and 005.348, | $005.349,005.414,005.452$, |
| $136.170^{\prime}$ ), $136.130^{\prime}$ | 136.272 and 136.273 ), $136.230^{5}$ | $005.350,005.360,010.313$, | $005.453,010.414,010.415$ |
| Plus 9 credit hours of electives | Plus 15 approved credit hours | $010.323,010.333,010.353$ | 010.424 or 010.400, 010.434, |
|  |  |  | $027.215,074.126$ |

Plus 3 approved credit hours

The following courses must be taken in University 1 or Year 2
$074.101^{2}, 005.100$ (B)
6 credit hours from the Faculty of Arts, which should include the required "W" course

|  |
| :---: |
| NOTES: |
| 1136.131 may be taken in place of $136.130 ; 136.151,136.152$ or 136.153 may be taken in place of $136.150 ; 136.171$ or 136.173 may be taken in place of 136.170. <br> 2074.101 may be taken in University 1 or later in the program. <br> 3 The courses required in this program satisfy the university mathematics requirement. <br> 4005.200 may be taken in University 1 or Year 2. <br> 5136.235 may be faken in place of 136.230 . <br> (Letters in brackets indicate minimum prerequisite standing for further sturiy.) |
| 416.5 Statistics Mathematics lontiprogram, DepartmentCode, o05M <br> The depatiments ofistatisticsand Mathenaticsofera jointhonourspogran forstudents wishing ondepthstudy in Statistlos and Mathematics. |
| Entry Requirements: <br> To enter the Honours program students must have satisfied the Faculty of Science requirements for entry to the program, and have completed $005.100,136.130$ and either 136.169 , or 136.150 and 136.170 or any equivalent with a minimum grade of "B" in each of 005.100 and 136.169 (or a " $B$ " average in 136.150 and 136.170). <br> YEAR 2 |
| JOINT HONOURS6 120 CREDIT HOURS |
| $136.130^{\prime}(\mathrm{B}), 136.169(\mathrm{~B})$ (ar $005.200^{4}, 136.220,136.235$, $005.305,005.347,005.348$, $005.414^{3}, 005.452,005.453^{3}$ <br> $136.150^{\prime}$ and $136.170^{\prime}(\mathrm{B})$, Plus 9 $136.260,136.275,136.280$ $005.350,005.360$ Plus 6 approved credit hours <br> credit hours Plus 6 approved credit hours Plus 3 approved credit hours  |
| The following courses must be taken in University 1 or Year 2 Plus a total of 30 credit hours from 136.240 and any 300 and 400 <br> $074.101^{2}, 005.100(B)$ level Mathematics courses, which must include at least 3 credit <br> 6 credit hours from the Faculty of Arts, which should include the hours at the 400 level and must also include $136.323,136.374$ (or <br> required " $W$ " course 136.376 ), 136.335 (or 136.330 ), 136.370 (or 136.371 ), 136.340 and <br>  136.380 |
| 30 Hours 30 Hours NOTES: |
| 1 136.131 may be laken in place of $736.130 ; 136.151,136.152$ or 136.153 may be taken in place of $136.150 ; 136.171$ or 136.173 may be taken in place of 136.170. |
| 2 May be taken in Year 2 |
| 3 May be taken in Year 3. |
| 4005.200 may be taken in University 1. |
| 5. The courses required in this program satisfy the university mathematics requirement. (Letters in brackets indicate minimum prerequisile standing for further study.) |

## Zoology

Courses to be deleted:
022.348 Population Ecology
$022.400 \quad$ Principles and Processes of Evolution
022.481 Fishery Biology and Management
-3L
$-3 \mathrm{~L}$
Courses to be introduced:
ZOOL 3XX0 Foundations of Population Ecology
$+3 \mathrm{~L}$
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: 022.237(001.237 or 065.237), 005.200 (C), or consent of department.

## ZOOL 3AAO Evolutionary Biology +3L

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. This course is also given in Botany as 001.3AA. Not to be held with the former 022.400. Prerequisites: 001.246 and any one of $001.211,001.221,001.229,022.232,022.250 \mathrm{~F}, 022.260$, or consent of department.

## ZOOL 4XX0 Applications of Population Ecology in Fisheries and Wildife +3L

The material introduced in 022.3XX 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: $022.3 X X$ or the former 022.348.

Course to be modified:
ZOOL 1330 Anatomy of the Human Body 3L
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 to be held with the former 022.123. Not available to students who have previously obtained credit in, or are currently registered in, both ZOOL 2530 and ZOOL 2540.

Prerequisite: 022.132(C) or 071.125(C). This prerequisite is waived for students in the Baccalaureate Program for Registered Nurses.

Modification to the Honours and Major Programs:
In the Zoology Honours and Major programs, 022.400 will be deleted from Year 4 and ZOOL3AA0 Evolutionary Biology will be added to Year 3.

## NET CHANGE IN CREDIT HOURS: 0

## University 1

Courses to be deleted from the University 1 course list:
007.123 Physical and Historical Geology (6) L
$007.124 \quad$ Earth and Planetary Scinece (6)
130.113 Introduction to Engineering (1)
130.140 Engineering Design (4)
130.135 Engineering Statics (4)
023.282 Fundamentals of Geomatics Engineering (4)
130.118 Introduction to Electric Circuits (4)
130.112 Thermal Science (4)

Courses to be added to the University 1 course list:
007.134 The Dynamic Earth (3)
007.135 The Evolving Earth (3)
007.144 Introduction to the Dynamic Earth (3)
007.137 The Earth in Space (3)

ENTM 1000 World of Bugs (3)
ENG 1ABO Design in Engineering (3)
ENG 1CC0 Introduction to Statics (3)
CIVL 2AAO Graphics for Civil Engineers (2)
CIVL 2BBO Civil Engineering Geomatics (3)
ENG 1AAO Introductory Computer \& Electrical Engineering Techniques (3)
ENG IXXO Introduction to Thermal Sciences (3)

University 1 recommends changes to the requirements for course distribution in University 1 . It is proposed that students will be required to take 6 credit hours from the Faculty of Arts, 6 credit hours from the Faculty of Sciences and 6 credit hours from Arts, Science or Clayton H. Riddell Faculty of Environment, Earth, and Resources, and 12 further credit hours from any other faculty of school that are on the list of courses acceptable for credit in University 1.

## Preamble

The Senate Committee on Awards (SCOA) terms of reference include the following responsibility:
> "On behalf of Senate, to approve and inform Senate of all new offers and amended offers of awards that meet the published guidelines presented to Senate on November 3, 1999, and as thereafter amended by Senate. Where, in the opinion of the Committee, acceptance is recommended for new offers and amended offers which do not meet the published guidelines or which other wise appear to be discriminatory under Policy No. 419 , such offers shall be submitted to Senate for approval." (Senate, April 5, 2000)

At its meeting on November 3, 2005 SCOA reviewed five new awards offers, nine award amendments and two award withdrawals and reports as follows.

## Observation

On behalf of Senate, the Senate Committee on Awards approved and recommends that the Board of Governors approve five new awards, nine award amendments and two award withdrawals as set out in Appendix "A" of the Report of the Senate Committee on Awards (dated November 3, 2005). These award decisions comply with the published guidelines of November 3, 1999, and are reported to Senate for information.

Respectfully submitted,


Professor R. Baydack, Chair Senate Committee on Awards

## APPENDIX "A"

## OFFERS

## VAL SIMANAVICIUS MEMORIAL SCHOLARSHIP

Through a bequest left by Val Simanavicius, an endowment fund of $\$ 100,000$ has been established to provide renewable entrance scholarships to students in the Faculty of Music. Beginning in 2007, scholarships will be offered to students who:
(1) are entering the Faculty of Music at the University of Manitoba as full-time students and have met all requirements for direct entry to the program;
(2) have achieved a minimum $70 \%$ average on the best five courses appearing on the list of acceptable courses for entrance scholarship consideration or, for students entering midprogram, have achieved a minimum cumulative grade point average of 3.0;
(3) are the most deserving entering students in the Violin major (music performance or music education) as determined through audition and selected by the Faculty of Music scholarship committee.

These scholarships are renewable at the value initially offered in each of the second, third, and fourth years of study at the University of Manitoba provided that the recipients:
(1) achieve a minimum sessional grade point average of 3.5;
(2) proceed into the next year of study as a full-time student;
(3) remain in the Violin major.

Students entering mid-program will only receive scholarship renewal offers for their remaining years of study in the music program.

Each year, the number and value of individual scholarships to be offered will be determined by the selection committee. New scholarship offers will be made out of the remaining available annual interest after renewals have been offered.

These scholarships may be held concurrently with the Leader of Tomorrow Scholarship, the Isabel Auld Entrance Scholarship and the Chancellors' Scholarship in name only and may not be held with any other scholarships in the University of Manitoba Entrance Scholarship Program excepting the Chown Centennial Scholarship.

The selection committee will be the Faculty of Music Scholarship Committee.

## WINSTON LEATHERS AWARD

The friends and family of Winston Leathers (Dip.Art/'56) have established an endowment fund initially valued at $\$ 20,300$ to support an award in the Faculty of Architecture at the University of Manitoba. Winston Leathers was a member of the Royal Canadian Academy of the Arts, a wellrespected member of Manitoba's visual arts community, a great supporter of the Winnipeg Art Gallery, and a mentor to many your visual artists and graduates from the Faculty of Architecture where he taught for 26 years. The award, valued at the available annual interest, will first be offered in the fall of 2006 to a student who:
(1) has completed their second year in the Environmental Design Program;
(2) is registered as a full-time student in any of the third year options (Architecture, City Planning, Interior Design or Landscape Architecture) in the Faculty of Architecture;
(3) has achieved a minimum cumulative grade point average of 3.5;
(4) has demonstrated financial need on the standard University of Manitoba bursary application form.

The selection committee will be named by the Dean of the Faculty of Architecture.

## ENID DRIBEN-TRILLER MEMORIAL SCHOLARSHIP IN SOCIAL WORK

Through a bequest from Freda Driben, an endowment fund of $\$ 20,000$ has been established at The University of Manitoba to provide support to graduate students in Social Work. Enid Driben-Triller, Freda's daughter, graduated from the University of Manitoba in 1981 with a Bachelor of Social Work. The available annual interest will be offered as a scholarship to a graduate student who:
(1) is enrolled part-time or full-time in the Faculty of Graduate Studies in the first year of the Ph.D. program in Social Work at the University of Manitoba;
(2) was the student admitted to the program with the highest grade point average (minimum grade point average of 3.0 ).

The selection committee will be named by the Chair of the Graduate Program Committee in Social Work.

## UNIVERSITY OF MANITOBA ENGINEERING SOCIETY (UMES) SCHOLARSHIP FOR STUDENT INVOLVEMENT

This scholarship is intended to recognize and reward undergraduate engineering students who are involved in extracurricular activities within the Faculty of Engineering. An annual contribution of $\$ 5,000$ from the Engineering Endowment Fund will provide five University of Manitoba Engineering Society (UMES) Scholarships for Student Involvement valued at $\$ 1,000$ each to students who:
(1) are enrolled full-time in any year of study in the Faculty of Engineering at the University of Manitoba (University 1 students who have admitted to the Faculty of Engineering for an upcoming year of study may submit an application);
(2) have achieved a minimum cumulative grade point average of 3.0 ;
(3) are involved in at least one extracurricular event or organization within the Faculty of Engineering (e.g., UMES Council, Engineering Student Groups, engineering design teams, engineering outreach, faculty committees, etc.).

Involvement in the university at large (e.g, UMSU, UMSU Student Groups, etc.) will be considered in addition to engineering involvement. The applicant should demonstrate ongoing commitment to these events or organizations.

Applications must be submitted by the applicant and include a letter of reference to demonstrate their extracurricular involvement. The application deadline will be the last business day in February.

The selection committee shall be the Scholarships, Bursaries and Awards Committee of the Faculty of Engineering.

## JANICE FILMON AWARD IN PEACE STUDIES

With a gift of $\$ 25,000$.from Dr. Arthur V. Mauro, and a matching contribution from the Manitoba Scholarship and Bursary Initiative, an endowment fund of $\$ 50,000$ has been established to support graduate studies and research into the processes of peace building. This award recognizes Janice Filmon (B.Sc.H.Ec./63) and her tireless work with community organizations and committees at the local, national and international levels including serving on the boards of CancerCare Manitoba Foundation and the Arthur V. Mauro Centre for Peace and Justice. The award, valued at the available annual interest, will be offered to a student who:
(1) is enrolled full-time in the Faculty of Graduate Studies in a Master's or Ph.D. program at the University of Manitoba;
(2) has completed the necessary course work towards the degree and has obtained approval for a thesis or dissertation proposal prior to undertaking the research funded by this award;
(3) is pursuing research into the processes of peace building.

Applicants must prepare a package including: a copy of their undergraduate transcripts; graduate transcripts (where available); a letter of support from their thesis/dissertation supervisor(s), department head, or departmental supervisor of graduate studies; a copy of their thesis or dissertation proposal; and a description (maximum 500-750 words) of the intended use of the award, which may include travel. Final selection will be at the discretion of the selection committee and will be based on the relative strengths of the full application packages.

The selection committee will have the discretion to divide the annual interest into more than one award.

The selection committee for this award will be named by the Dean of the Faculty of Graduate Studies and will include the Director of the Arthur V. Mauro Centre for Peace and Justice.

## AMENDMENTS

## JOAN KENNETT MEMORIAL AWARD

The value of this graduate award offered in the Department of French, Spanish and Italian will be amended to the available annual interest (from a fixed value of $\$ 50$ ).

## CANADIAN ASSOCIATION OF OCCUPATIONAL THERAPISTS BOOK PRIZE

This prize will undergo two amendments. First, the name of the prize will be amended to the CANADIAN ASSOCIATION OF OCCUPATIONAL THERAPISTS STUDENT AWARD. Second, the prize has been offered to the student who achieved highest standing in "Theory of Occupational Therapy". It will now be offered to the graduating student with the highest cumulative grade point average in the program.

## MANITOBA SCHOOLS SCIENCE SYMPOSIUM SCHOLARSHIPS

The value of the three scholarships will be increased to $\$ 700$ each (from $\$ 500$ ).

## JOEL NITIKMAN AND LINY CHAN ENTRANCE AWARD

This award offered in the Faculty of Law will undergo two amendments. First, the award value will be amended to the available annual interest (from a fixed value of $\$ 2,500$ ). Second, reference to Mr. and Mrs. Nitikman in the second paragraph of the terms of reference will be corrected to Mr. Nitikman and Ms. Chan.

## A.L. BUCKWELL MEMORIAL BURSARY

At the request of the donor organization, the terms of reference for this bursary offered in the Faculty of Architecture will be amended to a scholarship. First, the name of the award will be amended to the ARTHUR BUCKWELL MEMORIAL SCHOLARSHIP. Second, the criterion for bursary consideration will be removed and reference to a bursary will be changed to scholarship throughout the terms of reference.

## ANNE KOTELKO-YUZYK AND JOHN YUZYK BURSARY

The terms of reference for this bursary that is offered in the Faculty of Music and the Faculty of Education in alternate years will undergo one amendment. In the years it is awarded in the Faculty of Music, it will now be offered to a student specifically in the Voice program (previously the Jazz program).

## MANITOBA GRADUATE SCHOLARSHIP

The terms of reference for this scholarship will undergo several amendments.

- The terms of reference for the Master's level scholarship and the Doctoral level scholarship will be separated into two documents, one titled the MANITOBA GRADUATE SCHOLARSHIP FOR MASTER'S STUDENTS and the second titled, MANITOBA GRADUATE SCHOLARSHIP FOR DOCTORAL STUDENTS
- It will be specified that at least one scholarship at each level must be granted to a student focusing on agricultural research
- A new first criterion will be added stating that the scholarship will be offered to students who are, "are entering the first or second year of a Master's program (preference will be given to students who are entering the first year)
- It will be clarified in the second (previously first) criterion that students who are enrolled or plan to enroll in a research-based (thesis/practicum or comprehensive exam route) Master's program are eligible for consideration
- The third (previously second) criterion limiting eligibility to one of the eighteen top-ranking UMGF candidates at the Master's level will be replaced with, have achieved a minimum cumulative grade point average of 3.75 over the equivalent of the last two years of full-time study.
- It will be clarified that in the case of a student transferring from a Master's to Ph.D., the student may hold the scholarship while in the Ph.D. program but the value will remain at $\$ 15,000$.
- During the tenure of the award, recipients must maintain a minimum grade point average of 3.5 with no one grade lower than a C+ (including AX courses).
- For the Doctoral level scholarship, preference will be given to students who are entering the first year of a Doctoral program.


## AVENTIS PHARMA INC. AWARD IN LAW AND ETHICS

The terms of reference for this award offered in the Faculty of Pharmacy will undergo two amendments. First, due to a company merger, the name of the award will be amended to the SANOFI-AVENTIS AWARD IN LAW AND ETHICS. Second, the value will be increased to $\$ 200$ (from \$100).

## JOHN A. RUSSELL ALUMNI BURSARY

The terms of reference for this bursary in the Faculty of Architecture will undergo several amendments. The number offered will be changed to five at $\$ 350$ each (from four awards, one at $\$ 400$ and three at $\$ 300$ ). These five bursaries will be split equally between the Faculty of Architecture's five programs of study, specifically the second year of the undergraduate Environmental Design program, and the Pre-Master's or Master's year in Architecture, City Planning, Interior Design or Landscape Architecture. Finally, it will be clarified that the students must be enrolled full-time in one of these programs.

# SENATE COMMITTEE ON AWARDS REPORT TO SENATE - NOVEMBER 3, 2005 

 WITHDRAWALS
## NORSAT PRIZE

Norsat has chosen to discontinue this prize as they are no longer located in Winnipeg. PSYCHOSOCIAL OCCUPATIONAL THERAPY BOOK AWARD

The Department of Occupational Therapy has requested that this award be withdrawn.

In Memory
Dr. Edmund Berry
Edmund was born in 1915 in Leslie, Aberdeenshire, Scotland.
His parents were Rev. James Berry, a Minister in the Church of Scotland, and Agnes Henderson, a nurse.

Edmund immigrated to Canada with his parents and sister when he was 12. After attending high school and first year university in Fredericton, NB, Edmund transferred to Queen's University in Kingston. He graduated with First Class Honours in Classics and received the Prince of Wales Prize for the highest standing in the Faculty of Arts. His MA was also from Queen's. He received his PhD in Classics from the University of Chicago (1940). It was in Chicago that he met his future wife, Virginia Gingerick, a fellow graduate student.

Edmund joined the Classics Department at the University of Manitoba in 1940 and taught there for 40 years. Throughout his career Edmund's involvement in research and academia was paralleled by his care and concern for his students and younger faculty members. This often extended to bringing out-of-town students home for dinner or tea. At the university Edmund held a number of positions including Director of Summer School, Assistant Dean of Arts and Science, and Head of the Classics Department. He also served as President of the Humanities Association of Canada, President of the Classical Association of Canada and Chairman of the Humanities Research Council. He was elected a Fellow of the Royal Society of Canada in 1971.

Edmund retired from the university in 1980 and was awarded the title of Professor Emeritus. He was a supportive member of All Saints' Anglican Church for 65 years, a member of the Vestry (15 years) and Churchwarden. Retirement allowed Edmund to pursue his interest in travel, especially Britain, Spain and Victoria, BC, where he and Virginia spent many happy times. Reading and conversations with his many friends (often about books) were two of his greatest pleasures. He could be depended on to entertain and amuse with a timely anecdote or joke. Virginia's death in 2003 brought many changes but Edmund continued to maintain a positive attitude. Thanks to his caregivers Mary, Sheila, Ava and Del, he was able to enjoy his last years, helped by their warm, expert care and shared sense of humour.

Edmund was predeceased by his sister Elise in 1982 and Virginia, his wife of 59 years, in 2003. He has two daughters, Julia (George Melnyk) and Margaret (Philip Lin) and three. grandsons, Adam Melnyk, Brian Lin, and Michael Lin. Edmund was a true Scot, a gentleman and a good father. He will be missed by all who knew him.

# In Memory of Paul A. Fortier 

## University of Manitoba Distinguished Professor Born August 21, 1939 / Died October 15, 2005

In his funeral homily Father John Perry S.J. spoke of Paul Fortier as a complex and unique individual - a man with imperfections, in a church with imperfections, in constant search for the Word which since the beginning is God.

Paul Fortier was born and raised in Windsor Ontario. He often spoke of this strong union town as an influence on his views. He obtained his B.A. (Honours) from the University of Toronto in 1963, his Diplôme d'Études Supérieures from l'Université de Strasbourg in 1964 and his M.A. and Ph.D. from the University of Wisconsin (Madison) in 1965 and 1969.

Paul Fortier was a world-renowned scholar with a particular contribution to the role of computers in the Humanities. Since 1993 he held the title of Distinguished Professor at the University of Manitoba. He became one of a small number to hold this prestigious title which was a tribute to his outstanding research profile. A reading of Paul's Curriculum Vitae shows that he authored 4 books on Gide, Céline, Robbe-Grillet and Camus and that he contributed 5 edited volumes and research reports, 58 refereed articles and chapters, 23 reviews, 24 brief notices, and some 150 lectures, papers and posters. In support of this wide-ranging research Paul attracted almost $\$ 600,000$ in research grants, travel grants and graduate student support. At the time of his death Paul was working on a research grant administered through the Centre for Aging.

Paul Fortier was a teaching colleague in the Department of French, Spanish and Italian since 1972. Over these years he taught 15 different undergraduate courses and 8 different graduate courses. Those students who worked for him as part of his research grants and those who worked under his direction on their graduate degrees have lost a valued mentor. His service profile extended well beyond the department to the Faculty of Arts, the Faculty of Graduate Studies, the Senate, the Presidential Advisory Committee and in the last fifteen years to St. Paul's College. From 1979 to 2004 Paul was a strong supporter and contributor to the University of Manitoba Faculty Association where he served on many committees, two terms as Vice President and one as President.

Beyond the boundaries of the University he served with such distinction Paul Fortier was a devoted husband to Penny Gilbert for more than 35 years and a loving father to Rose, Marc, Luc and Jacques. Now grown, these children were a great source of pride to Paul and remain a source of strength for Penny.

Finally, Paul Fortier was a deeply spiritual man. He was a scholar of the first rank who imposed no creed in his research nor on his students. He taught the great Existentialists with intellectual integrity and enthusiasm in complete academic freedom while attending daily mass. In this respect he was at ease in the inclusive home of St. Paul's College which serves its faith community but welcomes faculty and students of all creeds including those with no creed at all. He taught objectivity and critical thinking while never excluding God from his head and understanding nor from his heart and thinking. This complex and enigmatic man was my friend for more than 33 years. He allowed me to be godfather to his youngest son. We sometimes disagreed on substance and almost always on tactics but it is difficult to imagine a world without him. Rest in peace, Paul. You have left us a legacy and a standard to emulate.

## Philip Clark

October 2005

## In Memory

RICHARD WESLEY (WES) McAMMOND


#### Abstract

Professor Richard Wesley (Wes) McAmmond obtained his Teaching Certificate from Winnipeg Normal School and his Masters in Education from The University of British Columbia. He was an instructor at the Manitoba Teachers College and joined the Faculty of Education in 1965 where he taught Early Child development for five years until his retirement. Prior to coming to the University of Manitoba, he taught and was then school principal in Neepawa.


He also served as an organist in the United Church and was President of the Lions Club of Neepawa. He was an encourager of children and youth in his years of coaching many hockey and baseball teams.

A memorial service was held on September 19, 2005. In lieu of flowers, the family requests that donations be made to a charity of their choice.
"To have lived well, laughed often and loved much; to have looked for the best in others, and to have given the best of yourself. That is achievement."

## In Memory of Dr. Marlene Reimer

With great joy and anticipation, Dr. Reimer accepted the position of Dean of the Faculty of Nursing at the University of Manitoba and arrived on July 1, 2005. Marlene spent the majority of her career at the University of Calgary where she received the appointment of Professor Emeritus upon leaving that university. This eminent title is in recognition of Dr. Reimer's distinguished service to the university through their teaching, research, and scholarly activities.

Dr. Reimer received her undergraduate degree from the University of Manitoba and masters and doctoral degrees from the University of Calgary. She held a number of major appointments. She was past president of the World Federation of Neuroscience Nurses, a former member of the Board of the Canadian Nurses Association, and former Chair of the Graduate Committee of the Canadian Nurses Association. At the time of her death, Dr. Reimer was a member of the Institute Advisory Board for the CIFR Institute of Neurosciences, Mental Health Addictions, a member of the Canadian Association of Schools of Nursing Research Committee, representative to the Canadian Association of Nurse Researchers, and a was a founding member of the Canadian Association for Rural and Remote Nursing.

Dr. Reimer's research focused on quality of life interventions and measurement, particularly with adults who are cognitively impaired secondary to brain injury, dementia or other neurodegenerative or psychiatric illness.

Marlene is survived by her husband, Ernie and their adult children, Beth, Jennifer, and Andrew.

The staff, faculty, and students of the Faculty of were deeply moved by Dr. Reimer's passing on November 1,2005. In the short time we knew Marlene, we were impressed with her kindness toward others and her vision for nursing education. Her time with us was too short. She will be missed.

## In Memory

## DONALD BRUCE SEALEY

March 11, 1927 - September 3, 2005

University of Manitoba Professor Emeritus Donald Bruce Sealey, passed away on September 3, 2005 at Chilliwack, BC. He was a Metis person who wrote and published much about Metis history. He taught cross-cultural education in the Faculty of Education.

At his request, no funeral or memorial services were held. Donations can be made in his name, to the Louis Riel Bursaries at the University of Manitoba.

## Council on Post-Secondary Education Conseil de l'enseignement postsecondaire

September 30, 2005

## UNIVERSITY OF MANITOBA

OCT 052005
OFFICE OF THE PRESIDENT

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Vice-Provost (Programs)
University of Manitoba
208 Administrative Building
Winnipeg MB R3T 2N2
Dear Dr. Lobdell:

## Re: Statement of Intent for B.Sc. In Health Sciences and B.A. in Health Studies

The Council on Post-Secondary. Education has reviewed the above noted statement of intent submitted by the University of Manitoba.

Please feel free to proceed with developing the full program proposal and submit to Council for approval. However, approval of the statement of intent does not necessarily mean that the program will ultimately be approved.

Should you have any questions or concerns, please do not hesitate to contact me at 945-4779.

Sipgerely,
Ab laai
Susan Deane
Manager, Post-Secondary Programming
c. Louise Gordon


October 4, 2005

Dr. Richard Lobdell
Vice-Provost (Programs)
University of Manitoba
208 Administrative Building
Winnipeg MB R3T 2N2
Dear Dr. Lobdell:

## Re: Statement of Intent for B.Sc. (Gen) in Geological Sciences

The Council on Post-Secondary Education has reviewed the above noted statement of intent submitted by the University of Manitoba.

Please feel free to proceed with developing the full program proposal and submit to Council for approval. However, approval of the statement of intent does not necessarily mean that the program will ultimately be approved.

Should you have any questions or concerns, please do not hesitate to contact me at 945-4779.


