

Senate
Senate Chamber
Room E3-262 Engineering Building
WEDNESDAY, June 24, 2009
1:30 p.m.
Regrets call 474-6892

AGENDA

I MATTERS TO BE CONSIDERED IN CLOSED SESSION - none

II MATTERS RECOMMENDED FOR CONCURRENCE WITHOUT DEBATE

1. **Report of the Faculty of Graduate Studies on
Course and Curriculum Changes [dated May 8, 2009]
RE: Department of Native Studies** Page 17
2. **Report of the Executive Committee of the Faculty of
Graduate Studies on Course and Curriculum Changes
[dated May 8, 2009]** Page 18
3. **Report of the Executive Committee of the Faculty of
Graduate Studies on Course and Curriculum Changes
[dated November 21, 2008]** Page 23

III MATTERS FORWARDED FOR INFORMATION

1. **Report of the Senate Committee on Awards** Page 24
2. **In Memoriam Dr. Stephen C. Stothers** Page 33
3. **Student Advocacy Annual Report (2007-2008)** Page 34
4. **Items approved by the Board of Governors
on April 27, 2009 and May 19, 2009** Page 44
5. **2009-2010 List of Senate members** Page 45

IV REPORT OF THE PRESIDENT Page 51

V QUESTION PERIOD

Senators are reminded that questions shall normally be submitted in writing to the University Secretary no later than 10:00 a.m. of the day preceding the meeting.

VI CONSIDERATION OF THE MINUTES OF THE MEETING OF MAY 13, 2009

VII BUSINESS ARISING FROM THE MINUTES

VIII REPORTS OF THE SENATE EXECUTIVE COMMITTEE AND THE SENATE PLANNING AND PRIORITIES COMMITTEE

1. **Report of the Senate Executive Committee** Page 55

**2. Report of the Senate
Planning and Priorities Committee**

- a) The Chair will make an oral report of the Committee's activities.
- b) **SPPC Report on the Siting of the ART Laboratory** Page 56

**IX REPORTS OF OTHER COMMITTEES OF SENATE,
FACULTY AND SCHOOL COUNCILS**

1. **Report of the Senate Committee on Approved
Teaching Centres with Respect to Cross-Registered
Courses and Instructors** Page 60
2. **Proposal from the Faculty of Science for a Bachelor
of Science (Major) and a Major Co-op in Biotechnology**
- a) **Program Proposal** Page 62
- b) **Report of the Senate Committee on
Curriculum and Course Changes** Page 94
- c) **Report of the Senate Planning and
Priorities Committee** Page 95
3. **Report of the Senate Committee on University Research
RE: Establishment of a Professorship
in Spinal Cord Research** Page 97
4. **Report of the Senate Committee on Instruction and
Evaluation RE: Professional Unsuitability By-laws
From the Faculties of Education and Social Work** Page 102
- a) **Faculty of Education** Page 103
- b) **Faculty of Social Work** Page 109
5. **Report of the Faculty of Graduate Studies [May 21, 2009]
RE: Proposal from Department of Soil Science** Page 115
6. **Report of the Faculty of Graduate Studies [May 21, 2009]
RE: General Regulation Changes: Ph.D. "Candidacy Exam"
and Master's Admission** Page 119
7. **Report of Senate Committee on Nominations** Page 122

X ADDITIONAL BUSINESS

1. **Strategic Framework Planning Document** Page 125

XI ADJOURNMENT

Report of the Faculty of Graduate Studies on Course and Curriculum Changes

Preamble

1. The Faculty of Graduate Studies has responsibility for all matters relating to the submission of graduate course, curriculum and program changes. Recommendations for new programs or changes are submitted by the Faculty Council of Graduate Studies for the approval of Senate.
2. The Dept. of Native Studies proposes two course instructions which have been extracted from the Ph.D. proposal in Native Studies. The department would like to offer the courses in Sept. 2009 and note that they can be supported by the existing resources in the department.
3. The courses were approved by the Faculty Council of Graduate Studies on November 14, 2008.

Recommendations

The Faculty Council of Graduate Studies recommends THAT: the course changes from the unit(s) listed below be approved by Senate:

Dept. of Native Studies

Course introductions:

NATV 7310 Critical Theory and Native Studies (3) +3

This course will assess the relevance of the concepts produced by recent social theory to the situation of Aboriginal peoples and the contribution made by 'fourth world' contexts to social theory. Marxism, feminism, post-structuralism, post-colonial theory, and cultural theory will be among the perspectives examined.

NATV 7320 Trauma Theory in Indigenous Writing in Canada and Australia (3) +3

This course will compare selected texts by Indigenous authors from Canada and Australia as trauma literature. The respective texts will be analyzed with the help of trauma theories as developed in relation to the Holocaust. Pre-requisite: written consent of instructor.

NET CHANGE IN CREDIT HOURS:

+6

Respectfully submitted,
Dean J. Doering, Chair
Graduate Studies Faculty Council

Report of the Executive Committee of the Faculty of Graduate Studies on Course and Curriculum Changes

Preamble

1. The Faculty of Graduate Studies has responsibility for all matters relating to the submission of graduate course, curriculum and program changes. Recommendations for new programs or changes are submitted by the Faculty Council of Graduate Studies for the approval of Senate.
2. In October 2007, the Faculty of Graduate Studies approved a process of *Streamlining Course Introductions, Modifications, & Deletions* which allows the Executive Committee to approve these changes in lieu of Faculty Council when the courses are not associated with a new program or program changes.
3. The Faculty of Graduate Studies Executive Committee met on the above date to consider course changes with respect to the Labour Studies Program (Arts), the Dept. of Biological Sciences (Science), Dept. of Family Social Sciences (Human Ecology), Masters of Physician Assistant Studies program (Medicine), and Faculty of Nursing, Dept. of Electrical & Computer Engineering (Engineering).

Observations

1. The Labour Studies Program of the Faculty of Arts proposes the introduction of one course, **LABR.7110 Advanced Topics in Labour Studies (3)**, to give students in Interdisciplinary graduate programs opportunities to take Labour Studies courses.
2. The Dept. of Biological Sciences proposes the deletion of four courses, **BOTN 7440 Methods and Approaches to the Analysis of Biological Data, Part I (3)**, **BOTN 7450 Methods and Approaches to the Analysis of Biological Data, Part II (3)**, and **BIOL 7460 Molecular Biology for Plants and Fungi (3)**, and the introduction of two courses, **BIOL 7530 Molecular Biology Techniques for Eukaryotes (3)**, and **BIOL 7540 Methods for Analysing Biological Data (3)** to change course titles and/or streamline the offering of course material.
3. The Dept. of Family Social Sciences proposes the introduction of one course, **FMLY 7500 Evaluation of Family, Health & Social Development Programs (3)** to provide greater depth of knowledge of an area that is an increasingly valued asset in industry.
4. The Masters of Physician Assistant Studies program proposes the deletion of four courses, **PAEP 7072 Maternal and Child Health for Physician Assistants I (2)**, **PAEP 7074 Maternal and Child Health for Physician Assistants II (2)**, **PAEP 7076 Maternal and Child Health for Physician Assistants III (2)**, and **PAEP 7300 Surgical Subspecialties for Physician Assistants (3)**, and the introduction of three courses, **PAEP 7042 Pediatrics for Physician Assistants (3)**, **PAEP 7044 Obstetrics and Gynecology for Physician Assistants (3)**, **PAEP 7204 Clinical Elective for Physician Assistants I (1.5)**, and **PAEP 7206 Clinical Elective for Physician**

Assistants II (1.5), to broaden the program's clinical electives and improve upon the logistical and pedagogical challenges of delivering the course material.

5. The Faculty of Nursing proposes the deletion of one course, **NURS 7280 Applied Physiology/Pathophysiology for Nurses (6)**, and the introduction of three courses, **NURS 7370 Pathophysiologic Concepts & Therapeutics I (3)**, **NURS 7380 Pathophysiologic Concepts & Therapeutics II (3)**, and **NURS 7390 Pathophysiologic Concepts & Therapeutics III (3)** to address the required primary care advanced practice nursing competencies in pathophysiology and therapeutics by allowing closer integration of the two principles and to utilize a case-based approach congruent with advanced practice nursing.
6. The Dept. of Electrical & Computer Engineering proposes the deletion of twenty courses **ECE 8360 VLSI Design Methodology (3)**, **ECE 8310 Computer-Aided Design in Biomedical Eng. (3)**, **ECE 8300 Computer Vision (3)**, **ECE 8240 Parallel Processing Architectures (3)**, **ECE 8160 Digital Filters (3)**, **ECE 8110 Digital System Design (3)**, **ECE 7920 Human Physiology for Engineering (3)**, **ECE 7780 Microwave Circuits (3)**, **ECE 7740 Physical Electronics 1 (3)**, **ECE 7720 Optimal Control 1 (3)**, **ECE 7660 Logic Problem Solving (3)**, **ECE 7540 Selected Topics of Solid State Electronics (3)**, **ECE 7490 Verification Tools (3)**, **ECE 7400 Neural Nets and Neurocomputing (3)**, **ECE 7370 Memory Devices and Systems (3)**, **ECE 7270 Scattering and Diffraction of Electromagnetic Waves (3)**, **ECE 7240 Signal Theory (3)**, **ECE 7220 Topics in VLSI Test and Fault Tolerance (3)**, **ECE 7180 Embedded Systems Engineering (3)**, and **ECE 7074 Biomedical Signal Processing (3)**. These courses have not been taught in over eight years.

Recommendations

The Executive Committee recommends THAT: the course changes from the units listed below be approved by Senate:

Labour Studies Program of the Faculty of Arts
Dept. of Biological Sciences
Dept. of Family Social Sciences
Masters of Physician Assistant Studies program
Faculty of Nursing
Dept. of Electrical & Computer Engineering

Respectfully submitted,

Dean J. Doering, Chair
Graduate Studies Faculty Council

Labour Studies Program, Faculty of Arts

Course introduction:

LABR.7110 Advanced Topics in Labour Studies (3) +3
The course will vary from year to year depending on the needs of students and the interests of the instructor. Prerequisite: written consent of the Labour Studies coordinator. As the course content will vary from year to year, student may take this course more than once for credit.

NET CHANGE IN CREDIT HOURS: +3

Dept. of Biological Sciences

Course deletions:

BOTN 7440 Methods and Approaches to the Analysis of Biological Data, Part I (3) -3
BOTN 7450 Methods and Approaches to the Analysis of Biological Data, Part II (3) -3
BIOL 7460 Molecular Biology for Plants and Fungi (3) -3

Course introductions:

BIOL 7530 Molecular Biology Techniques for Eukaryotes (3) +3
A techniques-intensive course focusing on the understanding of molecular biology techniques, trouble-shooting problems, writing reproducible Materials and Methods for publications, accurate recording of procedures in lab journals, and bioinformatics exercises, Not to be held with the former 001.742 or 001.746 or BOTN 7460.

BIOL 7540 Methods for Analysing Biological Data (3) +3
A survey of methods and approaches for analysing biological and environmental data containing many variables, suitable for graduate students. Offered in alternate years. Not to be held with BOTN 4650.

NET CHANGE IN CREDIT HOURS: -3

Dept. of Family Social Sciences

Course introduction:

FMLY 7500 Evaluation of Family, Health & Social Development Programs (3) +3
This course teaches the theory and practice of program evaluation with a focus on family, health, and social development programs. It will emphasize a utilization-focused evaluation approach from a "real world" perspective, including the political and ethical issues related to evaluation. The course will provide a strong theoretical and practical foundation to evaluation common to family, health, and social development programs. Students will choose a particular field on which to develop an actual evaluation plan with an existing agency, and will produce an evaluation report related to a particular program in their field of interest.

NET CHANGE IN CREDIT HOURS: +3

Masters of Physician Assistant Studies program

Course deletions:

PAEP 7072 Maternal and Child Health for Physician Assistants I (2)	-2
PAEP 7074 Maternal and Child Health for Physician Assistants II (2)	-2
PAEP 7076 Maternal and Child Health for Physician Assistants III (2)	-2
PAEP 7300 Surgical Subspecialties for Physician Assistants (3)	-3

Course introductions:

PAEP 7042 Pediatrics for Physician Assistants (3)	+3
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A brief, comprehensive didactic introduction to the field of pediatric medicine designed to prepare the physician assistant to diagnose and treat, within his or her scope of practice, common pediatric conditions. Pre-requisite: Successful completion of MPAS year 1.

PAEP 7044 Obstetrics and Gynecology for Physician Assistants (3)	+3
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A brief, comprehensive didactic introduction to the field of obstetrics and gynecology designed to prepare the physician assistant to diagnose and treat, within his or her scope of practice, common obstetrics and gynecology conditions as would be encountered in a primary care setting. Pre-requisite: Successful completion of MPAS year 1.

PAEP 7204 Clinical Elective for Physician Assistants I (1.5)	+1.5
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A brief (2 week) clinical rotation designed to provide the student with additional education and training in a clinical discipline of the student's choice. Course evaluated on a pass/fail basis.

PAEP 7206 Clinical Elective for Physician Assistants II (1.5)	+1.5
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A brief (2 week) clinical rotation designed to provide the student with additional education and training in a clinical discipline of the student's choice. Course evaluated on a pass/fail basis.

NET CHANGE IN CREDIT HOURS:	0
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Faculty of Nursing

Course deletion:

NURS 7280 Applied Physiology/Pathophysiology for Nurses	-3
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Course introductions:

NURS 7370 Pathophysiologic Concepts & Therapeutics I	+3
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Introducing principles of cell signaling, physiological feedback systems, adaptive and non-adaptive cellular responses, receptor-ligand interactions, drug kinetics, dynamics and therapeutics. Pathophysiology and treatment of disorders of immunity and inflammation, including hypersensitivity reactions, will also be covered in this course.

NURS 7380 Pathophysiologic Concepts & Therapeutics II	+3
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This course entails a systems-based analysis of disease states commonly seen in primary care, including cardiovascular, hematological, respiratory, neurologic and renal disorders and their

treatment. Problem- and case-based scenarios will be used to encourage critical thinking and integration of pathophysiologic and management principles.

NURS 7390 Pathophysiologic Concepts & Therapeutics III +3
 This covers pathophysiology and management of disorders of the musculoskeletal, gastrointestinal, dermatologic, reproductive and urogenital systems. One module will focus on disorders of the head, eyes, ears, nose, and throat. A case study approach to instruction will be used almost exclusively in this course, which culminates in a mock 'grand rounds' presentation.

NET CHANGE IN CREDIT HOURS: +6

Dept. of Electrical & Computer Engineering

Course deletions:

ECE 8360 VLSI Design Methodology (3)	-3
ECE 8310 Computer-Aided Design in Biomedical Eng. (3)	-3
ECE 8300 Computer Vision (3)	-3
ECE 8240 Parallel Processing Architectures (3)	-3
ECE 8160 Digital Filters (3)	-3
ECE 8110 Digital System Design (3)	-3
ECE 7920 Human Physiology for Engineering (3)	-3
ECE 7780 Microwave Circuits (3)	-3
ECE 7740 Physical Electronics 1 (3)	-3
ECE 7720 Optimal Control 1 (3)	-3
ECE 7660 Logic Problem Solving (3)	-3
ECE 7540 Selected Topics of Solid State Electronics (3)	-3
ECE 7490 Verification Tools (3)	-3
ECE 7400 Neural Nets and Neurocomputing (3)	-3
ECE 7370 Memory Devices and Systems (3)	-3
ECE 7270 Scattering and Diffraction of Electromagnetic Waves (3)	-3
ECE 7240 Signal Theory (3)	-3
ECE 7220 Topics in VLSI Test and Fault Tolerance (3)	-3
ECE 7180 Embedded Systems Engineering (3)	-3
ECE 7074 Biomedical Signal Processing (3)	-3

NET CHANGE IN CREDIT HOURS: -60

Report of the Executive Committee of the Faculty of Graduate Studies on Course and Curriculum Changes

Preamble

1. The Faculty of Graduate Studies has responsibility for all matters relating to the submission of graduate course, curriculum and program changes. Recommendations for new programs or changes are submitted by the Faculty Council of Graduate Studies for the approval of Senate.
2. In October 2007, the Faculty of Graduate Studies approved a process of *Streamlining Course Introductions, Modifications, & Deletions* which allows the Executive Committee to approve these changes in lieu of Faculty Council when the courses are not associated with a new program or program changes.
3. The Faculty of Graduate Studies Executive Committee voted via e-mail on the above date to consider a proposal from the Dept. of Educational Administration, Foundations, & Psychology of the Faculty of Education.

Observations

1. The Dept. of Educational Administration, Foundations, & Psychology of the Faculty of Education proposes the modification of one course, **EDUA 7520 Practicum Seminar in Counselling (6)**; the course description is being amended to ensure graduate students complete certain courses in an appropriate order.

Recommendations

The Executive Committee recommends **THAT**: the course changes from the units listed below be approved by Senate:

Dept. of Educational Administration, Foundations, and Psychology

Course modification:

EDUA 7520 Practicum Seminar in Counselling (6) +0
Supervised experience in both individual and group counseling. Attention is given to analysis of case studies using audio- and video-tapes. A minimum of 180 hours of counseling experience in placement situations is required. Not to be held with the former 043.704. Prerequisite: EDUA 5480 (129.548) (P) and permission of the instructor. Prerequisite or corequisite: EDUA 7550 (129.755). Course evaluated on a pass/fail basis.

NET CHANGE IN CREDIT HOURS: +0

Respectfully submitted,

Dean J. Doering, Chair
Graduate Studies Faculty Council

Comments of the Senate Executive Committee:
The Senate Executive Committee endorses the report to Senate.

REPORT OF THE SENATE COMMITTEE ON AWARDS

Preamble

Terms of reference for the Senate Committee on Awards 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 otherwise appear to be discriminatory under the policy on the *Non-Acceptance of Discriminatory Scholarships, Bursaries or Fellowships*, such offers shall be submitted to Senate for approval. (Senate, April 5, 2000)

Observations

At its meeting of May 19, 2009, the Senate Committee on Awards approved nine new offers, nine amended offers, and the withdrawal of three offers, as set out in Appendix A of the *Report of the Senate Committee on Awards* (dated May 19, 2009).

Recommendations

On behalf of Senate, the Senate Committee on Awards recommends that the Board of Governors approve approved nine new offers, nine amended offers, and the withdrawal of three offers, as set out in Appendix A of the *Report of the Senate Committee on Awards* (dated May 19, 2009). These award decisions comply with the published guidelines of November 3, 1999, and are reported to Senate for information.

Respectfully submitted,

Dr. Philip Hultin
Chair, Senate Committee on Awards

Appendix A
MEETING OF THE SENATE COMMITTEE ON AWARDS
May 19, 2009

1. NEW OFFERS

Bison Men's Volleyball - Dr. Dale Iwanoczko Memorial Scholarship

The Dr. Dale Iwanoczko Memorial Golf Tournament and Scholarship Committee has established an endowment fund (initial gift of \$17,000) at the University of Manitoba in memory of Dr. Dale Iwanoczko. The Manitoba Scholarship and Bursary Initiative has made a contribution to the fund. The fund will be used to support a scholarship for the returning volleyball player who best exemplifies Dale's characteristics of leadership in volleyball and scholastic accomplishment. The available annual income from the fund will be used to offer one scholarship, with a minimum value of \$1,500, to an undergraduate student who:

- (1) is a Canadian citizen or permanent resident;
- (2) is currently a member of the Bison men's volleyball team;
- (3) is in the third, fourth, or fifth year with the Bison Sports program;
- (4) is in satisfactory academic standing as determined by the University of Manitoba and is eligible to compete in CIS competition;
- (5) is registered in a minimum 80 percent of a full-course load as determined by the University and has demonstrated academic achievement based on a minimum sessional grade point average of 3.0 during the previous academic session;
- (6) has demonstrated athletic ability in volleyball and team leadership.

Preference will be given to a student who is in the fourth or fifth year in the Bison Sports program. Preference will also be given to a student who is registered in the Faculty of Medicine or, in the absence of a medicine student, to a student in any other professional program (i.e., dentistry, law, commerce etc.)

The selection committee will be named by the Athletic Director (or designate) and will include the Head Coach of the Bison Men's Varsity Volleyball Team (or designate), and a representative of the Dr. Dale Iwanoczko Memorial Golf Tournament and Scholarship Committee (or designate). More than 50 percent of the members of this committee shall be University of Manitoba staff.

The Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

The terms of this award will be reviewed annually against the Canadian Interuniversity Sport (CIS) criteria governing "University Academic Scholarships with an Athletic Component", currently numbered C.5 in the CIS Operations Manual.

Farron and Martin Brotman Bursary in Medicine

Mrs. Farron Brotman (M.S.W./62, B.S.W./60, B.A./59) and Dr. Martin Brotman (M.D./62, B.Sc.(Med.)/62) have established an endowment fund at the University of Manitoba, with an initial gift of \$25,000 contributed over two years, in 2009 and 2010. The purpose of the fund is to support students in the Faculty of Medicine. The available annual income from the fund will be used to offer one bursary to an undergraduate student who:

- (1) is enrolled full-time in any year of study in the Undergraduate Medical Education Program in the Faculty of Medicine and is in good standing;
- (2) 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 Medicine (or designate).

The Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

Allister B. Hickson Scholarship for Supply Chain Management

In memory of Dr. Allister B. Hickson, friends, family and colleagues have established an award in his name at the University of Manitoba. The purpose of the scholarship is to support students in the Department of Supply Chain Management, in the I.H. Asper School of Business. In the first two years that the scholarship is offered, contributions from family, friends and colleagues will be used to offer an annual scholarship valued at \$1,200. In the second year, if the value of the fund is less than \$1,200, Mrs. Denise Hickson will provide an additional contribution to top up the scholarship. In subsequent years, Mrs. Hickson will provide an annual contribution of \$1,200 to continue the scholarship.

One annual scholarship will be offered to an undergraduate student who:

- (1) is enrolled full-time (minimum 24 credit hours) in the I.H. Asper School of Business, in the Bachelor of Commerce (Honours) degree program;
- (2) has completed at least 24 credit hours toward a B.Comm(Hons.) degree and has declared Logistics and Supply Chain Management as his or her major;
- (3) has achieved a minimum degree grade point average of 3.0.

The selection committee will be named by the Dean of the I.H. Asper School of Business (or designate).

Martin and Elaine Kernahan Scholarship in Engineering (A Faculty of Engineering Centenary Scholarship)

Mr. Martin Kernahan [B.Sc.(M.E.)/49] and Mrs. Elaine Kernahan have established an endowment fund at the University of Manitoba, with an initial gift of \$10,000 in 2009. The purpose of the fund is to encourage engineering students to excel in their studies by providing scholarship support. The available annual interest from the fund will be used to offer one scholarship to an undergraduate student who:

- (1) is enrolled full-time or part-time in the second, third, or fourth year of study in the Faculty of Engineering;
- (2) has achieved a minimum degree grade point average of 3.5.

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

Dane Nordheim Memorial Award

In honour of Dane Nordheim, friends and family have established an endowment at the University of Manitoba, with an initial gift of \$10,782 in 2009. The fund will be used to offer a renewable scholarship for students pursuing graduate studies in English. Normally, the scholarship will be offered biennially. The available annual interest from the fund will be used to offer one scholarship to a graduate student who:

- (1) has successfully completed a Bachelor of Arts (Honours) degree in English at the University of Manitoba;
- (2) is enrolled full-time in the Faculty of Graduate Studies, in the first year of the M.A. in English;
- (3) has achieved a minimum degree grade point average of 3.0 based on the last 60 credit hours of study;
- (4) has demonstrated an interest in creative writing based on work completed during his or her previous degree.

The Dane Nordheim Memorial Award is renewable in the second year of the program provided that the recipient:

- (1) continues to be enrolled full-time in the Faculty of Graduate Studies in the M.A. in English;
- (2) has achieved a minimum degree grade point average of 3.0 based on the last 60 credit hours of study.

In any given year that a recipient does not qualify for the renewal, the scholarship will be offered to an entering student who meets criteria (1) through (4), as set out in the first paragraph.

The maximum number Awards one student may hold in his or her lifetime is two (2).

The Dean of the Faculty of Graduate Studies (or designate) will ask the Head of the Department of English, Film, and Theatre (or designate) to name the selection committee.

The Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

Roy C. Rettinger Graduate Scholarship for Interior Design

Mr. Roy C. Rettinger (B.I.D./53) has established an endowment fund at the University of Manitoba, with an initial gift represented by the cheques described in Schedule A of the gift agreement. The fund will be used to offer scholarships to students entering the Master of Interior Design program (either the professional degree or post-professional degree). The available annual interest from the fund will be used to offer one or more scholarships, with a minimum value of \$4,000 each, to graduate students who:

- (1) hold a Baccalaureate degree and qualify for admission to the Master of Interior Design program, in the Faculty of Graduate Studies;
- (2) have registered as full-time students in the Faculty of Graduate Studies, in the first year of study in the Master of Interior Design program;
- (3) have achieved a minimum degree grade point average of 3.5 (or equivalent) in their undergraduate program.

The selection committee will have the discretion to determine the number and value of awards offered each year according to the available annual interest.

Recipients may hold the Roy C. Rettinger Graduate Scholarship for Interior Design concurrently with any other awards, consistent with policies in the Faculty of Graduate Studies.

The Dean of the Faculty of Graduate Studies (or designate) will ask the Dean of the Faculty of Architecture (or designate) to name the selection committee for this award.

The Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

Raymond S.C. Wan Architect Inc. Recruitment Award

Raymond S.C. Wan Architect Inc. offers an annual scholarship to attract top students to the graduate program in the Faculty of Architecture at the University of Manitoba. The donor has agreed to fund the bursary for a term of three years, beginning in the 2009-2010 academic session, with the right to renew the commitment at the end of the term. Each year, one entrance scholarship valued at \$5,000, will be offered to a graduate student who:

- (1) is enrolled full-time in the Faculty of Graduate Studies, in the first year of the Master of Architecture degree program;
- (2) has achieved a minimum degree grade point average of 3.5 (or equivalent) in the undergraduate program;
- (3) has, based on his or her portfolio, demonstrated the strongest potential to become a practitioner of architecture in his or her career.

Recipients may hold the Raymond S.C. Wan Architect Inc. Recruitment Award concurrently with any other awards, consistent with policies in the Faculty of Graduate Studies.

The Dean of the Faculty of Graduate Studies (or designate) will ask the Dean of the Faculty of Architecture (or designate) to name the selection committee for this award, which will include one representative of Raymond S.C. Wan Architect Inc.

Windsor Masonic Bursary

The Windsor Masonic Lodge No. 138 has established an endowment fund at the University of Manitoba in 2009. The initial gift of \$40,000 represents proceeds from the sale of a property in St. Vital. The Manitoba Scholarship and Bursary Initiative has made a contribution to the fund. The purpose of the fund, which is to offer bursaries to undergraduate students, is consistent with the Lodge's long-standing practice of providing bursaries to graduates of St. Vital high schools. The available annual income from the fund will be used to offer one bursary to an undergraduate student who:

- (1) is enrolled full-time in any faculty or school;
- (2) has completed at least one year of full-time study;
- (3) has achieved a minimum degree grade point average of 2.5;
- (4) has demonstrated financial need on the standard University of Manitoba bursary application form.

The selection committee will be named by the Director of Financial Aid and Awards (or designate).

The Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

Dean David Witty Urban Design Scholarship

David Witty, PhD, MRAIC, FCIP, Dean of the Faculty of Architecture (2001-2009), through a personal donation and with funds received while he was Dean, for his design charrette outreach community work, has established an endowment fund at the University of Manitoba. The Manitoba Scholarship and Bursary Initiative has made a contribution to the fund. The fund will be used to offer the Dean David Witty Urban Design Scholarship in the Department of City Planning, Faculty of Architecture. The scholarship will be awarded to a City Planning student who is completing a thesis/practicum/comprehensive urban design topic.

The available annual income from the fund will be used to offer one scholarship, with a minimum value of \$1,500, to a graduate student who:

- (1) is enrolled full-time in the Faculty of Graduate Studies, in the second year of the Master of City Planning;
- (2) has achieved a minimum degree grade point average of 3.5 on course work completed at the Master's level;
- (3) has received approval on a thesis/practicum/comprehensive topic that focuses on a City of Winnipeg urban design issue(s).

Preference will be given to a student who is Aboriginal and/or a single parent.

The Dean of the Faculty of Graduate Studies (or designate) will ask the Dean of the Faculty of Architecture (or designate) to name the selection committee, which will include the Head of the Department of City Planning and two other faculty members from the Department.

The Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award.

2. AMENDMENTS

Cyril L. Anderson – Ridley Inc. Awards

At the request of the donor contact, and with the agreement of Ridley Inc. the names of the various Cyril L. Anderson – Ridley Inc. Awards were amended, as follows:

- from: *Cyril L. Anderson – Ridley Inc. Award in Animal Science – Degree* to: *Cyril L. Anderson – FeedRite Ridley Inc. Award in Animal Science – Degree*
- from: *Cyril L. Anderson – Ridley Inc. Graduate Fellowship in Animal Nutrition* to: *Cyril L. Anderson – FeedRite Ridley Inc. Graduate Fellowship in Animal Nutrition*
- from: *Cyril L. Anderson – Ridley Inc. Prize – Diploma Agriculture* to: *Cyril L. Anderson – FeedRite Ridley Inc. – Diploma Agriculture*

Agriculture Faculty Awards

A number of amendments were made to the terms of reference for the *Agriculture Faculty Awards* following a contribution to the trust fund that supports the award from the estate of Mr. Walter Williamson:

- The name of the Awards was changed to the *Agriculture Faculty – Walter Williamson Awards*.
- The following statement was added to the opening paragraph of the terms: “In 2009, a gift of \$10,000 from the estate of Mr. Walter Williamson (B.S.A./35) was added to the fund for the support of scholarships for students in agricultural programs. There shall be no encroachment on the capital of the fund.”
- The number of awards offered from the fund each year was revised from: 10 to: 8 prizes of equal value, which corresponds to the number of program, degrees, and diplomas for which the Awards are offered each year.
- A number of editorial revisions were made.

Consulting Engineers of Manitoba – Bill Evans Memorial Bursary

At the request of the donor, the terms of reference for the Consulting Engineers of Manitoba – Bill Evans Memorial Bursary were amended, as follows.

- The award was converted from a bursary to a scholarship. Following from this change, the award was renamed as the Consulting Engineers of Manitoba – Bill Evans Memorial Scholarship.
- The second paragraph, which formerly described a schedule of pledge payments to establish an endowment fund of \$10,000 over a period of five years, was modified to reflect that the donor has paid the balance of the pledge in 2009. Following from this change, the terms of reference now specify that the available annual income will be used to offer the award beginning in the 2010 – 2011 academic session, rather than the 2013-2014 academic session.
- Criterion (1) was revised to use credit hours completed to define the year of study, which varies across programs. It reads: “[who] has completed (a) between 30 and 112 credit hours toward any Bachelor of Science in Engineering (including the Industry Internship Program) or (b) between 30 and 92 credit hours toward any Bachelor of Science in Engineering (Co-operative Education Option).”
- Criterion (2) was revised to define full-time study as a minimum of 24 credit hours.
- A requirement that the recipient has demonstrated financial need was removed.

Corbett Cibinel Architects Award for Sustainable Design

At the request of the donor, several amendments were made to the terms of reference for the Corbett Cibinel Architects Award for Sustainable Design, which is offered to a student in the Master of Architecture program.

- The award was renamed the Cibinel Architects Design Achievement Award.
- The opening paragraph was revised to reflect that the donor for this award has established an endowment fund of \$10,000 in 2009 to support the award. The award has been offered as an annually funded award since it was established in 2004.

- A statement was added to indicate that the Manitoba Scholarship and Bursary Initiative has made a contribution to the endowment fund.
- The first paragraph now describes the purpose of the fund, which is: "...to offer scholarships to recognize students who demonstrate passion for design, professional promise, and clarity of purpose."
- The value of the Award was amended from: \$500 to: the available annual income from the fund.
- The revised terms specify that the award is to be offered to a student who has completed the first year of the Master of Architecture program and is enrolled full-time in the second year of the program.
- Criterion (3) [formerly criterion (2)] was revised from: "[who] demonstrates creativity in the research and design of sustainable architecture," to: "[who] has demonstrated creativity in design."
- The following clause was added to the terms: "The Board of Governors of the University of Manitoba has the right to modify the terms of this award if, because of changed conditions, it becomes necessary to do so. Such modification shall conform as closely as possible to the expressed intention of the donor in establishing the award."
- A number of editorial changes were made.

Max Kaplan Prize in Legal Aspects of Business Planning for Business Planning and Finance Law

At the request of the Faculty of Law, several revisions were made to the terms of reference for the Max Kaplan Prize in Legal Aspects of Business Planning for Business Planning and Finance Law:

- The value of the Prize was amended from: \$50 to: the available annual interest from the endowment fund.
- The Prize, which was formerly offered to the student who achieved the highest standing in the course Business Planning and Finance Law (45.386) will now be offered to a student who achieves high standing in an advanced clinical business law course.
- A number of editorial changes were made.

Christine Michalchyshyn Memorial Bursary

At the request of the Faculty of Nursing, the stipulation that the recipient of the Christine Michalchyshyn Memorial Bursary normally be selected in May and that the award be offered in July of the same year was removed from the terms of reference for the award. The change will allow the Faculty to select a recipient in the Fall term, at the same time that other bursary selections are made.

Procurity Pharmacy Services Inc. Award

At the request of the donor, the name of the Procurity Pharmacy Services Inc. Award was changed to the Procurity Inc. Award.

3. WITHDRAWALS

Carswell Prize for Highest Standing in First Year

Carswell Prize for Highest Standing in Second Year

Carswell Prize for Highest Standing in Third Year

At the request of the donor, the terms of reference for three annually funded awards for students in the Faculty of Law, the *Carswell Award for Highest Standing in First Year*, the *Carswell Prize for Highest Standing in Second Year*, and the *Carswell Prize for Highest Standing in Third Year*, were withdrawn.

In Remembrance of Dr. S.C. (Steve) Stothers

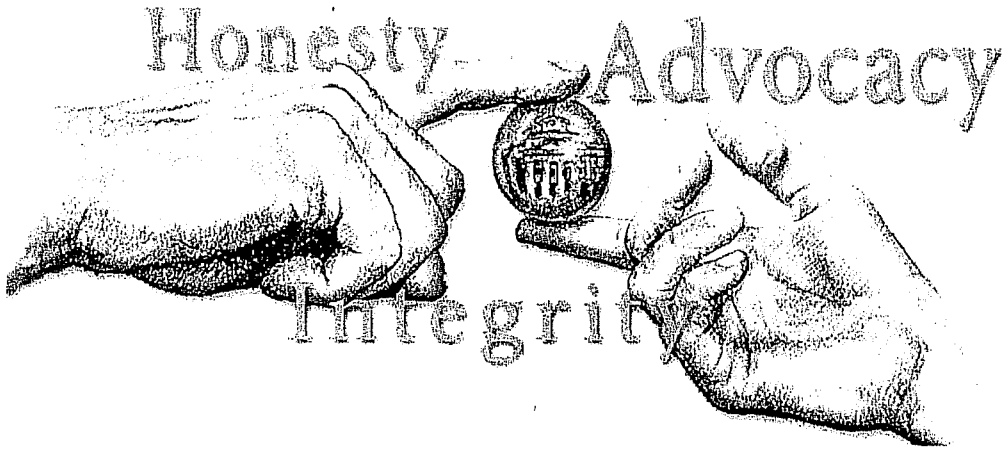
It is with great sadness that we announce the sudden passing of Dr. Stephen Cleghorn Stothers on April 29, 2009 at an age nearing 80 years. Dr. Stothers received his B.S.A. (Animal Husbandry) from the University of Toronto (Ontario Agricultural College) in 1951, an M.Sc. (Animal Nutrition) in 1952 and Ph.D. (Animal Nutrition) in 1954, both from Michigan State University. Nineteen fifty-five to 1994 he was a Professor of Swine Nutrition and Management in the Department of Animal Science, Faculty of Agriculture, University of Manitoba. Dr. Stothers was involved with the establishment of the Glenlea Research Station and was Director of the Swine Unit for many years.

During his tenure at the University of Manitoba, Dr. Stothers mentored many graduate students and was the advisor for at least 20 students. Many of his graduates have made significant contribution to academics and the swine industry around the world. His main research focus with his graduate students was protein nutrition and metabolism in swine and swine management in all phases of the production cycle. After 39 years of continuous service which included the Headship (1987-1991) Dr. Stothers retired but continued to work with undergraduate students for several more years as a Senior Scholar. Dr. Stothers was a member of University Senate (1963-1965) and served on many Faculty, Provincial and National Committees.

Dr. Stothers will be best remembered for his great interest in students (established an award in his name upon retiring) and for his constant support and interaction with all segments of the animal feed industry and the swine industry in Manitoba.

Dr. Stephen Cleghorn Stothers passed away suddenly at about 4:00 p.m. on Wednesday, April 29, 2009 at an age nearing 80 years.

He will be sadly missed.



Student Advocacy Annual Report

2007-2008

Contents

Mission	2	Meetings & Hearings	5	Staff.....	8
Introduction	2	Referrals.....	6	Future Plans.....	9
Contacts.....	2	Educational Initiatives	6	Recommendations.....	9
Demographics.....	2	Academic Integrity Week.....	7	Acknowledgements.....	9
Student Issues	2	Notable Accomplishments	7	Glossary of Terms.....	9
Resolution of Issues.....	5	Research and Scholarly Activities. 8			

Mission

The mission of the Student Advocacy office is to ensure that students are treated fairly in their dealings with the University. The Student Advocacy office is dedicated to educating the University community concerning student rights and responsibilities and assisting students in the resolution of conflicts arising from actions or decisions taken by the University.

While serving the University, Student Advocates maintain a student focus by providing information, investigating complaints, resolving conflict through alternative and formal systems, representing students at hearings, and reviewing policies and recommending change.

Introduction

This report, as submitted to Senate, summarizes the activities of the Student Advocacy office for the time period of September 1, 2007 to August 31, 2008. During this reporting year the office was staffed by two full time Student Advocates, one part time Student Advocate, Confidential Assistant, and the Director.

Contacts

In 2007-08, the Student Advocacy office received a total of 1994 contacts for assistance. Table 1 provides a breakdown of the types of contacts the office received.

Table 1: Office Contacts	2007	2006
	2008	2007
Individual Student Cases	950	978
Carried Forward Student Cases	36	23
Student Contacts	858	751
Group/Issues Cases	7	11
Staff Consults	143	147
Total	1994	1910

The office opened case files to assist 950 students. There were 36 students with issues continuing on from the previous reporting year. Some matters are not quickly resolved, or are often complex and require a significant amount of time to resolve. Other matters only come to light near the end of the reporting year. These factors result in the need to carry forward some cases into the following reporting year.

There were 858 students who contacted either the front desk or an advocate with a question, and were given general information or advice which did not necessitate opening a case file. This statistic, substantially higher than the previ-

ous year, also includes students who made an appointment to meet with an advocate but subsequently cancelled or chose not to attend. In May 2008, we began offering an online chat service for students. Of the 858 students who contacted, 31 of these came via online chat (see the 'Notable Accomplishments' section of this report). We anticipate this number to increase as more students became aware of this option for receiving assistance.

There were 7 group cases or issues (involving thirteen students) that were brought forward to the office.

In addition to assisting students, we also provide advice and consultation services to faculty and staff on campus. Faculty and staff may contact us for assistance with how to handle a particular student matter or for information about policy and procedures. In 2007-08, we received a total of 143 staff/faculty contacts. This is comparable to the previous year.

Demographics

These demographics are based on the number of students who had a case file opened in the 2007-08 year. Of these 950 individual students, 45% were male, and 55% were female. This ratio is comparable to our data from the previous year.

In this reporting year, we began gathering data on the number of international students we assisted. This data collection was based on student self-identification at the time of intake. A total of 251 students (26%) identified themselves as international students. It is important to note that it was optional for students to self-identify and steps were not taken by the office to verify whether a student was admitted as an international student. International students made up approximately 9% of the student population during the 2007-08 year (Office of Institutional Analysis 2007-2008 IS Book).