Susan Deane
Manager, Post-Secondary Programming

c. Louise Gordon

# Council on Post-Secondary Education $\geqslant$ Conseil de l'enseignement postsecondaire 

October 18, 2005

Dr. Richard Lobdell
Vice-Provost (Programs)
University of Manitoba
208 Administrative Building
Winnipeg MB R3T 2N2
Dear Dr. Lobdell:

## Re: Statement of Intent for Master of Physical Therapy

The Council on Post-Secondary Education (COPSE) has received the above noted Statemet of Intent submitted by the University of Manitoba.

As you are aware, there is much concern by the Departments of Health across Canada, regarding the number of health related professions that have increased education credentials directly impacting the qualifications required for entry to practice. As a result of this concern, a national federal/provincial assessment process has been established to review such requests through the Coordinating Committee for Entry to Practice Credential Change (CCETPC). The CCETPC is comprised of representatives of each province from the Departments of Health and Advanced Education, as well as two experts from regional health authorities and two from the academic community. This committee is endorsed by the Conference of Deputy Ministers of Health and supported by the Advisory Committee of Deputy Ministers of Education.

Currently, a request submitted by the Nova Scotia Ministry of Health regarding the possibility of Dalhousie University offering a Masters in Physical Therapy is being reviewed by the CCETPC. If approved, the Masters degree would replace the Bachelors degree, a request very similar to the Statement of Intent submitted by the University of Manitoba (UM).

The Council would like to defer a decision on the Statement of Intent submitted by the University of Manitoba until such time as the CCETPC has completed its review of the request from Nova Scotia on the Masters in Physical Therapy. We expect this decision to be made by February 2006. Following that decision, we will be in touch with you.

Should you have any questions or concerns, please do not hesitate to contact me at 945-4779.


Manager, Post-Secondary Programming

## c. Louise Gordon

University
of Manitoba

October 17, 2005

## Office of the <br> Vice-President (Research)



207 Administration Building Winnipeg, Manitoba Canada R3T 2N2
Telephone (204) 474-6915.
Fax (204) 474-7568
www.umanitoba.ca/vpresearch

TO: Mr. Jeff Leclerc, University Secretary
FROM: Joanne C. Keselman, Vice-President (Research) and Lilmb
Chair, Senate Committee on University Research (SCUR)
SUBJECT: Notification to Senate
Policy 1405, Research Centres, Institutes, and Groups, section 3.4, Procedures for Establishing Research Groups, states that "the official recognition and designation of a research group is at the approval of the Vice-President (Research), normally on the recommendation of the department head (where applicable) and dean/director."

Accordingly, the Dean of Medicine has forwarded a recommendation for the establishment of the Community Acquired Infections Research Group to me as VicePresident (Research). I subsequently reviewed and approved the proposal.

As Chair of SCUR, I am now requesting that Senate be informed of the establishment of the Community Acquired Infections Research Group.

Please contact me should you require further information. A copy of the proposal for the research group is attached for your information.

JCK/wc
encl.
$\begin{array}{ll}\text { c.c. } & \text { Dr. Digvir Jayas, Associate Vice-President (Research) } \\ \text { Dr. Peter Cattini, Associate Vice-President (Research) } \\ \text { Dr. J. Dean Sandham, Dean, Faculty of Medicine } \\ \text { Dr. Grant Hatch, Acting Associate Dean (Research), Faculty of Medicine } \\ \text { Dr. Joanne Embree, Head, Department of Medical Microbiology } \\ \text { Dr. John Wylie, Director, Community Acquired Infections Research Group }\end{array}$


Proposal to form a University of Manitoba Research Group focusing on Communityacquired pathogens:

Name of research group: Community Acquired Infections Research Group.
F Objectives and rationale for formation of the research group:
The objective of the proposed group is to facilitate communication and collaboration between University faculty whose research interests focus on public health and community-acquired pathogenic agents in domestic populations.

The formation of this research group does not detract from two existing research groups in the Department of Medical Microbiology whose primary interests are on resistance and susceptibility to infections, (primarily HIV and other sexually transmitted infections) and on antibiotic resistance in bacterial pathogens. Additionally, it is complementary to three other groups which are currently in the formative stages. The current intended research focus of these latter groups is primarily on International Health, and medically related infections, hence the focus of the proposed group on community acquired infections among domestic populations.

## Constitution of the Research Group:

1. Organizational structure: The group will consist of a director, group members, graduate students and research assistants, and associate members.
2. Membership:

- Director-The director will coordinate meetings of the group, facilitate communication among group members, participate as a regular member of the group, and submit an annual report to the Vice-President (Research).
- Members - members will have expertise in Public Health research focused on community-acquired pathogens. Research in this area can include basic laboratory or epidemiological research, geographic information system analysis, mathematical modeling or other relevant areas. They must maintain an active program of research, actively engage in collaborative research with other group members and have an affiliation with the University of Manitoba (tenured, tenurestream, or adjunct professor).
- Graduate students and research assistants - graduate students and research assistants who are working on collaborative projects with group members may become members of the group.
- Associate members - Associate members will be those who meet all the conditions of full membership in the group, but who do not have formal affiliation with the University of Manitoba.

Conditions of membership - Individuals can be approached to join the group by: invitation, or conversely can approach the director or another group member to be considered for possible membership. In the latter case, the Curriculum Vitae of the prospective member would be circulated amongst group members for feedback to the director.
3. Regular meetings will be held to discuss group research activities and to develop proposals for submission to appropriate national or international granting agencies. Individual members and subgroups within the group would provide updates on their research activities to the entire group during regularly scheduled CAIR meetings. Group meeting minutes will be prepared and circulated electronically to group members.
4. Reporting procedures - An annual report will be prepared by the group director describing group meetings and activities. This report would be submitted to the Medical Microbiology Department Head for review and assessment of the group and for forwarding to the Vice President of Research.


# University of Manitoba 

## 21 October 2004

Dr. Joanne Keselman
Vice President (Research)
Room 207, Administration Building
University of Manitoba

Dear Dr. Keselman:

We wish to support the application of Dr. John Wylie for the establishment of a Community Acquired Infections Research Group within the Department of Medical Microbiology, Faculty of Medicine at the University of Manitoba. The study of community acquired infections has taken on increasing significance in the past several years as a result of the emergence of new infectious agents, the reemergence of some of the infections of the past and the recognition of the development of antimicrobial resistance among pathogens transmitted in the community setting. The objectives and rationale for formulation of this research group is to facilitate communication and collaboration between university faculty whose research interests focus on public health and community acquired pathogenic agents in the domestic populations. The formation of this research group enhances and does not detract from the two existing research groups in the Department of Medical Microbiology whose primary interests are on resistance and susceptibility to HIV and on antibiotic resistance to bacterial pathogens. Additionally, it is complementary to other groups which are currently in the formative stages in the Department of Medical Microbiology, namely a research group dedicated to basic science research related to study of the mechanism and prevention of contamination of medical devices, a research group focusing on the study of hospital acquired infections, and finally, a research group related to international health.

The first formal meeting of the group, once formed, will focus on the development of a constitution detailing the group's structure, conditions of membership, and reporting procedures. A Memorandum of Understanding has been signed by the research group leader, Dr. John Wylie, the Department Head of Medical Microbiology, and the Associate Dean for Research. The group will. consist of a director and respeective members with academic and/or adjunct appointments at The University of Manitoba. The group plans on holding regular meetings to discuss group research activities and to develop research proposals for submission to appropriate national and international granting agencies. The membership will be primarily conditional on a demonstrated interest or expertise in public health research focused on community acquired pathogens. The nature of the research in this area can include basic laboratory or epidemiological research, geographical analysis,

Dr. J. Keselman
21 October 2004
Page 2
mathematical modeling, or other relevant areas of research. Individuals will be approached to join the group by invitation. As well, individuals with an interest in this area of research are free to approach the director or another group member to be considered a possible member. In either case, a curriculum vitae of the prospective member will be circulated amongst the group members for feedback to the director and approval for membership. As stated in the Memorandum of Understanding, an annual report describing group meetings and activities will be submitted to the Medical Microbiology Department Head for review and assessment as well as for forwarding to the Associate Dean for Research in the Faculty of Medicine, the Dean of Medicine, and the Vice President of Research.

On behalf of Dr. John Wylie, the research group director, and Dr. Joanne Embree, the department head of Medical Microbiology (the department home of the research group), we would ask that the Community Acquired Infections Research Group be formally recognized within the University of Manitoba.

J. Dean Sandham, MD, FRCPC, FACP

Dean


Patrick C. Choy, PhD, MP(Hon), FAHA, FIACS
Associate Dean (Research)

| University | Department of |
| :--- | :--- |
| of Manitoba | Medical Microbiology |

3.C. Wilt Medical Microbiology Laboratories Basic Sciences Building 543-730 William Avenue Winnipeg, Manjitoba Canada R3E OW3 Telephone (204) 977-5609
Fax (204) 789-3926

August 27, 2004
Community Acquired Infections Research Group: Memorandum of Uṇderstanding
In the establishment of a research group dedicated to the study of Community Acquired infections, the following understandings apply:

- The researchers will continue to have research space in the offices and laboratories of their parent departments or institutions
- The researchers will continue to have administrative support of their parent departments and institutions
- The researchers will be expected to continue to fulfill their teaching and/or clinical and/or administrative commitments to their parent departments and institutions
- The financial arrangements related to grants, contracts and honoraria held by the researchers in the department of medical microbiology will continue unaltered related to the clinical studies fund and the communal studies funds.
- The Department of Medical Microbiology will set up a "Community Acquired Infections Research Group activity support account" for the purposes of supporting the administrative and networking activities of this research group. The funding sources for this account will include any monies awarded from the "indirect costs of research initiative" for this group, as well as, a portion to be determined of any overhead incomes designated for the Department from grants or contracts generated by the group (as opposed to the individual members of the group).
- The Department of Medical Microbiology will take into account the needs of the research group as one of its priorities in its strategic planning
- The research group will report on its activities to the Department Head of Medical Microbiology and the Department Council of Medical Microbiology on a yearly basis.


Dean, Faculty of Medicirye

## Current CAIR member list (listed alphabetically):

| Individual | Department affiliations |
| :--- | :--- |
| Beaudoin, Carole | Community Health Sciences |
| Elliott, Lawrence | Community Heallh Sciences |
| Embil, John | Medical Microbiology <br> Internal Medicine |
| Embree, Joanne | Medical Microbiology <br> Pediatrics |
| Fast, Margaret | Medical Microbiology |
| Fowke, Keith | Medical Microbiology |
| Mulvey, Mike | Medical Microbiology |
| Plourde, Pierre | Community Health Sciences <br> Medical Microbiology |
| Van Caeseele, Paul | Medical Microbiology |
| Wylie, John (research group director) | Medical Microbiology <br> Community Health Sciences |

## Report of the Senate Committee on Academic Freedom regarding the language of clauses regarding academic freedom in donor contracts

## Preamble

1. The terms of reference of the Senate Committee on Academic Freedom ("the Committee") comprise section 8.12 of the Senate Handbook (online edition), wherein the Committee is charged "to address itself to such matters respecting academic freedom and other related issues as shall be referred by Senate from time to time".
2. On December 1, 2004, the following motion was approved by Senate:
"THAT the language respecting clauses regarding academic freedom in agreements with university benefactors, including that contained in the President's communication to members of Senate dated October 12, 2004, be referred to the Senate Standing Committee on Academic Freedom;

And that the Senate Standing Committee on Academic Freedom be requested to consider such language and report its findings to Senate, including recommendation for any modifications to forms currently in use."
3. The Committee met on January 27, 2005 and again on October 12, 2005 to consider the matters referred by Senate.

## Observations

1. The Committee reviewed the boiler plate language used in donor agreements, and requested an opinion from the University's General Legal Counsel regarding the legal strength of such clauses in protecting the University's interests with respect to institutional autonomy and the interests of members of faculty with regard to academic freedom.
2. The Committee determined that in the case of donor agreements, the term "academic freedom" should have the broadest possible definition. This determination was reinforced by the opinion of Legal Counsel when she noted, "by stipulating 'the academic freedom of its faculty members shall be maintained to the fullest extent', academic freedom should be interpreted in the broadest sense. A broad interpretation implies that minor objections and trivial technicalities cannot reduce the intent of the agreement".
3. Based on the opinion provided by Legal Counsel, the majority of the Committee is satisfied that in a common-law context, the academic freedom of faculty, and the university's autonomy are protected by all of the boiler plate clauses reviewed; observing that each clause contains the phrase "notwithstanding any provision of this agreement", thus ensuring that the clause protecting academic freedom cannot be overridden by any other clause in a donor agreement.
4. The Committee observes that the language in the boiler plate fits the requirements of protecting academic freedom, and feels that the University should be expected to use this language, or the equivalent of it within contracts executed with donors.
5. The Committee decided that, with legal assurance received about the adequacy and appropriateness of the language of clauses regarding academic freedom in contracts involving university benefactors, no recommendations for modifications to that language need to be made.
6. In the context of a broader discussion on private funding received by the University, the Committee also met with Vice-President (External) Elaine Goldie to discuss the process by which gifts are solicited and accepted. This discussion involved a review of Canada Revenue Agency guidelines regarding charitable donations and the University's gift acceptance policy.
7. The Committee also discussed whether or not Senate requires assurance that academic freedom is being protected in the acceptance of external donations. Among the issues discussed was whether Senate ought to establish a committee that would be charged with assessing the possible academic implications of agreements with major donors. The President said she would reflect on the matters raised. Members noted that a Board bylaw on academic freedom and relevant provisions of the UM-UMFA Collective Agreement govern the practices and procedures of the university.

Respectfully submitted,
Professor N. Subotincic, Chair
Senate Committee on Academic Freedom
/jml

My last report to Senate was submitted for its meeting on October 5, 2005. Part A of this report is organized into sections on General, Academic, Research, Administrative, and External matters. Part B contains a list of significant external engagements during the time period of this report.

## I. GENERAL

## 1. November 1, 2005 Enrolment

The official reporting date for student enrolment data to Statistics Canada is November 1.
Total enrolment stands at 28,049, an increase $1.5 \%$ over November 1, 2004, or an additional 407 students. This brings the University to its highest enrolment ever, exceeding last year's record. Undergraduate enrolment is up $1.4 \%$ to 24,267 while the graduate enrolment has increased by $2.2 \%$ to 3,332 students. The international student population increased by $15.5 \%$ from 2,304 to 2,661 students, representing $9.5 \%$ of the student body, with three-quarters of international students registering in undergraduate programs. Credit hours were increased by $0.3 \%$

## 2. Estimates Meeting

Members of the Council on Post Secondary Education (COPSE) visited the University on October 28, 2005 to review the estimates of operating and capital requirements for 2006/2007. Representing the University were Mr. Wayne Anderson, Chair of the Board of Governors, the President, and the Vice-Presidents. The Vice-Presidents presented an overview of their portfolios, including some challenges, with the Vice-President (Administration) outlining the financial requirements not only in the context of our University, but in comparison to what universities are receiving in other provinces. I concluded by outlining successful initiatives that have taken place, fiscal responsibility as balanced against our mission, excellence in education, and emphasizing that access is more than entry to the University; accessibility also means providing the courses, the instructors, the learning environment, the student services, and the research stimulation that students need. There were questions raised following the presentations, and overall the presentation and the submission appeared to be well received.

## 3. Maclean's Survey

The results of the Maclean's 2005 Ranking of Universities placed the University 15 out of 15 medical-doctoral universities. This ranking, while disappointing, is unlikely to change much given the methodology and the focus of the Maclean's survey. The following are highlights pertaining to the University:

- In the average entering grade category, Manitoba ranked 21st out of 47 universities at $83.1 \%$; however, this placed Manitoba $14^{\text {th }}$ out of a 15 medicaldoctoral universities unchanged from 2004 (McMaster is $13^{\text {th }}$ at $83.7 \%$, Ottawa is $15^{\text {th }}$ at $83.0 \%$, while McGill is $1^{\text {st }}$ at $88.9 \%$ )
- In terms of the proportion of first year students with an entering grade of $95 \%$ or higher, Manitoba ranked $4^{\text {th }}$ of the 47 universities at $7.9 \%$ (Saskatchewan was $1^{\text {st }}$ at $11.2 \%$, UBC was $2^{\text {md }}$ at $10.6 \%$ and Queen's $3^{\text {rd }}$ at $8.7 \%$ ). Maclean's does not include this measure in the calculation of a university's overall rank.
- In terms of the proportion of first years students admitted with grades below $70 \%$, Manitoba ranked $1^{\text {st }}$ at $6.8 \%$ among the medical-doctoral universities - the second position is Saskatchewan at $1.3 \%$. Maclean's does not include this measure in its calculation of a university's overall rank. The following observations apply to the 14 other medical-doctoral universities:
- None admitted with marks below 75\% (McGill, McMaster, Queen's, Western)
- < $1.0 \%$ admitted with marks below 75\% (Montréal, UBC)
- None admitted with marks below 70\% (Dalhousie, Laval, Ottawa, Toronto and the 6 above)
- < $1.0 \%$ admitted with marks below 70\% (Alberta, Calgary, Sherbrooke, [UBC also admitted 0.1\% below 70\%])
- $<6.8 \%$ admitted with marks below $70 \%$ (Manitoba)
- Manitoba ranked $3^{\text {rd }}$ among medical-doctoral universities (Ottawa was $1^{\text {st }}$ ) and tied $12^{\text {th }}$ among the 47 universities in "value-added" - the degree to which universities assist students to graduate within the time expected on admission. Maclean's does not include this measure in the calculation of a university's overall rank.
- Manitoba students were ranked $11^{\text {th }}$ among the 15 medical-doctoral universities in the number of national awards received.
- Manitoba's performance on the 24 factors considered by Maclean's was the following:
- unchanged from the rank attained in 2004 on 11 factors (average entering grade, $\%$ admitted with $75 \%$ or more, out of province students, class sizes ( $1^{\text {st }}$ and $2^{\text {nd }}$ year), classes taught by tenured faculty, awards for full time faculty, scholarships and bursaries, total library holdings, holdings per student, library expenses, reputation). These factors carry a weight of 55.8\%;
- decreased from the rank attained in 2004 on 8 factors (student retention, international ( $1^{\text {st }}$ year), intermational (graduate), student awards, SSHRC grants, operating budget, library acquisitions, and alumni support). These factors carry a weight of $21.8 \%$;
- increased from the rank attained in 2004 on 5 factors (proportion who graduate, class sizes ( $3^{\text {rd }}$ and $4^{\text {d }}$ year), faculty with PhDs , medical/science grants, student services). These factors carry a weight of $22.3 \%$.
- The response rate to the reputational survey was $11.6 \%$ down from $12.6 \%$ in 2004 , and $13.2 \%$ in 2003. University officials led the response rate with $40.3 \%$ return. Manitoba remained $15^{\text {th }}$ of 15 medical-doctoral universities in terms of reputation. Among the 47 universities, we rank
- $28^{\text {th }}$ on "best overall", and "most innovative" categories;
- $\quad 27^{\text {th }}$ on "highest quality" category
- $30^{\text {Lh }}$ on "most innovative" category;
- $\quad 29^{\text {th }}$ in the "leaders of tomorrow" category.


## 4. Visit to Churchill

On October 13, 2005, I participated in a visit to Churchill, Manitoba organized by John Alho, Director of Government Relations. The purpose of the visit was to see, first hand, the research conducted by Dr. David Barber, Department of Environment and Geography, Clayton H. Riddell Faculty of Environment, Earth, and Resources, and Canada Research Chair in Arctic System Science. The research is conducted in the vessel CCGS Amundsen which was in the Port of Churchill for one day. The research is part of ArcticNet, a Network of Centres of Excellence, and a consortium of researchers from 23 universities and five federal departments with the University of Manitoba and Université Laval, the largest contributors. ArcticNet supports research in four areas with Dr. Barber as the project leader for the theme "Managing the Largest Canadian Watershed in a New Climate: Land-Ocean Interactions in Sub-Arctic Hudson Bay". One component of this project is "Engaging Local, Scientific and Government Partners in Ocean Comanagement", led by Dr. Jill Oakes, Environment and Geography.

The visit was a wonderful opportunity to view the research that is supported by ArcticNet, and to understand better the important role that our institution plays in this project. It was also delightful to meet researchers, graduate students, and high school students who spend 13 days on board through the Students on Board Program, and to meet with the Mayor of Churchill. Among those participants in the visit were Honourable Diane McGifford, Minister of Advanced Education and Training, The Honourable

Raymond Simard, MP for St. Boniface, Ms. Bev Desjarlais, MP for Churchill, and Mr. Bemie Boucher, Chair of the ArcticNet Board of Directors.

## II. ACADEMIC MATTERS

## Faculty of Agricultural and Food Sciences

- The first recipient of The Willy Wiebe Graduate Fellowship is Golam Rasul, Ph.D. student in Plant Science who received a $\$ 17,000$ fellowship. Mr. Wiebe passed away in 2001 and although he never attended the University of Manitoba, his estate provided a $\$ 450,000$ gift to be used for research on Canadian Western Red Spring Wheat, including breeding new cultivars.
- Alex Pinterits, M.Sc. student in Food Science, was awarded 1st place for graduate student presentations at the recent meeting of the Canadian Section of the American Oil Chemists Society in Saskatoon. His paper entitled "Improvement of Canola Protein Gelation through Modification with Transglutaminase" was co-written with Dr. Sue Arntfield and Dr. Rotimi Aluko.
- Dr. Digvir Jayas, Biosystems Engineering and Dr. Edward Smith, University of Paisley, received the American Society of Agricultural and Biological Engineers (ASAE) Honorable Mention Paper Award in recognition of their contributions to literature of exceptional merit in agricultural engineering for their paper "Calculation and Limitations of Traverse Time in Designing Forced Ventilation Systems" published in Transactions of the ASAE.


## Faculty of Architecture

- In the recently completed North American round of the Holcim Awards for Sustainable Construction (August 2005) Professor Mark West, received the third place ( $\$ 25,000$ US) award behind the Renzo Piano / Arup second place ( $\$ 50,000$ US), and L'OUEF (Montreal) first place award ( $\$ 100,000$ US). His project, along with the other 14 top winners world-wide, now advances to the global awards round to be awarded in Bangkok, Thailand in April 2006.
- Architecture students, Michael Banman, Zach Pauls and Johan Voordouw teamed up to submit a design for the "Ideal Library Competition" conducted by the Royal Institute of Architects of Ireland. The challenge was to design a 21 st century library for a city the size of Cork, Ireland. The University of Manitoba team place first (with two other teams) out of a total of 230 entries. They shared the first place prize of $\$ 15,000$ (US) presented in September.


## School of Art

- Steve Gouthro, sessional instructor (Drawing), had a display called "Through the Mill" in the summer of 2005 in Thunder Bay. One of his paintings, " 80 " was featured in the September issue of Harper's Magazine.
- Diana Thorneycroft, sessional instructor (Drawing), was awarded two Manitoba Arts Council Grants, including a Major grant, in May, 2005. She had a solo exhibition entitled "The Doll Mouth Series" at the 7th International Fotofestival in Mannheim/Ludwigshafen, Germany in June 2005 and presented the same exhibit in St. Catharines and Vancouver. She published a work on this exhibit through Brock University, and contributed to Nor: Ideas of the North published by Dana Velan Publishers (Montreal).
- Marilee Salvator, sessional instructor (Printmaking and Design) participated in several exhibitions across North America showing silkscreen, mixed media and lithography works. She exhibited in Madison, Wisconsin with "Switched at Birth" for the Southern Graphics Council; "Hop Scotch", a solo exhibit with the Manitoba Printmakers Association; with the Manitoba Printmakers at the Lunenburg Art Gallery in Nova Scotia; at the Rainbow Building Gallery at the University of Miami (Coral Gables, FL); at the Blue Door Gallery in Seattle, WA; and in "The Power of Print", the Southern Graphics Council Event and Travelling Exhibition for the Italian Cultural Institute at the Italian Embassy in Washington, DC.


## Faculty of Education

- Dr. Arthur Stinner, Curriculum, Teaching and Learning, had his latest science drama performed for the first time on October 26-27 at the Deutsches Museum in Munich, Germany. Einstein Contra Newton: A Fictitious Debate About Space and Time was written to commemorate the 100th anniversary of Einstein's Theory of Relativity and the 50th anniversary of Einstein's death. Both shows were sold out and there are plans for the play to be performed again in late December.
- Dr. Seonaigh MacPherson, Curriculum, Teaching and Learning, along with visiting scholar Dr. Zvi Bekerman (Truman Centre, Hebrew University of Jerusalem), recently signed an agreement to launch a new academic journal. "Diaspora, Indigenous and Minority Education (DIME): An International Journal" will make a significant contribution through a wide variety of educational spheres to the study of minority, indigenous and displaced peoples' efforts to sustain the continuity of their cultures.


## Faculty of Engineering

- Dr. Sima Noghanian, Electrical and Computer Engineering, has been elevated to the grade of Senior Member of the Institute of Electrical and Electronic Engineers, Inc. (IEEE). This is the highest professional grade, with only $7.3 \%$ of IEEE's membership of 365,000 members having achieved this level.


## Faculty of Human Ecology

- Dr. Mohammed Moghadasian, Human Nutritional Sciences, received the Margaret Becklake Thematic Symposium Award at the National Research Forum for Young Investigators in Circulatory and Respiratory Health.
- Dr. Carla Taylor, Human Nutritional Sciences, received the 2005 Centrum Foundation New Scientist Award for outstanding contributions to research in nutrition by individuals within 15 years of completing their doctorate. The award was presented at the annual meeting of the Canadian Society for Nutritional Sciences.


## I.H. Asper School of Business

- Dr. Ed Tyrchniewicz, Associate Dean, has been appointed by the Minister of Agriculture and Agrifood Canada, the Honourable Andy Mitchell, to Chair a 32 person panel to review and recommend changes to the Canadian agricultural policy framework.
- Dr. Glenn Feltham, Dean, has been named a Fellow of the Society of Management Accountants of Canada (FCMA). This designation is awarded to CMAs who, through their outstanding achievements, bring distinction to the management accounting profession and serve as role models for others.


## Faculty of Law

- On October 20-22 the Faculty of Law, in cooperation with Manitoba Justice and The Law Society of Manitoba, hosted "Unlocking Innocence," a major international conference on avoiding wrongful conviction. The conference presented one of the largest groups of internationally recognized experts in this area and attracted registrants from across Canada and many other countries. The D. A. Thompson Fund provided scholarships for a group of law students from Robson Hall to attend.


## Faculty of Nursing

- Linda Mandzuk, Master's student, was honoured as the Rising Star in Nursing Research (Master's level) at the Sigma Theta Tau International Nursing Honour Society (Xi Lambda Chapter) Annual Conference. Krista Wilkins, a doctoral student in Cancer Control, was the recipient of the Rising Star in Nursing Research award at the doctoral level. The awards are presented to graduate students who show outstanding research potential and scholarly abilities.


## Faculty of Science

- Michael Smadella, student, was the recipient of the TRIUMF Award for the Prairie Provinces, one of five scholarships awarded to Canadian students majoring in physics or in engineering physics, who have achieved outstanding results in the their programs of study. These annual awards consist of a $\$ 2,000$ scholarship plus a paid four-month summer research internship at TRIUMF.
- Alexei Sukhovich, student, was selected as one of the R W B Stephens Prize Winners at the World Congress on Ultrasonics in Beijing. The prize recognizes his outstanding work in ultrasonics, and the excellent presentation of his results.


## St. John's College

- The conference "Currents in Biblical \& Theological Dialogue 2005" was held at St John's College on September 30 and October 1. The topic of the conference was "The Role of Theology on the Campus: Does the Academy Need the Study of Theology?" and the keynote speaker was Professor L. Gregory Bloomquist of Saint Paul University in Ottawa. This conference was jointly sponsored by St John's College, the University of Winnipeg Faculty of Theology, Providence College and the Canadian Mennonite University.


## Student Affairs

- The ASE (Agriculture, Science, and Engineering) Career Fair was held October 6. Approximately 400 students attended, along with 47 employers.


## III. RESEARCH MATTERS

## Honours and Distinctions

- The University of Manitoba has received two more national Synergy Awards for excellence in innovation. Announced October 19, 2005, at a ceremony in Halifax,
the new honours place the University of Manitoba second in Canada, with a total of eight Synergy Awards.

Established by the Natural Sciences and Engineering Research Council of Canada (NSERC), the Synergy Awards recognize outstanding research and development partnerships between universities and industry.

One award recognized the ten-year partnership between the University of Manitoba and Vector Construction Group. Led by civil engineering professor Aftab Mufti, president of ISIS Canada, the collaboration has focussed on the use of carbon-fibre-reinforced polymers (CFRP) to strengthen concrete and wood structures. This partnership is also leading the world in "civionics" - the use of advanced sensor devices and systems for real-time monitoring of bridges and other structures.

The second Synergy Award recognized the partnership between the University of Manitoba, the Manitoba HVDC Research Centre, and RTDS Technologies. Led by electrical and computer engineering professor Aniruddha Gole, NSERC Industrial Research Chair in Power Systems Engineering, the partnership has resulted in powerful new tools for the global power industry, including the world's first fully digital, real-time simulator for power systems.

- Dr. Douglas Ruth, Dean of the Faculty of Engineering, received the 2005 Technical Achievement Award from the Society of Core Analysts (SCA). The award is the Society's highest honour, and it is given annually to an individual deemed by the SCA board of directors to have made outstanding contributions to the advancement of core analysis technology.

Earlier this year, Dr. Ruth was also named as the 2005 Distinguished Lecturer of the Canadian Design Engineering Network (CDEN).

- Professor Alan Clayton, Civil Engineering, received the 2005 Wilbur Smith Distinguished Transportation Educator Award from the Institute of Transportation Engineers (ITE). This award is given annually to a transportation educator who has made an outstanding contribution to the transportation profession by relating academic studies to the actual practice of transportation.

Prof. Clayton was recognized for his outstanding achievements in educating and mentoring students in the field of transportation and for the support he provided during the creation of the ITE student chapter at the University of Manitoba.

- Dr. Lesley Degner, Faculty of Nursing, is the 2005 recipient of the Dr. John M. Bowman Memorial Winnipeg Rh Institute Foundation Medal for excellence in research accomplishments by senior University faculty. The award was presented
during the University of Manitoba Fall Convocation ceremony on October 20, 2005.

Dr. Degner is an intemationally recognized scholar and a leading researcher in the area of patient involvement in medical decision making. She has been instrumental in the development and implementation of new cancer control programs and strategies, and she has shown outstanding commitment to graduate training in cancer research.

- Dr. Degner has also been confirmed as the recipient of the Oncology Nursing Society (ONS) 2006 Distinguished Researcher Award. ONS is the largest professional oncology association in the world, and this annual award recognizes the contributions of a member who has conducted or promoted research that has enhanced the science and practice of oncology nursing. The award will be presented to Dr. Degner at the ONS annual congress in May, 2006.


## Grants Received and/or Applied For

- The Canadian Institutes of Health Research (CIHR) has announced its Partnerships for Health System Improvement awards from the Spring 2005 grant competition. One faculty member has received an award as follows:
- Dr. Alan Katz, Family Medicine, was awarded \$99,999 over three years for his project "Testing the Effectiveness of Health Lines in Chronic Disease Management of Congestive Heart Failure."
- The Muscular Dystrophy Association has announced its awards from the Spring 2005 competition. One faculty member has received an award as follows:
- Dr. Judy Anderson, Human Anatomy and Cell Science, was awarded an operating grant of US $\$ 200,000$ over two years for her project, "Combatting Fibrosis in MDX Mouse Dystrophy by Halofuginone - A Novel Gene Therapy for DMD."
- Two researchers have received Natural Sciences and Engineering Research Council (NSERC) Collaborative Research and Development grants:
- Dr. James Jamieson, Chemistry, was awarded $\$ 125,474$ over three years for the project, "Autophagic compartment for post-ER, pre-secretory degradation of lipid/lipoprotein."
- Dr. Martin Nyachoti, Animal Science, was awarded $\$ 75,000$ over 3 years for the project, "Digestible amino acid contents in feedstuffs for poultry: A basis for accurate feed formulation."
- Three research teams led by the principal investigators listed below have received NSERC Strategic Grants:
- Dr. Digvir Jayas, Associate Vice-President (Research) and Canada Research Chair in Stored-Grain Ecosystems was awarded \$318,500 over three years for the project, "Integration of near-infrared spectroscopy and machine vision for quality assessment of cereal grains."
- Dr. Norman Richards, Mechanical and Manufacturing Engineering, was awarded $\$ 519,150$ over three years for the project, "Development of procedures and modelling of gas turbine component repair."
- Dr. Carla Taylor, Human Nutritional Sciences, was awarded $\$ 528,970$ over three years for the project, "Evaluation of insulin-mimetic compounds of buckwheat: relationship to glucose utilization in diabetes."


## Contracts Received

- On September 16, 2005, a contract was awarded by the Agri-Food Research and Development Initiative (ARDI) to fund five key technical and operations positions at the Richardson Centre for Functional Foods and Nutraceuticals. The five-year contract is for $\$ 1.25$ million and is under the direction of Dr. Digvir Jayas, Associate Vice-President (Research), Canada Research Chair in Stored-Grain Ecosystems, and Interim Director of the Richardson Centre.


## Related Initiatives

- Dr. Digvir Jayas, Associate Vice-President (Research) and Canada Research Chair in Stored-Grain Ecosystems, attended the 11th Technology Summit and Technology Platform held in India from September 19 to 22, 2005. The Canadian delegation, led by the Honourable Jim Petersen, Minister of International Trade and Dr. Arthur Carty, National Science Advisor to the Prime Minister, included 115 representatives from industry, government and universities. The summit was organized by the Confederation of Indian Industry.

Dr. Jayas was invited to make two presentations: "Indo-Canada Biotechnology Partnering Opportunities" in Bangalore, and "Partnering Opportunities in the Biotech Field with the University of Manitoba" in Delhi.

- On October 14, 2005, an international press conference was held at the Hotel Fort Garry in Winnipeg to announce the official launch of the International Knockout Mouse Project, a worldwide effort to create knockout mice for every gene in the mouse genome. Dr. Geoff Hicks, Canada Research Chair in Functional Genomics
is co-leader of the North American arm of the project. A joint effort of the University of Manitoba, Genome Prairie, and CancerCare Manitoba, the event included a live satellite link with Italy.

In addition to Dr. Hicks and his European counterparts, event participants included: the Honourable Reg Alcock, President of the Treasury Board and Minister responsible for the Canadian Wheat Board, The Honourable David Chomiak, Minister of Energy, Science and Technology (Manitoba), University of Manitoba President and Vice-Chancellor Dr. Emőke Szathmáry, CancerCare Manitoba President and CEO Dr. Dhali Dhaliwal, and Dr. Arnold Naimark, Director of the Centre for Advancement of Medicine.

## IV. ADMINISTRATIVE MATTERS

## Strategic Resource Planning Process

- To support the 2006/07 resource allocation process, Deans, Directors and Heads of Administrative Units have been requested to develop their strategic resource plans with a particular focus on the relationship between the units' priorities and University strategic priorities as communicated in the document "Building for a Bright Future, a Strategic Academic Plan for the University of Manitoba". As part of the review process, the President and Vice-Presidents will meet with the Deans and Directors of academic units to review and discuss the unit submissions beginning in January 2006. Administrative units will meet with the Vice-President to whom they report. Copies of the submissions will be provided to the members of the Budget Advisory Committee to assist them in fulfilling their role of advising on the University's operating budget and related resource allocation issues.


## Information Services and Technology

- Work continues on various building network cabling projects for both new and existing buildings. An RFP for construction has been issued for Allen. Construction for Wallace is near completion. Design of new networks in the Basic Medical Science building is underway. Construction is almost complete for Chown. Construction has started for Human Ecology and Russell. The old Monsanto building, Dentistry and Sinnot will be added to the priority list for 2006/2007.


## Ancillary Services

- In order to provide additional casual parking on campus, construction of an extra 45 stalls was recently completed in the "S.D." ticket dispenser lot.
- The first annual Emerging Student Leaders Dinner will be held on November 24. This dinner will bring together student leaders from across campus and celebrate and acknowledge their contributions to the University of Manitoba community. Student leaders, for example, from residences, athletics, peers, student ambassadors, and UMSU will be invited to participate.
- On August 27, 2005, 41 residence student leaders participated in a United Way Day of Caring at the Urban Circle Training Centre on Selkirk Avenue. The Urban Circle Training Centre provides Aboriginal people with skill-specific training targeted to job market demands. Projects undertaken included landscaping and painting.
- The Cinemaworks/Rez Net project has been completed so that of DSL internet service is available in all 550 rooms of Mary Speechly Hall and Tache Hall. All residence rooms are now equipped with some form of high-speed internet connection.
- Over 1,000 students were trained in the University of Manitoba Safe Alcohol Function Education (UMSAFE) program.


## Physical Plant

- Updates on some Building Projects:
- Bannatyne Parkade - The installation of the precast piles is complete and the contractor is excavating around the piles.
- EITC - Renovation work in Engineering 1 is ongoing. Approximately $85 \%$ of the exterior windows have been replaced and asbestos abatement is approximately $75 \%$ complete. The project is scheduled for completion as of summer 2006.
- Environmental Safety Building - The building is now complete. Landscaping and demolition of the adjacent buildings are still pending.
- National Centre for Livestock and Environment (NCLE) - Feedmill construction is $100 \%$ complete. The alternate barn is nearing completion.
- Richardson Centre for Functional Foods and Nutraceuticals - Building is nearing completion and commissioning is ongoing. Building occupancy is slated for mid November. Exterior landscaping and parking areas nearing completion.
- Russell Building Exterior Wall Upgrade - All demolition and mould abatement/asbestos abatement as per original contract has been completed. Additional asbestos abatement will be required for removal of Level 300 ceiling and floor tile. Overall the project is $75 \%$ complete.
- Pharmacy Building - The anticipated tender date for the building is February 2006.
- St. Paul's College - Phase II foundation repair - backfilling is complete on the south side, with the work on the east side scheduled for completion early November. Remaining foundation work will be suspended until spring.
- Watermain Cleaning Program was implemented in October.


## Financial Services

- Over 23,000 fee payments were processed in September, an increase of approximately 2,000 over last year. WEB banking accounted for $31 \%$ of all payments, up from $28 \%$ for the same period last year.


## Human Resources

- The Canadian Nuclear Safety Commission (CNSC) has notified the University of a scheduled Type 1 inspection (audit). CNSC will inspect areas where radioactive material is in use, and will interview workers and their supervisors. Inspections and interviews are being scheduled for the Basic Medical Sciences Building, Manitoba Institute of Cell Biology, John Buhler Research Centre, Allen Building, Ellis Building and the new Environmental Safety Building-
- During the week of September 12, 2005, the Environmental Health and Safety Office held four modified Asbestos Awareness Training Sessions for the Winnipeg Fire and Paramedic Service. Approximately 100 firefighters attended.


## Security Services

- In October, Security Services conducted its SpeedWatch program in conjunction with Manitoba Public Insurance. Over 1,000 vehicles were monitored with over $60 \%$ of the vehicles exceeding the posted speed limit.


## Smart Park

- Smartpark is exploring the idea of locating a wind turbine at the entrance of the park. This turbine would supplement enough energy to One Research Road to cover the parking lot light standards. The turbine will also act as a symbol of renewable energy.
- Dr. Sephane Evoy from the National Institute of Nanotechnology presented a lecture entitled, "Nanotechnology: Emerging Healthcare Applications and

Markets" October 27. The event, which was "sold-out", was held in partnership with the Business of Science Symposium, and proved to be a great success.

## V. EXTERNAL MATTERS

## Special Events

- The official naming and dedication of William Norrie Centre at 485 Selkirk Avenue was held on October 21, 2005. About 150 people attended.
- The annual Remembrance Day Ceremony will be held on November 10, 2005 in Marshall McLuhan Hall. The featured reading was drawn from a memoir by education graduate Hilda Morrish who reflects on her life in England during the war and being in Paris around VE Day.


## Alumni Affairs

- Homecoming 2005 was held September 22 to 25 with a total attendance of approximately 3,500 , up from 2,400 last year. In addition, 11 faculties hosted organized class reunion events during this time.
- In response to feedback from alumni, On Manitoba magazine will have an updated look as well as feature new sections, including a full-length feature story and student profile.
- Upcoming out-of-town alumni events for 2006 are scheduled for Calgary on March 29, Edmonton on March 30, Vancouver on April 26, and Victoria on April 27.
- The Alumni Association is assisting The Honorable Frank McKenna, Canadian Ambassador to the United States, connect with graduates of Canadian universities living in the United States by promoting his Connect 2 Canada program to University of Manitoba alumni in the US.


## Government Relations Office

- The office arranged for a visit from a delegation of government representatives from the Province of Anhui, People's Republic of China. The delegation met with senior administration to discuss potential academic and research collaborations between the university and post secondary institutions in the Anhui province, and toured the CWB Grain Storage Research Centre and the ISIS Structures Lab.
- The Office organized a presentation to the House of Commons Standing Committee on Finance by Dr. Szathmáry and Dr. Keselman.
- The Office arranged tours of the following units for the indicated individuals:
- Faculty of Dentistry's Centre for Community Oral Health, for the Federal Minister of Public Health, Dr. Carolyn Bennett.
- Richardson Centre for Functional Foods and Nutraceuticals, for Honourable Rosann Wowchuk, provincial minister for Agriculture, Food and Rural Initiatives, along with some members of the NDP Caucus.
- The Director chaired the provincial Business of Science Biotechnology Symposium 2005- Post Secondary Stream - which resulted in 31 University of Manitoba students having access to the full program and another 150 students registered for the student program.


## Department of Development and Department of Advancement Services

- The total raised for this fiscal year to October 31,2005 is $\$ 9,721,574$
- Through the Annual Giving program's call centre, student callers have raised over $\$ 200,000$ in the last six weeks.
- In mid-October, the Annual Report to Donors was mailed out to more than 16,000 donors, industry leaders, board members and staff.


## PART B - Notable Events (External)

Emőke J. E. Szathmáry
September 16, 2005-, 2005
Friday, September 16, 2005 - Saturday, September 17, 2005

- Attend meeting of the Board of Directors, Canadian Genetic Diseases Network, Vancouver

Monday, September 19, 2005

- Bring greetings at the Faculty of Law's reception in honour of the Pitblado Scholars

Wednesday, September 21, 2005

- Bring greetings at the Homecoming event held by alumni of the Faculty of Education

Thursday, September 22, 2005

- Meet with Grand Chief Phil Fontaine, Assembly of First Nations

Friday, September 23, 2005

- Meet with recipients of the Distinguished Alumni Award of the Faculty of Arts: Constance Backhouse, Danny Finkleman, and Roger Léveillé
- Bring greetings at the luncheon celebrating the official opening of the Engineering and Information Technology Complex
- Present remarks at the Official Opening of the Engineering and Information Technology Complex
- Bring greetings at the Homecoming dinner held by alumni and alumnae of the School of Medical Rehabilitation

Saturday, September 24, 2005

- Bring greetings at the Reunion Breakfast of alumni of the Faculty of Medicine
- Participate in "Kickoff" ceremonies at the Bison's Homecoming Football Game
- Provide interview regarding Homecoming celebrations to Shaw CableTelevision
- Provide interview regarding Homecoming celebrations to Shaw CableTelevision
- Present remarks at the Homecoming Gala Banquet


## Sunday, September 25, 2005

- Host and present remarks at the President's Luncheon for alumni (classes of "35 and '45)

Monday, September 26, 2005

- Meet with Mr. Xu Liquan, Honourary, President, Anhui Peoples's Association for Friendship with Foreign Countries; Mr. Zhang Yaowen, Director General, Anhui Provincial Personal Department; Mr. Yu Zhifang, Deputy Director General, Anhui Provincial Education Department; Mr. Xu Jiasheng, Deputy Director General, Anhui Provincial Environmental Protections Bureau; Mr. Chen Huazhou, Deputy Director General, Anhui Provincial Foreign Affairs Office; Ms. Wang, Deputy Director General, Anhui Provincial Finance Department; Mr. Yu Aimini, Assistant Consultant and Interpreter, Division of Asia, America and Oceania of Anhui Foreign Affairs Office; Mr. Zhang Xianggen, Chairman, Jingxian County Congress of Anhui Province; Mr. Wang Jianhua, Director, Jingxian County Foreign Affairs Office of Anhui Province; along with Dr. Robert Kerr, VicePresident (Academic) \& Provost; Dr. Joanne Keselman, Vice-President (Research; Dr. David Morphy, Vice-Provost (Student Affairs; and Mr. John Alho, Director, Government Relations
- Attend meeting of the St. Boniface General Hospital Board of Directors
- Meet with representatives of Nanjing University of Finance and Economics VicePresident Dong Xinhua, Director of Publicity Department; Professor Zhang Shengbing, Deputy Dean of Food Science and Engineering School; Professor Song Wei, Professor of Foreign Languages Department; Feng Jianwen, Deputy Dean of Information, Engineering School; Professor Zhou Xiaofei, Lecturer in the Business and Administration School; along with Dr. Michael Trevan, Dean, Faculty of Agricultural and Food Sciences and Dr. Qiang Zhang, Professor, Biosystems Engineering

Tuesday, September 27, 2005

- Host reception for 2004 Teaching Award recipients at 37 King's Drive


## Wednesday, September 28, 2005

- Present remarks at the Faculty of Medicine's Welcome Dinner for new faculty

Saturday, October 1, 2005

- Present remarks at the Indian Canadian Culture and Heritage Association's Celebration of the Birth of Mahatma Gandhi

Monday, October 3, 2005

- Present remarks at the announcement of the Willy Wiebe Graduate Fellowship in Agricultural and Food Sciences
- Present remarks at the unveiling of the Official Portrait of John Wesley Dafoe , Chancellor (1934-1944)


## Tuesday, October 4, 2005

- Attend meeting of the Council of Presidents of Universities in Manitoba

Thursday, October 6, 2005

- Telephone meeting with The Honourable Belinda Stronach, Minister of Human Resources and Skills Development Canada
- Host the dinner at the University Club in honour of Vibeke Sorensen, Professor of Film and Media Studies at Arizona State University and Knight Distinguished Visitor
- Present remarks and attend lecture given by Knight Distinguished Visitor, Vibeke Sorensen

Friday, October 7, 2005

- Telephone meeting of the Association of Universities and Colleges in Canada (AUCC) Standing Advisory Committee on Intemational Relations (SACIR)

Tuesday, October 11, 2005

- Host reception at 37 King's Drive for recipients of Entrance Scholarships and their guests

Thursday, October 13, 2005

- Participate in the Canada West Foundation's "Embracing Change" Roundtable
- Present remarks at the annual dinner of the Council of Faculties of Agriculture and Veterinary Medicine (Canada)


## Friday, October 14, 2005

- Bring greetings at the Manitoba Institute of Cell Biology/CancerCare Manitoba announcement of the international "Knockout Mouse Project". The project's North American initiative is led by Dr. Geoff Hicks, with the financial support of Genome Prairie
- Visit Churchill, Manitoba to:
- Attend luncheon with Mayor Michael Spence and City Council
- Tour the research ship CCGS Amundsen and meet Captain Alain Gariépy and Chief Scientist Dr. Gary Stem, Department of Fisheries and OceansFreshwater Institute and University of Manitoba Adjunct Professor
- Attend the ArcticNet presentation by Dr. Martin Fortier, Executive Director, ArcticNet and Dr. David Barber, Department of Environment and Geography, Canada Research Chair, and Project Leader (Theme III)
- Attend dinner hosted by Captain Alain Gariépy and Chief Scientist Dr. Gary Stern


## Saturday, October 15, 2005

- Attend University of Winnipeg Convocation Dinner

Sunday, October 16, 2005

- Attend University of Winnipeg Fall Convocation ceremonies as a member of the platform party

Monday, October 17, 2005

- Attend Manitoba Chambers of Commerce Breakfast featuring The Honourable Dr. Carolyn Bennett, Minister of State, Health Canada
- Present remarks at Evening of Excellence


## Tuesday, October 18, 2005

- Attend Premier's dinner in honour of Governor General Michaëlle Jean


## Wednesday, October 19, 2005

- Provide remarks and host Convocation dinner for Honorary Degree recipients


## Friday, October 21, 2005

- Meet with Honourable Diane McGifford, Minister of Advanced Education along with the Council of Presidents of Universities in Manitoba
- Present remarks and act as Master of Ceremonies of the event naming 485 Selkirk Avenue as the William Norrie Centre
- Present remarks with Dr. Joanne Keselman, at the House of Commons Standing Committee on Finance pre-budget consultations

Monday, October 24, 2005

- Attend meeting of the St. Boniface General Hospital Board of Directors


## Tuesday, October 25, 2005

- Attend launch of Association of Universities and Colleges in Canada (AUCC) publication entitled, "Momentum", in Ottawa

Weduesday, October 26, 2005

- Attend biannual business meeting of the Association of Universities and Colleges in Canada (AUCC) in Ottawa

Thursday, October 27, 2005

- Attend meeting of the Association of Universities and Colleges in Canada (AUCC) Standing Advisory Committee on International Relations

Friday, October 28, 2005

- Present remarks at Child Health Research Day sponsored by the Manitoba Institute of Child Health

Sunday, October 30, 2005

- Present remarks at the India Canada Culture and Heritage Association Incorporated Annual Gala Dinner, and accept its 2005 Life Time Achievement Award

Monday, October 31, 2005

- Telephone meeting of the Council of Presidents of Universities in Manitoba


## Tuesday, November 1, 2005

- Attend St. Paul's High School Crusader Challenge Dinner honouring Gary and Janice Filmon

Thursday, November 3, 2005

- Present remarks at the opening session of the Canadian Association for Physical Anthropologists, Hotel Ft. Garry
- Meet with Mr. Bob Cox, Editor of the Winnipeg Free Press
- Meet with Premier Gary Doer and the Council of Presidents of Universities in Manitoba
- Attend a dinner in honour of the the 2005 Betts Lecturer, Dr. Geoffrey Ozin, Canada Research Chair in Materials Chemistry, Department of Chemistry, University of Toronto
- Present remarks and host reception at the University Club for recipients of promotion and/or tenure in 2003, and their guests

Saturday, November 5, 2005

- Attend St. John's College Convocation Dinner

Sunday, November 6, 2005

- Present remarks at Taxi Driver Appreciation Day, Marshall McLuhan Hall
- Attend St. John's College Convocation Ceremony as member of the platform party

Monday, November 7, 2005

- Host reception at 37 King's drive in honour of student athletes who were named RBC Academic All Canadians of 2004-05
- Present remarks at the Canadian Foundation for Innovation announcement of New Opportunities award recipients nationally, and also at the University of Manitoba


## Tuesday, November 8, 2005

- Present remarks at the concert organized by the Arthur V. Mauro Centre for Peace and Justice at St. Paul's College, at Centennial Hall

Wednesday, November 9, 2005

- Attend the Winnipeg Chamber of Commerce Luncheon featuring guest speaker The Honourable Reg Alcock

Tuesday, November 14, 2005

- Attend the inaugural meeting of the International Advisory Council of the Business School, Central European University, Budapest
- Meet with the Ambassador of Canada to Hungary, Mr. Robert Hage, in Budapest


## ANNUAL PROGRESS REPORT <br> (as of September 2005)

## BUILDING FOR A BRIGHT FUTURE

## A Strategic Academic Plan for the University of Manitoba

## The Plan

The Board of Governors and the Senate approved Building for a Bright Future in June 2003. The Plan outlined five institutional priorities for success:

1. Provide Access to an Exceptional Education
2. Attract and Retain the Best
3. Be a Centre for Research and Graduate Education that Makes a Difference to our Province, our Nation and our World.
4. Provide the Human, Physical and Technological Infrastructure Necessary for Learning and Research
5. Be at the Centre of our Community: On Manitoba

Each priority is accompanied by challenge statements which outline approaches to be taken to assist in addressing each priority.

## Progress Reports

Building for a Bright Future specifies that at the end of the 2006-07 academic year, the President will undertake a comprehensive evaluation of the progress made towards the attainment of the goals that address the challenges in the plan. In addition, the President was requested to report annually to Senate and the Board of Governors on the progress made towards the achievement of the plan. This report is the second of the annual reports that will be submitted.

## Format of the Progress Report

This report is in two sections:

## Section A: Responses Centrally Initiated

This section summarizes initiatives which were developed centrally, (and in the case of Academic Program Reviews, by Senate) which relate to many units within the University.

Section B: Responses from the Units
Each faculty, school and administrative unit submitted reports on the progress made at the unit level in addressing the five priorities. This section of the report includes some examples from faculty and school reports and from the vice-presidents for the units reporting to them. These provide an overview of initiatives taking place at the unit level.

SECTION A:
RESPONSES CENTRALLY INITIATED

## 1. Academic Program Reviews

In January 2005, Senate approved revisions to the University Policies and Procedures with respect to Academic Program Reviews. The purpose of this policy is to maintain academic integrity of programs, at both undergraduate and graduate level, through a process of periodic formal reviews. These reviews consist of a thorough self-study and subsequent assessment by an external review team. These reviews will be very helpful in identifying the strengths of programs, and in suggesting ways by which academic programs can be further improved. Twenty-two graduate program reviews have been completed, covering 34 credentials, (e.g., one of the reviews was English, but it reviewed two programs, the M.A. and the Ph.D.) . The results have been encouraging and very helpful. Seventeen more are in process and more will be initiated by June 2006. During 2005/06 the process of reviewing undergraduate programs will begin.

## 2. Infrastructure and Capital Project Support

A common challenge among the five institutional priorities is the need to provide infrastructure support and capital project development. A detailed analysis of requirements and financial models that would support these requirements was developed. Much time has been devoted to this challenge by the President, Vice-President (Administration), Associate Vice-President (Finance) and the Director of Government Relations including extensive discussions with Government officials. These discussions resulted in the University receiving approval for a $\$ 75$ million loan from the Province at an interest rate of $5.23 \%$. Debt proceeds are being used to address deferred maintenance and health and safety problems as well as technology requirements, and to bridge finance major capital projects such as the new Engineering and Information Technology Complex, the Richardson Centre for Functional Foods and Nutraceuticals, the new facility on Selkirk Avenue which houses the inner-city Social Work Program, a new Pharmacy building at the Bannatyne campus and a Centre for Music, Art and Design.