We also recorded data on students' faculty of registration (at the time of intake with our office). Most students were enrolled in U1 (23%), followed by Science (18%), Arts (17%) and Graduate Studies (9%). This is consistent with our data from previous reporting years, as well as reflective of the number of students overall who are registered across these faculties. The remaining 33% of cases were spread across the other faculties.

Student Issues

In 2007-08, there were a total of 1173 issues that the advocates assisted students with. Note that this statistic is different than the total number of individual cases (950);

as some students present more than one issue per case. The number of issues, although slightly lower, is comparable to the previous year (1186 issues in 2006-07).

Although the number of students and issues has slightly decreased, the amount of time the advocates spend on individual cases has increased. Unfortunately, this is not necessarily conveyed through our statistics. For example, an advocate may have fewer numbers of active student cases at any given time, but the nature of the issues may require significantly more hours of work on the part of the advocate. Typically a student advocate's work with a student involves any or all of the following: meeting with the student in person or over the phone; corresponding with the student via email; researching policies and procedures relevant to student's cases; making contacts with other staff and faculty on the student's behalf; preparing for and attending meetings and/or hearings with the student; and helping to follow up with the student depending on the outcome of his/her issue. As has been stated in past annual reports, there are increasing numbers of cases that due to their complexity take up a disproportionate amount of the advocates' time. Sometimes it's the nature of the student's program or the serious impact of the decision (e.g. graduate studies or professional programs). Other times it may involve working with a student whose disruptive behaviour involves several university offices.

One of the initiatives that the office worked on this year was the 'streamlining' of some first-contact issues. These strategies were originally put in place to provide students with information while waiting during peak periods to meet with an advocate. The material is also beneficial to provide general information for students who visit our website and might not need to meet with an advocate.

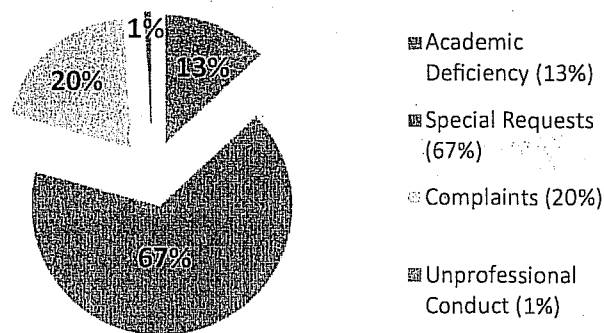
Student issues have been categorized as "academic" (69%), followed by "administrative" (15%), "discipline" (12%), "admission" (2%) and "equity" (2%). This distribution is consistent with the data on issues from our previous reporting year.

Academic

Within this category we further divide the issues into sub-categories. Figure 1 shows how the sub-categories comprise the academic issues.

The first and largest sub-category of academic issues is **special requests** (67%). These are issues in which a student wishes to make a special request for an academic concession, or a waiver to an existing rule or regulation. Examples of such requests are: authorized withdrawals or retroactive voluntary withdrawals from courses; deferred tests or

Figure 1: Academic Issues: Sub-Categories



examinations; extensions on coursework or other time-sensitive program requirements; or leaves of absence from an academic program. These types of requests are normally based on extenuating circumstances such as medical, personal, procedural, or compassionate grounds. Requests made on such grounds almost always require some formal supporting documentation submitted by the student. The majority of special requests in 2007-08 were authorized withdrawals, which is comparable to the previous year's data.

The next sub-category of academic issues is **complaints** (20%). These are issues where the student is bringing forward a concern, complaint, or where they are seeking clarification about a policy or rule. This may include a concern about a grade, course syllabus, or a conflict with an advisor or professor. As with the previous year, the majority of issues under this sub-category were grade appeals.

The third sub-category of academic issues is **academic deficiency** (13%) and is based on students not meeting minimum academic performance requirements in their programs. This includes situations where students are seeking advice or submitting appeals regarding academic probation or suspension, requirement to withdraw, or starting a program afresh. There were slightly more of these types of issues in 2007-08 compared to the previous year (9% of academic issues in 2006-07)

The final sub-category of academic issues is **unprofessional conduct** (less than 1%). This is not the same as behavior that is investigated as a discipline matter but rather behavior that occurs in the context of an academic program handled under academic policies. This includes practicum or field placement issues, unsafe practice and professional unsuitability. This sub-category applies mainly to students in professional programs.

Administrative

The issues in this category represent areas that are handled by an administrative office (e.g. Registrar), such as fee appeals, or transcript notation removal. It can also include administrative issues related to graduation, or matters normally outside the jurisdiction of the University, such as student visas or student loans.

Discipline Issues

Academic discipline matters pertain to a range of behaviours that are academically dishonest (see Table 2). Inappropriate collaboration, false admissions information, false documentation, and academic fraud are up only slightly from the previous year. For the category "cheating" the number appears lower, however we created a separate category for students accused of bringing unauthorized materials into an exam, a category which is used within the University Discipline Committee Annual report. When "unauthorized materials" and "cheating" are combined, the number is comparable to the previous year. Plagiarism cases seen by our office slightly decreased from the previous year. It was also noted in the University Discipline Committee Annual Report for 2007-08 that there was a decrease from 2006-07 in the (University-wide) number of plagiarism cases reported.

Table 2: Academic Discipline

	2007	2006
	2008	2007
Academic Fraud	3	2
False Documentation (e.g. falsified medical notes)	3	2
False Admissions Information	4	2
Inappropriate Collaboration	16	14
Unauthorized Materials	22	n/a
Cheating	28	40
Plagiarism	52	60
Total	128	120

A second type of student discipline can be categorized as non-academic. This kind of discipline pertains to student behavior outside of academic issues. As can be seen in Table 3, there was an overall decrease in number of non-academic discipline issues seen by our office compared to the previous year specifically due to the decrease in the number of residence discipline cases.

In addition, Brandy Usick, as Director, consulted with UofM staff or faculty about five inappropriate/disruptive student issues. These issues may or not have involved students working with a student advocate.

Table 3: Non-Academic Discipline

	2007	2006
	2008	2007
Inappropriate or disruptive behaviour	7	4
Inappropriate computer use	1	2
Residence discipline	1	9
Other	4	6
Total	13	21

Admission Issues

Admission issues comprised the same percentage of overall issues as the previous year, 2% of our total caseload. These mainly involved situations where students were appealing an admissions decision from a prospective faculty or program.

Equity Issues

During the 2007-08 reporting year, 22 cases (or 2% of all issues) fell under the 'equity' category. Such cases involved a spectrum of concerns including human rights complaints, personal harassment (bullying), and sexual harassment.

The majority of the 22 cases were brought forward by students who had complaints about another student or a faculty or staff member on campus. Of those student complaints, the majority were related to personal harassment. Still other students approached our office to find assistance regarding complaints that had been brought against them.

The student advocates provided information and advice to students regarding their rights and responsibilities under policies such as the Respectful Work and Learning Environment (RWLE). In addition, most students who received our assistance were referred to Equity Services for further support. Students who went on to work with Equity Services sometimes continued to use our office in tandem as they resolved their concerns.

Student complaints have a variety of possible resolutions (formal or informal), and may involve or fall under more than one policy (for example, RWLE, Inappropriate and Disruptive Student Behavior Student Discipline Bylaw). The time-to-resolution for complaints sometimes depends on whether or not a formal approach was taken. For this reporting year, at least one third of the equity issues were pending resolution.

Resolution of Issues

The goal of the Student Advocacy office is to resolve matters at the lowest level possible (i.e., seek informal resolution involving those closest to the issue). Table 4 provides the details of our issue resolution patterns which are comparable to the previous year.

In 2007-08, 60% of issues (n = 702) were resolved informally. Of those, 80% (n = 566) of students were given advice and information. The advocates made requests on behalf of students, or mediated a concern in 18% (n = 129) of the cases. Students were referred to other services in approximately 1% (n = 7) of the issues.

Formally resolved issues comprised 40% (n = 464) of issues seen in 2007-08. This is similar to the previous year. Most of the formal resolutions resulted in the students' requests or appeals being granted 59% (n = 274). Some resulted in denials (22%, n = 102), and others (9%, n = 40) resulted in modified resolutions. We consider a resolution to be 'modified' when a compromise or alternative was reached between what the student was asking for, and what the faculty granted the student to receive. An example of this would be where a student was requesting a selective Authorized Withdrawal (i.e., only from some courses, but not all, taken during a given academic term), and where the faculty granted full Authorized Withdrawals from all courses taken during the given academic term. In 9% (n = 39) of the issues, the final decision was pending at the end of the reporting year. Finally, in a small number of cases (<1%, n = 9), the issues did not have a formal decision, nor were they left pending. These issues concluded in various ways, such as appeals that were refused a hearing by the respective committee.

The remaining few formal issues (less than 1%) concluded (as far as our office's support goes) as follows: student withdrew their formal appeal or request (5); student retained a lawyer (1); or the advocate withdrew service (1).

Table 4: Resolution of Issues

	2007-2008	2006-2007
Informal	60%	63%
Formal	40%	36%
Granted	59%	63%
Modified	9%	7%
Denied	22%	21%
Decision Pending	9%	9%
Other Resolution	<1%	1%

Meetings & Hearings

In 2007-08, advocates attended a total of 127 meetings. This includes both academic and discipline meetings. This represents an increase in the total number of meetings attended in the previous year (118 meetings in 2006-07). We define a meeting as being typical at a lower level within a given process and less formal in terms of procedures and number of decision makers involved.

The advocates attended a total of 120 hearings. This includes both academic and discipline hearings that usually involved a committee and formalized procedures. The number of hearings represents a decrease from the previous year (156 hearings in 2006-07).

Figure 2 displays the trends for academic meetings and hearings in 2007-08. The number of academic hearings tended to peak in August, September, January, and June, coinciding with the beginning and end of academic sessions. These hearings may include students appealing decisions pertaining to academic status (i.e., suspensions, required to withdraw), or requesting authorized withdrawals following an unsuccessful term or year.

Academic meetings, although less common, tend to occur more regularly during the mid-term period. For example, these may take place if students are asked to meet with a professor or their advisor about academic concerns pertaining to courses, program progress, or graduate work.

Figure 2: Academic Meetings and Hearings for 2007-08

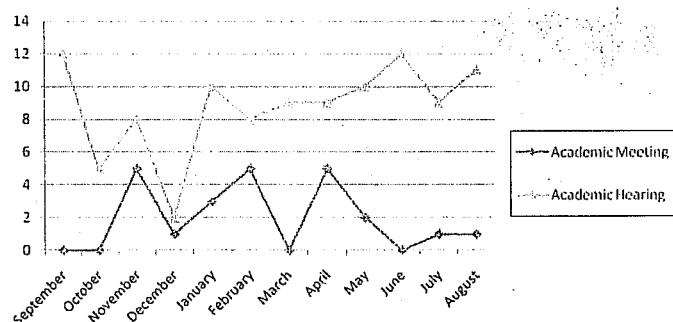
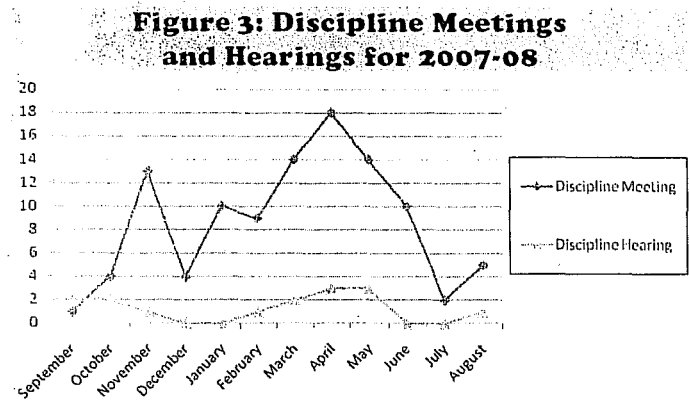


Figure 3 displays the trends for discipline meetings and hearings for 2007-08. There were significantly more discipline meetings than hearings in 2007-08 a possible indication that more matters are being resolved at lower levels. A discipline meeting would normally include the first level of an investigation of a discipline matter. A discipline hearing would take place if a student appealed a discipline decision rendered by a previous level. Discipline meetings peaked in mid-term (i.e., November and March), typically resulting from issues following assignment submission or writing of

a mid-term test. There was also a peak in discipline meetings following the end of terms (i.e., January, April, May) arising from final term papers or final exams. Discipline hearings were consistently low throughout the year, with the most taking place in April and May (n=6).



In general, and as seen in our data from previous reporting years, the numbers of meetings and hearings for both discipline and academic matters tend to follow the ‘cycles’ within the University. Institutional activities and timetables such as application, registration, holidays, examination, assessment and admissions all strongly correlate with the trends in our office’s attendance and involvement at meetings and hearings.

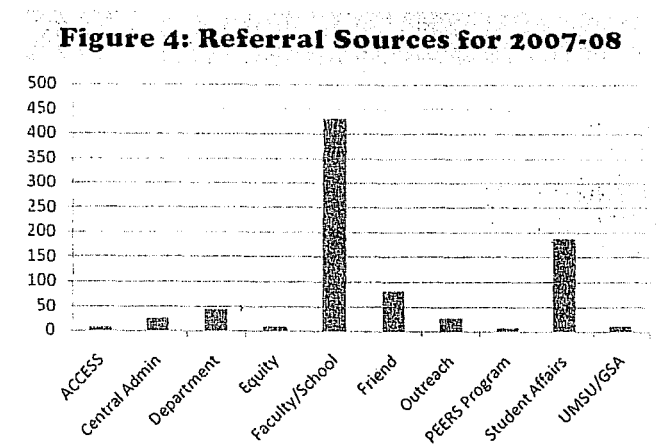
Referrals

Approximately 67% of the students who contacted our office, and who had a case file opened, were referred to us from another on-campus staff or office (see Figure 4). This is comparable to the previous year. The main referral source was from the student’s faculty (52%), followed by referrals from other Student Affairs offices (23%). The next three most common referrals came from friends and family (10%), academic departments (5%), and from our own outreach efforts (3%). Our outreach includes workshops and orientations, and our website.

Several students came to our office from referrals by a friend or family member. Sometimes we hear from students that they knew someone who received help from us and who had a positive experience with the help they received. This ‘word of mouth’ advertising is one way students come to know and contact our service.

Educational Initiatives

The staff prepared and presented a total of 60 workshops and orientations to several different audiences including U of M students, staff, and faculty. This overall number is slightly lower than the previous year. However, the compo-



sition of types of workshops/orientations is similar. Table 5 provides a breakdown of the types of educational outreach that was done in 2007-08.

Table 5: Orientations and Workshops	
Student Rights & Responsibilities	35
Orientations	26
General Student Advocacy services	7
Faculty/Staff	2
Academic Integrity	20
General	10
Plagiarism/writing and citing	9
Faculty/Staff	1
Faculty & Administrators	5
General Policy & Procedures	3
Handling Incivility	1
Conflict resolution/resources	1
Total	60

In 2007-08, we observed the increased use of technology (such as email, blogging, online courses and social networking sites) among students. We also saw the potential for inappropriate student behavior in the increased use of these emerging and established communication technologies. Therefore, our student orientations and general workshops were updated to include information about this. In addition, workshops for staff and faculty on responding to student behavior were updated to include how to handle inappropriate behavior through electronic communication.

Academic Integrity Week: Integrity 11

The main focus of Academic Integrity Week for the 2007-08 year was on international students. Staff approached several faculties to assess what the needs may be for international students in their programs. Although most faculties felt the educational initiatives would be helpful for all students, there were a number of workshops provided to students through the English Language Centre, as well as the International Centre for Students. Table 6 provides a detailed description of the events held for Integrity 11.

Table 6: Academic Integrity 11 Events

September

- » Presentation for Human Ecology course
- » Panel discussion on the topic of Personal and Academic Integrity for students in the Faculty of Education

October

- » Acting with Integrity: Know your University's Expectations. Skills for Success session presented for International Centre for Students and University 1.
- » Integrity 11: Information Booths
- » Writing an A+ Paper: Tips for using electronic sources wisely and appropriately. Hands-on workshop for International and/or English as Another Language Students.

November

- » Writing an A+ Paper: Tips for using electronic sources wisely and appropriately.
- » Plagiarism workshop for students enrolled in the Academic English Program for University and College Entrance, English Language Centre.
- » Workshop for English Language Centre instructors on Responding to Academic Dishonesty.
- » Academic Integrity workshop for students enrolled in the Intensive Academic English program, English Language Centre.

Notable Accomplishments

Peers: Students Helping Students (SHS)

Peers: SHS is a program funded jointly between Student Affairs and the University of Manitoba Students' Union. Heather Morris continued as Program Administrator and Chair of the Steering Committee. Angela Kennedy was hired for the student position of Program Coordinator working in the Peer office and coordinating the student volunteers.

This student volunteer program had another successful year in 2007-08. The main accomplishment for Peers this year was the celebration of its 20th anniversary in provid-

ing an excellent student-to-student service on campus. A commemorative tree was planted on campus during a well-attended ceremony. In addition, former staff and volunteers with the program were invited to a reunion barbeque. Heather Morris and Ali Wood were on the 20th Anniversary Planning Committee.

Academic Integrity in High Schools

Student Advocacy staff received modest funding through the U of M's Major Outreach program. During this reporting year, staff made contact with stakeholders within the secondary school system in Winnipeg. Plans for this project include surveying high schools for curriculum on academic integrity, determining ways our offices' could assist in developing academic integrity materials, and facilitating sessions on this topic.

Student Advocacy Website

Brian Barth worked at improving the navigability of our website, to ensure that important information was easy for students to find and access. The layout and organization of our webpage was improved, as well, content was added to provide students with helpful, step-by-step information to assist them in understanding processes involved with certain matters such as final grade appeals and authorized withdrawals. As mentioned earlier in this report, this is part of our attempt to 'streamline' student issues, so students can access the information they need in advance of a meeting with an advocate. As well, if it turns out this information helps them to navigate the processes on their own, then it has served the purpose of assisting them through the university procedures.

Our office also worked with Information Services and Technology (IST) to include an online chat feature on our website. Brian worked with IST to feature the chat via our website. The chat went 'live' and was monitored by Student Advocacy staff beginning in May 2008.

Heather Morris worked with Maggie Duncan from Equity Services on creating information regarding harassment and discrimination, as well as an easy-to-follow summary of the steps involved in complaints under the Respectful Work and Learning Environment Policy. Although this will be housed through Equity Services, it will be linked to the Student Advocacy website as well.

Office Materials

Staff created a new brochure on Student Conduct to supplement the existing brochures on academic misconduct (i.e., academic integrity). The purpose of this document is to coordinate all of the existing 'conduct policies' (i.e., inappropriate or disruptive student behaviour, respectful work and learning environment, etc.) into a publication that will help students understand what to expect generally, if they

are being investigated under one of these policies. This material was ready for circulation in 2008-09.

Strategic Program Development Fund

Brandy Usick, with Miriam Unruh of Learning Assistance Centre, submitted a proposal entitled Multimedia Project: Creating Web Resources for Students. Rather than hiring an individual to assist with the creation of multimedia modules and learning objects, it was decided to purchase software that will allow both offices to create their own materials. The funds were used in the following year to purchase Articulate software, laptops, and hardware.

Other Projects

Staff worked on materials regarding student safety on campus and online.

Nathan Kessler, a graduate student in engineering, worked on the Graduate Community Section of the Virtual Learning Commons.

Staff began preliminary drafts of a document on the Learning Objectives for Student Advocacy.

Research and Scholarly Activities

- » Brandy Usick and Heather Morris revised content for online course offered by CHERD entitled The Role of the Student and Student Needs, which was offered in the Fall 2008.
- » Heather Morris worked with Marlene Pomrenke of the Student Counselling & Career Centre on a research project entitled, "Social workers in student affairs: An examination of motivation, training, and career opportunities". In the 2007-08 year a focus group was held and the results were used to develop a web survey to collect additional data from social workers across Canada.
- » Brandy Usick was interviewed by Julie Horbal, Winnipeg Sun on the issue of plagiarism at the University of Manitoba

Conference Presentations

- » Smith, L.M. & Usick, B.L. (2008, June 24). Procedural Fairness: Responding to contemporary challenges. CACUSS conference, Memorial University, St. John's, NFLD.
- » Hackett, C. & Usick, B.L. (2008, June 23) Supporting graduate students in the disciplinary process, CACUSS conference, Memorial University, St. John's, NFLD.