## 3. Resource Planning

The implementation section of Building for a Bright Future states that "during the annual planning exercise, which is part of the University's resource allocation process, the President and the Vice-Presidents will require the submission of plans under each institutional priority to warrant the allocation of incremental funds."

The process for developing submissions for the annual operating budget and for the three year strategic resource plan was amended in October 2003 to reflect this requirement in the plan. A strategic resource planning template was developed to assist academic and administrative units in formulating their Strategic Resource Plan which is a written communication that summarizes a unit's strengths, weaknesses, opportunities, and threats, and outlines the unit's strategic priorities, resource plans, and achievements. The template creates an explicit linkage between unit priorities and those expressed in Building for Bright Future. Unit priorities are to be
addressed in the submissions in the context of the five priority statements outlined in the strategic plan. In October 2004 the process was further amended to provide the opportunity for each faculty and school, and St. John's and St. Paul's Colleges, to present their submissions to the President and the Vice-Presidents.

## 4. Enrolment Management

An Enrolment Management Plan has been finalized. The intent of the Plan is to give strategic direction to the University with respect to anticipated or planned growth from 2004-05 to 2010 and beyond. The overriding assumption in the plan is that it is based on demographic trends and estimates. This leads to the conclusion that for planning purposes the optimal enrolment or capacity should be 26,000 students. The process of reviewing administrative policies and practices that may impact on enrolment, and a review and refinement of recruitment and retention strategies are underway. Specific attention is being given to Aboriginal students, international students and graduate students. To monitor and oversee the process, the VicePresident (Academic) and Provost has developed an Enrolment Management Team that includes the Vice-Provost (Student Affairs), the Executive Director, Student Services, the Executive Director, Enrolment Services, the Registrar and the Director, Sport and Active Living. In addition, a University-wide Enrolment Management Committee is being formed to assist in the development and support of this strategic direction.

## 5. Student Affairs Re-Organization

In the fall of 2004, the Vice-President (Academic) and Provost initiated a review of Student Affairs. The primary intent of the Review was to determine whether Student Affairs was organized in a way that would best support the Strategic Plan of the University and specifically, the recently approved Enrolment Management plan of the University. As a result of the Review, a new structure was implemented June 1, 2005. The revised structure is based on the philosophy of blending and balancing the University's commitments to student development and to strategic enrolment management. Specifically, an Executive team has been created including the Executive Director, Student Services; the Executive Director, Enrolment Management; and the Registrar reporting to the Vice-Provost (Student Affairs). A link to the Director of Sport and Active Living has also been created which will facilitate more effective communication between the areas in support of students. Units formerly reporting directly to the Vice-Provost (Student Affairs) will report to an Executive Director. Housing and Student Life will continue to report jointly to the Vice-Provost (Student Affairs) and the Director, Ancillary Services. The new structure positions Student Affairs to more effectively respond to the new priorities of the University with respect to recruitment, retention and records.

## 6. Council of Health Professions

During 2004/05, the Vice-President (Academic) and Provost re-established the Council of Health Professions, a forum for wide-ranging discussion of programming in health human resource development throughout the province. The Council consists of the Deans of Medicine, Dentistry, Nursing, and Pharmacy, and the Director of Medical Rehabilitation; and external representatives from Manitoba Health, the Winnipeg Regional Health Authority, and regional health authorities outside Winnipeg. The Council has met on several occasions, and has proved
to be an excellent way for the University and the broader health services community, to collaborate in the areas of training and research.

## 7. Economic Impact Study

Related to the priority Be at the Centre of our Community: On Manitoba, the Vice-President (Administration) commissioned Pricewaterhouse Coopers to undertake an economic impact study of the effect of the University's operating, research and capital expansion (current and planned) activities on the Province and the City of Winnipeg. The report was released in the fall of 2004 and information contained in the Report has been presently publicly by the President and through various documents such as the audited Annual Financial Report and the Annual Report of the University of Manitoba. Key findings of the study, which were based on the 2002-2003 financial statements, were as follows:

- The gross output impact of $\$ 696$ million of initial expenditures on operating, research and planned capital activities generated $\$ 1.2$ billion of economic impact in the Province.
- On a value added basis, these initial expenditures stimulated $\$ 643$ million of economic activity in the Province and $\$ 552$ million in the City of Winnipeg alone.
- . When one considers that approximately $\$ 100$ million of the University's revenue came from outside the Province in 2002-2003, the return on investment to the City, the Province and all Manitobans also exceeded the direct investment by Manitobans on a value added basis.
- In addition to creating 6,700 full-time, part-time and casual positions, the University's expenditures created a further 6,486 jobs in the Province; these jobs gave rise to $\$ 158$ million tax revenues for the Province and the City.

As a result, this study demonstrated that a large part of the dollars invested in the University of Manitoba by the Province and the people of Manitoba stay in Manitoba. This independent study provided an opportunity for promoting the University to its stakeholders over the past year.

## SECTION B: <br> RESPONSES FROM THE UNITS

As noted, each faculty, school and administrative unit has submitted reports on the progress made towards achieving the five priorities. The following are some examples from these reports, outlined according to each priority in Building for a Bright Future. The examples from units reporting to the Vice-President (Research), the Vice-President (Administration) and the VicePresident (External) are included in the reports of each Vice-President, in specific sections, below.

## 1. Provide Access to an Exceptional Education

## Agricultural and Food Sciences

- The new Agricultural Finance option in the Diploma in Agriculture program was approved by Senate and began to accept students in September 2005. This new offering addresses a growing shortage of skilled labour to work with lending institutions such as credit unions, banks, Farm Credit Corporation, Manitoba Agricultural Credit Corporation, leasing companies, and with larger farms and agribusinesses.
- The Plant Systems option in the Bachelor of Science (Agriculture) program has been replaced by a new Plant Biotechnology option. Students in this new option will study the sciences and advanced biotechnologies used in the improvement, protection and utilization of agricultural and horticultural crops.


## Architecture

- Interior Design received full accreditation for a five year period from the Foundation for Interior Design Education Research. Landscape Architecture also received full accreditation from the Canadian Society of Landscape Architects. Its accreditation standards mirror US requirements.
- Discussions with the Faculty of Architecture and Urban Planning, Chongqing University (ranked in the top 8 in China) and the Faculty of Architecture, Southwest Jiaotong University in China, have resulted in the signing of preliminary exchange agreements. These agreements will afford our students opportunities to study in China.
- The Faculty's Aboriginal Advisory Council is composed of aboriginal leaders and those working in, or with, aboriginal communities. The Council is exploring the opportunities and need for an Aboriginal Planning and Design undergraduate degree.
- A Winter Session Visiting Artist Program was established to bring distinguished contemporary artists to the School of Art for public lectures and private critiques with honours thesis students. A "Art History Presents" visiting lecture program was also established where scholarly public talks are presented. These programs provide a national and international context for students.
- A new course for summer session on "Topics in Aboriginal Art" was introduced and the Inuit Art course re-designed. These initiatives resulted in increased interest and enrolment in these courses.
- A New Media Working Group is designing a curriculum in this emerging area. To date two courses in new media (Foundations in New Media, and Debates in New Media) have been developed and will be sequenced with three existing courses to prepare a proposal for a new media major.


## Arts

- An interdisciplinary major in Italian Studies has been approved. This program includes courses offered in Classics, History, Fine Arts, and Music, as well as those in Italiạn language and literature.
- A joint honours program between the Department of Economics and the Department of Statistics, and a joint honours program between the Department of Economics and the Department of Mathematics, were approved.
- The Faculty of Arts continued to expand opportunities for students in international and other cultural exchanges. The Department of German and Slavic Studies joined the Four- University Canadian consortium to enhance student exchange with the University of Freiburg, Germany. The Department of Native Studies offered the Baffin Island (Pangnirtung) Summer School and Anthropology and French, Spanish and Italian cooperated in offering the Winter term student exchange with Universidad Latina de America for study in Mexico. Letters of intent for student and faculty exchanges were also developed with Lanzhou University, Ningbo University, Harbin Institute of Technology (all China), and Momoyama Gakuin University (Japan).
- A number of innovative travel-study programs have been developed, for example, the Women's Studies Program offers a progxam in Nicaragua that allows students to work with local women's community groups and organizations. The experience offers participants mutual understanding and cross-cultural learning.


## Continuing Education Division

- Work with University 1 to develop learner supports for students on probation, students studying at a distance (i.e., distance education students and students
studying internationally), and students entering via the new Option 4. Distance Education instructional designers have been working with University 1 student advisors to develop the U1 Start Book program as an online (WebCT) student orientation. The first version will be used by students admitted to the UMClifford Centre Program in Guangzhou, China.
- The feasibility of developing and delivering graduate programs by distance education (e.g., Master in Public Administration; Master in Social Work; Master in Education) continues to be investigated. A pilot for the Master in Public Administration is planned for the Fall of 2006.
- A concept paper on international programming opportunities through the Continuing Education Division has been developed. This includes study abroad, exchange programs, and international program delivery.


## Dentistry

- $100 \%$ of the Dental Students were successful in the National Board Examinations and $100 \%$ of the Dental Hygiene Students were successful in the National Dental Hygiene Certification Board Examinations.
- The appointment of a full-time Education Specialist has provided increased learning opportunities to students.
- The Faculty began collaboration on a longitudinal, national study to identify and assess variables that predict student success in Dentistry. The results will help to establish the validity and reliability of the assessment instruments used to select students for Dentistry throughout Canada.


## Education

- A transition/preparation program "Academic Aid Program for Internationally Educated Teachers" is being implemented in collaboration with the Winnipeg School Division and Seven Oaks School Division.
- A major review of the Bachelor of Education program has begun.


## Engineering

- The development of design engineering as a focus of the undergraduate program has been adopted with design courses in all programs. Two additional Engineers in Residence have been added to assist in bringing the practice of engineering into the classroom. The Engineers in Residence program is now being modelled by other faculties across Canada.

Clayton H. Riddell Faculty of Environment, Earth, and Resources

- A full-time Cooperative education coordinator has been appointed to oversee the expansion of the co-op program to provide opportunities for hands-on, real world environmental problem solving and experiential education.
- An Aboriginal Programs coordinator has been appointed to assist in developing an access and student success program, and unique programmatic offerings for aboriginal students.
- Work continues on internationalizing the curriculum and providing opportunities for study abroad programs and exchanges, including the North 2 North program of the University of the Arctic.


## Human Ecology

- A new undergraduate curriculum in Interdisciplinary Health is being developed in collaboration with Arts and Science. The proposal would encompass two programs, a B.A. (Health Studies) and a B.Sc. (Health Sciences). The unique feature is the integration of social and biological sciences in the learning experiences offered in both programs.
- A new practicum course in the Foods study area has been introduced which provides access for students to practical experience in industries that design and supply food products for food retail and food service companies.


## I.H. Asper School of Business

- A review of undergraduate curriculum will begin this year to ensure programs provide the best possible education to meet the needs of the ever changing business environment.
- The International Exchange Program now has 33 partners world-wide and is reviewing universities in China with which to partner. A unique exchange began this year with Tel Aviv University, in which students form the Asper School of Business and Tel Aviv University participate in a New Venture Analysis class, which is offered partially in Israel and partially in Winnipeg.
- A Continuous Improvement Committee has been established as a standing committee of Faculty Council to recommend and monitor continuous improvement policies, processes and activities, and to report to Faculty Council, including the reviewing of all proposals and activities that might affect the maintenance of accreditation.


## Law

- A Task Force is reviewing programs and practices for Aboriginal recruitment and academic support. Meetings have been held with recent Aboriginal graduates and recommendations will be finalized by the end of 2005.


## Libraries

- The Information Literacy Coordinator working with the Info LIT team, which includes staff from across the Libraries, has developed a strategic plan for Information Literacy. To date learning outcomes for the Department of Textile Sciences have been developed which will be used as model for other departments. The goal of information literacy is to help students develop the ability to access, evaluate and manage the overwhelming amount of information available at their fingertips. For example, as students progress from first year to fourth year, they will develop increasingly higher levels of skills in retrieving, evaluating, analysing, and presenting information in a credible and responsible manner. These skills will be useful in study and research, or everyday life, but more importantly, will be an asset in the workplace.
- The number of full-text electronic journals new exceeds the numbers of print journals available to students and faculty, (14,394 e-journals, 7,657 print). A program of access to e-books has also been implemented. To date, 79,060 electronic versions of print books are available.
- The Google Scholar search engine has been included on the Libraries' home page. Google Scholar searches for scholarly literature such as journal articles, theses, reports and preprints from a subset of publishers, universities, societies and other sources. Links to the Libraries' holdings automatically appear in Google Scholar search results.
- The Libraries' website is the primary means for providing access to its resources and services. The access statistics of the UML website continue to grow as more digital information is made available via the web. In 2004-05 the use of the site was four times what it was in 2001-02. With over $46,800,000$ requests, the Libraries' site is the most active on campus.


## Medicine

- The Dean of Medicine chairs the Canadian Collaborative for Quality and Safety in Intensive Care Units and personally brings this issue to the Question \& Answer discussions at presentations of faculty during recruitments, research forums, educational forums, and strategic planning. This Canadian collaborative now has funding from the Canadian Patient Safety Institute. The Dean is a member of the steering committee for the national endeavour "Safer Health-Care Now". Over 50 teams from over 35 institutions in Canada in all provinces participate.
- A demonstration project on interdisciplinary education as a tool to improve quality, sponsored by the Deans of Medicine, Nursing, Dentistry, Pharmacy, the Chief Operating Officer of the Winnipeg Regional Health Authority (WRHA) and the Director of the School of Medical Rehabilitation is scheduled for this winter. Twenty student volunteers from each of the five disciplines in their clinical years of education will be placed in multidisciplinary teams and assigned to patients with chronic illness. They will receive three extracurricular one-day learning sessions over five months based on the collaborative methodology. They will be responsible for assessing the impact of the processes of care on patients, and suggesting changes that may improve care.
- The Centre for the Advancement of Medicine is developing a proposal to form a Centre for Innovation for Quality and Safety in Health Care. This initiative will integrate planning for an academic "home" for faculty with skills in a number of areas with the goal to improve health care education and research at a variety of levels around issues of patient safety and quality improvement.
- Fundraising continues for the simulation centre in the Clinical Learning Centre (CLC) with students as the first group to donate. The CLC has advanced to the design-to-tender phase.
- Space for a functional centre for support of Aboriginal Health Education has been identified and planning is underway. The Centre supports educational, research, recruitment and student support activities in the Faculty and on Bannatyne Campus. The development of a one year post-Family Medicine fellowship in Aboriginal Health is in early planning stages.


## Music

- The ALIVE program (Accessible Live Internet Video Education), a new technology developed by a sessional instructor, was used to teach jazz students a composition course with the instructor, Jazz artist and composer Andy Farber, teaching from his home studio in New York.
- A rock music history course was developed which is popular with students in University 1.
- The Faculty initiated the Canadian Israeli Music and Culture Alliance - an international program to partner with the professional organizations and educational institutions to exchange students and professionals between Israel and Canada. Other exchange programs with universities in Canada, U.S., Israel, Germany, Singapore and Iceland for partnerships, student and faculty exchanges, are also underway.
- The curriculum of the Four Year Baccalaureate Nursing Program has been revised to reflect student, faculty and community input as well as accreditation and program approval standards. Changes include a revised conceptual framework, an additional clinical course, a concentrated focus on community health in the fourth year of the program, and the inclusion of a native studies elective. The proposed start date is Fall 2006.
- A discussion document regarding students with disabilities was developed and offers recommendations that address the matter of students with disabilities who seek admission and/or are studying within the Faculty of Nursing.


## Pharmacy

- The entry level curriculum continues to be upgraded with a particular emphasis on developing a central skills theme across the four professional years of the program. This theme integrates required physical, clinical and social science streams within practice simulation laboratories using standardized patient models and experiential clinical placements. The new curriculum ensures early exposure to patient-focused clinical interaction, as opposed to the previous model in which the formative years of the program were devoted to knowledge acquisition.
- Students are provided with an orientation the first day of classes, including assigning senior students as mentors to new students.
- Students graduating from the Faculty have a $100 \%$ success rate in attaining a position in the profession.

Physical Education and Recreation Studies

- The development of the Community Recreation and Active Living Diploma (CRALD) in partnership with Aboriginal Programs and Human Ecology is in the community-consultation phase. Consultations have been held in Winnipeg and are planned for Thompson and The Pas this fall.
- Discussions continue on the development of a Ph.D. program in Applied Health Sciences, involving the Faculty of Physical Education and Recreation Studies, the Faculty of Nursing, the School of Medical Rehabilitation and the Faculty of Human Ecology.


## St. Paul's College

- The B.A. (Minor) in Catholic Studies, one of a few programs of its kind in Canada, became fully operational in 2004-05. Enrollments in the introductory course met expectations.
- The Ph.D. in Peace and Conflict Studies, offered through the Mauro Centre, at St. Paul's will accept its first students in January 2006. The Program is the only program of its type in Canada.


## Science

- Computer Science is developing joint programs with the Department of Statistics, and with the Management Information Science Major in the Faculty of Management. The program was suggested by the Department's Industrial Liaison Committee and is supported by Manitoba's ICT industry.
- A joint double Honours program in Physics and Biochemistry has been established. A Joint double Honours program in Physics and Chemistry is also under development. These programs are in response to student demand as well as future research initiatives.
- Zoology is a founding member of the Lake Winnipeg Research Consortium which has the former Coast Guard Ship, the Namao as its research vessel. This has provided an innovative teaching opportunity which has made it possible for students in limnology/ecology courses to have a lab trip on the vessel to conduct a variety of sampling techniques.


## Social Work

- The Ph.D. program has been completely revised and is being used as a model by the Faculty of Social Work at the University of Calgary to revise its Ph.D. program.


## University 1

- An alternative entry option to University 1 (Option 4) has been approved for introduction in September 2006. In the context of the transition to university from high school, the concept of students at-risk underlines that the first term is the most critical time for students to drop-out of university, in most cases the first six weeks. It is also a time when averages (GPAs) drop 10 to $12 \%$. The key goal is to reduce the number of students who show these profiles and, therefore, elevate the overall quality of students preparing to transfer or transit to their Faculty of choice. Students applying for admission with high school averages between $63 \%$ and $69.9 \%$ will be conditionally accepted, and provided with additional advising and supports. If after 24 credit hours, students fail to achieve a cumulative GPA of 2.0 or better they will not be permitted to re-register in

University 1. Rather than students "failing" before they receive any specific intervention, the goal of Option 4 is for the less academically prepared student to "receive specific intervention".

- The academic content of University 1 Orientation has been increased, broadened and delivered over the two days of Orientation.
- A student advisors' Network has been established for all undergraduate advisors from faculties, schools and University 1 to ensure that academic advisors can stay up-to-date on the current changes and to enhance communication among advisors.

Vice-President (Academic) and Provost:

## Student Affairs

- Financial Aid and Awards developed Canada's first confirmation of enrolment process for government-sponsored student aid, and a related self-service option, thereby dramatically reducing student line-ups.
- The Registrar's Office is recognized for its development of web self-services for students, including registration courses. The development of web registration (with Administrative Systems, IST) has resulted in $94 \%$ of registration activity being done via the web.
- An agreement was signed with Clifford School, Guangzhou, China. Clifford is n international school that educates both Chinese and ex-patriot children from kindergarten to Grade 12 in English. It follows the Manitoba High School curriculum. The University will make available 36 credit hours of University 1 level courses. If successful, students are eligible to transfer to the University of Manitoba. The program will begin in the Fall of 2006.
- In collaboration with the Office of the Vice-Provost (Academic Affairs), "SpeakEASY," an individualized program to facilitate clear understanding of spoken English in the teaching/learning environment, continued for a second year. A total of 22 faculty members in 19 departments (at the Fort Garry and Bannatyne Campuses) received support through this program. SpeakEASY is a service available through the English Language Centre.


## Vice-President (Research):

- The Office of the Vice-President (Research) (VPRO) continued its efforts to rerecognize and celebrate excellence in students, faculty and staff by nominating faculty for local, national and international awards and honours for research. In 2004/05 VPRO oversaw and facilitated the submission of 60 nominations for research awards and honours compared to 44 in the previous year. In collaboration with the President's Office, two major celebratory events were
hosted: one in honour of Canada Research Chairs and the other in honour of Royal Society Fellows.
- The VPRO, in collaboration with the Faculty of Graduate Studies, initiated the development of guidelines for graduate students on intellectual property issues. Draft guidelines are currently under review, and a final document is expected by December 2005.


## Vice-President (Administration):

- The University's Respectful Work and Learning Environment Policy was approved. The policy creates a culture of respect and provides mechanisms for addressing problems. This policy and procedures establish the right of all students and staff to be treated with respect, dignity, and to be free from abuse or personal harassment.
- The Office of Legal Counsel has streamlined the placement agreements with hospitals, health care facilities, and educational institutions. Placement agreements provide excellent education and training opportunities for students.
- Workstations in Information Services and Technology (IST) open area labs were upgraded in Education, St. Paul's and University Centre. The new labs in the Engineering Information Technology Centre (EITC) were opened in September 2005.
- The new web-based student portal, JUMP, was implemented in January 2005. This new facility provides greatly enhanced teaching and communication facilities to students and instructors. Many instructors are now using the JUMP course management tools to improve their interaction with students.
- Parking and Shuttle Services continues to provide students, faculty and support staff a fast, free, and effective means to get around the Fort Garry campus as well as offering an express bus service between the Fort Garry and Bannatyne campus throughout the academic year. This year the Fort Garry Express - a shuttle bus devoted exclusively to getting students and staff from the perimeter Parking Lots (SD \& U Lots) and Smartpark, directly to Tier Building - operating 7:30 to 9:00 am weekdays, was introduced.


## Vice-President (External):

- In 2004-05, $\$ 5.1$ million was raised for student support, and $\$ 1.8$ million additional has been raised for this purpose since April 1, 2005. In addition, the success of Building on Strengths: Campaign for the University of Manitoba in increasing the value of endowment funds for scholarships and bursaries means the annual amount available for student awards will continue to increase in perpetuity.
- Public Affairs continued to perform a key role in raising awareness of the university's successes by recognizing and celebrating excellence in our students, faculty and staff. The most important initiative was the implementation of a targeted national communication and marketing plan to enhance the national reputation and competitiveness of the University of Manitoba, which included over 22,000 direct mailings to key audiences.


## 2. Attract and Retain the Best

## Agricultural and Food Sciences

- The Faculty developed a recruitment plan and hired a marketing agency to assist with the development of logo, slogan and visual concepts. A variety of tools (advertisements, displays, brochures, website and posters) were created. The Faculty also conducted a direct mail campaign to University 1 students and continued its Student Ambassador program in Manitoba high schools.
- The Faculty has received a Canada Research Chair (Tier 1) in Nutrition and Functional Foods. Two Canada Research Chairs (Tier 2) are being recruited, as well as two Industrial Research Chairs.


## Architecture

- Two faculty members are being supported to complete their Ph.D.s at other universities by assisting them financially and encouraging residency during study leave.
- For the past five appointments in three different Departments, the top candidate accepted the offer even though each was sought by other institutions.
- A total of $\$ 1.5$ million in new scholarship and bursary money was received through the Capital Campaign. Of that amount, $\$ 100,000$ has been earmarked as a scholarship for Aboriginal students.


## Arts

- The Faculty made 20 new probationary faculty appointments in 2004-05, increasing the diversity of areas as well as enhancing research in core areas in the humanities and the social sciences.
- The Faculty has been allocated three new Canada Research Chairs (CRC): Tier 1 in the area of Globalization and Cultural Studies, Tier 2 in the area of Aboriginal Canadian Studies and Tier 2 in Indigenous Politics and Governance.
- The Dean's October reception was initiated this year to introduce new members of the teaching staff to other members of the Faculty. This activity proved to be
an excellent way to help new faculty members network among themselves and to promote networking with established members of the Faculty.


## Continuing Education Division

- A mentorship program has been established linking new probationary appointments with continuing/tenured academic staff. The first year of the program ended in June 2005 and both mentors and mentees rated the program as beneficial.


## Dentistry

- Dental Diagnostic and Surgical Sciences implemented a Mentor Program for all new academic staff to provide collegial support toward tenure and promotion and to enhance retention.


## Clayton H. Riddell Faculty of Environment, Earth, and Resources

- A faculty member has been appointed to lead the development of a mentoring program for new faculty, and strategies for faculty development, including continuing education. An intemational student advisor has also been appointed.


## I.H. Asper School of Business

- Two faculty members have been sponsored to pursue Ph.D. studies at Queen's University.

Law

- A Student Recruitment Committee was created in 2004 to encourage top Manitoba applicants to enrol. In its first year, there was a dramatic increase in the number of students accepting positions First Year. These results will further improve with the recent creation of an In-House Admissions Office, a change of timing that will allow offers to be made earlier in the year, and the implementation, for 2006-2007, of the new Entrance Awards Program.


## Libraries

- A New Staff Orientation program for all new Libraries staff was introduced in 2004-05. The goal of the program is to introduce new staff to Library managers and to review with them the Libraries' goals and objectives.
- A Library Innovation Speaker Series was launched. The Libraries is facing a changing academic environment, changing information environment and changing technological environment. The challenge its to find new solutions to meet the new needs of scholars and students. Building on past successes, the Series provides an opportunity to seek out the very best ideas the academic library
world has to offer. Four leaders in the international academic library community were invited to take part in the Speaker Series. Colleagues from the University of Winnipeg and Brandon University were also invited to attend.
- The Learning and Development Committee developed and presented a customer service initiative program. The series of programs ran during the year and covered a variety of topics designed to explore the customer service philosophy as it applies to services the Libraries offer to students and faculty.


## Medicine

- The M.D./Ph.D. program is being reviewed with the objective of increasing the numbers of students, insuring success, and providing structure and process for all aspects of the program.

Music

- The initiative to actively recruit students nationally and internationally has resulted in a $300 \%$ increase in applications and improvement of student entrance standards from an average $68 \%$ to $83 \%$. Student retention rates, which had been less than $50 \%$ for year one and year two students, have increased to above $90 \%$.


## Pharmacy

- Applications for the 50 spaces have increased from 155 in 2001, to 340 in 2005. Further, entry level GPA for admitted students (without exemption) is also increasing, with a minimum adjusted GPA in excess of 4.0 for 2005 . Over the last five years, on average, $94 \%$ of the entry cohort has successfully graduated with a B.Sc. (Pharm), within the four years of entering the undergraduate program.


## Physical Education and Recreation Studies

- As part of the objective of encouraging and supporting the pursuit of athletic excellence within an educational environment, a full time assistant football coach was hired. This has allowed the University of Manitoba to achieve equity in terms of the other universities in Canada West.
- Senior undergraduate students in the Faculty now meet annually with researchers to discuss research and graduate program opportunities.

Science

- The Faculty has appointed 43 new academic staff in the past six years. When the current searches are complete, about $25 \%$ of the academic staff will be new. This will create an excellent mix of young and more experienced staff and this renewal will continue. The Faculty is currently searching for three Canada Research
will continue. The Faculty is currently searching for three Canada Research Chairs (Tier I: Advanced Materials, Tier II: Genomics; Tier II, Bioscience).


## Social Work

- The Faculty, utilizing its new recruitment policy, attracted a number of candidates for each of three positions. In addition to being highly qualified, one appointee is an Aboriginal woman, another is an African-Canadian, and the third person a woman with a disability.
- In addition to the annual review, where the Dean meets with each faculty member, the Dean informally meets all faculty members 2 or 3 times a year to review their work and their job satisfaction, and suggest how the Dean might be helpful in resolving any difficulties or providing assistance or advise.


## Vice-President (Academic) and Provost:

Vice-Provost (Academic Affairs):

- Each August a three-day orientation for new faculty is held (organized jointly with the University Teaching Services), followed by monthly workshops. In addition, numerous initiatives are undertaken at the faculty/school level to provide new academic staff with on-going orientation and mentorship.
- A Faculty Recruitment website has been launched. In addition to providing information on the University and the City of Winnipeg, the website will feature profiles of new faculty, and programs and services for new faculty.

Vice-President (Research):

- The Office of the Vice-President (Research) led the development of eight nominations for Canada Research Chairs (CRCs) as well as five CRC renewal nominations. One of the successful nominations included Dr. Peter Jones, who will join the University in November of 2005 from McGill University, as the Scientific Director of the Richardson Centre for Functional Foods and Nutraceuticals.

Vice-President (Administration):

- A new compensation system for the Management, Administrative and Professional staff was developed by Human Resources. This initiative will not only improve employee morale, but will support recruitment and retention objectives.
- Ancillary Services is implementing a learning and development program for all food services staff, managers, and supervisors. A position of Customer Service/Learning and Development Coordinator will oversee this program.


## Vice-President (External):

- In February, 2005, the University announced a $\$ 10$ million gift from geological sciences graduate Clayton H . Riddell, which created an endowment fund for the Clayton H. Riddell Faculty of Environment, Earth, and Resources. This extraordinary gift will give the University's newest faculty annual funds for significant support for long-term planning, including funding to recruit and retain top quality faculty members; offer grants to leverage funding from national granting bodies; develop new areas of curriculum and course delivery; and establish scholarships for outstanding undergraduate and graduate students.
- From April 1, 2004 to August 31, 2005, $\$ 1.3$ million was raised for chairs and professorships, which assists in recruiting faculty.
- The National Communication and Marketing Plan conducted by Public Affairs was implemented to enhance the national reputation and competitiveness of the University of Manitoba, which will impact on recruitment initiatives for both faculty and students. The department is also working with Enrolment Services to ensure consistency of student recruitment efforts with the oyerall plan. Also included in the Plan was a re-designed web page environment.

3. Bea Centre for Research and Graduate Education that Makes a Difference to our Province, our Nation and our World

## Agricultural and Food Sciences

- The Faculty has begun construction on the National Centre for Livestock and the Environment, an $\$ 8.8$ million facility aimed at research on sustainable cropping and animal production systems. Researchers from many disciplines will study issues such as odour, water quality, greenhouse gas emissions and fertilizer use. The Centre will train undergraduate and graduate students, postdoctoral fellows and visiting scientists in systems-based livestock production research.


## Architecture

- The proposal for a Ph.D. in Planning, and Design has been approved by Senate and will be forwarded to the Board for consideration.
- Intermational studios were held for undergraduate and graduate students in the UK, Germany and Turkey. The Turkey Design/Build Studio involved students working with a small rural community to design and refurbish a Turkish bath house.

School of Art

- Two new graduate program proposals are being developed: A Master in fine arts and a Master of Arts in art history.


## Arts

- The Faculty has made a significant increase in funding for graduate students. Arts Graduate Research Awards were made to up to 16 entering graduate students otherwise eligible for University of Manitoba Graduate Fellowship awards. Forty-seven Arts Graduate Student Conference Travel Awards were made, reflecting the extraordinary level of graduate student conference presentations now underway.
- The Faculty has began creating a database of researchers. The database will provide information on areas of expertise, grants received, projects in process as well as provide a research profile for the Faculty.
- The Social Science Research Unit (SSRU) continues to be developed. Funds have been allocated for a computer research lab for students and staff; the appointment of a director and the development of the project and its research space, will occur in 2006.
- The Faculty continues to support through active faculty and graduate student participation, seven research centres and institutes committed to a range of humanistic, social scientific and, particularly, interdisciplinary research: Centre for Professional and Applied Ethics, Centre for Defence and Security Studies, Centre for Hellenic Civilization, Institute for the Humanities, Language Centre, Centre for Ukrainian Canadian Studies, Winnipeg Area Study.


## Education

- The University was a successful applicant for one of NSERC supported Centres for Research in Youth Science Teaching and Learning (CRYSTAL). The $\$ 978,000$ project, Understanding the Dynamics of Risk and Protective Factors in Promoting Success in Science and Mathematics Education will research two central questions: (1) What factors impede, contribute to and have the greatest consequence on science and mathematics success for students? and (2) How can a CRYSTAL use this understanding to empower the user community through outreach activities to contribute to improved science and mathematics success for students. The Project is under the direction of Principal Investigator, Dr. Gordon Robinson (Science) and involves participation by eight faculty members in Education.
- The Faculty has established the Imperial Oil Academy for the Learning of Mathematics, Science and Technology, with support from Imperial Oil of \$100,00 a year for five years. There are 24 research projects funded by the Academy.

Clayton H. Riddell Faculty of Environment, Earth, and Resources

- An Associate Dean (Research) has been appointed to lead the Faculty in developing a research plan and strategy that identifies research strengths and promotes the development of inter-disciplinary teams to address those research areas.
- The Faculty has four Canada Research Chairs and continues to promote network building with other universities in Canada and internationally, through, for example the NCE (Network Centres of Excellence) Northern Research Forum, the University of the Arctic, and a major project in Indonesia.


## Human Ecology

- The new Centre for Developmental Health will focus on the behavioural aspects related to developmental health. A new $4^{\text {th }}$ year undergraduate course in Development Health is being developed to support this area of study. Research in developmental health will be conducted with Master and Ph.D. students, in particular from Family Social Sciences. Renovations have started on the research facilities of the Centre.


## Law

- The new Centre for Legal Research and Graduate Studies was constructed during the past year which includes a new Graduate Student Office. Additional support is available for graduate students through the Sgayias Fellowships.


## Libraries

- The Libraries' Institutional Repository (IR) Team, in collaboration with the Faculty of Graduate Studies (FGS), successfully launched a University of Manitoba Electronic Theses and Dissertations (ETD) Pilot Project in December 2004. The project goal is to provide University of Manitoba graduate students with the option of submitting their thesis in an electronic format.


## Medicine

- A retreat was held for the Associate Deans, Department Heads, leaders from the Winnipeg Regional Health Authority (WRHA) and research leadership of the faculty. The main themes were: interdisciplinary education as a strategy to improve quality in health care, alternate funding plans as a strategy to preserve the role of the clinician scientist, and strategies to double research funding over five years. The advice from that retreat is being utilized in planning and a followup session will be held to assess progress.
- Discussions are underway with Schools of Nursing in Finland and Sweden on collaboration in faculty research and graduate student education.
- The Faculty is participating in the development of a Master's degree in Circumpolar Health and Well-Being with four other universities outside of Canada.


## Pharmacy

- Discussions with the China-Japan Friendship Hospital in China have lead to faculty members undertaking research into the efficacy of many widely used Chinese herbal medicines, and formalizing their involvement in combined graduate education programs between the University of Manitoba, and the ChinaJapan Friendship Hospital. Also, there have been discussions on potential collaborations in undergraduate training in hospital phamacy between the University of Manitoba and China Pharmaceutical University.


## Physical Education and Recreation Studies

- The Health, Leisure and Human Performance Research Institute and the Faculty have together taken on a leadership role in the promotion of physical activity for health and well-being, in its involvement in the Winnipeg and Manitoba in Motion community-based initiatives. This involves research by several graduate students.


## St. John's College

- A Colloquium - "Canada's North: An Interdisciplinary Perspective" is scheduled for spring 2006.


## St. Paul's College

- The Arthur V. Mauro Centre for Peace and Justice hosted the first joint conference with the Hebrew University's Truman Institute for the Advancement of Peace which featured Canadian and Israeli academics, military personnel and foreign service personnel presenting papers on peacekeeping. These papers will be published in 2005-06 as part of the series produced by the University's Centre for Strategic Studies.

Science

- The Faculty is currently hiring Canada Research Chairs in Structural Biology and Advanced Materials, and possibly an Industrial Research Chair in Biomedical Mass Spectrometry. With only two exceptions, all new faculty appointed in the
last five years hold NSERC grants. The Faculty has won or led twenty-three CFI grants worth nearly $\$ 7$ million, plus matching funds. Four faculty members have been made Canada Research Chairs, and one is an NSERC Northern Research Chair.


## Vice-President (Research):

- To build broad awareness of the University's research expertise and capabilities, the Office of the Vice-President (Research), in collaboration with Public Affairs, has developed a periodic research review, which will be distributed in the fall of 2005 to external stakeholders, both locally and nationally. They have also created a specialized brochure and display booth (Bringing Research to Life) to promote the University's life sciences capabilities, which was featured as part of Manitoba's pavilion at Bio2005 in Philadelphia.
- The University has entered into a major, five-year collaborative research and development agreement with Agriculture and Agri-food Canada (AAFC) and St. Boniface General Hospital (SBGH) that will see a major expansion of both the natural health products research program and infrastructure at the National Centre for Agri-food Research in Medicine. This agreement has as its goal the creation of research environment in which scientists and staff from AAFC, SBGH and the University will work side by side as members of an integrated team in order to produce research results that could not be achieved by operating independently.
- Discussions continued in collaborative research opportunities with the University of North Dakota (UND) and included the hosting of a bilateral meeting in Winnipeg of infectious disease scientists. A visit by representatives of the Universities of Saskatchewan and Alberta to explore collaborative programming in public health was co-hosted with the Vice-President (Academic) and Provost.
- As part of the initiative to raise recognition of the University's essential role in local economic development and innovation, the VPRO hosted and organized a forum on the role of research universities in local economic development that involved representatives from universities, government and economic development organizations in the Winnipeg and Grand Forks regions; participated in 2004 Business of Science, sponsored by Manitoba Energy, Science and Technology; participated in Bio2005 in Philadelphia as part of the Manitoba pavilion; and continued to serve on key boards and associations, including the Premier's Economic Advisory Council and Executive committee, Destination Winnipeg, and the Manitoba Chambers of Commerce.

Vice-President (Administration):

- A new position has been created in the Environmental Health and Safety Office that will assist in the preparation of research proposals with respect to the safety requirements related to use of animals in research.
- The use of the central high performance computing facility by researchers in a number of faculties increased and demand currently exceeds supply. The University also joined Westgrid, the western Canadian high performance computing consortium and will be part of the next submission to CFI to fund a western Canadian high performance computing grid.
- Over the last three years, Smartpark has stimulated over $\$ 100$ million in capital developments. The park is home to eighteen growing companies presently employing 850 employees in high-tech sectors. Smartpark's high-tech focus will ultimately contribute to an environment and culture that encourages entrepreneurs and University graduates across many disciplines to stay in Winnipeg and in Manitoba, each in turn contributing to further investment and development.


## Vice-President (External):

- In June, 2005, a gift from Husky Energy to the University of Manitoba of $\$ 1$ million was received in support of biofuels research. The gift from the Calgarybased company lays the foundation for the creation of two research chairs in biofuels with a focus on ethanol. Husky will provide an additional $\$ 1.625$ million over five years which the university will seek to augment through government support programs. This strategy is expected to leverage a total investment of over $\$ 5$ million towards biofuel research.
- To promote teaching and research activities and successes to graduates, the Alumni Association used communication vehicles including the magazine, website, and e-newsletter. Examples include the professor profile and Research News sections in each On Manitoba Magazine. The e-newsletter focuses on university achievements as well a faculty and research news.
- To help raise the profile of the university nationally and internationally and to support graduate student education, the Alumni Fund dispersed travel grants to 117 graduate students presenting research at eighty conferences around the globe in 2004-05.
- Government Relations initiatives included identifying non-traditional sources of government funding for university initiatives. Government Relations also organized an Energy Forum in June 2004 with the Vice-President (Research) Office, which featured the Provincial Minister of Science and Technology, and highlighted opportunities for energy research.


## 4. Provide the Human, Physical and Technological Infrastructure Necessary for Learning and Research

## Agricultural and Food Sciences

- The Faculty officially opened the Canadian Wheat Board Centre for Grain Storage Research in March 2005. This facility houses laboratories and a pilotscale grain cleaning and handling structures. Researchers at the facility are conducting integrated studies into grain storage issues such as insect and fungal infection management, grain drying and structural analyses.
- Through direct and indirect costs of research funding upgrades have been completed in several areas: laboratory space in Animal Science, growth chambers in Plant Science, classroom data projectors in 138 and 172 Agriculture Building, and updated computer network in Agribusiness and Agricultural Economics.


## Architecture

- Students frequently work late into the night and early morning on studio projects. A new security system is being installed which is a keyless entry system that will provide new security for all students.
- Through the Partners Program and Technology Program Fee, new technology for classrooms is being installed as part of the Russell Building upgrade.
- The Faculty acquired a laser cutter to facilitate student and faculty research in The Centre for Architectural Structures and Technology (C.A.S.T.).

School of Art

- A Visiting Artist Studio has been developed in the Art Barn area that also serves as a new lecture/seminar instructional space.
- A 16 -station digital design lab for graphic design and video is being developed.
- The Anthropology Laboratory Complex was renovated including mobile shelving to house the department's extensive archeological collections. The lab is widely used and has multifunctional purpose including teaching, research, curatorial, digital imagery and storage.
- A Research Centre for Globalization and Cultural Studies is being established. The Centre will establish a unique regional research capability by forging synergies across the globalization and cultural studies fields locally, nationally and internationally. The Centre will house state of the art internet - protocol
video conferencing technology that will allow for collaboration on projects without extensive travel.


## Dentistry

- The aging clinical dental equipment has been replaced with new, state-of-the-art equipment. The Faculty is now arguably the best equipped dental school in Canada.
- A digital dental library is being developed that will encompass all the current dental texts used in the curriculum, and will be the comerstone of a digital curriculum. This provides students with improved access to information and learning resources.


## Engineering

- The opening of EITC and the associated renovations to Engineering 1 which are now underway, will provide a state-of-the-art facility for teaching and research.


## Clayton H. Riddell Faculty of Environment, Earth, and Resources

- The Wallace Building addition has provided space for new computer laboratories and the new Secondary Ion Mass Spectrometer which will be operated by a new CRC Chair.


## Human Ecology

- A new food research and teaching facility funded by a donor, has been completed which will increase the number of students who can take the laboratory-based food study course, which are part of collaboration with the food industry. In addition the facility will contribute to the research work at the Weston Food Sensory Analysis Laboratory, in the Faculty, and the Richardson Centre for Functional Foods and Nutraceuticals.
- With the ending of the industry supported Manitoba Fashion Institute (MFI) activities, its equipment was transferred to the Faculty. The industrial printers and plotters, including one that prints directly on fabric, will contribute to the textile development laboratory that is being planned.


## I.H. Asper School of Business

- Wireless Internet access has been completed on $5^{\text {th }}$ floor Drake Centre and in room 117. The plan is to have all public areas in the Drake Centre with wireless Internet access by March 2006.


## Law

- The opening of the Research Centre will alleviate a critical shortage of office space as well as create new space for graduate students, research activities and publications.
- The fourth floor of Robson Hall is now fully equipped with wireless Internet access.


## Libraries

- The implementation of a new integrated library system based on client/server system, designed to improve performance was introduced in July. The system offers easier and more extensive searching capability in BISON and a time-saving graphical interface for library staff; and supports a combined catalogue for the University of Manitoba Libraries and the Collège universitaire de Saint-Boniface.
- The Libraries' Technology Plan addresses the rapid, profound, transformative and sometimes unpredictable changes technologies have upon academic libraries. The impact of technology on academic libraries has not been evolutionary, but revolutionary. This accelerated rate of change eclipses present experience and resources. The Plan addresses possible solutions to a broad spectrum of issues in technology, access, service, collection development, infrastructure, organization, intellectual property, and technical standards.
- Wireless access has been introduced in five libraries. Students with laptops can now surf the web in designated areas in the libraries via a wireless connection. Patrons can now do research on the Internet, check their e-mail and search for library books online without having to wait for an available terminal. This project is a joint initiative with Information Services and Technology.
- Document Delivery processes have been streamlined by providing a web-based request system, thus eliminating paper files, double data entry and improving turn-around time for the requester.


## Medicine

- A steering group was established to develop and implement a faculty needs assessment related to Information Management-Information Technology including a Curriculum Information System. The group includes representatives from Information Systems and Technology and will review existing systems and those comparable systems at other Canadian universities.
- An Information Systems Manager for Medicine was hired in collaboration with the Executive Director of Information Systems and Technology.
- Two positions were established: A Research Analyst who will gather data that will be used to improve the Faculty's ability to assess the research environment across Canada, to look for patterns predictive of success, and to inform the research strategy; and a Grant-Writing Facilitator who will assist faculty in their applications with the objective of improving success, particularly for new faculty.

Music

- Renovations are complete in the Great Hall, University College which provide a larger rehearsal and performance site for Orchestra, Wind Ensemble, Concert Band, Opera, and Summer programs.


## Pharmacy

- A ceiling-mounted LCD projector was installed in one lecture room which provides the capability of delivering electronic presentations.


## Physical Education and Recreation Studies

- A CT Web-based course in Sport Tourism has been developed in partnership with a consortium of three Canadian (Manitoba, Alberta, Regina) and three international universities [Luton (UK), de Montpellier (France), Jyväskylä (Finland)].


## St. Paul's College

- Major improvements in facilities during the past year included the opening of the Mauro Centre for Peace and Justice, wheelchair access to Theatre 100 and washrooms, air conditioning in the administrative wing and repairs to the building membrane.

Science

- The major development for the Faculty was the re-location of Computer Science to the Engineering and Information Technology Complex.
- A major fund raising initiative is underway in Chemistry to provide approximately $\$ 900,000$ of "state-of-the-art" research and teaching equipment in chemical and environmental analysis laboratories.
- New research laboratory space has been completed in the lower level of the Buller Building.
- A high speed data link has been set up between the Glenlea Observatory and the Fort Garry campus. This will enable remote observing and data transfer for students taking first and second year astronomy courses.
- Renovations have been completed on the $5^{\text {th }}$ floor of the Tier Building, to provide additional offices and a small meeting room.

Vice-President (Research):

- A targeted effort to increase the level of research support from the three national granting agencies continued, with a particular focus on traditionally "underutilized" programs as well as new programs, by holding specialized workshops on NSERC Strategic Research grants, CIHR New Investigator awards, and CIHR New and Emerging Team grants. In 2004/05, tri-council funding increased to $\$ 42.4 \mathrm{M}$, from $\$ 39.4 \mathrm{M}$ in $2003 / 04$.
- The Office aggressively pursued Canada Foundation for Innovation (CFI) funding to renew research infrastructure, receiving $\$ 19.8 \mathrm{M}$ as the result of successful CFI applications in 2004/05. A consultant was also hired, with indirect costs of research funds, to further enhance the development of institutional proposals, specifically those to CFI.
- A St. Boniface Hospital/University of Manitoba joint Research Services Office was established at the Hospital's Research Centre to enhance services provided to university researchers located there.


## Vice-President (Administration):

- The administrative systems renewal project continues with the following timelines:
- A financial management system will be implemented Aprill, 2006.
- The first phase of a student information system will be implemented in stages by mid 2006.
- The Human Resource Information System, phase 1, was implemented in a staged manner with full implementation done by June 2005.
- A new Pension Administration System has been installed as part of the new Human Resource Information System Project.
- A new private funding and alumni system was implemented in the Spring of 2005.
- A management system for curriculum vitae, also known as the academic record, is currently being deployed.
- A new library automation system was installed in 2004.
- New systems were installed to support research management and are now being deployed.
- Financial Services participated in an initiative to encourage Aboriginal operated entities to bid on public sector supply opportunities. The Seminar was hosted by
the Aboriginal Business Service Network in partnership with the Aboriginal Chamber of Commerce.
- The Environmental Health and Safety Office has installed a new University-wide database software inventory program which will maintain an inventory and other related information on all chemicals, biological and radioactive materials used at the University.
- A senior advisory committee on academic computing was established to develop an information technology plan for the University. Input from faculty and staff was obtained through an online questionnaire. The plan is being completed and will be circulated for comments.
- Physical Plant has purchased the VFA software, which will track the Deferred Maintenance and the Facilities Condition Index ( FCI ). The building assessments are almost complete and modelling and data analysis will be the next step. This information will be used to track, prioritize and project funding requirements.
- An Intern Architect has been hired in Physical Plant to establish design guidelines for sustainability requirements and Leadership in Energy and Environmental Design (LEED) rating targets, as well as an office systems review.
- Physical Plant's training coordinator has successfully completed the four training modules required to prepare Physical Plant for Certification of Recognition (COR). COR is a safety program supported by the Manitoba Safety Association. This program meets the University's obligation to ensure all staff are trained, advised and knowledgeable about their work environments and also the employers obligation under Bill C45. The University is the only university in Western Canada to embark on this type of initiative.
- The communication systems of Security Services at Bannatyne and Health Sciences Centre Patrol Services have been integrated in order to provide prompt reaction to incidents at the Bannatyne Campus.
- The University of Manitoba Book Store underwent renovations to improve traffic flow, sales, and patronage. New external signage, upgrading and expansion of the General Reading and Reference area and the Customer Service desk are among the new features. A window opening between Campo and the Customer Service Area will allow for faster and more accessible used book buyback services.


## Vice-President (External):

- In 2004-05, $\$ 7$ million was raised from private sources for infrastructure. Funding is still required for several major capital projects and remains a top priority for the Department of Development:

| - | Aboriginal Student Centre |
| :--- | :--- |
| - | Centre for Music, Art and Design |
| - | Richardson Centre for Functional Foods and Nutraceuticals |
| - | National Centre for Livestock and the Environment |
| - $\quad$ The Pharmacy Building |  |
| -- Engineering and Information Technology Complex |  |

Vice-President (Administration) and Vice-President (Research):

## Smartpark

- Smartpark collaborated and contributed to faculties of the University through companies and organizations such as:
- TRlabs, participates in the education of Ph.D. and Masters students in computer and electrical engineering, and has awarded $\$ 1.1$ million in graduate student scholarships
- IDERS contributed more than $\$ 135,000$ to university research
- $\quad$ MRAC funded $\$ 420,000$ in joint university-industry initiatives including the Richardson Centre for Functional Foods and Nutraceuticals
- RTDS contributed Power System Simulation Research Chair, Faculty of Engineering
- $\quad$ Cangene received with the $U$ of $M$ the Synergy Award for Innovation from NSERC, and has co-funded the NSERC Industrial Research Chair in Fermentation Microbiology.


## 5. Be at the Centre of Our Community: On Manitoba

## Agricultural and Food Sciences

- In conjunction with the National Centre for Livestock and the Environment, the Faculty is planning construction of the Glenlea Farm Education Centre, an interactive showplace with hands-on displays of grain and feed production, viewing galleries for the hog barn with videos relaying scenes from the demonstration barn, and food retailing and food safety displays. Visitors to the Education Centre will include school aged children, farmers, university students, area residents, service and interest groups, and the general public.
- The Faculty has formed a committee to organize Ag Centennial 2006, the celebration of its $100^{\text {th }}$ anniversary in 2006. A weekend of activities is planned for July 22-23, 2006, as well as a more formal event on November 6, 2006 - the official $100^{\text {th }}$ anniversary of the day the Manitoba Agricultural College opened its doors.


## Architecture

- The Faculty has finalized an agreement with the City of Winnipeg for a comanaged Design Centre that will be funded by the City of Winnipeg and located in the downtown area. The Faculty will provide students and faculty to explore downtown design issues.
- The Faculty has retained a recent graduate intern architect of Aboriginal ancestry to assist in recruiting Aboriginal students into the Faculty by visiting selected high schools in Winnipeg and selected high schools in northern Manitoba. Aboriginal students will be able to see a role model, and will be provided information on the Faculty and the professions.
- The Partners Program organized funding for the design of two landscape architecture projects by students in Morden and in Winkler. These projects involved community presentations and meetings with Mayor and Council. In addition, students completed a design competition for Barkman Concrete.

School of Art

- "Printmaking in the 1950 's" - an exhibition in Gallery One One One featured the work of many 1950's School of Art members who went on to have successful international careers.
- The Institute for the Humanities offered two programs in the community, "Food for Thought" seminars at McNally-Robinson Booksellers and a co-sponsored round-table with the Winnipeg Art Gallery, both featuring Arts faculty members.
- The Black Hole Theatre produced three highly-acclaimed and well-attended productions during the past year.
- Five departments in Arts sponsored public lectures for the larger community. The lectures and lecturers in the past year were: the John Zubeck Memorial Lecture in Psychology (J. Don Reid, Simon Fraser University), Sidney Warhaft Memorial Lecture in English (Stewart Garrett, Univerity of Iowa), James Jackson Lecture in History (Jonathan Vance, University of Western Ontario), the Edmund G. Berry Lecture in Classics (John Grant, University of Toronto), and the Pall Gudmundson Memorial Lecture in Icelandic Studies (Gundmunder Halfdanarson, University of Iceland).


## Dentistry

- The Faculty provided services to the residents of all 52 nursing homes in Winnipeg as well as residents or patients at the Manitoba Development Centre, Deer Lodge Centre and Health Action Centre.
- A proposal is being developed to partner with the University College of the North to provide the dental hygienists program in the north.


## Education

- The Faculty's Distinguished Lecture Series continues to generate greater interest and activity as does the Summer Institutes on Aboriginal Education, Teaching English as a Second Language, and Education and Democracy.


## Engineering

- The Faculty formed a "Friends of Engineering" group in Manitoba. The primary purpose of this group is to provide a window into the engineering community (engineers and people who use engineering services) so that the Faculty can remain informed about the needs of the profession. This group will also serve as the primary focus for the placement of students in cooperative education assignments, internships, summer jobs and full time jobs.
- The Faculty provided graduates who comprise approximately $85 \%$ of the new engineering hires in Manitoba.


## Clayton H. Riddell Faculty of Environment, Earth, and Resources

- An External Advisory Board has been established with representatives of Government, industry and non-governmental organizations to advise the Faculty on its future role and priorities.
- The Faculty hosted the Canon Envirothon that brought students from all over Manitoba to the University, and are on the Planning Committee for the 2006 International Canon Envirothon to be held in Winnipeg.
- Linkages have been developed with the University of North Dakota, North Dakota State University, and the University of Minnesota to explore the use of novel sustainability mechanisms and strategies across the northern plains of North America.

Human Ecology

- Aboriginal initiatives included involving four consultants of Aboriginal ancestry in the delivery of regular program classes in Family Social Sciences and Human

Nutritional Sciences, and the appointment of a recruiter who was active in high schools in predominantly Aboriginal communities.

- New CAD (Computer Aided Design) software has been donated by Lectra, which has selected Winnipeg to host its national training session for customers. The training will be provided by the Faculty. This initiative is important for students in the textiles option because it increases industrial applications of learning and collaboration with industry.