Staff

Ali Wood was hired as a full time Student Advocate in summer 2008. Ali worked with our office previously as a student during her academic program. She completed her BA in May 2008.

Valentina Ly was hired as our Student Advocacy summer student in 2008 working mainly at the front desk and helping out with various office projects.

Ravi Jayas was a volunteer with Peers, and completed his Peer placement in the Student Advocacy office.

Committee Work

Student Advocacy staff are committed to playing an active role in Student Services, Student Affairs and University committees. Staff participation is summarized below:

Brandy Usick was involved with Council of Student Affairs (COSA), Faculty of Graduate Studies Guidelines and Policy Committee, Student Advocacy and Resource Services Coordinators meeting (Chair), Student Leadership Task Force and Program Design Subcommittee, VLC Working Group, and Emergency Social Services Meeting. Heather Morris was involved with ATTPAC (Academic Advising Toolkit and Training Project Advisory Committee). Heather Morris chaired and Ali Wood was member of the Peers: Students Helping Students 20th Anniversary Planning Committee. Angel Therrien attended the Peers: Students Helping Students Placement Coordinators meeting.

Staff were also involved with selection committees including: Student Affairs Communications Specialist (Brandy), Student Life and Welcome Family Coordinator (Brandy), Leaders of Tomorrow Scholarship Selection Committee (Heather), ACCESS (Brian) and Disability Services Test Centre Administrator (Angel).

Professional Development

Student Advocacy staff are committed to participating in educational opportunities that lead to the development or enhancement of skills or provides reflection of our services. The following are highlights:

- » Brian Barth attend CISAS (Canadian Institute on Student Affairs and Services) held in Sidney, BC (April 2008).
- » Heather Morris and Brandy Usick attended CACUSS at Memorial University, St. John's NFLD. (June 2008).
- » Heather Morris audited the Administrative Law course taught by Karen Busby, Faculty of Law (Winter 2008).
- » Heather Morris completed the course Faculty of Social Work Field Instructor, offered by the Faculty of Social Work.

- » Staff attended suicide intervention training presented by Klinik.
- » Brandy Usick attended a series of webinars about risk assessment.
- » Brandy Usick attended Disruptive Student Behaviour Webinar presented by Dr. Gerald Amada.
- » Heather Morris attended Manitoba Advising Professionals presentation on Facebook at RRC.
- » Brandy Usick, Ali Wood and Brian Barth attended Legal Issues for Academic Administrators in the University, presented by Sheila Devine (August 2008).
- » Staff from Student Advocacy and Resource Services attended the annual Retreat held at the St. Norbert Arts Centre (May 2008).

Staff also attended sessions offered by various units on campus including Student Affairs, University Teaching Services, Learning Development Services and Information Services and Technology. Staff have also participated in the American Sign Language courses offered by Disability Services.

Staff Outreach

Brandy Usick continued her work on the Alumni Association Board of Directors. Brian Barth remained a member of the Joint-Research Ethics Board. Angel Therrien and Ali Wood coordinated the United Way Rainbow Auction. Staff participated in University wide events including Evening of Excellence, Info Days, Parents Program, Campus Beautification day and Sneaker Day.

Future Plans

There are several initiatives we will be working on into the next academic year. We will be continuing research for the Major Outreach project “Academic Integrity in Manitoba high schools”. We also plan to expand on the materials available on our website, and update existing material using multi-media software such as “Articulate”. These programs will allow for users to have a more interactive experience when reviewing policy and procedure information on our website. In addition, we plan to upload some of our existing presentations; and modify the format to be more accessible and user-friendly to those who would like the information but are unable to attend a scheduled workshop.

Recommendations

Our office lent support to a professor who made a recommendation to the Faculty of Science regarding the Faculty’s practice of not allowing students to have access to final exams before the final grade appeal deadline (according to the examination regulation policy). The recommendation

also included allowing professors to provide students with their final exam marks (numerical grades) and to disclose the letter grade thresholds (numerical equivalents for letter grades). As a result, the Faculty of Science implemented a pilot project to allow students to receive useful feedback regarding their performance in a course.

We feel this was a successful new practice, as evidenced by substantially fewer students from that Faculty contacting us after the next academic session regarding grade appeal concerns. We would recommend that all faculties consider their practices when it comes to providing students with ways to review their exam performance, and understand how their final grade breaks down numerically. Again, not only does this provide valuable instructional feedback to students, but it also may reduce the number of formal grade appeals submitted at the end of each term.

Acknowledgements

We appreciate the support we receive from the U of M community each year. It is also helpful for student issues, as well as time effective, when we can work together with various offices and staff to assist in the resolution of issues or to complete projects. For the 2007-08 year in particular, we would like to acknowledge Maggie Duncan and Equity Services for their efforts to work collaboratively with us on projects and with student cases.

Glossary of Terms

- Contacts** - students and staff who contact the Student Advocacy office with questions or to arrange an appointment with an advocate.
- Issue** - matter in which a student is seeking assistance (e.g., concern, complaint, appeal, etc.). An “issue case” applies when there is an overall issue affecting a large number of students.
- Cases** - case file is opened for a student to follow a particular issue/request/appeal.
- Group Case** - a group of students contacts the office with the same issue.
- Category** - the way in which issues are classified or grouped.



UNIVERSITY
OF MANITOBA

Student Advocacy
519 University Centre
University of Manitoba
Winnipeg, Manitoba R3T 2N2

Tel: 204-474-7423
Fax: 204-474-7567

Email: student_advocacy@umanitoba.ca
umanitoba.ca - 43 - t/advocacy

**STUDENT
AFFAIRS**

Student Services



UNIVERSITY
OF MANITOBA

Office of the University Secretary

312 Administration Building
Winnipeg, Manitoba
Canada R3T 2N2
Fax (204) 474-7511

MEMORANDUM

DATE: May 21, 2009
TO: Dr. David Barnard, Chair of Senate
FROM: Jeff M. Leclerc, University Secretary 
SUBJECT: Items approved by the Board of Governors on April 27, 2009 & May 19, 2009

The Board of Governors, at a meeting held on April 27, 2009, considered the following items of interest to Senate:

Reports of the Senate Committee on Awards

The Board of Governors approved the reports of the Senate Committee on Awards dated February 23, 2009.

Aboriginal Design and Planning Option

The Board of Governors approved the proposal for the Aboriginal Design and Planning Option within the Environmental Design Degree [as recommended by Senate April 1, 2009].

The Board of Governors, at a meeting held on May 19, 2009, considered the following item of interest to Senate:

Proposed Site for new Residence

The Board of Governors approved the site for the proposed Pembina Hall Student Residence [as recommended by Senate May 13, 2009].

Senate Membership 2009-2010

a)	President	David T. Barnard	01.07.08
b)	Chancellor	William Norrie	01.06.01
c)	Vice-Presidents		
		Digvir Jayas	04.28.09
		Deborah McCallum	01.11.03
		Joanne Keselman	01.09.97
		Elaine Goldie	01.04.01
d)	Deans of Faculties		
	Agricultural & Food Sciences	Michael Trevan	01.07.04
	Architecture	David Witty	01.08.01
	Arts	Richard Sigurdson	01.07.04
	Clayton H. Riddell Faculty of Environment, Earth, and Resources	Norman Halden	01.07.08
	Dentistry	Anthony Iacopino	01.07.07
	Education	John Wiens	01.08.01
	Engineering	Doug Ruth	01.07.99
	Graduate Studies	John Doering	01.07.05
	Human Ecology	Gustaaf Sevenhuysen	01.07.05
	Law	Christopher Axworthy	01.07.08
	I.H. Asper School of Business - Faculty of Management	Glen Feltham	01.07.04
	Medicine	Dean Sandham	01.10.04
	Marcel A. Desautels Faculty of Music	Edmund Dawe	01.07.07
	Nursing	Dauna Crooks	01.07.07
	Pharmacy	David Collins	01.07.99
	Kinesiology and Recreation Management	Jane Watkinson	01.07.07
	Science	Mark Whitmore	01.07.04
	Social Work	Harvey Frankel	01.07.08
(e)	Director of the School of Art	Paul Hess	01.07.08
(f)	Dean, Extended Education	Lori Wallace	01.07.06
(g)	Director, Libraries	Karen Adams	01.07.08
(h)	Vice-Provost (Student Affairs)	Dave Morphy	01.10.82

(i)	Heads of Constituent or Member Colleges		
	St. John's College	Janet Hoskins	01.07.97
	St. Paul's College	Denis Bracken	01.07.07
	University College	Richard Sigurdson	01.05.06
(j)	Vice-Deans of Arts and Science		
(k)	Appointed by the Board of Governors		
		TBA	01.06.09-31.05.12
		TBA	01.06.09-31.05.12
(l)	President of UMSU	Sid Rashid	01.05.09-30.04.10
(m)	Appointed by Alumni Association		
		TBA	01.06.09-31.05.10
		TBA	01.06.09-31.05.10
(n)	Members-at-large		
(o)	ELECTED BY FACULTY AND SCHOOL COUNCILS (R=Re-elected)		
	Agricultural & Food Sciences		
		Wole Akinremi (R)	01.06.04-31.05.10
		Martin Scanlon	01.06.09-31.05.12
		Merv Pritchard	01.06.08-31.05.11
	Architecture		
		Lancelot Coar	01.06.09-31.05.12
		Jean Trottier	01.06.06-31.05.12
	Art		
		Sharon Alward	01.06.08-31.05.11
	Arts		
		Timothy Anna (R)	01.06.05-31.05.11
		Elizabeth Comack	01.06.09-31.05.12
		Roisin Cossar	01.06.09-31.05.12
		Mark Gabbert (R)	01.06.03-31.05.12
		Ellen Judd	01.06.09-31.05.12
		Ken MacKendrick	01.06.07-31.05.10
		Judith Owens (R)	01.06.03-31.05.12
		Wayne Simpson	01.06.09-31.05.12
		Arlene Young (R)	01.06.03-31.05.12
		*leave replacement Andrew Woolford	01.01.09-01.06.09
	Extended Education Division and Counseling Services (Student Affairs)		
		Nancy Chislett	01.10.08-31.05.11

Dentistry	Archie McNicol (R) Joanna Asadoorian	01.06.04-31.05.10 01.06.08-31.05.11
Education	Nancy Hansen Sandie Kouritizin	01.06.07-31.05.10 01.06.08-31.05.11
Engineering	Witold Kinsner David Kuhn Dimos Polyzois	01.06.08-31.05.11 01.06.07-31.05.10 01.06.05-31.05.11
Clayton H. Riddell Faculty of Environment, Earth, and Resources	Andrew Frederiksen Iain Davidson-Hunt	01.06.07-31.05.10 01.06.09-31.05.12
Human Ecology	Carla Taylor (R)	01.07.04-31.05.10
Law	John Irvine (R)	01.06.01-31.05.10
Libraries	Jan Guise Christine Bone	01.06.09-31.05.12 01.06.06-31.05.12
I.H. Asper School of Business - Faculty of Management	Sarath Abeysekera Mary Brabston (R)	01.06.05-31.05.11 01.06.04-31.05.10
Medicine	Robert Tate Deborah Wirtzfield Murray Enns Kevin Coombs (R) Elizabeth Cowden Gerarda Cronin Heather Dean Joanne Embree (R) Emily Etcheverry (R) Grant Hatch (R) Lorrie Kirshenbaum (R) Andrew McDiarmid Rob McIlwraith Ira Ripstein Peter Nickerson Steven Pistorius (R) Louise Simard Don Smyth (R) Theresa Sullivan (R) Maria Vrontakis (R) Kim Wiebe Reeni Soni Kristel van Ineveld	01.06.03-31.05.12 01.06.09-31.05.12 01.06.09-31.05.12 01.06.03-31.05.12 01.06.06-31.05.12 01.06.07-31.05.10 01.06.07-31.05.10 01.06.05-31.05.11 01.06.04-31.05.10 01.06.04-31.05.10 01.06.05-31.05.11 01.06.08-31.05.11 01.06.07-31.05.10 01.06.06-31.05.12 01.06.05-31.05.11 01.06.03-31.05.12 01.06.06-31.05.12 01.06.04-31.05.10 01.06.04-31.05.10 01.06.05-31.05.11 01.06.07-31.05.10 01.06.08-31.05.11 01.06.09-31.05.12

Steven Kirby (R) 01.06.05-31.05.11

Nursing

Marie Edwards 01.06.08-31.05.11
Diana McMillan 01.06.08-31.05.11

Pharmacy

Yeuwen Gong (R) 01.06.05-31.05.11

Kinesiology and Recreation Management

Michael Campbell 01.06.08-31.05.11
Jennifer Mactavish 01.06.08-31.05.11

Science

Tom Berry (R) 01.06.03-31.05.12
John Anderson 01.06.08-31.05.11
Michael Freund 01.06.09-31.05.12
Elizabeth Worobec 01.06.08-31.05.11
Phil Hultin 01.06.07-31.05.10
Judy Anderson 01.06.09-31.05.12
John van Rees (R) 01.06.03-31.05.12

Social Work

Alex Wright 01.06.07-31.05.10
Eveline Milliken 01.06.08-31.05.11

(p) Heads of Affiliated Colleges

St. Andrew's College Roman Bozyk (Acting) 01.05.03

St. Boniface College Raymonde Gagné 01.09.03

(q) Deputy Minister of Education Heather Reichert (designate - Dan Smith)

(r) **ELECTED BY THE STUDENTS** (April 1, 2009 to March 31, 2010)

Agricultural & Food Sciences

TBA

Architecture

TBA

Art

TBA

Arts

Mr. Dave Bowles
Mr. Curtis Martel
Ms. Natasha Sajan

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

Raymond Pudavick

Dentistry/Dental Hygiene

TBA

Education	Trevor Dueck Jay McGurran
Engineering	Kathryn Marcynuk
Graduate Studies	Amir Hossein Birjandi Majid Ostadrahimi Arman Vahedi
Human Ecology	TBA
I.H. Asper School of Business - Faculty of Management	TBA TBA
Law	TBA
Medical Rehabilitation	TBA
Medicine	Kristjan Thompson
Marcel A. Desautels Faculty of Music	TBA
Nursing	TBA
Pharmacy	TBA
Kinesiology and Recreation Management	TBA
Science	TBA
Social Work	TBA

(s)

ASSESSORS

Vice-Provost (Academic Affairs)	Karen Grant	
Vice-Provost (Programs)	Richard Lobdell	
Associate Vice-President (Research)	Vacant	
Associate Vice-President (Research)	Peter Cattini	(term ending 30.06.09)
Associate Dean of Grad Studies	Karen Jensen	
Associate Dean of Continuing Education	Kathleen Matheos	
Chair of the Senate Planning and Priorities Committee	Norman Hunter	
UMFA Representative	Brad McKenzie	
St. Boniface College	Ibrahima Diallo	
Director of Admissions	Peter Dueck	
Registrar	Neil Marnoch	
Executive Director, Student Services	Lynn Smith	
Chair of the Senate Committee on Curriculum and Course Changes	N/A	
Vice-President of UMSU	Mitch Tripple	(01.05.09-30.04.10)
President of Grad Students Association	Abas Sabouni	(01.05.09-30.04.10)
Director of University I.	Christine Blais	
University 1 Students	Mr. Allan Easter vacant vacant	

*updated June 11, 2009

PRESIDENT'S REPORT: June 24, 2009

I. GENERAL

On May 26, a draft of the University's planning framework was circulated to members of Senate for their review and comment. It was subsequently sent to the broader university community to solicit their feedback as well. Many responses were submitted and overall, the feedback suggests there is substantial support for the framework's shape and approach. The feedback that has been received has been incorporated into the document to the extent it is possible, while remaining true to its purpose as a framework rather than a detailed strategic plan and while recognizing that the perspectives that have been shared are not, in all cases, held consistently. A discussion about the revised framework is scheduled for the June 24 meeting of Senate.

Efforts are already underway to prepare for the 2010/11 budget year, and beyond. Earlier this month, the President's Executive Team, Deans and senior Directors participated in a facilitated retreat to formulate options and ideas that are consistent with the framework and that respond to the anticipated funding pressures of the next few budget cycles. The retreat generated a series of ideas and options that could assist the university in approaching its strategic priorities while also presenting options for addressing the budgetary situation. In the coming weeks, work will be undertaken to further define and structure the options being considered, in order to determine which of them should be pursued.

A joint federal/provincial funding announcement was held on May 21, 2009 for the government support awarded through the Knowledge Infrastructure Program. The federal government awarded the University of Manitoba \$20 million: \$15 million for the Art Research Technology (ART) Lab; \$2.5 million for Smartpark Lake 2 Infrastructure Development; and \$2.5 million for the Space Renovation and Development for the Regenerative Medicine Program. The province is contributing \$18.5 million to the ART Lab and \$2.5 million toward the Space Renovation and Development for the Regenerative Medicine Program. The Smartpark development is further supported with \$27 million in private contributions.

I had the great pleasure to participate with the graduating students in their Convocation celebrations, which spanned three campuses and ten ceremonies this Spring. The completion of one's course of study marks a tremendous achievement for students and presents tangible evidence for the university community of the value of their individual contributions as well. Many faculty members attended to support and honour the students with whom they have worked and I would like to extend my thanks to them for their participation, along with my sincere congratulations to our new graduates.

II. ACADEMIC MATTERS

- Lori Wallace, Dean, Extended Education, was recently appointed to serve as President and Chair of the Board of Directors of the Canadian Virtual University (CVU) beginning August 2009. CVU is a consortium of ten Canadian Universities specializing in online and distance education.

- Mike Namaka, Pharmacy, was awarded the Sanofi-Aventis Biotech Challenge Trophy for his outstanding mentorship of two high school students, Aresh Sepehri and Mark Xu, for their research project entitled “Antigenic Induction of Spinal Cord Brain Derived Responsive Cells”.
- Roberta Woodgate, Nursing, was elected as the Manitoba representative to the Canadian Association of Nursing Research Board of Directors.
- Rick Suffield, Kinesiology and Recreation Management, recently published a book entitled Coaching Defensive Basketball: Becoming the Best. This book will become part of Nike’s 2010 Championship Basketball Clinics, marking the first time a Canadian coach’s publication has been included in the resource materials.
- The Canadian National Section of the International Board on Books for Young People, presented Dave Jenkinson, Education, with one of two 2008 Claude Aubry Awards for “distinguished service in the field of children’s literature”.

III. RESEARCH MATTERS

- A new partnership led by Dr. John Sinclair, Natural Resources Institute, will receive \$1 million in funding over the next six years through a Community-University Research Alliances (CURA) grant administered by the Social Sciences and Humanities Research Council of Canada (SSHRC). The team includes Dr. Alan Diduck from the University of Winnipeg and Dr. Iain Davidson-Hunt from the University of Manitoba. Partners on the project number more than twenty organizations, some of which include the City of Kenora, Northern Ontario Sustainable Communities Partnership, Grand Council Treaty Number Three, and Kenora Métis Council. The project titled the Common Ground Research Forum will examine how northern Ontario and First Nations communities are working together in a unique partnership to jointly manage the use of former Abitibi-Consolidated Inc. lands and promote economic development in the region.
- Dr. Verena Menec, Director of the Centre on Aging and Canada Research Chair in Healthy Aging, is leading one of ten data collection centres across Canada, all part of the new Canadian Longitudinal Study on Aging (CLSA). This new study will increase the understanding of common health problems affecting seniors. This long-term study of 50,000 Canadians will look into the many factors affecting Canadians as we age, while at the same time creating several new science-related jobs. The study is one of the most comprehensive studies on aging ever undertaken and will inform the Government of Canada’s programs and services for the elderly. It is estimated that study organizers will be hiring as many as 160 researchers and research co-ordinators, laboratory staff and IT systems personnel over the next year at ten centres across the country.
- The Natural Sciences and Engineering Research Council’s operating grant programs have provided the University of Manitoba with total funding of \$8,757,894 as follows: 9 grants totalling \$541,791 for Research Tools and Infrastructure; 54 new awards totalling \$1,749,317 for Discovery and Sub Atomic Physics grants; and 217 ongoing awards totalling \$6,466,786.