## 1.H. Asper School of Business

- The Asper Centre for Entrepreneurship offers two Biz Camps for at risk youth - a one-week day Biz Camp for middle school students from ages 12 to 14 and a three-week day Biz Camp for youth 15 to 20 interested in entrepreneurship. These are sponsored by the Peter D. Curry Foundation. Upon graduating, each student is provided with a mentor from the business community who shares the student's interests. Contact is maintained with graduates of the camp through regular luncheons, where guest speakers discuss topics such as investing in the stock market. The Asper Centre was also instrumental in the opening of Biz Camps in Israel at Tel Aviv University, Toronto and Calgary, all modelled at the University of Manitoba Biz Camp. The Centre also offers a one-week Asper New Venture Adventure Camp for 10 to 12 year olds, through the University of Manitoba mini-university camps. Activities include learning what it takes to be an entrepreneur, team building exercises, field trips to retail outlets and visits by local entrepreneurs.

Law

- The Faculty is a joint sponsor with the Law Society of Manitoba and Manitoba Justice in planning a major international conference on wrongful convictions for the Fall of 2005.
- Mentorship and judge shadowing programs continue to generate increased interest and support from the Bar and Bench in Manitoba.


## Libraries

- The Manitoba: Life and Times project was developed. This digitization project has the most accessible and comprehensive online archive of historical newspapers and documents in Canada. There are over 120,000 pages of historical Manitoba newspaper (1859-1919) plus archival maps, photographs, diary pages and letters in a full-text, searchable version, available free of charge to the citizens of Manitoba and schools in the Province.
- The Dean has created the Dean's Advisory Council consisting of business leaders from Manitoba, previous Deans, alumni with industry experience, and the CEO of the Winnipeg Regional Health Authority. The Council will provide advice to the Dean, in particular on ways to enhance community support.
- Efforts have been expanded to link with partners at the Winnipeg Regional Health Authority, The College of Physicians and Surgeons, The College of Registered Nurses; the Manitoba Medical College Foundation, the Manitoba Medical Services Foundation and others. A quarterly newsletter is published jointly with wide circulation to alumni and others in our community.


## Music

- Dig! Magazine is distributed throughout Manitoba and is attracting submissions from a wide spectrum of musicians and music lovers. The monthly publication brings the news of Winnipeg's burgeoning jass scene to the public.
- The Faculty has partnered with several local elementary schools to direct school music composition programs to expose students to the concept of contemporary musical composition at an early age.
- The Faculty initiated a partnership with the Province leading to "Music in our Schools Month". The funding supports the offering of special programs throughout the province.
- The Preparatory Studies Division has partnered with Yamaha Canada and St. John's Music to bring string instrument education programs to Winnipeg elementary schools.


## Pharmacy

- The Manitoba Pharmaceutical Association has agreed to provide course coordination for all undergraduate courses.


## Physical Education and Recreation Studies

- The Faculty is an active partner in Winnipeg in motion and Manitoba in motion, to be launched in October 2005. A baseline survey of physical activity behaviours and attitudes was conducted (province-wide) by the Health, Leisure, and Human Performance Research Institute. Faculty members serve on in motion committees.
- A School's Coordinator Position was established in Children's Programs in February 2005. Since that time 2607 children from both urban and rural schools
have participated in on-campus programs. The mix is about $50 \%$ rural schools, and $50 \%$ urban schools including children from many inner city schools who are predominantly Aboriginal. Three programs were offered: a day visit; 10 single day visits over a period time; and a residential experience usually lasting about 3 days.
- The Faculty coordinates the Leisure Directions West Executive Seminar for Department Heads of nine of the largest cities in Western Canada.


## St. Paul's College

- The Gala Concert for Peace that marked the opening of the Mauro Centre was attended by 1200 people.


## Science

- Botany responds to over 800 public and non-public sector inquiries from the general public; Forestry, and pulp and paper industries; and agriculturalists, horticulturalists and commercial green house operators.
- A very successful "High School Teachers Chemistry Workshop" was organized for provincial high school chemistry teachers.
- Physics and Astronomy received an NSERC PromoScience award for the Ewen Telescope, based at the Glenlea Observatory. The award has enabled the Department to hire an outreach coordinator to facilitate workshops for high school teachers and a summer science camp for high school students.
- Together with Chemistry, Physics and Astronomy hosted the International Physics and Chemistry Olympiad training camp for the top 15 high school students from across Canada in each discipline.


## Social Work

- A decentralized MSW program was implemented for BSW graduates working for the South East Tribal Council. The program will provide students with social work supervisors as they continue to assume more responsibility for child and family social services.
- The Faculty continues to work with the Collège universitaire de Saint-Boniface on the implementation of its BSW (en français) program, which will help to serve the social work educational needs of franco-Manitobans.

Vice-President (Research):

- The Office assisted with the development of an Advanced Composite Materials Centre proposal for the next round of CFI to establish this Centre at Smartpark in order to maximize synergies with the Composite Innovation Centre
- The Office continued efforts to grow Manitoba's infectious diseases cluster by membership on the board of directors of the newly created International Centre for Infectious Diseases.
- A new Executive Director of Technology Transfer was appointed who has an extensive background in technology transfer in both the private and university settings to lead knowledge transfer to key industry sectors and facilitate the development of Manitoba's knowledge-based industry.
- A networking series (as part of Smartpark's Interactive series) was introduced which focuses on high priority topics within key industry sectors to showcase University expertise and serve as "knowledge bridge" with industry. In 2004/05, three events were held, focusing on: nanofabrication; composite materials, and the new Canadian Light Source at the University of Saskatchewan.


## Vice-President (Administration):

- Physical Plant continued with the development of new projects that continually add to energy conservation program savings of over $\$ 3,400,000$ annually and further reduce carbon dioxide emission savings of 21,850 tonnes a year.
- Parking and Shuttle Services, with assistance from Public Affairs, initiated the production of a new University promotional image for the Fort Garry - Bannatyne Shuttle. This ad will be prominently featured on both sides of the entire bus. This large shuttle bus will be visible throughout the community during its repeated runs from downtown to Fort Garry, weekdays from 7:15 a.m. to 7:15 p.m.
- A campaign was launched to promote the availability of monthly rental accommodations for students at the Mauro Student Residence over the summer. A brochure tagged "Summer Sleepover" was distributed throughout the city, with focus on hospitality and tourism industries, hospitals and medical care facilities, Folklorama and other summer festival offices.
- University Centre Pharmacy took over the responsibilities of the Medical Information Line for the Elderly (MILE) outreach program. The MILE Program also enhanced ongoing relationships with the Winnipeg Regional Health Authority and the Faculty of Pharmacy.
- Kid-netic Energy Saturdays, a Smartpark collaboration with Women in Science and Engineering (WISE) access program, was offered to Grade 5 students over 4 days in February.
- Community meetings with Fort Richmond residents are held annually as an Annual Community Information Meeting to discuss recent and upcoming developments at Smartpark.

Vice-President (External):

- The home page was revised and is regularly updated. Public Affairs posted 102 stories on the home page in the period September 1, 2004 to June 30, 2005. Increased flexibility in managing routine link updates allows flexibility in maintaining link lists that are relevant and up-to-date.
- In December 2004, the "Distinguished Graduates" website was launched, which pays tribute to the university's alumni who have received the Order of Canada and the Order of Manitoba. The website shows achievement in every endeavour, from community and public service to business and the arts.

Vice-President (Administration) and Vice-President (Research):

## Smartpark

- Smartpark was further developed through: the development of a 9,000 square foot facility for anew park tenant, IMRIS Inc., a medical imaging developer and spinoff company of the NRC-IBD; the development of a 23,500 square foot facility (to be completed by September 2005) to house the Industrial Technology Centre and expanded facilities for the Composite Innovation Centre; the onset of the development of Number One Research Road, Smartpark's third multi-tenant facility; and the initiative of the second expansion of Cangene Corporation.
- Smartpark Interactive Breakfast Series and the Cash at Smartpark series (moderated by Martin Cash of the Winnipeg Free Press) provide opportunities for networking. Frank Clegg, President of Microsoft Canada; Mark Ross, President of Boeing Canada Technology; and John Langstaff, President and CEO of Cangene Corporation have been speakers.


## Report of the Senate Executive Committee

## Preamble

The Executive Committee of Senate held its regular monthly meeting on the above date.

## Observations

1. Speaker for the Executive Committee of Senate

Professor Peter King will be the Speaker for the Executive Committee for the December meeting of Senate.
2. Appointment of Vice-Chair of the Senate Committee on Appeals

Professor Brian Stimpson's term as Vice-Chair of the Senate Committee on Appeais will conclude with his retirement on December 31, 2005. Senate Executive has appointed Professor Arlene Young for the term ending May 31, 2007.
3. Comments of the Executive Committee of Senate

Other comments of the Executive Committee accompany the report on which they are made.

Respectfully submitted,

Dr. Emőke Szathmáry, Chair
Senate Executive Committee
Terms of Reference: Senate Handbook (Revised 1992), Section 9.
/nis


## Preamble

The Senate Committee on Awards (SCOA) terms of reference include the following responsibility:
"On behalf of Senate, to approve and inform Senate of all new offers and amended offers of awards that meet the published guidelines presented to Senate on November 3, 1999, and as thereafter amended by Senate. Where, in the opinion of the Committee, acceptance is recommended for new offers and amended offers which do not meet the published guidelines or which other wise appear to be discriminatory under Policy No. 419 , such offers shall be submitted to Senate for approval." (Senate, April 5, 2000)

## Observation

At its meeting on November 3, 2005, Senate Committee on Awards reviewed three new applications that appears to be discriminatory under policy number 419. The committee received letters of support for the Enterprise Rent-A-Car Foundation Scholarship from Dr. Glenn Feltham, Dean of the I.H. Asper School of Business and from Ms. Kali Storm, Director of the Aboriginal Student Centre. For the Farm Credit Canada Scholarship, letters of support were received from Dr. Michael Trevan, Dean of the Faculty of Agricultural and Food Sciences, from Dr. Glenn Feltham, Dean of the I.H. Asper School of Business and from Ms. Kali Storm, Director of the Aboriginal Student Centre. Finally, for the Winston Samlalsingh Scholarship, letters of support were received from Mr. Peter Dueck, Executive Director of Enrolment Services and Ms. Kali Storm, Director of the Aboriginal Student Centre.

## Recommendation

The Senate Committee on Awards recommends that Senate approve and recommends that the Board of Governors approve the Enterprise Rent-A-Car Foundation Scholarship, Farm Credit Canada Scholarship and Winston Samlalsingh Scholarship as set out in Appendix A of the Report of the Senate Committee on Awards - Part B dated November 3, 2005.

Respectfully submitted,


Professor R. Baydack, Chair Senate Committee on Awards


## APPENDIX "A"

## OFFERS

## ENTERPRISE RENT-A-CAR FOUNDATION SCHOLARSHIP

The Enterprise Rent-A-Car Foundation has established an endowment fund of $\$ 25,000$ at The University of Manitoba to provide two scholarships to Aboriginal students in the I.H. Asper School of Business. The scholarships, each valued at half of the available annual interest, will be offered annually to undergraduate students who:
(1) are Aboriginal (Status, Non-Status, Métis, Inuit);
(2) are enrolled full-time in the I.H. Asper School of Business at the University of Manitoba;
(3) have completed at least one year of study in the I.H. Asper School of Business;
(4) have achieved a minimum cumulative grade point average of 3.0.

Final selection from this pool of candidates will be at the discretion of the selection committee.
The selection committee will be named by the Dean of the I.H. Asper School of Business and will include a representative from the Winnipeg Chamber of Commerce.

## FARM CREDIT CANADA SCHOLARSHIP

Farm Credit Canada (FCC) wishes to offer an annual scholarship of $\$ 1,500$ to an Aboriginal student at the University of Manitoba. FCC is a federal Crown Corporation established in 1959 devoted to helping farmers and agribusiness operators grow, diversify and prosper. FCC believes that diversity is a business advantage and is committed to building a diverse workforce that is representative of the available qualified workforce. The first award will be offered for the 20052006 academic session to a student who:
(1) is Aboriginal (Status, Non-Status, Métis, Inuit);
(2) is enrolled as a full-time student in the third or fourth year of study in the I.H. Asper School of Business or the Faculty of Agricultural and Food Sciences at the University of Manitoba;
(3) has achieved a minimum cumulative grade point average of 3.5.

Final selection from this pool of candidates will be at the discretion of the selection committee.
FCC will review their commitment to this scholarship on an annual basis and will notify the Financial Aid and Awards Office of their decision each spring.

The selection committee will be named by the Executive Director of Enrolment Services.

SENATE COMMITTEE ON AWARDS REPORT TO SENATE - NOVEMBER 3, 2005 (Part B)

## WINSTON SAMLALSINGH SCHOLARSHIP

An endowment fund of $\$ 25,000$ has been established in memory of Winston Samlalsingh (B.A/'54) to provide a scholarship to an Aboriginal student entering the University of Manitoba. The first scholarship will be offered for the 2006-2007 academic session.

The scholarship, valued at the available annual interest, will be offered to a student who:
(1) is Aboriginal (Status, Non-Status, Métis, Inuit);
(2) is enrolled full-time in University 1 or any program that admits directly from high school at the University of Manitoba;
(3) has achieved the highest average on the high school courses used for admission purposes (minimum average of $80 \%$ ).

This scholarship will be renewable for each year of a three or four year undergraduate degree provided that the recipient:
(1) registers full-time in the next ensuing year of study;
(2) has achieved a minimum sessional grade point average of 3.0.

A new recipient will be selected when the current recipient either completes a first degree or does not meet the criteria for renewal.

The selection committee will be named by the Executive Director of Enrolment Services.

University
of Manitoba

Asper School of Business
Faculty of Management

## DATE: October 26, 2005

| TO: $\quad$ Senate Committee on Awards |  |
| :--- | :--- |
| c/o Ms Diana Kaspersion, Awards Establishment Coordinator |  |
|  | Financial Aid and Awards Office |

FROM: Dr. Glenn Feltham, Dean, Asper School of Business


SUBJECT: ENTERPRISE RENT-A-CAR FOUNDATION SCHOLARSHIP
The Asper School of Business is committed to growth in Aboriginal Business Education. Consistent with this priority, I am writing in support of the Enterprise Rent-A-Car Foundation Scholarship.

During Regular Session 2005-2006, a total of 15 aboriginal students are studying in the Aboriginal Business Education Program of the Asper School of Business, approximately $1.0 \%$ of our total student population of 1429 full and part time students. As aboriginal peoples represent $13.6 \%$ of Manitoba's population, ${ }^{1}$ aboriginal students are underrepresented at the Asper School of Business in comparison to the general population.

Over the past five years, the ratio of students enrolled in the Asper School of Business Aboriginal Business Education Program relative to the total number of Asper School of Business students (full and part time) was: 2000-2001: 17/1424 (1.2\%); 2001-2002: 19/1447 (1.3\%); 2002-2003: 20/1436 (1.4\%); 2003-2004: 20/1469 (1.4\%); 2004-2005: 14/1483 ( $0.9 \%$ ). Clearly, aboriginal students have a history of being under-represented relative to the total Asper School of Business student population.

The Enterprise Rent-A-Car Foundation Scholarship will provide support to aboriginal students enrolled in the Bachelor of Commerce (Honours) program in the Asper School of Business. Given the Asper School's commitment to growth in Aboriginal Business Education, and given the under-representation of aboriginal students in the Asper School of Business, I strongly support the offering of this scholarship.

JMJ/

[^0]

## University of Manitoba

## Aboriginal Student Centre

October 25, 2005
Dr. Rick Baydack
Chair of the Senate Committee on Awards C/o Ms. Diana Kaspersion
Awards Establishment Coordinator
417 University Centre


537 University Centre Wimipeg, Manitoba R3T 2N2
Telephone (204) 474-8850
Fax (204)275-3142
Toll Free in Manitoba
1-800-432-1960 ext. 8850
asc@umanitoba.ca

Dear Dr. Baydack \& Senate Committee:
Please accept this letter as formal support for the establishment of the Enterprise Rent-ACar Foundation Scholarship designed to assist Aboriginal students in the I. H. Asper School of Business.

As the Director of the Aboriginal Student Centre, I can verify that financial strain is the leading cause for Aboriginal students leaving school before graduation. It is common lonowledge that many Aboriginal peoples live in poverty and whereas a university education can help rectify this, most cannot afford to do so. It is only reasonable that the University of Manitoba would want to assist in rectifying this situation with or without the declared commitments made in the Strategic Plan.

The number of Aboriginal students attending the University of Manitoba continues to increase and, I believe, is partially due to the financial assistance made available through programs and faculties. The establishment of the Enterprise Rent-A-Car Foundation Scholarship is an example of a positive attempt at addressing the financial difficulties faced by Aboriginal students. For many Aboriginal students, attending university requires moving away from home knowing there is little or no financial assistance available from their families should they need it.

I trust that the Senate committee will approve this scholarship and others like it, in the hopes of increasing the recruitment and retention of Aboriginal students in the I. H. Asper School of Business.

In education, miigwetch!


Kali Storm, Director
Aboriginal Student Centre

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| :--- | :--- |</table-markdown></div> of Manitoba $\mid$ and Food Sciences 

September 15, 2005

Dr. Rick Baydack
Chair, Senate Committee on Awards
c/o Diana Kaspersion
Financial Aid and Awards Office
422 University Centre
Re: Farm Credit Canada Scholarship
The Faculty of Agricultural and Food Sciences is committed to attract more aboriginal students to our program and to "make the University of Manitoba the first choice of aboriginal students in Manitoba and from across Canada."

The Faculty currently has less than 10 aboriginal students in our programs. The Farm Credit Canada scholarship will provide the first scholarship to support aboriginal students in our Faculty.

I strongly support the offering of this scholarship at the University of Manitoba and seek Senate's approval of the new scholarship.


Dr. Michael Trevan, Dean
Faculty of Agricultural and Food Sciences


University
of Manitoba

Asper School of Business
Faculty of Management

Glenn Feltham, PhD, MBA, LLB, CMA
Dean and CA Manitoba Chair in Business Leadersh 314 Drake Centre 181 Freedman Crescent Winnipeg: Manitoba Canada R3T 5V4 Telephone (204) 474-9209 Fax (204) 474-7928
glenn_felham@umanitoba.ca

DATE: October 26, 2005
TO: Senate Committee on Awards c/o Ms Diana Kaspersion, Awards Establishment Coordinator Financial Aid and Awards Office

FROM: Dr. Glenn Feltham, Dean, Asper School of Business

## SUBJECT: FARM CREDIT CANADA SCHOLARSHIP



The Asper School of Business is committed to growth in Aboriginal Business Education. Consistent with this priority, I am writing in support of the Farm Credit Canada Scholarship.

During Regular Session 2005-2006, a total of 15 aboriginal students are studying in the Aboriginal Business Education Program of the Asper School of Business, approximately $1.0 \%$ of our total student population of 1429 full and part time students. As aboriginal peoples represent $13.6 \%$ of Manitoba's population, ${ }^{\dagger}$ aboriginal students are underrepresented at the Asper School of Business in comparison to the general population.

Over the past five years, the ratio of students enrolled in the Asper School of Business Aboriginal Business Education Program relative to the total number of Asper School of Business students (full and part time) was: 2000-2001: 17/1424 (1.2\%); 2001-2002: 19/1447 (1.3\%); 2002-2003: 20/1436 (1.4\%); 2003-2004: 20/1469 (1.4\%); 2004-2005: 14/1483 ( $0.9 \%$ ). Clearly, aboriginal students have a history of being under-represented relative to the total Asper School of Business student population.

The Farm Credit Canada Scholarship will provide support to aboriginal students enrolled in the Bachelor of Commerce (Honours) program in the Asper School of Business. Given the Asper School's commitment to growth in Aboriginal Business Education, and given the under-representation of aboriginal students in the Asper School of Business, I strongly support the offering of this scholarship.

JMJ/
${ }^{1}$ Statistics Canada, 2001 Census.


## UNiversity of Manitoba

October 25, 2005
Dr. Rick Baydack
Chair of the Senate Committee on Awards
C/o Ms. Diana Kaspersion
Awards Establishment Coordinator
417 University Centre
Dear Dr. Baydack \& Senate Committee:
Please accept this letter as formal support for the establishment of the Farm Credit Canada Scholarship designed to assist Aboriginal students in their third or fourth year in the I. H. Asper School of Business or in the Faculty of Agricultural and Food Sciences.

As the Director of the Aboriginal Student Centre, I can verify that financial strain is the leading cause for Aboriginal students leaving school before graduation. It is common knowledge that many Aboriginal peoples live in poverty and whereas a university education can help rectify this, most cannot afford to do so. It is only reasonable that the University of Manitoba would want to assist in rectifying this situation with or without the declared commitments made in the Strategic Plan.

The number of Aboriginal students attending the University of Manitoba continues to increase and, I believe, is partially due to the financial assistance made available through programs and faculties. The establishment of the Farm Credit Canada Scholarship is an example of a positive attempt at addressing the financial difficulties faced by Aboriginal students. For many Aboriginal students, attending university requires moving away from home knowing there is little or no financial assistance available from their families should they need it.

I trust that the Senate committee will approve this scholarship and others like it, in the hopes of increasing Aboriginal student success and specifically, the successful completion of an I. H. Asper School of Business or Faculty of Agricultural and Food Sciences degree.

In education, miigwetch!


Kali Storm, Director
Aboriginal Student Centre


University
of Manitoba

## Enrolment Services

Financial Aid \& Awards 422 University Centre Winnipeg, Manitoba Canada R3T 2N2
Telephone (204) 474-9531
Fax (204) 474-7554
awards@umanitoba.ca

October 26, 2005

Dr. Rick Baydack
Chair, Senate Committee on Awards
c/o Diana Kaspersion, Awards Establishment Coordinator
Financial Aid and Awards Office
422 University Centre
RE: Winston Samlalsingh Scholarship
Dear Dr. Baydack and members of the Senate Committee on Awards:
Enrolment Services at the University of Manitoba is commitied to growth in Aboriginal education. The Aboriginal population in Manitoba makes up 11.7\% (approximately 150,045) of the total population of Manitoba. According to the Senate-approved General Terms and Conditions for Student Awards at the University of Manitoba, we can allow and encourage the establishment of discriminatory awards for designated groups such as Aboriginal students as long as the proportion of Aboriginal students to the total student population falls below 80 percent of the proportion of Aboriginal people within the total provincial population. Eighty percent of $11.7 \%$ is $9.36 \%$, and the population of Aboriginal students on campus is still a long way from $9.36 \%$ of the total student population.

In 2004-2005, the undergraduate student population was 23,935. At 9.36\% of this total student population, we would hope to have a population of at least 2240 Aboriginal students. The actual number of self-declared Aboriginal students was 1563, or $6.53 \%$ of the undergraduate population.

|  | $2003-2004$ | $2002-2003$ | $2001-2003$ | $2000-2001$ |
| :--- | :--- | :--- | :--- | :--- |
| University of Manitoba undergraduate student <br> population | 23032 | 21724 | 20534 | 19000 |
| Aboriginal undergraduate student population | 1378 | 924 | 794 | 513 |
| Aboriginal undergraduate student population by $\%$ | $5.98 \%$ | $4.25 \%$ | $3.87 \%$ | $2.70 \%$ |

As the statistics show, Aboriginal students are a highly under-represented group within the University. Therefore, I strongly support the establishment of the Winston Samlalsingh

Executive Director, Enrolment Services

# UNIVERSITY of Manitoba <br> <br> Aboriginal Student Centre 

 <br> <br> Aboriginal Student Centre}

October 25, 2005
Dr. Rick Baydack
Chair of the Senate Committee on Awards
C/o Ms. Diana Kaspersion
Awards Establishment Coordinator
417 University Centre


537 University Centre
Winnipeg, Manitoba R3T 2N2
Telephone (204) 474-8850
Fax (204)275-3142
Toll Free in Manitoba
1-800-432-1960 ext. 8850
asc@umanitoba.ca

Dear Dr. Baydack \& Senate Committee:
Please accept this letter as formal support for the establishment of the Winston Samlalsingh Scholarship designed to assist Aboriginal students entering University 1 directly from high school.

As the Director of the Aboriginal Student Centre, I can verify that financial strain is the leading cause for Aboriginal students leaving school before graduation. It is common knowledge that many Aboriginal peoples live in poverty and whereas a university education can help rectify this, most cannot afford to do so. It is only reasonable that the University of Manitoba would want to assist in rectifying this situation with or without the declared commitments made in the Strategic Plan.

The number of Aboriginal students attending the University of Manitoba continues to increase and, I believe, is partially due to the financial assistance made available through programs and faculties. The establishment of the Winston Samlalsingh Scholarship is an example of a positive attempt at addressing the financial difficulties faced by Aboriginal students. For many Aboriginal students, attending university requires moving away from home knowing there is little or no financial assistance available from their families should they need it.

I trust that the Senate committee will approve this scholarship and others like it, in the hopes of increasing the recruitment and retention of Aboriginal students at the University of Manitoba.

In education, miigwetch!


Kali Storm, Director Aboriginal Student Centre


Proposal from the Admissions Office (Enrolment Services) and University 1 to amend the General Entrance Requirements of the University and the Specific Subject Requirements of University 1 (2005.11.03)

## Preamble

High school students entering the University of Manitoba must observe three sets of entrance requirements:

- The General Entrance Requirements which seek to define the minimum level of overall accomplishment necessary for admission to post-secondary studies;
- The Specific Subject Requirements for the initial faculty or program, which detail the specific high school subjects and minimal levels of performance necessary for study in this first faculty or program; and
- The University Course Prerequisites that stipulate any required or recommended high school subjects needed for registration in specific university courses, courses which may be required for a future application to a destination faculty.

This proposal identifies short-comings and recommends changes for the first two sets of requirements: the General Entrance Requirements and the Specific Subject Requirements for University 1.

This proposal is a collaboration between the Admissions Office (Enrolment Services), responsible for the establishment of the General Entrance Requirements, and University 1, responsible for its Specific Subject Requirements.

There were several driving forces behind these proposals for change:

- The requirements, both General and Subject, were based upon a Manitoba high school course numbering system that was discontinued over ten years ago.
- The high school curricula and graduation requirements have changed significantly over the past years, and this is not reflected in either the General or Subject requirements.
- The requirements differ significantly from those in other Canadian provinces, making it easy for Manitoba students to qualify for admission in another province, but difficult for out-of-province students to qualify for admission at the University of Manitoba.
- The requirements focus on breadth of Senior 4 (Grade 12 courses), and discourage depth, even when depth might be an advantage in post-secondary studies.
- The requirements have become increasingly lengthy and complex, making interpretation difficult for both students and counsellors. The Student Recruitment staff within Enrolment Services must devote a disproportional amount of their contact time with prospective students in simply explaining the General Entrance Requirements and the Specific Subject Requirements for University 1. This time would be far better spent describing the strengths, services, supports, and academic programs offered by the University.


## Observations

This proposal is divided into three sections:

1. The Process
2. The General Entrance Requirements
3. The University 1 Specific Subject Requirements

## 1. The Process

The development of this proposal involved the gathering of information from four different sources:
a. The Enrolment Services High School Advisory Committee
b. Manitoba Education, Citizenship \& Youth: Manitoba High School courses and graduation requirements
c. A survey of entrance requirements at other Canadian universities
d. The University of Manitoba strategic plans
i. Building for a Bright Future (2003)
ii. An Enrolment Management Plan for University of Manitoba (2004)

The Enrolment Services High School Advisory Committee was established by the office of Enrolment Services in 2004 to provide guidance to this office in matters relating to student recruitment, admission, and financial aid and awards. The members of the Committee were carefully chosen to represent the needs and interests of a broad range of schools and students. Members include counsellors from:

- Collège Jeanne Sauvé
- Ft. Richmond Collegiate
- Gimli High School
- Kildonan East Collegiate
- St. John's High School
- St. John's Ravenscourt

Plus:

- President, Manitoba School Counsellors' Association
- IB Prairie Organization Chair
- MB Education Citizenship \& Youth - Director, Program Development
- MB Education Citizenship \& Youth - Consultant/Career Ed \& Grad. Requirements
- MB Education Citizenship \& Youth - Pilot project on post-sec participation rates
- Director, Universityl

The Enrolment Services High School Advisory Committee was consulted at every stage in the development of the proposal.

The high school programs, courses, and graduation requirements as defined by Manitoba Education, Citizenship \& Youth were also examined in detail. Resource material from this department included:

- The Subject Table Handbook Student Records System and Professional School Personnel System September 2004-2005
- Focus on the Future: Your Grad Planner
- The Senior Years: A Record of Graduation Requirements for Parents and Students: Manitoba High School Courses and Graduation Requirements
Additional information was also gathered through discussion with the representatives of Manitoba Education Citizenship \& Youth and the high schools who served on the Enrolment Services Advisory Committee.

Tables 1 and 2 of this proposal are based upon information gathered from these sources.

A survey of the entrance requirements at thirty major universities across Canada was completed, using the information available on their websites and in their calendars. Findings are presented in Tables 3 and 4 of this proposal.

A fourth consideration was the University of Manitoba's strategic plan, Building for a Brighter Future. It was felt that the creation of a 'welcoming and supportive environment' begins with entrance requirements that are logical, easily communicated and understood, and reflective of the provincial educational system. The 'best and brightest' students will be attracted with strong academic programs and services; not by complex entrance requirements. In terms of the Enrolment Management Plan (2004), simpler admission requirements enhance recruitment efforts on national and international levels.

## 2. The General Entrance Requirements

The present General Entrance Requirements, also known as the 28, 5, 4, 3, 2 Rule, include:

- 28 credits as needed to meet the MB graduation requirements, with
- 5 credits at the Senior 4 (Grade 12) level, in
- 4 different subject areas chosen so these include
- 3 credits in different subject areas from the "Approved List" (a list of 35 specific $40 \mathrm{~S}, 42 \mathrm{~S}$, 45S, and 41G courses, plus any and all AP \& IB courses), plus
- 2 more credits in any G, $S$ or $U$ courses.

In order to discuss the University's General Entrance Requirements, an examination of the school curricula and high school graduation requirements as established by Manitoba Education, Citizenship and Youth is helpful. Table 1 outlines the requirements necessary to graduate from the English Program (similar tables exist for the François, French Immersion, and Technology Education programs).

Table 1: Manitoba high school graduation requirements

| English Program |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Compulsory credits | S1 | S2 | S3 | S4 | Total credits |
| English | [ | [ | [ | [ | 4 |
| Mathematics | [ | [ | [ | [ | 4 |
| Science | [ | [ |  |  | 2 |
| Social Studies | [ | [ | [ |  | 3 |
| Physical Education/Health | I | [ |  |  | 2 |
| Optional credits* | Up to 10 |  | Min 1 | Min 2 | 13 |
| TOTAL credits | Up to 20 |  | Min 4 | Min 4 | 28 |
| * Limitations on SIC's and SIP's: <br> - a maximum of 11 School Initiated Courses (SIC's - all 41G's) allowed <br> - a maximum of three Student Initiated Projects (SIP's - all 41G's) allowed <br> - of the three SIP's allowed, only one can be for Community Service. |  |  |  |  |  |

It should be noted that every student graduating from a Manitoba high school must complete 4 credits of English and 4 credits of mathematics, and that a breadth of education has been mandated over the four years of education (Senior 1 to 4 , the former Grades 9 to 12). 28 credits are required for graduation, with a minimum of four at the Senior 4 level. Students balance the 28 credits over the four years, with the vast majority of students completing five, six, or more at the Senior 4 level.

Until the early 1990 's, Manitoba Grade 12 courses were designated as ' 300 ' (academic), ' 301 ' (general), ' 302 ' (business), ' 304 ' (modified) and ' 305 ' (technical and other). These courses have now been re-labelled according to the system outlined in Table 2 below.

Table 2: Manitoba high school course numbering system

| 1 st digit-Course Level | 2nd digit - Course Source | 3rd digit - Course Designation |
| :---: | :---: | :---: |
| 1 Senior 1 (Grade 9) | 0 Dept developed 1 credit | G General |
| 2 Senior 2 (Grade 10) | 5 Dept developed . 5 credit | F Foundation |
| 3 Senior 3 (Grade 11) | 1 School or student developed | S Specialized |
| 4 Senior 4 (Grade 12) | 2 Externally developed | E ESL. |
|  |  | M Modified |
|  |  | 1 Individualized |
|  |  | C College-based |
|  |  | $U$ University-based |

For example, Chemistry 40S, is a Senior 4 (Grade 12) course worth 1 credit ( 0 Dept developed), based upon a curriculum developed by Manitoba Education, Citizenship \& Youth and considered preparation for further study at university, college, or within an apprenticeship program (S indicating specialized). Psychology 41 G is a Senior 4 (Grade 12) course that was developed at the school level and is considered to present a general ( G ) educational experience for all students. Calculus 42 U would be a Senior 4 (Grade 12) course that is externally developed (based upon a university's-curriculum) and taught by a university in the high school. It can count as both a university credit and a high school credit.

There are no Foundation courses at the Senior 4 level at this time. E, M, and I are designed for students facing language and other challenges and do not represent equivalent curricula. $C$ credits are similar to U credits but are based on college-taught courses.

The important point to remember is that there are levels of course specialization within the Manitoba curriculum and, therefore, the students have a variety of options available to them.

A survey of the general entrance requirements at thirty Canadian universities has been organized in Table 3.

Table 3: Survey of entrance requirements at other Canadian universities

| Hipes | , Description. | Universities , , , | \# ${ }^{\text {m }}$ |
| :---: | :---: | :---: | :---: |
| E | Examinable (Courses with provincial exams) | UBC | 1 |
| G | Groups of courses (e.g. sciences, the humanities, the arts, etc.) | UVic, U of A, Calgary, Regina, Memorial | 5 |
| L | Lists of acceptable courses | SFU, U of $\mathrm{M}, \mathrm{U}$ of Winnipeg, Queen's | 4 |
| A | "Academic" courses | Trent, York, PEI, Dalhousie, St. Mary's | 5 |
| H | Admissible to university in home province | McGill, Concordia | 2 |
| 0 | Grade 12 courses | U of S, Carleton, Guelph, Lakehead, McMaster, Ottawa, Toronto, Waterloo, Wilfred Laurier, Mt Allison | 10 |

The Canadian universities all required high school graduation, with varying levels of other requirements. UBC required a certain number of examinable courses ( E ); some required students to present a number of courses ranging across a variety of discipline groupings(G); some presented lists
of acceptable Grade 12 courses (L); some just stated the Grade 12 courses should be considered 'academic' in nature (A); two stated a student had to show they met the entrance requirements of their home university $(\mathrm{H})$; and, for the largest group of universities, students were asked to simply present a certain total number of Grade 12 courses, sometimes including at least some courses designated as university-bound or equivalent courses (Manitoba ' $S$ ' courses). This last group provided the greatest range of subject choices for their applicants, and focused their selection on competitive averages. (It should be noted that the Canadian universities also required specific Grade 12 subjects for admission for specific degree programs; these requirements would be similar to the University of Manitoba's Specific Subject Requirements of the entry faculty and the university course prerequisites.)

The proposal being brought forward is that the General Requirements of the University of Manitoba shall be:

Manitoba high school graduation, with full credits at the Senior 4 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.

This new proposal differs from the present requirements in several ways:

- The inclusion or exclusion of courses acceptable for admission is based on standards developed by Manitoba Education, Citizenship, and Youth.
- Students will have a greater range of acceptable Senior 4 courses, allowing them to select high school courses more relevant to their destination faculty or career.
- It aligns the University of Manitoba entrance requirements with the majority of similarsized universities across the country.
- From a recruitment standpoint, it will greatly reduce the focus on basic entrance requirements, offering more opportunity to focus on the academic programs offered by the faculties and the appropriate high school subject preparation for the destination faculty.

How will these changes affect the direct-entry programs such as Engineering, Music, Fine Arts, or University 17 Students will still need to meet any specific subject requirements of their target Faculty but will have the advantage of either having a wider range of high school courses or a greater level of concentration in specific subject areas.

How will these changes affect entrance into target faculties beyond University 1 ? Students will still complete the University 1 level courses required and recommended for the destination faculty. As well, transiting students will still need to meet performance levels and subject prerequisites. One distinct advantage is that students may have more high school courses related to their destination program.

## 3. The University 1 Specific Subject Requirements

The main goal for the change in University 1 specific subject and performance requirements is simplification. More user-friendly requirements would return the focus to the best preparation for the destination faculty over preparation for University 1 entrance. The University 1 requirements should also align with the Manitoba high school curricula and graduation requirements.

The current requirements for University 1 are as follows. (Note: students must also meet the University's General Entrance Requirements and any specific prerequisites for university courses.)

## University 1

You must meet one of Option 1, 2, 3 or 4 below.

## Option 1

a) have a minimum $60 \%$ in two credits of English/Anglais 40S, or in one credit of English/Anglais 40S and one credit in French/Français 40S, and
b) have a passing grade in Applied, Consumer, or Pre-Calculus Mathematics 40S, or in Consumer Math V and VI 45S, and
c) have a minimum $70 \%$ average over three different subjects from the list of 'Academic Subjects Approved for Selection.'
Option 2
a) have a minimum $60 \%$ in one credit of English/Anglais 40 S , or in one credit of

French/Français 40S, and
b) have a minimum 60\% in Pre-Calculus Mathematics 40S, and
c) have a minimum $70 \%$ average over three different subjects from the list of 'Academic Subjects Approved for Selection.'
Option 3
Have a standing of $80 \%$ or higher in three different courses chosen from three of the following five subject areas:
Area 1: Englisb/Anglais or French/Français 40S

Area 2: Pre-Calculus Mathematics 40S
Area 3: science 40S (Biology, Chemistry, or Physics)
Area 4: humanities or social science 40S (Geography, History, Social Studies, a 40S language from the list of 'Academic Subjects Approved for Selection', or a 41G Canadian Aboriginal language)
Area 5: any other course from the list of 'Academic Subjects Approved for Selection' except for Consumer Math 40S/45S and language courses $42 S$ credits granted for IB or AP courses can be substituted for the 40S courses listed in the five areas above. With Senate approval, $42 U$ credits can also be used. $42 S$ AP/IB and $42 U$ credits may also qualify for advanced credit.

## Option 4:

You must meet one of the following descriptions:
a) You have a high school average of $63-69 \%$ and meet the English and Mathematics requirements of either of Option 1 or 2, or
b) You have a high school average of $70 \%$ or higher but are missing one or more of the English and Mathematics requirements of either Option 1 or 2.
NOTE:
i) The average for admission will be calculated over three different subjects from the list of 'Academic Subjects Approved for Selection.'
ii) Admission under Option 4 is considered a limited admission to University 1; some registration restrictions and performance standards will apply, and additional academic supports and services will be provided.

The proposed Specific Subject Requirements for admission to University 1:
A student must meet one of the following requirement sets:
Set A: One credit of Senior 4 S or U English with a minimum grade of $60 \%$, and a minimum average of $70 \%$ over three Senior 4 S or U credits $O R$
Set B: One credit of Senior 4 S or U English, with a minimum grade of $60 \%$, and a minimum average of $63-69 \%$ over three Senior 4 S or U credits OR
Set C: A minimum average of $70 \%$ over three Senior 4 S or U credits but lacking the English requirement
Note: Admission under Set B or C is considered a limited admission to Universityl; some registration restrictions and performance standards will apply, and additional academic supports and services will be provided.

How will this new proposal differ from the present Option system?

- The new proposal marks the elimination of the double English credit that dates back to the course English 300 which was worth 2 credits. This course was phased out over ten years ago. English, the language of instruction at the University of Manitoba, will remain a required course.
- The mathematics requirement will no longer be a University 1 admission requirement but will remain a specific subject requirement as needed for specific university courses.
- The requirements will be simpler and in line with requirements at other Canadian universities.

A number of issues surround the inclusion or exclusion of the mathematics requirement. The first concern has been that University of Manitoba students need a good mathematics foundation. The following points address this concern:

- Since the inception of University 1, the requirements for Manitoba high school graduation have changed, and now all Manitoba students must complete a Senior 4 (Grade 12) mathematics course. This course may be any one of pre-calculus, applied, consumer, or accounting. (Students who take the accounting generally take another mathematics course as well.) Therefore, all U1 students from Manitoba high schools will automatically have a background in mathematics. The net effect will be that there will be no change in the level of high school mathematics preparation of Manitoba students entering University 1. (On the first day of class in September 2005, there were 3,495 U1 students who had been admitted on the basis of their high school records; of this group $87 \%$ were from Manitoba.)
- With our current regulations, there is no guarantee that students enter with a 'good mathematics foundation'. Students can currently enter with just consumer mathematics, a math of everyday life, which cannot serve as a prerequisite for further mathematics courses. In addition, mature status students can enter Universityl with no math preparation, and students from other universities can transfer with no math background. Thus, our current cohorts of U1 students may not have the 'good mathematics foundation' that we may believe them to have.
- $U$ of $M$ currently has an ' $M$ ' requirement, but we do offer seven ' $M$ ' courses that have no Senior 4 mathematics requirement.
- As well, if mathematics skills are required for a specific course of study, Math Skills courses are offered through Extended Education to meet this need.
- A number of University of Manitoba courses in chemistry, physics, and mathematics have specific high school subject requirements. These requirements are widely publicized to prospective students to ensure they enter University 1 with the background necessary to complete the university courses for their destination faculty.

Figure 1: Destination of students after University 1


Another concern has been that mathematics is needed to enter any other Faculty of Science in Canada. However, at the University of Manitoba, University 1 is the gateway to both Science and Atts, as well as to many other faculties. Figure 1 indicates the destination of students when they leave University 1. Only $13.8 \%$ of University 1 students (1998-1999 cohort) transferred to the Faculty of Science where mathematics is a pre-requisite for most programs.

Setting mathematics as a criterion to enter University 1 deters students who are not interested in a future degree that requires mathematics: At the University of Manitoba, some of the degree programs require high school mathematics as a prerequisite to courses specifically required for their degrees. Students intending a degree in these fields would not be deterred by setting a high school mathematics course as a entrance requirement for University 1 . These faculties include:

1. Agricultural \& Food Sciences
2. Business
3. Dental Hygiene
4. Dentistry
5. Education (some)
6. Environment, Earth, \& Resources (some)
7. Human Ecology (some) .
8. Medicine
9. Pharmacy
10. Science

Other faculties do not have a high school mathematics course as a prerequisite for any of the courses needed for the degree. Students could be deterred from entering the University of Manitoba if high school mathematics was a requirement for admission to University 1 when it is known that a student could enter the same degree program at another university without the high school math course. These include:

1. Arts (except for the Economics Joint Honours programs)
2. Education (some)
3. Environment, Earth, \& Resources (some)
4. Environment Design
5. Fine Arts (Art History)
6. Human Ecology (some)
7. Law
8. Medical Rehabilitation
9. Physical Education and Recreation Studies (all programs)
10. Social Work

Should students not intending to enter Science be denied entry to University 1 due to a lack of mathematics? Table 4 outlines the thinking at other Canadian institutions.

Table 4: Canadian Universities who require mathematics to enter Faculties of Arts

| Prov | M Institution | Gr 12 English required for Science | G12 Math required for Aits |
| :---: | :---: | :---: | :---: |
| BC | UBC | Yes | No |
| BC | U Victoria | Yes | No |
| BC | Simon Fraser U | Yes | No |
| AB | U of Aberta | Yes | No |
| AB | U of Calgary | Yes | No |
| SK | U of Sas katchewan | Yes | No |
| SK | U of Regina | Yes | No |
| MB | Brandon U | No | No |
| MB | U of Winnipeg | Yes | No |
| MB | U of Manitoba | Yes |  |
| ON | Carleton | No | No |
| ON | Guelph U | Yes | No |
| ON | Lakehead U | Yes | No |
| ON | McMaster U | Yes | No |
| ON | Ottawa U | Yes | No |
| ON | Queen's U | Yes | No |
| ON | $U$ of Toronto | Yes | No |
| ON | TrentU | Yes | No |
| ON | Waterloo | Yes | No |
| ON | U of Western Ontario | Yes | No |
| ON | Wilfred Laurier | Yes | No |
| ON | York | Yes | No |
| PQ | McGill | Yes | No |
| PQ | Concordia | No | No |
| NB | U of New Brunswick | Yes | No |
| NB | Mt Allison U | Yes | No |
| PEI | U of PEI | Yes | No |
| NS | Dalhousie | Yes | No |
| NS | St. Mary's U | Yes | No |
| NFLD | Memorial U | Yes |  |

The Faculty of Science has established the university courses that will be required to meet the graduation requirements for its different degree programs. By examining the high school courses that serve as prerequisites for the university courses required for the different degree programs, it can be seen that all UofM Science students, with the possible exception of students completing an Honours or Four Year Major in Psyshology, will need to present either Pre-Calculus or Applied Math. None of these degree programs can be completed by a student with only Consumer Math, although Consumer Math is sufficient to enter University 1. By using the existing high school prerequisites for specified university courses, the Faculty of Science already ensures their students have the necessary mathematics backgrounds.
Table 5 Minimum mathematics required to complete a Science degree at U of M
Minimum Mathematics Background for Science Degrees at UofM

| Dept/Program | Degree |  |  |
| :---: | :---: | :---: | :---: |
| Actuarial Mathematics $\left.\begin{array}{l}\text { Honours } \\ \text { Joint Math-Actuarial Honours }\end{array}\right\}$ Joint Statistics-Actuarial : |  |  |  |
| Biochemistry $\quad$ Joint HonoursJoint Hours Cooperalive OptionJoint Four Year MjorJoint Four Year Cooperative Optlon |  |  |  |
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| Four Year Major |  |  |  |
|  |  |  |  |

The only program that does not explicitly include Applied Math or Pre-Calculus as a prerequisite to required courses is the Honours/Major in Psychology. However, both of these programs require a
significant number of additional Science courses ( 36 for Honours, 30 for Major), and it may be difficult to find enough courses without a mathematics prerequisite to meet this requirement.

Even students seeking a General degree in Science must have either Pre-Calculus or Applied Mathematics simply to meet the breadth requirement in Science.

Table 6: General Science degree breadth requirements

| Twenty four credit hours must be chosen from the following list of introductory Science courses, with at <br> least six hours from each of four subject areas: (p.366 2005-2006 General Calendar) |  |  |
| :--- | :--- | :--- |
| Area | Available courses | High school math prerequisite |
| Astronomy | $16.181,16.182,16.183$ | No prerequisite for 181/183 |
| Biology | 71.125 | No prerequisite |
| Chemistry | $2.130 \& 2.131$ | Applied Math 40S |
| Computer Science | $74.101 \& 74.102$ | Pre-Calculus 40S |
| Mathematics | $136.120 \&$ others | Pre-Calculus 40S |
| Physics | $16.102 \& 103$ or $16.105 \& 107$ | Applied Math 40S (102/3) or <br> Pre-Calculus 40S (105/7) |
| Statistics | $5.100 \& 5.200$ | No prerequisite |

## Recommendation

## The Senate Committee on Admissions recommends to Senate as follows:

- That, for students entering the University of Manitoba in September 2007, the General Requirements of the University of Manitoba be: Manitoba high school graduation, with five full credits at the Senior 4 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.
- That, for students entering the University of Manitoba in September 2007, the Specific Subject Requirements for admission to University 1 shall be:

A student must meet one of the following sets:
Set A: One credit of Senior 4 S or U English with a minimum grade of $60 \%$, and a minimum average of $70 \%$ over three Senior 4 S or U credits $O R$
Set B: One credit of Senior 4 S or U English with a minimum grade of $60 \%$, and a minimum average of $63-69 \%$ over three Senior 4 S or G credits $O R$
Set C: A minimum average of $70 \%$ over three Senior 4 S or $U$ credits, but lacking the English requirement.

Notes: Admission under Set B or C is considered a limited admission to University 1; some registration restrictions and performance standards will apply, and additional supports and services will be provided.

Equivalent levels of entrance requirements will be established for candidates applying on the basis of academic credentials from other provinces and from other countries. The committee also noted that, as is usual in these circumstances for programs with no admission quota, the new admission requirements may be used for the 200607 fall/winter session in those cases where the new requirements would be advantageous to applicants.

Respectfully submitted, Dr. D.R.Morphy, Chair Senate Committee on Admissions

Terms of reference: Senate Handbook (revised 1992), pp. 10.6-10.8

## Proposal from the Faculty of Agricultural and Food Sciences to amend its entrance requirements for students entering the Bachelor of Science (Agribusiness) program (2005.11.03)

## Preamble

The Faculty Council of the Faculty of Agricultural and Food Sciences recommends that the admission requirement for Agribusiness students to have standing in high school chemistry be removed. This modification does not apply to any of the other faculty degree programs.

## Observations

Formerly, the Faculty of Agricultural and Food Sciences offered Bachelor of Science in Agriculture (BSA) degrees that required students entering the faculty to have high school standing in chemistry and pre-calculus mathematics. In 1995, the Bachelor of Science (Agribusiness) degree was created. Contrary to the other degrees offered within the faculty, these students are not required to take university level chemistry and therefore do not require the high school chemistry as a prerequisite course. After much discussion regarding whether these students should still be required to have high school chemistry, it was proposed to Faculty Council that this admission criterion be modified.

## Recommendation

The Senate Committee on Admissions recommends to Senate that, effective for the 2006-07 fall/winter session, the admission requirement for Agribusiness students to have standing in high school chemistry be removed. This modification does not apply to any of the other faculty degree programs. The admission criteria for students entering the Agribusiness program will be modified to include only pre-calculus math ( $60 \%$ ) as a high school requirement along with 24 University 1 credit hours and a GPA of 2.0 or above.

Respectfully submitted, Dr. D.R. Morphy, Chair, Senate Committee on Admissions

Terms of reference: Senate Handbook (revised 1992), pp. 10.6-10.8

Report of the Senate Committee on Admissions concerning a proposal from the Faculty of Human Ecology to amend its admission requirements, setting programspecific quotas (2005.09.30)

Preamble
The Faculty of Human Ecology proposes a change to its admission requirements for the fall/winter session of 2006-2007 (September admission): Each major of the Faculty will admit a maximum of 80 students for each regular session. Current programs are: Family Social Sciences, Human Ecology (general degree), Human Nutritional Sciences (including second degree program), and Textile Sciences. Currently, students are admitted to the Faculty itself, not to programs within the Faculty.

If the number of applicants exceeds 80 , the top 80 applicants will be chosen for regular session admission. Thus, the minimum adjusted grade point average will vary from year to year. If space exceeds the number of applicants, the grade point average for admission will remain 2.0 for that session. Students will rank Human Ecology program(s) of their choice on the application form.

## Observations

1. The top 80 applicants will be offered a spot in their first choice program.
2. If the student's first choice program is full, internal application can be made to enter another program in the Faculty (if a second choice is indicated on the admission application form). Internal applicants will be reviewed before space decisions are made for external University of Manitoba applicants for January admission. Advising and program planning will be provided to ensure that the student can take the courses to meet the first choice program should space become available through internal transfer.
3. Mid-session transfer by other University of Manitoba students to a particular program/major for January of that same academic session will be permitted if the total of 80 has not yet been reached (after internal Human Ecology students have had a chance).

## Recommendation

The Senate Committee on Admissions recommends to Senate that, effective for the 2006-2007 regular academic session, the Faculty of Human Ecology will accept a maximum of 80 applicants to each undergraduate program for each regular session, up to the overall faculty quota: Family Social Sciences, Human Ecology program, Human Nutritional Sciences, and Textile Sciences. Applicants for each program with the best 80 adjusted grade point averages will be selected for admission.

Respectfully submitted,
Dr. D.R.Morphy, Chair
Senate Committee on Admissions
Terms of reference: Senate Handbook (revised 1992), pp. 10.6-10.8


Proposal from the Faculty of Physical Education and Recreation Studies to change the admission requirements for the undergraduate degree programs (Exercise and Sport Science, Recreation Management \& Community Development, Physical Education) effective for the September 2006 intake (2005.09.30)

## Preamble

In the fall of 2004 the Faculty of Physical Education and Recreation Studies' Curriculum Review Committee was mandated to review the curriculum of our programs (undergraduate and graduate). The Curriculum Review Committee members included J. Elliott, J. Halas, K. MacKay, M. Porter, K. Swallow Yee and E. Ready. The Curriculum Review Committee consulted widely during this process. The Committee submitted its report, with thirteen recommendations, to Academic Council on August 26, 2005. Recommendation \#5a stated "that admission to all undergraduate degree programs (Exercise and Sport Science, Recreation Management and Community Development and Physical Education) be based solely on GPA". This change was considered because the extra entrance requirements (e.g., interviews, skills and leadership forms, etc.) were determined by the Selection Committees to not add value to the admissions process.

Subsequently, the Faculty Council of the Faculty of Physical Education and Recreation Studies passed a motion on September 21, 2005, recommending, "that admission to all undergraduate degree programs be based solely on GPA".

## Observations

Admission standards based solely on GPA will attract applicants that are academically stronger. With the introduction of University 1 in 1998, grades provide a more objective measure of academic achievement (unlike high school grades). Up to ten percent of admissions can be accepted under the Special Consideration Category thus ensuring opportunities for students who may not meet the minimum GPA criterion but who should be considered based on other factors (maturity level, professional experience, etc.). The Skills and Leadership forms currently used in the BPE and BESS admission process disadvantage marginalized students who have fewer opportunities for such experiences. These forms place disproportionate emphasis on sport skills and the sport model, an approach that is no longer useful (e.g., Healthy Kids Healthy Futures recommendations). Concerns have also been raised about the reliability and validity of these assessments. While it is recognized that interviews can be useful tools to screen for professional suitability, they are highly resource intensive. We recommend that professional education be built into the curriculum, and that means of evaluating professional suitability be further examined.

## Recommendation

The Senate Committee on Admissions recommends to Senate that, effective for the 2006-07 fall/winter session, admission to all undergraduate degree programs (Exercise and Sport Science, Recreation Management \& Community Development, Physical Education) be based solely on GPA.

Respectfully submitted,
Dr. D.R. Morphy, Chair,
Senate Committee on Admissions
Terms of reference: Senate Handbook (revised 1992), pp. 10.6-10.8

## Report of the Senate Committee on Instruction and Evaluation

## Preamble

1. The terms of reference for the Senate Committee on Instruction and Evaluation (SCIE) are found in Section 8.26 of the Senate Handbook.
2. The Committee met on November 3, 2005 to consider a proposal to amend Policy 1303, Voluntary Withdrawal.