- In early May, 650 students and delegates from across Canada came to the University of Manitoba for the Canada Wide Science Fair. As host site for this national fair, the University of Manitoba, through the Office of the Vice-President (Research), hosted a day of lab tours and science lectures. The students and delegates enjoyed the day and gained new insight into research activities through this activity. Many delegates were very impressed with the calibre of the research and researchers at the University of Manitoba and commented on the enthusiasm and dedication of our research teams.
- On June 1, the Office of Research Services launched a new tool for researchers called “My Research Tools.” This new set of web applications is designed to alert researchers to external funding opportunities; identify internal collaboration opportunities; help researchers connect with potential collaborators; provide researchers with online access to their research projects; and make research expertise searchable. The application for the first time integrates information in InfoEd (an Office of Research Services system) with Aurora (Budgets & Grants) and VIP (Human Resources).

IV. ADMINISTRATIVE MATTERS

- **Campus Beautification Day** - The 12th annual Campus Beautification Day took place on May 21, 2009. Approximately 1200 staff, students, faculty and retirees participated by planting flowers and trees, pulling weeds, raking, sweeping, picking up litter etc. This highly popular event provides an opportunity for staff, students and retirees to work together to beautify the campus instilling a sense of pride in the University. A noon hour barbeque featuring a “low waste” lunch sponsored by ARAMARK was held in the quadrangle on the Fort Garry Campus and in front of the Brodie Centre on the Bannatyne Campus. The Book Store and other campus businesses donated “door” prizes for the event. The grand prize of two airline tickets was donated by West Jet.
- **Operating Budget Development** – The Operating Budget for 2009-2010 was approved by the Board of Governors on May 19, 2009. The 2009-2010 operating budget was developed on the basis of a 4.5% base grant increase, a 4.5% tuition increase for domestic students, a 22% increase for undergraduate international students and a revised tuition fee refund policy in which the 50% refund category was eliminated. Through the application of some targeted baseline reductions a balanced budget was achieved and a small pool of funds was made available for reallocation to address the University’s most critical needs and strategic priorities.
- **Aramark Campus Food Services** - Kevin Nagy, Executive Chef, UM Food Services recently won the bronze medal in at the Cutting Edge Culinary Conference. The conference featured 24 Chefs competing from Universities across Canada.
- **Canada Wide Science Fair** – The University of Manitoba was host to approximately 700 participants in the Canada Wide Science Fair, May 9-17, 2009 in which over 450 students from across Canada competed in nine divisions and three age categories for medals and other prizes worth over \$360,000. The students attending this fair were chosen from 25,000 competitors in more than 100 regional science and technology fairs across the country.

- **EMAIL Problems** – The ongoing problems experienced by the email system last month have been resolved. IST will be engaging consultants to review our existing email infrastructure as well as looking at alternatives for staff and student email services.
- **Sanitary Sewer Line** – replacement is underway and will be completed in two phases:
 - 1) Dafoe Road East has been closed to traffic until July 1, 2009 pending completion of this phase.
 - 2) N Lot will be closed to traffic and permit holders effective July 1, 2009 to enable phase 2 to commence.
 - 3) Work is also proceeding adjacent to the Duff Roblin Building.

V. EXTERNAL MATTERS

- Total funds raised to June 1, 2009: \$1,933,196.07
- Nestor Burtnyk, CM, BscEE/50, was chosen as the recipient of the 2009 Distinguished Alumni Award. He had a 45-year career with the National Research Council as a software engineer where he worked with Marcelli Wein, a physicist, to develop key-frame animation, which became the basis for all computer animation. The technology was used to create the 1974 film “Hunger”, which won the jury prize at Cannes and became the first computer-animated film to be nominated for an Academy Award for best short. Burtnyk won an Academy Award in 1997 for technical achievement in computer animation. The award will be presented at fall convocation in October.
- The Alumni Association board of directors approved a five-year affinity agreement with TD Insurance Meloche Monnex, provider of home and auto insurance. Alumni receive a significant discount through this program, and the association will receive a minimum of \$75,000 over the term of the agreement, plus a signing bonus of \$7,500 this year. TDIMM will also provide a \$1,000 scholarship annually.
- On May 29, 2009 the Faculty of Medicine announced the establishment of the Renal Transplant Research Chair and opened the Frederic Gaspard Theatre (formerly Theatre A) in the Basic Medical Sciences building. The chair is the result of a generous community campaign and support by faculty members in the Department of Internal Medicine to raise the \$3 million endowment. The final gift to complete the fundraising for the chair was provided by Inge Gaspard in honour of her husband Frederic Gaspard—who had a personal connection with the research area—and the lecture theatre was renamed in his memory. Frederic Gaspard was president and CEO of Gaspard & Sons, a successful manufacturing company famous for its convocation gowns and academic regalia with a head office and factory in Winnipeg, and branch offices in Canada and the United States.
- The Immunology Centre, the 4th floor of the Apotex building, will be officially opened at an event on Wednesday, September 9, 2009 at 11:00 am, in conjunction with an immunology symposium presented by the University of Manitoba.

June 10, 2009

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 Kevin Coombs will be the Speaker for the Executive Committee for the June meeting of Senate.

2. Comments of the Executive Committee of Senate

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

Respectfully submitted,

Dr. David Barnard, Chair
Senate Executive Committee

Terms of Reference:

http://umanitoba.ca/admin/governance/governing_documents/governance/sen_committees/477.htm

/mb

Report of the Senate Planning and Priorities Committee RE: Proposed site for the new Art Research Technology (ART) Laboratory

Preamble:

1. The terms of reference of the Senate Planning and Priorities Committee (SPPC) are found on the website at:
http://www.umanitoba.ca/admin/governance/governing_documents/governance/sen_committees/508.htm, wherein SPPC is charged with making recommendations to Senate regarding physical plant development.
2. The SPPC Space Planning Subcommittee met on May 21, 2009 to review a proposal to build a new building to house some of the Fine Art and possibly Music program elements on the Alumni House site.

Observations:

The committee observed and noted the following:

1. The functional, formal, logistical and architecture rationale are well considered in a separate report authored by Mr. Alan Simms, Associate Vice-President (Administration).
2. This project is part of a major university development entitled Project Domino. The intent is to relocate the Marcel A. Desautels Faculty of Music and the School of Art into the current Taché Hall Residence. Additional built space will be required to contain some of the larger program/space needs for both Music and Art.
3. In turn, it has been proposed to showcase and highlight the project by siting some of the additional built space (primarily Fine Arts) on the Alumni House site.
4. The Alumni House site is well-suited for a larger and more prominent building – to complete and to connect the Drake Centre, Taché Hall and the Tier Building visually and functionally.
5. Alumni House has no particular architectural value; however, it is part of the University's history and should be recognized through some form of architectural and/or artistic 'commemorative' enterprise.
6. Preliminary conceptual design studies hold promise for a truly significant building designed by world-renowned architects Patkau Architects with LM Architects (note Centennial Library Addition).

Recommendations

The SPPC recommends:

THAT Senate approve and recommend to the Board of Governors that it approve the proposed site for the new Art Research Technology (ART) Laboratory.

Respectfully submitted,

Norman Hunter, Chair
Senate Planning and Priorities Committee

Comments of the Senate Executive Committee:
The Senate Executive Committee endorses the report to Senate.

May 19, 2009

To: Prof. Ed Epp, SPPC Sub-Committee on Site Selection

From: Alan Simms

Re: Proposed Site for a New Art Research Technology (ART) Lab

This is a request for consideration and approval of the site depicted in red on **Figure 1** as a building site for a 70,000 sq. ft., 3 to 4 storey facility to be referred to for these purposes as the ART Lab.

The site is at the southwest intersection of Dafoe Road and Alumni Lane; immediately to the east of Tache Hall East and to the north of the Drake Building. It also presents to the southeast corner of the quadrangle. The Alumni House, a 2-storey, 2,000 sq. ft. facility is situated on the property.

The ART Lab would be an integral part of Project Domino's central theme: the restoration of Tache Hall for the Faculty of Music and the School of Art. It would: i) respond to the need for large open areas of the School of Art (painting, digital design, drawing studios), ii) provide common classroom areas for both the Faculty of Music and School of Art, without costly structural intervention in Tache; and iii) promote the University's cultural profile through siting of the School's public art gallery (Gallery 1.1.1) prominently at the southeast corner of the University's historic quadrangle.

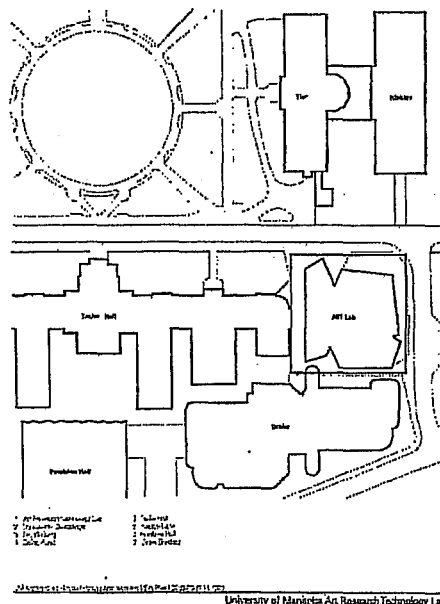


Figure 1: Proposed Site for the new ART Lab

Background and Further Reasons in Support of This Site

1. Original Plans

A renovated and redeveloped Tache Hall (currently a student residence) will be the primary site for the School of Art and Faculty of Music under Project Domino. Tache was built in 1911 as a dormitory with little need for large program areas. Following a thorough and detailed assessment, the design consultant suggested that new space development on the proposed site as well behind Tache would most efficiently accommodate specific open area needs of the School of Art and Faculty of Music programs. The significant redevelopment of Tache for the more cellular space needs of these programs (offices, thesis rooms, rehearsal rooms, etc.) would still advance.

2. Effective and Timely Delivery of Project Domino

Tache Hall can only be redeveloped as a new home for the Faculty of Music and the School of Art after it has been vacated of students – in other words, following completion of a new replacement residence facility. Although the new residence development is on track, it will not be completed until mid-2011. Commencement of construction of the ART Lab later this year therefore enables immediate progress for parts of the program that would otherwise be impossible to delivery prior to at least 2013.

The ART Lab project commencement this year and its ability to proceed quickly and prior to completion of the new residence later was a major factor contributing to a successful application to the federal government's Knowledge Infrastructure Program (KIP). The KIP program will provide \$15 million (or one-half of the financial requirement) towards this project.

3. High-Profile Location and Important Visibility for Public Art Gallery Space

The ART Lab will be designed by LM/Patkau & Associates, a recent RAIC gold medal recipient. The site offers high visibility for public art gallery space as well as the opportunity to showcase a visual transition between Manitoba heritage architecture and modern design by a leading architect. LM/Patkau is also designing the Tache redevelopment, which ensures synergistic programming and the evolution of the two projects as one.

4. Ease of Access to Other University Buildings and Integration With Tache Hall

The site allows for the ART Lab to become a pivot point for connecting Tache Hall with the Drake/Tier tunnel system and that system, ultimately, with Pembina Hall and Mary Speechly residences.

5. Issues Arising

- a) The Drake Building to the south of the site was constructed with capacity for additional floor expansion of that facility if expansion were required in the future (in the manner of the additional floor on the Wallace Building). The subject site therefore would not be required for this purpose.

b) Alumni House

The Alumni House is on the north side of the site facing Dafoe Road. Alumni House is a Georgian-style residence completed in 1939 for what was then the Department of Home Economics. It is now the home of the Alumni Association.

Relocation of Alumni House, including securing, lifting and moving the building and re-establishing or creating service connections and new foundations has been estimated to exceed \$1 million. The prudent financial decision, supported by Alumni Affairs, is to relocate Alumni House staff; demolish the house; and appropriately commemorate Alumni House, i.e. through use of various components in and around the Faculty of Human Ecology facility (i.e. use of the bricks in a new commemorative walkway to Human Ecology).

Summary

The backside of Drake, the side elevation of Tier and the east corner of Tache Hall present a jumble of architectural styles bearing down on a small Georgian style house. Appropriate development of this southwest corner of Alumni Lane at Dafoe Road is an opportunity to strengthen the presentation of the southeast corner of the Quadrangle. The Patkau designed ART Lab on this site will take its place as a modern architectural statement. A public art gallery will be a center piece of the project, and the project itself is integral to the transformation of Tache Hall as a new home for the School of Art and the Faculty of Music.

The ART lab project already has secured KIP funding support, which is a major \$15 million contribution towards the advance of Project Domino.

Report of the Senate Committee on Approved Teaching Centres with Respect to Cross-Registered Courses and Instructors for 2009-2010

Preamble

1. The terms of reference for the Senate Committee on Approved Teaching Centres (SCATC) are found on the web at:
http://umanitoba.ca/admin/governance/governing_documents/governance/sen_committees/494.htm2.
2. Since last reporting to Senate, the Senate Committee on Approved Teaching Centres has considered the lists of proposed courses and instructors as submitted by William and Catherine Booth College (WCBC), and Prairie Theatre Exchange (PTE) for cross-registration with the University of Manitoba in 2009-2010.

Observations

1. **William and Catherine Booth College**

The attached list shows all cross-registered courses and proposed instructors as submitted by WCBC for the year 2009-2010. Approval has been received from appropriate departments in the Faculty of Arts.

2. **Prairie Theatre Exchange**

Attached is a list of the courses and instructors submitted by the Prairie Theatre Exchange for cross-registration at the University of Manitoba for 2009-10. Approval has been received from the Department of English, Film, and Theatre for the courses and instructors proposed.

Recommendations:

The Senate Committee on Approved Teaching Centres recommends THAT:

Senate approve the Approved Teaching Centre instructors and courses listed in Appendix A of this report.

Respectfully submitted,

Senate Committee on Approved Teaching Centres

/mb

Comments of the Senate Executive Committee:
The Senate Executive Committee endorses the report to Senate.

Senate Committee on Approved Teaching Centres, June 10, 2009 APPENDIX A

Cross-Registered Courses to be offered at ATCs for 2009-10, with Proposed Instructors

U of M Dept, School or Faculty	Course No.	WCBC	PTE
Faculty of Arts			
English, Film, & Theatre	ENGL 1260	Allyna E. Ward, Ph.D.	
	THTR 2170		Brenda MacLean/ Debbie Patterson/
	THTR 2490		John B. Lowe/ Stephen Sim/ Hope McIntyre/ Deb Patterson/ Brenda MacLean
History	HIST 1390	Lloyd Penner, Ph.D.	
	HIST 1400	Lloyd Penner, Ph.D.	
Psychology	PSYC 1200	Joseph Campbell, Ph.D.	
Religion	RLGN 2160	Roy Jeal, Ph.D.	
	RLGN 2170	Roy Jeal, Ph.D..	
	RLGN 3780	Roy Jeal, Ph.D..	
	RLGN 3800	Donald Burke, Ph.D.	
Sociology	SOC 1200	Sherrie Steiner, Ph.D.	

**Faculty of Science
University of Manitoba**

Microbiology-Chemistry Joint Bachelor of Science (4 year Major) in Biotechnology

SECTION I: Program Description

1.1 Description of the program as it would appear in a catalogue:

Biotechnology is the application of the principles of chemistry, biochemistry and microbiology to the development of new technologies. The Biotechnology Major Program is a modification of the existing Honours program such that students wishing to pursue part-time study or those who do not satisfy the academic requirements of the Honours program will be able to obtain a 4 year B.Sc. in this discipline.

1.2 Program educational objectives and learning outcomes:

The Bachelor of Science (Major) in Biotechnology will provide students with a strong basic science background and specialization in their choice of Analytical, Environmental/Biosystems or Molecular Biotechnology. Students will receive broad exposure to theoretical concepts and practical training in many areas of applied science. All students will have to complete a Common Core of required courses plus required Stream Specific courses. Students will be required to complete a 'stream' composed of 15 credit hours of related courses, of which at least 12 credit hours are at the 3000 or 4000 level. Students will also be encouraged to select a Minor in a complementary area, such as, but not limited to: Management (I.H. Asper School of Business), Animal Systems (Faculty of Agricultural and Food Sciences), Food Science (Faculty of Agricultural and Food Sciences), Plant Biotechnology (Faculty of Agricultural and Food Sciences) or Human Nutrition and Metabolism (Faculty of Human Ecology). They will have enough free electives to cover the 18 credit hours required for a Minor. The remaining courses can be selected from the list of Recommended Electives. Although courses from the Faculty of Science make up the bulk of the program, courses from the Faculty of Agricultural and Food Sciences and the Faculty of Engineering are required and courses from the Faculty of Arts, Clayton H. Riddell Faculty of the Environment, Earth, and Resources, Faculty of Human Ecology, Faculty of Medicine, and the I. H. Asper School of Business are included in the list of recommended electives.

1.3 Program Requirements

1.3.1 Admission requirements

Students must meet the Faculty of Science requirements for entry into a Major Program; a Degree GPA (DGPA) of 2.0 on all courses completed at the end of Year 1 (minimum 24 credit hours). Also students must have a minimum grade of C+ in BIOL 1030 and CHEM 1310 and a minimum grade of C in BIOL 1020, CHEM 1300, MATH 1500, PHYS 1020 or PHYS 1050 and STAT 1000. Existing university repeat rules will be followed.

Courses required for Admission:

	<u>Credit Hours</u>
BIOL 1020 Biology 1: Principles and Themes	3
BIOL 1030 Biology 2: Biological Diversity, Function and Interactions	3
CHEM 1300 Chemistry: Structure and Modeling	3
CHEM 1310 Chemistry: Introduction to Physical Chemistry	3
MATH 1500 Introduction to Calculus	3
PHYS 1020 or 1050 General Physics 1 or Physics 1: Mechanics	3

Comments of the Senate Executive Committee:
The Senate Executive Committee endorses the report to Senate.

STAT 1000 Basic Statistical Analysis 1	3
6 cr. hr Arts course(s) including W course	6

 30

1.3.2 Continuation and Graduation Requirements:

Once accepted, Faculty of Science Academic Regulations for Majors Programs will apply. Students will have to complete a Common Core of required courses plus one Stream S 'stream' composed of 15 credit hours of related courses, of which at least 12 credit hours are at the 3000 or 4000 level. Although not required, students are encouraged to complete one of the recommended Minors or any other relevant Minor. Students must maintain a CGPA ≥ 2.0 and a minimum grade of "C+" on all Common Core Courses and minimum grade of "C" on all Stream Specific Courses, in all terms. There is no term registration load requirement. No more than 18 credit hours of F's can be accumulated, regardless of whether any course has been repeated and a higher grade achieved. A Degree GPA ≥ 2.0 on a minimum of 120 credit hours is required for graduation. Students who do not meet these minimum requirements will be required to withdraw from the program and will normally be eligible to enter the 3 Year General B. Sc. Program.

Required Common Core Courses for all Streams:

	<u>Credit Hours</u>
BIOL 2500 Genetics 1	3
BIOL 2520 Cell Biology	3
BIOL 4610 The Business of Biotechnology	3
BIOL 4560 Microtechnique	3
CHEM 2210 Organic Chemistry I: Structure and Function	3
CHEM 2220 Organic Chemistry II: Reactivity and Synthesis	3
CHEM/MBIO 2360 Biochemistry 1: Biomolecules and Metabolic Energy	3
CHEM/MBIO 2370 Biochemistry 2: Catabolism, Synthesis and Pathways	3
CHEM 2470 Analytical Chemistry	3
CHEM 3590 Instrumental Analysis	3
CHEM 4630 Biochemistry of Proteins	3
MBIO 2100 General Microbiology A	3
MBIO 3410 Molecular Biology	3
MBIO 3000 Applied Biological Safety	3
MBIO 4510 Industrial Microbiology	3
PLNT 2530 Plant Biotechnology	3
PLNT 4610 Bioinformatics	3

 78

Analytical Biotechnology Stream Required Courses

MATH 1700 Calculus 2	3
CHEM 4370 Glycobiology and Protein Activation	3
CHEM 4590 Bioanalytical Methods	3
CHEM 4670 Drug Design and Discovery	3
CHEM 4700 Advanced Biochemistry Laboratory	3
Recommended Electives (to complete degree)	27

 120

Environmental (Biosystems) Biotechnology Stream Required Courses

MATH 1700	Calculus 2	3
BIOE 3530	Engineering Fundamentals	3
BIOE 3200	Environmental Engineering for Non-Engineers	3
BIOE 4510	Agricultural Waste Management	3
MBIO 4672	Applied Molecular Biology	3
Recommended Electives (to complete degree)		27

 120
Molecular Biotechnology Stream Required Courses

MBIO 2110	General Microbiology B	3
MBIO 4672	Applied Molecular Biology	3
MBIO 4600	Molecular Genetics of Prokaryotes	3
MBIO 4610	Molecular Genetics of Eukaryotes	3
BIOL 4550	Molecular Biology for Plants and Fungi	3
Recommended Electives (to complete degree)		27

 120
Recommended Minors (Minors require 18 cr. hrs of prescribed courses):

Animal Systems (Faculty of Agricultural and Food Sciences)

Food Science (Faculty of Agricultural and Food Sciences)

Plant Biotechnology (Faculty of Agricultural and Food Sciences)

Human Nutrition and Metabolism (Faculty of Human Ecology)

Management (I.H. Asper School of Business)

Other recognized Minors will be approved by the signing authority.