## Observations

1. The current policy on Voluntary Withdrawal was introduced in 1993 in response to concerns about the high rate of. withdrawals from courses and the negative effects of withdrawals on the classroom experience. The policy extended the registration revision period by two weeks and the voluntary withdrawal deadline by three weeks. In addition, a limit was set on the total number of voluntary withdrawals a student could take, which was an equivalent of one full year of study. A limited access policy was applied to all courses, which applied to students who wished to repeat a course taken or withdrawn from within the previous 12 month period. At the time the policy was established, Senate also decided that voluntary withdrawals (VWs) would be noted on a student's transcript. In order to distinguish VWs from withdrawals granted for compassionate or health reasons, the category of Authorized Withdrawal (AW) was created. AWs do not appear on a student's transcript.
2. The Registrar informed the Committee that the rate of VW from Arts and Science Courses has dropped from just over $20 \%$ in 1991 to around $13 \%$ in 2004. As the policy introduced in 1993 contained several changes, it is difficult to determine which, if any, of the changes were the cause of this improvement. The Committee reviewed the practices with respect to Vws at other western Canadian universities. It is worth noting, that the University of Alberta, which does not have a limit on the total number of VW's allowed, or a limited access policy, has experienced a VW rate of $4-6 \%$ in the last five year period.
3. With the implementation of Aurora Student Information System, the University is required to re-examine the ways in which it handles Voluntary Withdrawals, as the current practices cannot be supported under Aurora. This is because the current VW policy is applied differently or not applied at all for students registered in different faculties. As a result, students in the same course have had rules applied differently regarding withdrawals and limited access. The unevenness of the policy's application is even more challenging for students who move from one program to another.
4. As students are currently limited to the number of VWs they can take, many will stay in a course until very close to the VW deadline, which is near the end of term. This can have a potentially negative impact on the student, who struggles with a course for which they are not prepared, as well as affecting the overall classroom experience for all students and the instructor.
5. While the University of Manitoba's deadlines for VW are consistent with other major
6. While the University of Manitoba's deadlines for VW are consistent with other Universities in Western Canada, very few Universities impose a limit on the total number of Voluntary Withdrawals allowed.
7. The VW limit is not uniformly enforced, as Faculties and Schools have the authority to grant extra VWs over the limit as requested by students on a case-by-case basis. This provision can cause an inconsistent experience for students, as some may know to ask for extra VWs and others may just accept the limit. The Committee is not convinced that limiting the maximum number of VWs provides any additional value to the quality of the educational experience for students or for their instruction.
8. With regard to the limited access policy for students repeating previously completed or withdrawn courses, the Committee feels that limited access policies should be applied only to high demand courses as determined by the Faculty or School offering the course.
9. The Committee is recommending these amendments to improve the student experience and to facilitate the implementation of the Aurora Student Information System. The Committee will seek to conduct a more comprehensive review of the Voluntary Withdrawal Policy in the future.

## Recommendation

THAT Senate approve the amendments to Policy 1303, Voluntary Withdrawal, as outlined in Appendix A of this report. The amendments would:
a) Eliminate the limit on the total number of Voluntary Withdrawals a student may take; and
b) Apply the limited access policy only to selected high demand courses as determined by the Faculty or School offering course.

All other portions of the Policy 1303 would remain unchanged
Respectfully submitted,
Dr. Karen R. Grant, Chair
Senate Committee on Instruction and Evaluation
/jml

## Policies

## \& Procedures

Board of
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Senate
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Chancellor
University Secretary

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| Board \& Senate |

Section 1300: Students (Academic)
Policy: 1303
Subject: Voluntary Withdrawal

Approved By: Contact: Group: Approved: Revised:

Senate
Office of the University Secretary
All
February 1, 1977
May 13, 1993

## Preamble

The Registration Revision period at the beginning of each term allows essentially unrestricted course and timetable changes providing sufficient opportunity for students to plan their schedules with both academic and personal circumstances in mind. Given that such planning is desirable and should be encouraged, courses dropped during these periods shall not be counted as withdrawals or referred to on student histories. Nevertheless, 9 students ghould-be-permitited-limited-numberaf
 etherized withdraw (AN3) granted formedieat ar еоmpassientatereasom.

## General Policy

1. The Registration Revision period shall be extended to the end of the second week of classes in both terms. Courses dropped during this period shall not be regarded as withdrawals and shall not be recorded on official transcripts or student histories.
2. After the Registration Revision period, students shall be allowed a timer voluntary withdrawals (VWs) which shall be recorded on official transcripts and student histories.
 equivalent to ene fully year study as definedin the University General Gatendardercription fitherelevant program. Faculties and-Sehols may apply morerestrietive ordifferent-regulatiansolong they are reported to and

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9) After fiveyears of no registrations, the eotint-0f the
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3. The following dates have been adopted as deadlines for voluntary withdrawals:
a) the Voluntary Withdrawal deadline shall be the 48 th teaching day in both first and second term for those half courses taught over the whole of each term;
b) the Voluntary Withdrawal deadline for full courses taught over both first and second term shall be the 48 th teaching day of the second term; and
c) the Voluntary Withdrawal deadline for full and half courses taught during Intersession, Summer Session, or during other special schedule shall be calculated in a similar manner using a pro-rated number of teaching days.
N.B. Consult the Academic Schedule published annually in the University General Calendar for the exact dates each year.
4. Subject to the provision of satisfactory documentation to a student's Faculty/School of registration, Authorized Withdrawals (AWs) may be permitted on medical or compassionate grounds. Affy-willmot beeunt toward
 Seheot. AWs will be recorded on the student histories, but will not appear on official transcripts issued by the

University.
5. A Limited Access Policy restricting registration for students who have withdrawn from or previously completed a course shall be applied to li-eurges. Freuties or-5ehools, for whieh-suehapelieyis inappropriate, mayoptout-ifter informing-Senate of their intention do-se. determined by the Faculty or school offering the course.
a) Normally the enforcement of Limited Access Policies shall apply to the two sessions following the session in which the course was taken.

> This-poliey becomes effective-September-1, 1993., WAHs aceamulated-prior to that diate-shall mot-be-ernted townrd anylimit on the number of-WNs permitted.

Emall: governance@umanitoba.ca
Office of the University Secretary
312 Administration Building
Fax: (204) 474-7511

Policies $\quad$....................

University of Manitoba - Winnipeg, MB, Canada R3T 2N2, 204.474.8B80
Questions or Comments? www@umanitoba.ca
(c) University of Manitoba

## Report of the Senate Committee on Instruction and Evaluation

## Preamble

1. The terms of reference for the Senate Committee on Instruction and Evaluation (SCIE) are found in Section 8.26 of the Senate Handbook.
2. The Committee met on November 3, 2005 to consider a proposal to introduce a policy on Grade Point Averages (GPA) and to consider a proposal to amend Policy 1304, Challenge for Credit.

## Observations

1. The implementation and maintenance of the Aurora Student Information System requires a uniform policy for all faculties and schools for the calculation of cumulative, term and degree GPA. The Committee also feels that it is advisable for the University to have a policy which defines GPA and sets out the parameters for how GPA is calculated.
2. Under the proposed policy, all students will have three GPAs reported; the Cumulative GPA (CGPA), the Term GPA, and the Degree GPA (DGPA).
3. The proposed CGPA is different from the present one, as it will include the grade point average of all courses, institutional and transferred, taken at the same level (nondegree, undergraduate, or graduate).
4. Term GPA is the grade point average of all courses taken during a single term. In the Aurora Student Information System, there are four terms, fall, winter, summer 1 and summer 2.
5. Degree GPA is the grade point average for all courses completed that are acceptable for credit in a student's current degree/program.
6. When a student repeats a previously completed course or an equivalent course is taken, the grade received in the last attempt shall be used in the calculation of the CGPA and DGPA. Prior attempts not included in a student's CGPA shall be counted towards a student's Term GPA for the term in which the attempt was made. This change will make the treatment of repeated courses uniform for all students. This will benefit students, as the rules applied to the calculation of GPA will not change as students change faculties.
7. The Registrar presented the Committee with data demonstrating that in 105,000 instances, the last attempt of a course resulted in the highest mark 100,000 times. The Committee was satisfied that having the last attempt count in the calculation of CGPA and DGPA was a fair model.
B. The proposed policy proposes that courses completed by means of a letter of permission from another institution be used in the calculation of the CGPA and the

Comment rithern-rarnarombee:

DGPA, but that such courses shall not be used in the calculation of the Term GPA.
9. Courses completed by means of Challenge for Credit shall be used in the calculation of the CGPA, the DGPA and the Term GPA. Under a proposed amendment to Policy 1304 Challenge for Credit, the inclusion of Challenge for Credit grades in the CGPA, the DGPA, and the Term GPA is included. Additionally; it is proposed that Challenge for Credit Courses be allowed in satisfying the residence requirement. The vast majority of Challenge for Credit courses involve pre-calculus taught at the High School level, and in all reported cases, students who complete a course by means of Challenge for Credit meet or exceed the residence requirement anyway.

## Recommendations

1. THAT Senate approve the proposed new policy on Grade Point Averages [as set out in Appendix A of this report], and
2. That Senate approved the amendments to Policy 1304 Challenge for Credit [as set out in Appendix B of this report].

Respectfully submitted,
Dr. Karen R. Grant, Chair
Senate Committee on Instruction and Evaluation
/jml

## Appendix A

UNIVERSITY of Manitoba


### 1.0 Reason for Policy

To articulate, on an institutional basis, the manner in which Grade Point Averages (GPA) will be calculated at the University of Manitoba.

### 2.0 Policy Statement

2.1 The University of Manitoba will report cumulative and term grade point averages for all students through the student information system.
2.1.1 Cumulative Grade Point Average (CGPA) is defined as the grade point average of all courses, institutional and transferred, taken at the same level (non-credit, undergraduate, or graduate), subject to repeat rules described in section 2.1.4.
2.1.2 Term Grade Point Average (Term GPA) is defined as the grade point average of all courses taken during a single term.
2.1.3 Degree Grade Point Average (DGPA) is defined as the grade point average of all courses acceptable for credit in a students' current degree/program subject to repeat rules described in section 2.1.4.
2.1.4 Where a student repeats a course or an equivalent course is taken, i.e., a course that may not be held for credit with the original course, the grade
received in the last attempt shall be used in the calculation of CGPA and DGPA. Prior attempts not included in a student's CPGA shall be counted towards a student's Term GPA for the term in which the attempt was made.
2.1.5 Courses completed by means of a Letter of Permission from another institution shall be used in the calculation of CGPA and DGPA, but shall not be used in the calculation of Term GPA.
2.1.6 Courses completed by means of Challenge for Credit shall be used in the calculation CGPA, DGPA, and Term GPA.
2.2 The University's Student Information Systems provide a number of other grade point average calculations. Faculties and Schools may use any grade point average calculations available in the Student Information System for their purposes.

### 3.0 Accountability

3.1 The University Secretary is responsible for advising the President that a formal review of the Policy is required.

### 4.0 Secondary Documents

4.1 Senate may approve Procedures which are secondary to and comply with this Policy.

### 5.0 Review

5.1 Formal Policy reviews will be conducted every ten (10) years. The next scheduled review date for this Policy is May 1, 2016.
5.2 In the interim, this Policy may be revised or rescinded if:
(a) the Approving Body deems necessary; or
(b) the relevant Bylaw, Regulations or Policy is revised or rescinded.
5.3 If this Policy is revised or rescinded, all Secondary Documents will be reviewed as soon as reasonably possible in order to ensure that they:
(a) comply with the revised Policy; or
(b) are in turn rescinded.

### 6.0 Effect on Previous Statements

6.1A This Policy supersedes the following:
(a) all previous Senate Policies, Procedures, and resolutions on the subject matter contained herein; and
(b) all previous Administration Policies, Procedures, and directives on the subject matter contained herein;

### 7.0 Cross References




Section 1300: Students (Academic)
Sear

## Policy: 1304

## Subject:

Approved By: Contact: Group: Approved: Revised:

Challenge for Credit
Senate
Office of the University Secretary All
October 4, 1974
March 4, 1987

Sear

## General Principles

1. Each faculty or school council is requested to consider whether any courses presently offered are suitable for the granting of credit on the basis of challenges for credit. In faculties or schools which are organized by departments, the choice of courses for challenge shall involve consultative procedures comparable to those ordinarily used in the addition or deletion of courses from the list of offerings.
2. Applications for challenges for credit must be approved by the faculty or school in which a student is enrolled or, in the case of new students, to which the student has been admitted. In determining whether approval should be granted, the faculty or school will take into consideration such factors as (a) the acceptability of the challenged course in the student's program, and (b) whether preparation for a challenge for credit would involve an unreasonable academic load. Within these limitations, either entering or continuing students may challenge such courses as are indicated available for Challenges for Credit. Challenges for Credit are not available to a student unless the student has first been granted admission: (a) to the faculty, school or department in which the course challenged is offered for credit, or (b) to the program to which the course challenged is offered for credit.
3. Each faculty or school offering a course for challenge shall specify and make available to students a description of the means of evaluation to be used and the level of performance expected. Methods of evaluation may include written, oral or practical examinations, evaluation of laboratory experience of competence. The choice of evaluation methods shall be made by the faculty or school
council, in accordance with university and faculty or school examination regulations.

## Procedures

1. Students will be examined within dates established by each faculty and school. These dates will include, as a minimum, the regularly scheduled examination periods.
2. a) Students wishing to challenge shall be required to register through the Student Records Office and pay the specified fee no less than 45 days prior to the period of examination. The time limit may be waived for incoming students with the consent of the faculty or school involved.
b) Any course taken by way of Challenge for Credit shall not be considered as part of the student's course load limit during the session in which the course is challenged.
3. Results of challenges will be reported to the Student Reerfs Registrar's Office in the form of a grade for a specific course. Successful challenges shall be recorded on the student's history, and shall be incorporated into the gessionat term ${ }_{3}$ degree and cumulative grade point averages, in the same manner as for students in course. The practice has become that results for Challenges are reported in the same fashion as for any course taken in the traditional manner. This means that successes as well as failures are reported and included in GPA calculations aeerding to theregulatiens of atudentis hemefeethy:

Faetties-and-seheols which donotwighteineorperate-the grade-for-z chatlenge-into their respetivesergionat antur eumutativegrade-point arerages - hathpresent their
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4. Challenges for Credit shall be subject to the normal appeal procedures established by the appropriate faculty and school, and of Senate.
5. Where a student wishes to challenge a course that is a prerequisite for another course, departments, consistent with existing practice, may exercise discretion in varying sequences in cases where the prerequisite course is to be challenged at a later date.
6. Departments should exercise flexibility in any restrictions on students who wish to challenge.
7. A faculty brochure on challenges, or the Student Handbook shouid contain warning of possible hazards associated with challenges.
8. Where appropriate, departments will attempt to make evaluations of challenges comparable with usual methods of evaluation, and shall not specify a higher standard of achievement than for students in course.
9. The list of courses available shall be included in the timetable of courses normally provided to students who are eligible to register for any session. The courses available shall be reported to the personnel charged with the responsibility for collecting the list of courses, at the same time as the list of regular offerings is reported for the particular session.

## Limitations

1. No student shall be allowed more than one challenge per course.
2. No student may obtain more than the equivalent of one year's credit on the basis of challenges.
3. No student may challenge a course while on academic probation or suspension.
4. Eredit-obtained on the basis of ehatlerger for ereditmy fro be used to meet stipulated residence requirements.
5. Challenges by persons in-Mature-Student-natur may not be 4gedus basis for establioning-Regular-Student-statur.

Where applicable in terms of faculty or school regulations relating to student progress, challenges will count as Attempts.
5 . Courses which have previously been taken at the University of Manitoba may not be challenged for credit.

## Fees for Challenge

The Board of Governors approved, on June 26, 1980, that the fee for a challenge for credit be reduced to one-half the fee normally associated with the course in question.

[^1]
# PROPOSED MODIFICATIONS OF THE JOINTS MASTERS PROGRAMS 

 GENERAL REGULATIONSCommentary prepared by Raymond F Currie, Chair of the Joint Senate Committee September 2005

The intent of our changes is to streamline and simplify the regulations and to avoid repetition of procedures that are already in place and covered by other regulations, particularly in the Faculty of Graduate Studies at the University of Manitoba. These recommendations were debated at four meetings of the Joint Senate Committee in the Spring term of 2005 and were approved unanimously.

Over the summer, the document was then circulated to the Chairs of the three Joint Programs who also unanimously approved the proposed changes.

The numbers used in this document refer to the numbers in the proposed new General Regulations, unless otherwise specified.

Section 3 Implementation, Review and Termination
The proposed changes simply bring the document up to date. In terms of reviews of programs our proposals place the document in the context of the current schedule of reviews of graduate programs at the U. of Manitoba.

Section 4 Approval Procedures...
We recommend the inclusion of this new section which deals with approval procedures for new proposals. It is complemented by a new chart in the Appendix, which outlines the procedures.

Section 6.1 Size and Composition of the JSC

1) We recommend that alternate members of the committee be removed. Our committee did not find this procedure effective, and the committee meets so infrequently it was hard for them to grasp the issues.
2) We recommend that the Vice President (Research, Graduate Studies and International) at the U. of Winnipeg and the Dean of Graduate Studies at the U . of Manitoba be voting members of the Committee. Their role on the Committee is essential.
3) The manner of choosing graduate students on the committee reflects the actual procedures in place, given the organizations of graduate students at the two universities.

Section 6.2 Powers and Duties of the JSC

Comments of the Eman Erentur Comar:
The Senate Exadive Gommitee Cuteres ine report to Senate.

We recommend that these powers and duties be reduced from 16 to 10 items. Those task that we recommend be removed are already handled by other committees within the University of Manitoba Graduate Faculty. We feel the duplication is unnecessary and, in fact, our Committee had not been carrying out these tasks.

We recommend that the nos. $3,4,5,6,10$ and 14 of the current Regulations be removed.

Except for the two comments immediately below, the wording of the remaining Powers and Duties remain the same.

1) The new No. 1 is a revised process that was approved by the Executive Committee of the Faculty of Graduate Studies in November, 2004. Our Committee did not feel that we receive sufficient information to make an informed decision. The Executive Committee of Graduate Studies concurred.
2) The recommended new No. 6 fits with the schedule of reviews of Graduate Programs at the U of Manitoba.

Section 9 Process of Approval
This is a new section. We recommend that the steps in the process of proposing a new joint program be explicit as we describe them in this section and outline them in the Appendix in a chart.

## Section 10 Academic Dishonesty

We recommend this new section be added. It follows current procedures with the addition of some clarifications required for JMP students at the U. of Winnipeg who may be enrolled in non-JMP courses.

## Section 11 Appeals

We recommend this section be approved, which is modified to conform to current appeal procedures.

## Section 11.1 Appeals to the Joint Senate Committee

This is perhaps the most significant change in the Regulations that we propose. The current procedure requires the establishment of a separate Joint Senate Appeals Committee, which includes a pool of individuals from whom a specific Appeal Committee is to be selected. It also requires an appointment of a Chair by the two Presidents. In our judgment this is unnecessarily complex. In the last four years there has not been a single appeal, given that the grounds are so restricted. We believe that our proposed procedures can be fair and uncomplicated.
(Comments prepared by Raymond F. Currie, June 2005 and submitted to the Chairs of the Joint Programs)

# SUBMITTED TO THE SENATES OF THE UNIVERSITIES OF MANITOBA AND WINNIPEG, SEPTEMBER 2005 

## PART A - GENERAL AND INSTITUTIONAL ARRANGEMENTS

## 1. Introduction and Definitions

There shall be one joint parity committee at the level of Senates hereinafter referred to as the Joint Senate Committee (JSC). Its detailed terms of reference are specified below in Section 4. For each Joint Masters Program (JMP) there will be a joint committee at the departmental or discipline level hereinafter referred to as a Joint Discipline Committee (JDC). The detailed and specific terms of reference for each JDC are specified in parts, B, C and D, etc., of this document. The Chair of the JSC will be designated as CJSC and the Chair of the JDC will be designated as CJDC.

The institutional arrangements provided in this Agreement are intended to apply to initial JMPs and should not preclude the initiation, in the future, of other types of JMPs, such as a sub-disciplinary JMP as may be mutually negotiated and agreed to by the respective Universities.

Students enrolled in JMPs of UM and UW shall enjoy all the rights and privileges at both Universities normally accorded to graduate students.

## 2. General Responsibility for Standards and Appeals

Notwithstanding the powers and duties of the JSC as specified below, it is agreed that general responsibility for the operation of JMPs and the maintenance of high academic standards therein rests jointly with the Dean of the Faculty of Graduate Studies (UM) and the Vice-President (Research, Graduate Studies and International) (UW) or their delegates. Similarly it is agreed that the Dean of the Faculty of Graduate Studies (UM) and/or the VicePresident (Research, Graduate Studies and International) (UW) or their delegates may, if they judge it appropriate, attempt to use their good offices to reach an amicable solution to an appeal before the appeal is formally submitted to the Joint Senate Committee.

## 3. Implementation - Review - Termination

The formal start date for the agreement establishing the JMPs was July 1, 1976. The original agreement called for a review after the first three years and envisaged the possibility of terminating the arrangement at the end of an initial five-year period.

It is now agreed that Part $A$ of the agreement shall continue without term, but with a comprehensive review of each program in accordance with the schedule of reviews of graduate programs, but not less frequently than the beginning of the fifth year following the reviews currently scheduled for 2005 and 2007. Moreover, in the event that either party

## -If Grade Appeal

$1^{\text {st }}$ level of appeal is made to the decision maker informally (i.e. Instructor)
$\mathbf{2}^{\text {nd }}$ level of appeal is made to the Head of Department offering the course:

- If course taught at UM, this process is formally initiated through the Student Records Office grade appeal process.
- If course is at UW, Department Review Committee
$3^{\text {rd }}$ level of appeal:
- If graduate level course appeal is made to Faculty of Graduate Studies Appeals Committee, ruling can be made on process only
- If undergraduate level course:
- At UM, appeal is made to Teaching Faculty Appeals Committee, e.g. Faculty of Arts Appeals Committee
- At UW, appeal is made to the Senate Appeals Committee


## -If Academic Appeal (Not Grade Appeal):

Appeal is made to the branch of the decision making body
If Academic Decision was Made by JDC Chair or Sub-committee (e.g. transfer of credit not recommended to FGS; Student Program Time Extension not recommended to FGS; unsatisfactory Annual Progress Report):
$1^{\text {st }}$ Ievel of appeal is made to the decision maker (i.e. Chair JDC)
$2^{\text {nd }}$ level of appeal is made to the JDC
$3^{\text {rd }}$ level of appeal is made to ISC
If Academic Decision was Made by Dean, FGS (UM) (e.g. Required to withdraw due to "F" grade; Student not granted a Leave of Absence; Student not granted an Program Time Extension; etc.)
$\mathbf{1}^{\text {st }}$ level of appeal is made to the decision maker, the Dean FGS (UM)
$\mathbf{2}^{\text {nd }}$ level of appeal is to FGS Appeals Committee
$3^{\text {rd }}$ level of appeal is to Senate Appeals Committee (UM)

## -If Admission Appeal:

Appeal is made to the branch of the decision making body.
If Admission Decision was Made by JDC Chair or Sub-committee (i.e. Student not recommended for admission to FGS)
$1^{\text {st }}$ Ievel of appeal is made to the decision maker (i.e. Chair JDC)
$2^{\text {nd }}$ level of appeal is made to the JDC
$3^{\text {rd }}$ level of appeal is made to JSC
If Admission Decision was Made by Dean, FGS (UM) (degree not recognized by FGS;

GPA does not meet minimum FGS criteria, etc.)
$\mathbf{1}^{\text {st }}$ level of appeal is made to the decision maker, the Dean FGS (UM) $\mathbf{2}^{\text {nd }}$ level of appeal is made to Senate Admission Appeals Committee (UM)

### 11.1 Appeals to the Joint Senate Committee

An appeal to the Joint Senate Committee will be referred to its sub-committee, the Joint Senate Appeals Committee, for its recommendation. The decision of the Joint Senate Appeals Committee will be final.

This Joint Senate Appeals Committee will be a panel of three persons consisting of one faculty member from each University, and one graduate student, all of who are not members of the appealing student's JMP.

All appeals heard by the Joint Senate Appeals Committee shall be heard with due regard for natural justice.

An appeal to the Joint Senate Appeals Committee must be based upon one of the following grounds only:

- Procedural errors at the prior level of appeal
- New evidence that could not have been seen at the prior level of appeal
- Allegations of bias at the prior level of appeal


## 12. Financial Matters

12.1 Tuition fees and administrative costs shall be divided on an enrollment based, proportional basis. That proportion shall be calculated using a rolling 3 year average of the number of credit hours attributed to UW relative to the total JMP credit hours, based on November $1^{\text {st }}$ enrollment figures. Credit hours are totaled for courses taken at each University and 12 credit hours are designated for advising on supervising a thesis. Thus the proportion for each year is calculated by dividing UW JMP credit hours by total JMP credit hours.
12.2 For purposes of fee distribution, tuition fees are the total of tuition, faculty fees and student services fees
12.3 Administrative costs attributable to the JMP shall be a proportion of the annual operating budget of the Faculty of Graduate Studies. In each fiscal year, the April budget amount shall be used in determining these administrative costs. The portion of costs attributable to the JMP shall be determined by dividing the number of JMP students by the total number of UM graduate students as of November $1^{\text {st }}$. The portion of these administrative costs to be paid by UW each year will be determined using the same proportion used to distribute tuition fees for that year.
12.4 JMP students are eligible to compete for University of Manitoba Fellowships. The
costs of fellowships awarded to JMP students shall be split equally by UM and UW. This co-funding is to be acknowledged in all communications regarding fellowships awarded to JMP students and for these students the Fellowships shall be designated the UM/UW Graduate Fellowships.

All students in JMPs are members of the Graduate Students' Association; they should also be members of UMSU and UWSA without having to pay greater student fees than other Masters students at the UM.

## Appendix A

## Approval of New Joint Master's Program Proposal



# Amended UM Senate, May 13, 1977 and UW Senate May 18, 1977 <br> Amended UM Senate, August 6, 1980 and UW Senate November 17, 1980 <br> Amended UW Senate, February, 1999 

Amended UM Senate, April, 1999
Amended by UM Senate, April 5, 2000

# University of Manitoba <br> <br> Office of the University Secretary 

 <br> <br> Office of the University Secretary}

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## MEMORANDUM

DATE: $\quad$ November 10, 2005
TO: $\quad$ Dr. Emöke J. E. Szathmáry, Chair of Senate
FROM: Jeff M. Lecierc, University Secretary Aryeclen -
SUBJECT: Proposal for an amendment to the 2005-2006 Academic Schedule

A proposal has been made to hold a session of Convocation for graduates of the Faculty of Medicine on the Bannatyne Campus beginning in 2006.

I would therefore request that Senate consider amending the 2005-2006 Academic Schedule by adding a session of Convocation on Friday, May 12, 2006.
/jml


[^0]:    ${ }^{1}$ Statistics Canada, 2001 Census.

[^1]:    Email: govemance@umanitoba.ca Office of the University Secretary 312 Administration Building Fax: (204) 474-7511