Recommended Electives:

All courses in above described Minors. Appropriate pre-requisites must be taken for all Electives.

BIOE 3200	Environmental Engineering for Non-Engineers
BIOE 3530	Engineering Fundamentals
BIOE 4510	Agricultural Waste Management
BIOL 1300	Economic Plants
BIOL 2240	The Non-Flowering Plants
BIOL 2180	Introductory Toxicology
BIOL 2260	Biology of Fungi and Lichens
BIOL 2300	Principles of Ecology
BIOL 2540	Developmental Biology
BIOL 4540	Developmental Molecular Biology
BIOL 3290	Medicinal and Hallucinogenic Plants
BIOL 3500	Genetics 2
BIOL 3540	Advanced Cell and Developmental Biology
BIOL 3550	Plant Anatomy
BIOL 4500	Molecular Genetics of Plant Development
BIOL 4550	Molecular Biology for Plants and Fungi
CHEM 4360	Signaling and Regulation of Gene Expression
CHEM 4370	Glycobiology and Protein Activation
CHEM 4590	Bioanalytical Methods

CHEM 4620	Biochemistry of Nucleic Acids
CHEM 4670	Drug Design and Drug Delivery
CHEM 4700	Advanced Biochemistry Laboratory
COMP 1010	Introductory Computer Science 1
COMP 1020	Introductory Computer Science 2
COMP 1260	Introductory Computer Usage 1
COMP 1270	Introductory Computer Usage 2
ENG 1420	Engineering Processes for Non-Engineering Students
ENTR 2020	Starting a New Business
MATH 1700	Calculus 2
MBIO 2110	General Microbiology B
MBIO 2280	Microbial Ecology
MBIO 3010	Mechanisms of Microbial Disease
MBIO 3430	Molecular Evolution
MBIO 3440	Microbial Physiology
MBIO 3450	Regulation of Biochemical Processes
MBIO 3460	Membrane and Cellular Biochemistry
MBIO 3470	Microbial Systematics
MBIO 3480	Microbial Diversity
MBIO 4010/4020	Immunology
MBIO 4410	Virology
MBIO 4470	Fermentations
MBIO 4540	Biological Energy Transductions
MBIO 4600	Molecular Genetics of Prokaryotes
MBIO 4610	Molecular Genetics of Eukaryotes
MBIO 4670/4672	Applied Molecular Biology
PHAC 4030	Drugs in Human Disease I
PHAC 4040	Drugs in Human Disease II
PHIL 2740	Ethics in Biomedicine
PHIL 2830	Business Ethics
PLNT 3140	Introductory Cytogenetics
PLNT 3500	Plant Physiology
PLNT 3520	Principles of Plant Improvement
PLNT 3570	Fundamentals of Plant Pathology
PLNT 4330	Intermediate Plant Genetics
PLNT 4540	Plant Genomics
PLNT 4550	Developmental Plant Biology
PLNT 4560	Secondary Plant Metabolism
PLNT 4570	Research Methods in Plant Pathology
PLNT 4580	Molecular Plant-Microbe Interactions
PLNT 4590	Physiology of Crop Plants
PLNT 4600	Issues in Agricultural Biotechnology
STAT 2000	Basic Statistical Analysis 2

FOUR YEAR MAJOR in BIOTECHNOLOGY
Proposed Program
2008-2009

Microbiology – Chemistry Joint Program in Biotechnology, Department Code: 0601

UNIVERSITY 1	YEAR 2	YEAR 3	YEAR 4
JOINT FOUR YEAR MAJOR 120 CREDIT (comprising courses listed in chart below, and electives)			
BIOL 1020 (C), BIOL 1030 (C+), CHEM 1300 (C), CHEM 1310 (C+), PHYS 1020 OR 1050 (C), MATH 1500 (C), STAT 1000 (C)	CHEM 2210, CHEM 2220, MBIO/CHEM 2360, MBIO/CHEM 2370, MBIO 2100, CHEM 2470, BIOL 2500, BIOL 2520	CHEM 3590, MBIO 3410, PLNT 2530, MBIO 3000	MBIO 4510, CHEM 4630, BIOL 4560, BIOL 4610, PLNT 4610
Plus 6 credit hours from the Faculty of Arts which should include the required "W" course.	PLUS PROGRAM STREAM COURSES.	PLUS PROGRAM STREAM COURSES.	PLUS PROGRAM STREAM COURSES.
Plus sufficient credit hours of electives to total 30 hours.	Plus sufficient credit hours of electives to total 30 hours.	Plus sufficient credit hours of electives to total 30 hours.	Plus sufficient credit hours of electives to total 30 hours.
30 Hours	30 Hours	30 Hours	30 Hours

NOTE:

MATH 1510, 1520 or 1530 may be used in place of MATH 1500; MATH 1710 may be used in place of MATH 1700.

Program Stream courses:

Analytical Biotechnology

MATH 1700, CHEM 4370, CHEM 4590, CHEM 4670, CHEM 4700

Environmental Biotechnology

MATH 1700, BIOE 3530, BIOE 4510, BIOE 3200, MBIO 4672

Molecular Biotechnology

MBIO 2110, BIOL 4550, MBIO 4600, MBIO 4610, MBIO 4672

Recommended Minors:

Management (I.H. Asper School of Business)

Animal Systems (Faculty of Agricultural and Food Sciences)

Food Science (Faculty of Agricultural and Food Sciences)

Plant Biotechnology (Faculty of Agricultural and Food Sciences)

Human Nutrition and Metabolism (Faculty of Human Ecology)

Recommended Elective courses:

All courses in above Minors. All prerequisites as required.

Biological Sciences: BIOL 1300, BIOL 2240, BIOL 2180, BIOL 2260, BIOL 2300, BIOL 2540, BIOL 3540, BIOL 3550, BIOL 3290, BIOL 3500, BIOL 4500, BIOL 4540, BIOL 4550

Chemistry: CHEM 4360, CHEM 4370, CHEM 4590, CHEM 4620, CHEM 4670, CHEM 4700

Computer Science: COMP 1010, COMP 1020, COMP 1260, COMP 1270

Engineering: ENG 1420, BIOE 3530, BIOE 4510, BIOE 3200

Management: ENTR 2020

Mathematics: MATH 1700

Microbiology: MBIO 2110, MBIO 2280, MBIO 3010, MBIO 3430, MBIO 3440, MBIO 3450, MBIO 3460, MBIO 3470, MBIO 3480, MBIO 4010/4020, MBIO 4410, MBIO 4470, MBIO 4540, MBIO 4600, MBIO 4610, MBIO 4670/4672

Pharmacology: PHAC 4030, PHAC 4040

Philosophy: PHIL 2740, PHIL 2830

Plant Science: PLNT 3140, PLNT 3500, PLNT 3520, PLNT 3570, PLNT 4330, PLNT 4540, PLNT 4550, PLNT 4560, PLNT 4570, PLNT 4580, PLNT 4590, PLNT 4600

Statistics: STAT 2000

1.3.3 Course Descriptions

a. Existing Courses:

Courses Required for Admissions:

BIOL 1020 Biology 1: Principles and Themes Cr.Hrs.3 (Lab Required) A laboratory-based course in unifying principles of biology including cell biology, bioenergetics, cell division, genetics and evolution. This course is intended for major and honours students in the biological sciences. Not to be held with BIOL 1000 or BIOL 1001 (or 071.100), BIOE 2590 (or 034.259), or the former 071.125, 071.123 or 071.201. *Prerequisite:* Biology 40S (or equivalent) or BIOL 1000 (C); and any grade 12 Mathematics course (or equivalent) (50%). Students who complete BIOL 1000 as the prerequisite for BIOL 1020 will not be allowed to use both BIOL 1000 and BIOL 1020 towards their degree program as the two courses may not be held for credit with one another.

BIOL 1030 Biology 2: Biological Diversity, Function and Interactions Cr.Hrs.3 (Lab Required) A laboratory-based course introducing biological diversity including prokaryotes, protists, fungi, plants and animals; the form and function of plants and animals and basic concepts of ecology. This course is intended for major and honours students in the biological sciences. Not to be held with BIOL 1010 or BIOL 1011 (or 071.101), BIOE 2590 (or 034.259), or the former 071.125, 071.123 or 071.201. *Prerequisite:* BIOL 1020 (C).

CHEM 1300 University 1 Chemistry: Structure and Modelling in Chemistry Cr.Hrs.3 (Lab Required) (Formerly 002.130) Atomic and molecular models and their applications to chemistry, including a discussion of solid, liquid, and gaseous states, and of mixtures. Not to be held with CHEM 1301. *Prerequisites:* Applied Mathematics 40S or Pre-calculus Mathematics 40S, or the former Mathematics 40S (300); and Chemistry 40S (or equivalent) or CHEM 0900 (or 002.090) (P), or a minimum grade of "B" in CHEM 1000 or CHEM 1001 (or 002.100).

CHEM 1310 University 1 Chemistry: An Introduction to Physical Chemistry Cr.Hrs.3 (Lab Required) (Formerly 002.131) Thermochemistry, chemical thermodynamics, and chemical kinetics. *Prerequisite:* CHEM 1300 or CHEM 1301 (or 002.130) (C).

MATH 1500 Introduction to Calculus Cr.Hrs.3 (Lab Required) (Formerly 136.150) Differentiation and integration of elementary functions, with applications to maxima and minima, rates of change, area, and volume. Not to be held with MATH 1501, MATH 1510 (or 136.151), MATH 1520 (or 136.152), the former or 136.153, the former MATH 1680 (or 136.168), MATH

1690 (or 136.169). *Prerequisite:* a minimum grade of 60% in Pre-calculus Mathematics 40S or the former Mathematics 40S (300), or a grade of 60% or better in the Mathematical Skills course taught by Extended Education.

PHYS 1020 General Physics 1 Cr.Hrs.3 (Lab Required) (Formerly 016.102) A non-calculus survey course in Physics covering topics in mechanics and thermodynamics, with illustrations drawn from the life and physical sciences. This course, together with the sequel PHYS 1030 (or 016.103), is recommended for students seeking either a single, comprehensive course in Physics or entry into health science programs. It may also be used for entry into the Honours Physics program ("B+" or better) or the Major Physics program ("B" or better). Not to be held with PHYS 1050 or PHYS 1051 (or 016.105), PHYS 1410 (or 016.141) or PHYS 1420 (or 016.142) (or the former 016.127). *Prerequisites:* Either Physics 40S, PHYS 0900 (or 016.090) (with a Pass), or equivalent; and either Pre-calculus Mathematics 40S, Applied Mathematics 40S (with 70% or better), or equivalent. It is strongly recommended that students attain a minimum of 70% as the average of their marks in Physics 40S and Pre-calculus Mathematics 40S.

PHYS 1050 Physics 1: Mechanics Cr.Hrs.3 (Lab Required) (Formerly 016.105) A calculus-based introduction to classical mechanics which includes vectors, translational kinematics and dynamics, work and energy, linear momentum and collisions, rotational kinematics and dynamics, and oscillatory motion. This course is intended for students considering a program of study in engineering or the physical sciences. Not to be held with PHYS 1020 or PHYS 1021 (or 016.102), PHYS 1410 (or 016.141) or PHYS 1420 (or 016.142) (or the former 016.118, 016.120 or 016.127). *Prerequisites:* Pre-calculus Mathematics 40S (300) (or equivalent) and Physics 40S (300) (or equivalent) or PHYS 0900 (or 016.090) (with a grade of "Pass"). It is strongly recommended that students attain a minimum of 80 per cent as the average of their marks in Physics 40S (300) and Pre-calculus Mathematics 40S (300). *Prerequisite or concurrent requirement:* One of MATH 1500 or MATH 1501, MATH 1510, MATH 1520, the former 136.153 or MATH 1690.

STAT 1000 Basic Statistical Analysis I Cr.Hrs.3 (Formerly 005.100) An introduction to the basic principles of statistics and procedures used for data analysis. Topics to be covered include: gathering data, displaying and summarizing data, examining relationships between variables, sampling distributions, estimation and significance tests, inference for means. Not to be held with STAT 1001, STAT 2220 (or the former 005.222). *Prerequisite:* Any grade 12 or 40S Mathematics, or equivalent.

Required Common Core Courses for All Streams:

BIOL 2500 Genetics 1 Cr.Hrs.3 (Lab Required) (Formerly 001.246) Principles of heredity, gametogenesis and the cytological basis of inheritance in plants and animals. The concepts of dominance and genetic interaction, sex and inheritance, linkage, chromosomal variations, quantitative and population genetics, the genetic code. Not to be held with BOTN 2461 or PLNT 2520 (or 039.252). *Prerequisite:* BIOL 1030 or BIOL 1031 (or the former 071.125) (C).

BIOL 2520 Cell Biology Cr.Hrs.3 (Formerly 022.228) The microscopic and submicroscopic aspects of cellular structure and function are considered with emphasis on the living cell as a dynamic system. *Prerequisite:* BIOL 1030 or BIOL 1031 (or the former 071.125) (C).

BIOL 4560 Microtechnique Cr.Hrs.3 (Lab Required) (Formerly 022.414) This course deals with a spectrum of animal tissue preparation techniques and microscopy. These span a survey of all types of microscopes, live cell and tissue methods, fixation and tissue processing for paraffin and plastic tissue embedding, histo- and immunocyto-chemistry, electron microscopy, video and image

processing microscopy. This is a practical course with a major emphasis on the laboratory portion. *Prerequisite:* BIOL 1030 or BIOL 1031 (or the former 071.125) (C).

CHEM 2210 Introductory Organic Chemistry 1: Structure and Function Cr.Hrs.3 (Lab Required) (Formerly 002.221) An introduction to the concepts of organic reactivity and bonding in organic molecules. Preparation and properties of functionalized organic molecules. Not to be held with CHEM 1320 (or 002.132) or CHEM 2211. *Prerequisite:* CHEM 1310 or CHEM 1311 (or 002.131) (C).

CHEM 2220 Introductory Organic Chemistry 2: Reactivity and Synthesis Cr.Hrs.3 (Lab Required) (Formerly 002.222) An introduction to the reactivity of organic compounds and organic spectroscopy. The application of functional group interconversions to syntheses. *Prerequisite:* CHEM 2210 or CHEM 2211 (or 002.221) (C).

CHEM 2360 Biochemistry 1: Biomolecules and an Introduction to Metabolic Energy Cr.Hrs.3 (Lab Required) (Formerly 002.236) An introductory course dealing with kinds of molecules encountered in biochemistry, and the concept of metabolic energy as a product of catabolism and a requirement for biosynthesis. This course is also given in Microbiology as MBIO 2360. Not to be held with CHEM 2361 or CHEM 2770 (or 002.277), or MBIO 2360 or MBIO 2361 (or 060.236), or MBIO 2770 (or 060.277). *Prerequisites:* CHEM 1310 or CHEM 1311 (or 002.131) and BIOL 1030 or BIOL 1031 or the former 071.125, both courses with a minimum grade of (C).

CHEM 2370 Biochemistry 2: Catabolism, Synthesis, and Information Pathways Cr.Hrs.3 (Lab Required) (Formerly 002.237) An introductory course dealing with the basic metabolic processes that occur in living cells, including the production and use of metabolic energy, the breakdown and synthesis of biomolecules; the synthesis of DNA, RNA and proteins; and the regulation of these processes. This course is also given in Microbiology as MBIO 2370. Not to be held with CHEM 2780 (or 002.278), or MBIO 2370 or MBIO 2371 (or 060.237), or MBIO 2780 (or 060.278). *Prerequisites:* CHEM 2360 or CHEM 2361 (or 002.236) or MBIO 2360 or MBIO 2361 (or 060.236); and CHEM 2210 or CHEM 2211 (or 002.221), both courses with a minimum grade of (C).

CHEM 2470 Introductory Analytical Chemistry Cr.Hrs.3 (Lab Required) (Formerly 002.247) An introduction to common laboratory techniques of chemical analysis including gravimetric, volumetric and selected instrumental methods. *Prerequisites:* CHEM 1310 or CHEM 1311 (or 002.131) (C) and three credit hours of mathematics with the exception of MATH 1000, MATH 1010, MATH 1190, MATH 1191 or MATH 1020.

CHEM 3590 Instrumental Analysis Cr.Hrs.3 (Lab Required) A course dealing with the theory and use of standard instruments used for chemical and biochemical analyses. An introduction to the interpretation of data obtained from such analyses. This course is designed to follow a classical analytical chemistry course. Not to be held with ENVR 3550 (or 128.355) or the former 002.347 or the former 002.355. *Prerequisite:* CHEM 2470 (or 002.247) (C).

CHEM 4630 Biochemistry of Proteins Cr.Hrs.3 (Formerly 002.463) The structure and function of proteins, their physical and chemical properties and methods for studying them. *Prerequisite:* CHEM 2370 or CHEM 2371 (or 002.237) or MBIO 2370 or MBIO 2371 (or 060.237) or 002.235 or 060.235) (C).

MBIO 2100 General Microbiology A Cr.Hrs.3 (Lab Required) (Formerly 060.210) Fundamental principles of and methods used in microbiology. An introduction to the major groups of microorganisms, their structure and function, growth, metabolism, physiology and regulatory systems.

Prerequisite: BIOL 1030 or BIOL 1031 (or the former 071.125) (C); and CHEM 1310 or CHEM 1311 (or 002.131) (C), or CHEM 1320 (or 002.132) (C).

MBIO 3000 Applied Biological Safety Cr.Hrs.3 A comprehensive overview of (i) applied biological safety in research and industrial environments and (ii) the disease-causing features of relevant infectious agents and considerations for their containment. The course consists of lectures and demonstration components. *Prerequisite:* MBIO 2100 (or MBIO 2101 or the former 060.210) (C) or permission of instructor. Check with department for availability.

MBIO 3410 Molecular Biology Cr.Hrs.3 (Formerly 060.341) A rigorous treatment of the foundations of modern day molecular biology as it pertains to molecular disease, gene and cell manipulation, and cellular controls. *Prerequisites:* MBIO 2370 or MBIO 2371 (or 060.237) or CHEM 2370 or CHEM 2371 (or 002.237) or MBIO 2780 or CHEM 2780 (or 060.278 or 002.278) (C); and one of MBIO 2110 or MBIO 2111 (or 060.211) (C), ZOOL 2280 or ZOOL 2281 (or 002.228) (C) or BOTN 2460 or BOTN 2461 (or 001.246).

MBIO 4510 Industrial Microbiology Cr.Hrs.3 (Lab Required) (Formerly 060.451) A survey of microbial reactions used in industry. Fermentations, such as the production of amino acids and antibiotics, will be discussed. *Prerequisites:* MBIO 2110 or MBIO 2111 (or 060.211) (C) and MBIO 2370 or MBIO 2371 (or 060.237) or CHEM 2370 or CHEM 2371 (or 002.237) (C).

PLNT 2530 Plant Biotechnology Cr.Hrs.3 (Formerly 039.253) An introduction to current biotechnological techniques, including recombinant DNA, plant tissue culture, plant transformation and regeneration. A background to the techniques as well as a discussion of their applications in current biology and crop production will be examined. A laboratory will provide first hand experience with many of the techniques. Not to be held with the former 039.450. *Prerequisites:* CHEM 2770 (or 002.277) and PLNT 2520 (or 039.252) or BOTN 2460 (or 001.246).

Stream Specific Courses

Analytical Biotechnology Stream:

MATH 1700 Calculus 2 Cr.Hrs.3 (Lab Required) (Formerly 136.170) Theory and techniques of integration, curve sketching, volume, arc length, surface area and partial derivatives. Not to be held with MATH 1690 (or 136.169), MATH 1710 (or 136.171), the former 136.173) or 006.126, 013.149, or 013.159. *Prerequisite:* MATH 1500, MATH 1501 (or 136.150) (C), MATH 1510 (or 136.151) (C), MATH 1520 (or 136.152) (C), the former 136.153 (C) or the former MATH 1680 (or 136.168) (C).

CHEM 4370 Glycobiology and Protein Activation Cr.Hrs.3 (Formerly 002.437) The role of carbohydrate containing biomolecules in biochemistry and their importance for understanding some genetic diseases. The importance of limited proteolysis in activation of biomolecules. Not to be held with the former 002.449. *Prerequisite:* CHEM 2370 or CHEM 2371 (or 002.237) or MBIO 2370 or MBIO 2371 (or 060.237) or 002.235 or 060.235) (C).

CHEM 4590 Bioanalytical Methods Cr.Hrs.3 (Lab Required) This course introduces different methods used currently for the analysis of biological materials. Qualitative and quantitative aspects are explored. Instrumentation is described and practical methods are designed. Not to be held with the former 002.347. *Prerequisite:* a grade of "C" in CHEM 3590 or ENVR 3550 (or 128.355) or the former 002.355.

CHEM 4670 Drug Design and Drug Discovery Cr.Hrs.3 An understanding of the design,

synthesis and interactions of drug molecules. Emphasis will be on novel drug-like molecules in the early stages of drug discovery with special focus on brain diseases and infectious diseases.

Prerequisites: CHEM 2220 (C); and one of CHEM 2360 (C) or CHEM 2860 (C).

CHEM 4700 Advanced Biochemistry Laboratory Cr.Hrs.3 (Formerly 002.470) (Lab required)

A laboratory and workshop consisting of lectures, problem solving, and advanced instrumental techniques such as magnetic resonance spectroscopy, mass spectrometry, circular dichroism, x-ray crystallography, fluorescence spectroscopy and computer analysis of protein sequences. This course is required for all final year Honours students in Biochemistry. *Prerequisite or concurrent requirement:* CHEM 4620 (or CHEM 4621) and CHEM 4630 (or CHEM 4631).

Environmental (Biosystems) Biotechnology Stream:

MATH 1700 Calculus 2 Cr.Hrs.3 (Lab Required) (Formerly 136.170) Theory and techniques of integration, curve sketching, volume, arc length, surface area and partial derivatives. Not to be held with MATH 1690 (or 136.169), MATH 1710 (or 136.171), the former 136.173) or 006.126, 013.149, or 013.159. *Prerequisite:* MATH 1500, MATH 1501 (or 136.150) (C), MATH 1510 (or 136.151) (C), MATH 1520 (or 136.152) (C), the former 136.153 (C) or the former MATH 1680 (or 136.168) (C).

BIOE 3530 Engineering Fundamentals Cr.Hrs.3 (Formerly 034.353) Principles of heat transfer, steam, psychometrics, fluid mechanics, material balances, electricity and refrigeration. Cannot be held for credit in the Faculty of Engineering. Not to be held with the former 034.329. *Prerequisite:* MATH 1680(136.168M) or the former 013.129 or 013.128.

BIOE 4510 Agricultural Waste Management Cr.Hrs.3 (Formerly 034.451) Characteristics of waste, design of systems for collection, storage and land application, alternate treatment/conversion systems, impacts on air, soil and water quality. *Prerequisite:* ANSC 3530 (035.353) or consent of instructor.

MBIO 4672 Applied Molecular Biology Cr.Hrs.3 The overall objective of this course is to introduce and describe the current molecular techniques and their application to biological problems. These include, but are not limited to, basic gene cloning, mutagenesis and over-expression. Not to be held with the former MBIO 4580 (or 060.458) or MBIO 4670 (or the former MBIO 4570 or 060.457). *Prerequisite:* MBIO 3410 or MBIO 3411 (or the former 060.341) (C).

Molecular Biotechnology Stream:

MBIO 2110 General Microbiology B Cr.Hrs.3 (Lab Required) (Formerly 060.211) Microbial synthesis of nucleic acids and proteins, introductions to bacterial and animal viruses, mutation, and bacterial genetics. *Prerequisite:* MBIO 2100 or MBIO 2101 (or 060.210) (C).

BIOL 4550 Molecular Biology for Plants and Fungi Cr.Hrs.3 (Lab Required) Basic molecular biology techniques for the collection, preservation, and analysis of DNA and RNA in a wide variety of organisms with an emphasis on plants and fungi. Extraction, amplification, diagnostic, recombinant DNA theory, bioinformatics, and interpretation of biological data focusing on troubleshooting and hands-on experience in the laboratory. Not to be held with BOTN 7460 (001.742 or 001.746). Restricted to Honours students or with permission of the instructor.

MBIO 4672 Applied Molecular Biology Cr.Hrs.3 The overall objective of this course is to introduce and describe the current molecular techniques and their application to biological problems. These include, but are not limited to, basic gene cloning, mutagenesis and over-expression. Not to be

held with the former MBIO 4580 (or 060.458) or MBIO 4670 (or the former MBIO 4570 or 060.457). *Prerequisite*: MBIO 3410 or MBIO 3411 (or the former 060.341) (C).

MBIO 4600 Molecular Genetics of Prokaryotes Cr.Hrs.3 (Lab Required) (Formerly 060.460) A detailed examination of replication, expression, mutability, repair and transposition of DNA in bacteria and their viruses. Priority will be given to Science Honours students. Not to be held with the former 060.452 or 060.456. *Prerequisites*: MBIO 2110 or MBIO 2111 (or 060.211) (C) and MBIO 2370 or MBIO 2371 (or 060.237) or CHEM 2370 or CHEM 2371 (or 002.237) (C). BOTN 2460 (or 001.246) is recommended.

MBIO 4610 Molecular Genetics of Eukaryotes Cr.Hrs.3 (Lab Required) (Formerly 060.461) A comprehensive study dealing with replication and expression of DNA, genome structure, and the involvement of genes in AIDS and cancer. Check with the department for availability. Not to be held with the former 060.452 or 060.455. *Prerequisites*: MBIO 2110 or MBIO 2111 (or 060.211) (C) and MBIO 2370 or MBIO 2371 (or 060.237) or CHEM 2370 or CHEM 2371 (or 002.237) (C). BOTN 2460 (or 001.246) is recommended.

b. Newly Developed Courses:

BIOE 3200 Environmental Engineering for Non-Engineers Cr.Hrs. 3 This course will introduce students to the engineering approach to providing solutions to environmental problems such as air, water, and soil pollution, with an emphasis on the use of biotechnology. The course will consist of four modules that will discuss air pollution and odor control, remediation of contaminated soil and ground water, waste-water and solid waste treatment, and the role of microbes in these processes. *Prerequisites*: Permission of Instructor. (Course proposed through the Faculty of Engineering)

BIOL 4610 The Business of Biotechnology Cr.Hrs. 3 A critical examination of Biotechnology development and marketing. Lectures, tutorials and workshops providing in-depth study of topics including the legal, business, marketing, industrial and governmental, and scientific and ethical aspects of the biotechnology industry and, “for profit” science. *Prerequisites*: PLNT 2530 (C+) and MBIO 3000 (C+). BOTN 2460 (or 001.246), ZOOL 2280 (or 022.228) and CHEM 3590 (or 002.359) are highly recommended.

PLNT 4610 Bioinformatics Cr. Hrs. 3 (Lab required) An introduction to the theory, strategies, and practice of data management and analysis in molecular biology. Topics include DNA and protein analysis, biological databases, genomic mapping, and analysis of gene expression data. (Course proposed through the Faculty of Agricultural and Food Sciences)

1.4 Program fit with institutional mission and planning priorities:

1.4.1 University of Manitoba Priorities:

In accordance to the 2003 University of Manitoba Strategic Academic Plan: Building for a Bright Future, the proposed B.Sc. 4 yr Major in Biotechnology ‘provides access to an exceptional education’ and aims to ‘attract and retain the best’. Presently part-time students cannot enroll in the B.Sc. Honours Biotechnology program. In addition, students in the Honours program do not have a Majors program to enter if they do choose for whatever reason, academic or personal, to enter a Major program. These students can enter another Major program, such as Biochemistry, Chemistry or Microbiology and may have to take extra courses to satisfy these program requirements. The

proposed program will provide a new option for students who do not wish to pursue full-time study. The rigor and course requirements of the existing Honours Program have been retained and co-operative opportunities will be equally accessible. In many cases the 'best' students do not wish to enroll in Honours programs, hence the more flexible Majors program will de facto provide access and attract and retain the best students.

1.4.2 Faculty of Science Priorities:

Strategic Priorities, as listed in the 2008 Faculty of Science Plan: Science for Many Futures includes the delivery of modern, innovative undergraduate programs which improve the quality of the undergraduate experience, and motivate and support student success. The proposed B.Sc. 4 year Major in Biotechnology satisfies this priority by opening up access to a degree in Biotechnology. In addition, the proposed program is interdisciplinary, drawing from expertise throughout the Faculty of Science and from the Faculties of Agricultural and Food Sciences, Engineering, Medicine, Human Ecology and the Clayton H. Riddell Faculty of Environmental, Earth and Resources, thus satisfying the priority to 'build stronger ties with the community, both internal and external'. The co-operative program will also build ties with the biotechnology sector in Manitoba and abroad.

1.5 Comparison to existing programs:

Many of the major universities in Canada have programs containing a Biotechnology component, including Brandon University, University of Winnipeg, and Red River Community College. At the University of Manitoba, the Biotechnology Honours B. Sc. Program has been in place for over 20 years. At present, students not meeting academic requirements for the Honours Biotechnology program but wishing to remain in a 4 year program must choose to enter a Major program in Microbiology, Chemistry or Biochemistry. Students in this situation in most cases must take several additional courses to meet the requirements of their elected Major. A Four Year Major in Biotechnology provides a new option for students who do not wish to take full-time study and for those who either must exit or choose to exit the Honours Biotechnology Program. This also brings Biotechnology in line with related programs such as Microbiology and Biochemistry which have both Honours and Majors Programs.

SECTION II: Market Need and Market Demand for the Program

2.1 Local or provincial market needs for graduates:

The Biotechnology Sector has become very prominent in Manitoba and across Canada. Students with the proposed Major degree will have obtained high quality, relevant training to secure a variety of positions in local pharmaceutical/biotechnology companies (e.g. Cangene, Apotex, Biovail), any lab where analytical and quality control expertise is required (e.g. Enviro-Test Laboratories, Vita Health, Maple Leaf Pork), the National Microbiology Laboratory and the National Research Council Institute for Biodiagnostics. Graduates will be desirable employees as technicians/technologists in research laboratories. Graduates will also be employable in similar industries, agencies and laboratories across Canada.

2.2 Probable employment destinations:

As described above, the biotechnology sector is expanding across Canada and includes facets such as quality control, biosystems processing, production, research and development in pharmaceutical, agricultural, environmental areas. All biotechnology and related companies in Manitoba and across the country are continuously hiring the equivalent to graduates from the proposed program.

2.3 Consultation with relevant groups/agencies:

The proposed program was developed by an interdisciplinary group including faculty members from the Faculty of Science Departments of Biological Sciences, Chemistry and Microbiology, the Faculty of Agricultural and Food Sciences Department of Plant Science, and the Faculty of Engineering Department of Biosystems Engineering. The proposal has also received support from the Clayton H. Riddell Faculty of the Environment, Earth, and Resources, Faculty of Agricultural and Food Sciences and the Faculty of Arts. In addition, Dr. John Langstaff, President and CEO of Cangene Corp., one of the largest biotechnology companies in Winnipeg, has given his support for this program.

2.4 Fit with provincial economic, social and cultural priorities:

The existing B. Sc. Honours in Biotechnology and the newly proposed Majors programs fit with many of the priorities outlined in the 2008 Provincial Budget (Moving Forward: Manitoba's Priorities for the Future). Students graduating from these programs will be able to enter the work force in a variety of biotechnology industries including the pharmaceutical industry and biosystems sectors. They will be involved in research and developments leading to improved health care and cleaner energy and environments. The Majors Program will provide more accessibility to a high quality education to those who choose to or cannot for whatever reason pursue full time study. This falls directly under the provincial priority to 'improve education and training opportunities for young people here at home.' Along with obtaining a strong science training, students will also receive business training and be encouraged to pursue minors in relevant areas as management, food science, and plant biotechnology.

2.5 Potential for job creation and research and development:

Graduates from the proposed program will be well poised to either pursue jobs in the research and development branches of any given biotechnology company. Entrepreneurial students who have opted for a minor in management will be well placed to develop new companies and foster job creation for graduates from this and related programs.

SECTION III: Student Demand for the Program

3.1 Students the program will serve:

The program is targeted to undergraduate students who are interested in pursuing a highly rigorous interdisciplinary biotechnology degree however either cannot, due to financial or personal reasons, or chose not to follow full-time study.

3.2 Existing program offerings in Manitoba:

No equivalent programs exist within the province.

3.3 Evidence of student interest and demand for the program:

To date students wishing to pursue a career in the biotechnology sector are required to enroll in the Honours program. No equivalent part-time program exists. Although there is no statistical data, Faculty of Science Student Advisors have 20 years of anecdotal evidence of students inquiring about and expressing interest in a Majors Biotechnology Program. Development of a Majors program will put biotechnological training in line with the majority of other programs offered by the Faculty of Science which have both Honours and Majors options for their students.

3.4 Projected enrolments:

We anticipate between 20 students will enter this program each year.

3.5 Existing programs projected to lose enrolment to this program:

Presently and historically, students who wanted a biotechnology-like Majors program opted for the Microbiology or Biochemistry Major programs. It is conceivable that both of these programs will lose students to a new Biotechnology Majors program. The ideal situation is that students registered in the 3 Yr. General B. Sc. Program will be the major draw. This scenario is a win-win situation in that students in the General program will be attracted into a highly rigorous, relevant advanced degree and the university will retain motivated students for an extra academic year.

3.6 Proposed growth limits and minimum enrolments:

None. All interested students will be accommodated as required.

3.7 Projected number of students for the first 3 to 5 years:

Approximately 20 students will graduate from the program each year. Estimating that 20 students will enter program each year, after three years this will result in 60 students per year at various stages in the program.

3.8 Participation and success by under-represented groups:

The very nature of a Majors program, whereby students have the option to pursue full-time or part-time study, gives the flexibility and accessibility most often requested by under-represented groups. Students will be able to work, raise families, care for elderly, etc. and still succeed in receiving an advanced degree.

3.9 Availability to part-time learners:

Yes, the proposed program will readily accommodate part-time learners.

SECTION IV: Faculty Requirements**4.1 Current Faculty who will teach in the program:**

	Department	Classification
Piercey-Normore Michele	Biological Sciences	Assistant Professor
Weihrauch Dirk	Biological Sciences	Assistant Professor
Huebner Erwin	Biological Sciences	Professor
Graham Lane	Biological Sciences	Associate Professor
Hiebert Colin	Biological Sciences	Sessional
Sereda Karen	Biological Sciences	Sessional
Shaw Michael	Biological Sciences	Senior Instructor
Sparling Richard	Biological Sciences	Associate Professor
Sumner Michael	Biological Sciences	Associate Professor
Whyard Steven	Biological Sciences	Assistant Professor
Worley Anne	Biological Sciences	Assistant Professor
	Biosystems	
Cenkowski Stefan	Engineering	Professor
	Biosystems	
Cicek Nazim	Engineering	Associate Professor

Cullen John	Chemistry	Associate Professor
Duckworth Harry	Chemistry	Professor
Freund Michael	Chemistry	Associate Professor
Gauvin Francois	Chemistry	Instructor
Hegmann Torsten	Chemistry	Assistant Professor
Hultin Philip	Chemistry	Professor
Hunter Norman	Chemistry	Professor
Koczanski Krystyna	Chemistry	Instructor
Kroeker Scott	Chemistry	Associate Professor
O'Neil Joseph	Chemistry	Professor
Perreault Helene	Chemistry	Professor
Schweizer Frank	Chemistry	Assistant Professor
Smirnova Elena	Chemistry	Senior Instructor
Sorensen John	Chemistry	Assistant Professor
Spearman Maureen	Chemistry	Sessional
Stetefeld Joerg	Chemistry	Assistant Professor
Thorne-Tjomsland Gro	Chemistry	Sessional
Wang Feiyue	Chemistry	Associate Professor
Gupta Chander	Mathematics	Professor
Kalajdzievski Sasho	Mathematics	Senior Instructor
Korytowski William	Mathematics	Sessional Instructor
Penner Peter	Mathematics	Senior Instructor
Platt Craig	Mathematics	Professor
Shivakumar Pappur	Mathematics	Professor
Sichler Jiri	Mathematics	Professor
Thomas Robert	Mathematics	Professor
Zhang Yong	Mathematics	Associate Professor
Butler Michael	Microbiology	Professor
Cameron Linda	Microbiology	Instructor
Cardona Silvia	Microbiology	Assistant Professor
Dibrov Pavel	Microbiology	Associate Professor
Hausner Georg	Microbiology	Associate Professor
Loewen Peter	Microbiology	Professor
Mark Brian	Microbiology	Assistant Professor
Oresnik Ivan	Microbiology	Associate Professor
Spearman Maureen	Microbiology	Sessional
Theriault Steven	Microbiology	Sessional
Thorne-Tjomsland Gro	Microbiology	Sessional
Cadogan John	Physics	Professor
Gericke Michael	Physics	Assistant Professor
Hu Canming	Physics	Associate Professor
Mathur Maya	Physics	Instructor
Page John	Physics	Professor
Sharma Kumar	Physics	Professor

Williams Gwyn	Physics	Professor
Zetner Peter	Physics	Professor
Ballance George	Plant Science	Professor
Abarin Taraneh	Statistics	Sessional
Harrigan Thomas	Statistics	Sessional
Holens Gordon	Statistics	Senior Scholar
Johnson Bradford	Statistics	Assistant Professor
Li Xuan	Statistics	Sessional
Loewen David	Statistics	Instructor
Mateo Zenaida	Statistics	Instructor
Morris Andrew	Statistics	Sessional
Paquette Carrie	Statistics	Sessional
Sheocharan Amelia	Statistics	Sessional

4.2 Additional Faculty and Staff requirements:

None required.

SECTION V: Cooperative Arrangements

5.1 Cooperative agreements with other institutions/organizations:

The University of Manitoba has many formal Student Exchange agreements with universities world-wide. Students with an interest to study abroad will be encouraged to do so and will be assisted in selecting course which will be readily transferred into their program.

5.2 Transfer Credit:

Block and transfer will be readily accepted from other institutions in Manitoba, Canada and abroad following assessment using existing processes.

5.3 Internship/Practicum components:

Students will be encouraged to register in the Co-operative Option, following guidelines and procedures in place for existing Faculty of Science Co-operative programs. All Co-operative Option students will spend at least 12 months (three – four month terms) in employment terms with a department-approved employer. Co-operative Option work placements are coordinated through the Faculty of Science Co-operative Program Office.

5.4 Provisions for prior experiential learning:

Transfer credit arrangements with other post-secondary institutions will be assessed on a case by case basis following standard processes.

SECTION VI: Learning Technologies

6.1 Use of modern learning technologies:

The method of instruction will be at the discretion of individual course instructors. A variety of technologies such as PowerPoint, video, internet and audience response units (iClickers) are presently used. Laboratories in the Faculty of Science are undergoing renewal such that students will have state-of-the-art facilities available in the near future.

SECTION VII: Resource Requirements

7.1 Library Resources:

There are currently sufficient library resources to support the proposed program. (see attached Library Support Statement)

7.2 Computer Facilities:

There are currently sufficient computer facilities to support the existing Honours Biochemistry Program. The proposed Majors Program will require no additional support.

7.3 Use of existing infrastructure and equipment:

Existing lecture and laboratory facilities and equipment will be sufficient. No additional resources will be required.

7.4 Additional facilities and equipment required:

None.

SECTION VIII: Financial Considerations

8.1 New resources required:

Nil

8.2 Reallocation of existing funds/new funds required:

Nil.

8.3 Program costs accrued through tuition fees:

No new costs are associated with the proposed program.

8.4 Enrolment impact on overall tuition fees:

The proposed program should attract students to the university resulting in an increase in tuition collected.

8.5 Program funding if enrolment decreases:

There are no additional resources required to implement the program hence a decrease in enrolment will not have a financial impact.

SECTION IX: Program Consultations and Evaluations:

9.1 Consultations:

The proposed program was developed by an interdisciplinary group including faculty members from the Faculty of Science Departments of Biological Sciences, Chemistry and Microbiology, the Faculty of Agricultural and Food Sciences Department of Plant Science, and the Faculty of Engineering Department of Biosystems Engineering. The proposal has also received support from the Clayton H. Riddell Faculty of the Environment, Earth, and Resources, Faculty of Agricultural and Food Sciences and the Faculty of Arts. In addition, Dr. John Langstaff, President and CEO of Cangene Corp., one of the largest biotechnology companies in Winnipeg, has given his support for this program.

9.2 Evaluation of proposed program:

As described above. The proposed program was reviewed by the Joint Chemistry Microbiology Committee on Biochemistry and Biotechnology Programs, Chemistry and

Microbiology Departmental Councils, Faculty of Science Committee on Courses and programs, Executive and Faculty Council, Senate Curriculum and Course Change Committee, Senate Executive and Senate. Given that the proposed program is an extension of the existing Honours program it was not deemed necessary to seek outside evaluation.

9.3 Procedures for institutional evaluation:

Procedures for evaluation during implementation are as described in 9.2. Subsequent to implementation, the program will be evaluated yearly by the Joint Chemistry and Microbiology Committee on Biochemistry and Biotechnology Programs.

LIBRARY SUPPORT STATEMENT FOR PROPOSED COURSE CHANGES

The signatures below endorse the findings of the bibliographer whose comments are attached. They do not necessarily indicate that the library has the resources to support the course change as outlined in the departmental submission.

NAME OF PROGRAM

Faculty: Science

Department:

Course no. and names: Biotechnology (Revised Program)

SUPPORT STATEMENT

PREPARED BY: Marie Speare (Bibliographer)

APPROVED BY: Jan Homer
Coordinator, Collections Management

[Signature]
Director of Libraries

DATE: 20 May 2008

UNIVERSITY OF MANITOBA LIBRARIES
INTER-DEPARTMENTAL CORRESPONDENCE

DATE: June 20, 2008

TO: Dr. Elizabeth Worobec, Associate Dean, Faculty of Science

FROM: Marie Speare, Bibliographer for Microbiology, Sciences and Technology Library *MS*

RE: **Library Support for the Bachelor of Science (Honours) in Biotechnology (Revised Program)**

The proposed Bachelor of Science (Honours) in Biotechnology (Revised Program) consists of existing courses, four new courses (BIOL 4XXX The Business of Biotechnology, BTEC 4XXX Research Project in Biotechnology, PLNT 4XXX Bioinformatics and BIOE 4XXX Environmental Engineering for Non-Engineers) and an expanded list of elective courses.

The library support statements for all the new courses indicate that sufficient library resources are available. Support statements for the new courses are attached.

The other existing courses offered in the program are from several different departments in the Faculty of Science, the Biosystems Engineering Department in the Faculty of Engineering and the Plant Science Department in the Faculty of Agricultural and Food Sciences. These courses are currently being supported by the Libraries.

Therefore, there are adequate resources to support the revised program in biotechnology. Any new courses that might be developed in the future for the revised program will need to be evaluated as they are introduced.

cc: J. Horner, Coordinator, Collections Management
J. Harper, Head, Sciences and Technology Library
G. Sobie, Faculty of Science General Office
N. Godavari, Donald W. Craik Engineering Library
M. Gregg, William R. Newman Library

THE UNIVERSITY OF MANITOBA
Faculty of Science
249 Machray Hall

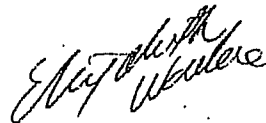
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INTER-DEPARTMENTAL CORRESPONDENCE

DATE: May 7, 2008

TO: Dr. Michael Trevan, Dean, Faculty of Agricultural and Food Sciences
Dr. Nat Chard, Dean, Faculty of Architecture
Dr. Richard Sigurdson, Dean, Faculty of Arts
Dr. Anthony Iacopino, Dean, Faculty of Dentistry
Dr. John Wiens, Dean, Faculty of Education
Dr. Doug Ruth, Dean, Faculty of Engineering
Dr. Norm Halden, Dean, Faculty of Environment, Earth and Resources
Dr. Gustaaf Sevenhuysen, Dean, Faculty of Human Ecology
Dr. Glenn Feltham, Dean, I.H. Asper School of Business
Dr. Harvey Secter, Dean, Faculty of Law
Dr. Dean Sandham, Dean, Faculty of Medicine
Dr. David Collins, Dean, Faculty of Pharmacy

FROM: Elizabeth Worobec, Associate Dean, Faculty of Science



RE: **Request to Review the Revised BSc (Hons) Biotechnology Program, a New
(4 yr Major) Biotechnology Program and Cooperative Options for Both Programs**

Please find attached the following proposals:

1. Revisions to the existing B. Sc (Hons) Biotechnology Program
2. Newly developed B. Sc 4yr Major in Biotechnology Program
3. Cooperative Options for both Honours and Major Programs.
4. Course outlines for two new courses that will accompany theses degree programs
BIOL 4XXX The Business of Biotechnology
BTEC 4XXX Research Project in Biotechnology

These proposals have been approved by the Faculty of Science Joint Microbiology and Chemistry Committee on Biochemistry and Biotechnology (JMCCBB) and will be submitted to the Faculty of Science Committee on Courses and Programs at the end of the month. In preparation for this meeting I am asking all relevant faculties and schools to review the proposal and provide me with any comments and/or concerns which I will use to revise the attached draft.

...../2

I am certain that this program will not be static but will continue to evolve with respect to streams and course selections. With this in mind, we will welcome any new courses or streams proposed by members of your Faculty along with suggestions for relevant electives and minors. We would also like to invite any interested faculty members to act as mentors for students enrolled in BTEC 4XXX Research Project/Thesis or employers for student in the Cooperative Options.

Thank you in advance for taking time to assist us in developing these interdisciplinary programs. Please contact me (474-8310 or eworobe@cc.umanitoba.ca) if you have any queries or concerns. I would be pleased to meet with you, any interested/concerned faculty members, and/or your Faculty Council to discuss this program in person. If possible, comments would be appreciated prior to May 29, 2008.

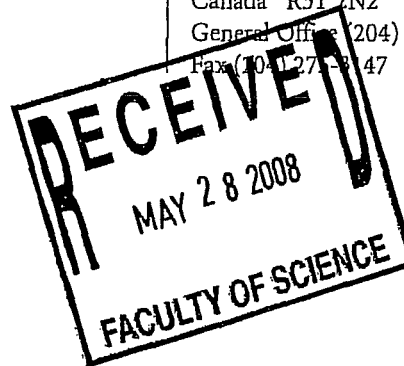
EW/mas



UNIVERSITY
OF MANITOBA

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

440 Wallace Building
Winnipeg, Manitoba
Canada R3T 2N2
General Office (204) 474-7252
Fax (204) 275-8847



DATE: Friday May 23, 2008

TO: Dr. E. Worobec (Associate Dean, Faculty of Science)

FROM: Dr. M. Benbow (Associate Dean (Academic), Clayton H. Riddell Faculty
of Environment, Earth, and Resources) *MB*

SUBJECT: Proposed Programs in Biotechnology

Thank you for the opportunity to review the revised and proposed programs in Biotechnology. I have circulated the proposals to Dr. Nancy Chow (Head, Geological Sciences) and Dr. W. Norton (Acting Head, Environment and Geography). They both have no concerns regarding the proposals and I attach their e-mails to confirm their views. The reviewed and proposed programs offer important opportunities for students and faculty alike.

In addition, I wish to recommend a minor in Environmental Science may be a particularly interesting option for students enrolled in the revised and proposed programs. Biotechnology plays an important role in many environmental remediation methods and techniques involving waste, water, soils, and sediments, and as these are becoming increasingly common in industry and business, offer significant employment opportunities. I would welcome the opportunity to discuss this further, and would also be interested in discussing options for faculty to assist in mentoring students.

cc. Dr. N. Halden (Interim Dean, Clayton H. Riddell Faculty of Environment, Earth, and Resources)
Dr. N. Chow (Head, Geological Sciences)
Dr. W. Norton (Acting Head, Environment and Geography)

Mary Benbow

From: "Nancy Chow" <chown@cc.umanitoba.ca>
To: "mary Benbow" <benbow@cc.umanitoba.ca>
Sent: Friday, May 23, 2008 12:31 PM
Subject: B.Sc. Biotechnology

Hello Mary,

I have reviewed the Faculty of Science proposal for the B.Sc. in Biotechnology. I see nothing in the proposal that raises any concerns. Given the interests in our department, I think it unlikely that there will be much opportunity for our students or faculty to participate in biotechnology research projects or for our students to do a minor in biotechnology but you never know.

Regards,
Nancy

* * * * *

Nancy Chow, P.Geo.
Professor and Head
Dept. of Geological Sciences, University of Manitoba
Winnipeg, Manitoba, R3T 2N2, Canada
Tel. 204-474-6451, Fax 204-474-7623

Mary Benbow

From: "William Norton" <William_Norton@Umanitoba.ca>
To: "Mary Benbow" <benbow@cc.umanitoba.ca>
Sent: Tuesday, May 20, 2008 3:28 PM
Subject: BSc Biotechnology

Mary:

On behalf of the Dept of E and G, I have no concerns with this proposal.

Bill

--

William Norton
Department of Environment and Geography
307 St John's College
University of Manitoba
Winnipeg Manitoba
Canada R3T2M5
Tel: 204 4748241
Fax: 204 4747610



UNIVERSITY
OF MANITOBA

Faculty of Arts

Dean of Arts
310 Fletcher Argue Building
University of Manitoba
Winnipeg, Manitoba
Canada R3T 5V5
Telephone (204) 474-9291
Facsimile (204) 474-7590
Email richard_sigurdson@umanitoba.ca

DATE: May 29, 2008

TO: Elizabeth Worobec, Associate Dean, Faculty of Science

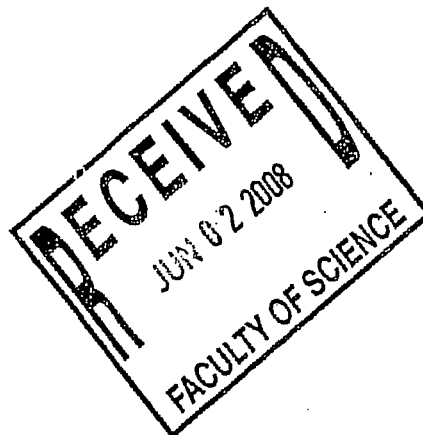
FROM: Richard Sigurdson, Dean, Faculty of Arts

**SUBJECT: Revised BSc (Hons) Biotechnology Program, New (4 yr Major)
Biotechnology Program and Cooperative Options for Both Programs**

As requested, we have reviewed the four proposals regarding the above noted programs.

The Faculty of Arts fully supports the revisions being proposed to existing programs as well as the introduction of the new programs/courses.

RS/js





UNIVERSITY
OF MANITOBA

Faculty of Agricultural & Food Sciences

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MEMORANDUM

DATE: May 23, 2008

TO: Elizabeth Worobec, Associate Dean, Faculty of Science

FROM: Dr. Michael Trevan, Dean

SUBJECT: Faculty of Science Biotechnology Programs -
response from the Faculty Of Agricultural and Food Sciences

The Faculty of Science has requested input from the Faculty of Agricultural and Food Sciences on its proposed revisions to the BSc (Hons) Biotechnology program and a new four year major Biotechnology Program. The Honours Biotechnology program has been undersubscribed and the Faculty of Science believes that by restructuring the program and by introducing a new major in biotechnology that more students may be attracted into this area of study. In addition, a cooperative option will be introduced for both the Honours and Major programs. The Faculty of Science feels that there are work experience opportunities for these students in business, engineering, and agriculture.

Following are comments from the Faculty of Agricultural and Food Sciences (FAFS) on the proposed changes and program introduction:

1. The Faculty of Agricultural and Food Sciences has a vested interest in the program offerings in the Faculty of Science because of the Plant Biotechnology program within the BSc. (Agriculture) currently offered by our faculty. Initially the Faculty of Science proposed a Plant Biotechnology stream which our faculty did not support. We are pleased to see this option has been removed from discussion and that there will be collaboration with our Plant Biotechnology program.
2. We have some concerns that there remains a limited pool of students interested in the biotechnology area because of the chronic low enrolments both our faculties have endured in this area of study. Hopefully these new curricula will prove attractive to students.

3. The introduction of a cooperative option is appropriate and should prove beneficial for those students choosing this course of study. It is difficult to say however the level of demand for these students in industry because we have had few students looking for cooperative placements in our plant biotechnology program..
4. We strongly support the decision to encourage students to consider a minor in a number of areas including some in our faculty: Animal Systems, Food Science and Plant Biotechnology. We do have a question for our own edification: A minor in Plant Biotechnology requires students to take PLNT 2530 Plant Biotechnology plus 15 additional credit hours of Plant Science courses. Since students in the Biotechnology (Honours or Major) would be taking PLNT 2530 as a required course, if they chose a Plant Biotechnology minor, would you require them to take an additional 15 or 18 credit hours in Plant Science since PLNT 2530 was already required in their major?
5. The Department of Plant Science has been requested to deliver the course PLNT 4XXX Bioinformatics as a required course in both the Honours and Major programs. Plant Science currently teaches a course in bioinformatics at the 7000 level. A new course will be introduced at the 4000 level to meet the needs of these two programs.
6. Our faculty approves of PLNT 2530 Plant Biotechnology being used as a required course in both the Honours and the Major programs.
7. The faculty also approves the listing of a number of other Plant Science courses as electives or as credit towards a Plant Biotechnology minor.
8. At this time it is difficult to determine whether our academic faculty would commit to serving as mentors for students doing their research project (BTEC 4XXX) or as employers for students in the cooperative option. Their decision to do so of course will depend on their individual interests and their other time commitments.

This proposal represents a concerted effort by the Faculty of Science to increase the number of students pursuing the study of biotechnology. This new programming will provide students with more choice of streams to suit their particular interests. The Faculty of Agricultural and Food Sciences supports these efforts and appreciates the opportunity to have had input into the discussions during the revision/development of these programs. Our Faculty may also realize some benefits with increased student interest in biotechnology through increased enrolments in some courses offered in the Department of Plant Science.

From: Elizabeth Worobec <eworobe@ms.UManitoba.CA>
To: michael_trevan@umanitoba.ca
Subject: Faculty of Science Biotechnology Programs
Send reply to: eworobe@ms.UManitoba.CA
Date sent: Fri, 23 May 2008 15:56:12 -0500

Dear Dr. Trevan,

Thank you for your memo dated May 23, 2008. We are very pleased to have the support of your Faculty for our revisions to the Honours Biotechnology Program and the new Majors and Co-operatives programs. Members of your Faculty have been extremely helpful in drafting these initiatives.

To answer your query in point 4 of your memo, where you ask if students opting for a Minor in Plant Biotechnology would have to take an additional 15 or 18 credit hours of PLNT courses? This is a very good question which I will put forward when these proposals are reviewed by the Faculty of Science Committee on Courses and Programs. Traditionally Minors require 18 credit hours of specific courses but in this case I can see valid reasoning for requiring 15 cr. hrs. I will report back to you after our committee meets. This will be at the end of June.

Thank you once again for the support of your Faculty. We hope that this program will be exciting enough to attract new students to this university. I envision such an accomplishment will benefit many Faculties such as Agricultural and Food Sciences!

Regards,

Betty
Elizabeth Worobec, Ph.D.
Associate Dean (Student Affairs)
Faculty of Science

Subject: RE: Biotechnology program revisions
Date sent: Thu, 10 Apr 2008 11:03:38 -0500
From: "John Langstaff" <jlangsta@cangene.com>
To: <eworobe@ms.UManitoba.CA>

Betty:

Thank you very much for the opportunity to review the documents relating to the Honours Biotech degree. I think the concepts and courses offer great opportunities for the students. I also like the concept of a Co-op program although it may be necessary to have the students go out of province for some Co-op activities, is this possible?

I think the idea of having these three different areas, analytical, environmental and molecular biotechnology is a good one. An alternative would be to focus on one area, which would be a bit of a departure from the current thinking. An idea would be to try to become the big dog in the area of Environmental Biotechnology and integrate with the Institute of Sustainable Development, the Freshwater Institute, etc.

All the best in this program and I believe it offers some great potential to the students in these areas.

John

-----Original Message-----

From: Elizabeth Worobec [<mailto:eworobe@ms.UManitoba.CA>]
Sent: Tuesday, April 08, 2008 12:05 PM
To: John Langstaff
Subject: Biotechnology program revisions

Hi John,

Thank you for agreeing the review the revisions we have made to the existing Honours Biotechnology degree.

I have attached our most recent draft which contains the rationale for the changes along with the calendar maps for the existing and proposed programs. We are also

introducing a Majors program (in the above mentioned attachment) and Diane Kunec is drafting cooperative options for both Honours and Majors programs. Finally I have attached the proposed course outlines for two of the new courses, The Business of Biotechnology which Judy Anderson, the new Head of the new Department of Biological Sciences has developed and the 4th year project course.

Any and all feedback on any aspect of what I am sending will be very welcomed. Please also share this with your colleagues, both inside and outside of Cangene! The more feedback the better!

I am working towards a deadline of May 15 to receive back all feedback so the package can be forwarded to our Faculty Committee on Courses and Programs which meets in early June.

Thank you again for your assistance!

Betty

Elizabeth Worobec, Ph.D.

Associate Dean (Student Affairs)

Faculty of Science

University of Manitoba

Winnipeg, Manitoba

Canada R3T 2N2

Phone: +1-204-474-8310

FAX: +1-204-474-7618

From: Elizabeth Worobec <eworobe@ms.UManitoba.CA>
To: "John Langstaff" <jlangsta@cangene.com>
Subject: RE: Biotechnology program revisions
Send reply to: eworobe@ms.UManitoba.CA
Date sent: Thu, 10 Apr 2008 11:38:04 -0500

Hi John,

Thank you for taking the time to review the proposals for the revised Biotechnology Honours Program and the new 4 Year Major Biotechnology Program. I am very impressed with how quickly you replied! Your comments and insight as an employer are extremely helpful!

To answer your question about the mobility of co-op students... Yes, we have indeed placed several of our co-op students outside of Manitoba (e.g. PBI in Saskatoon, Merck in Montreal, Alberta, Ontario) and even in Europe (e.g. Max Plank). I assume such will be the case for the Biotech. Coop students as well.

I will certainly keep you up to date with the progress we make on all the Biotechnology Programs. I am sure we will also be contacting you for advice.

Regards,

Betty

On 10 Apr 2008 at 11:03, John Langstaff wrote:

> Betty:

> Thank you very much for the opportunity to review the documents relating
> to the Honours Biotec degree. I think the concepts and courses offer
> great opportunities for the students. I also like the concept of a
> Co-op program although it may be necessary to have the students go
out

> of province for some Co-op activities, is this possible?

>

> I think the idea of having these three different areas, analytical,

Report of the Senate Committee on Curriculum and Course Changes on a Proposal to Introduce a Bachelor of Science (Major) and Co-op Major Degree in Biotechnology

Preamble

1. The terms of reference for the Senate Committee on Curriculum and Course Changes (SCCCC) are found on the website at:
http://www.umanitoba.ca/admin/governance/governing_documents/governance/sen_committees/497.htm.
2. The Senate Committee on Curriculum and Course Changes considered a proposal to introduce a Bachelor of Science (Major) and Co-op Major Degree in Biotechnology at its meeting on November 4, 2008.

Observations

1. The Faculty of Science has offered a Bachelor of Science (Honours) in Biotechnology for over 20 years. At present, students who do not meet academic requirements for the Honours Biotechnology program but wish to remain in a 4 year program must choose to enter a Major program in Microbiology, Chemistry or Biochemistry. In most cases students in this situation must take several additional courses to meet the requirements of the major. In addition, the Honours program is not available to students on a part-time basis.
2. The introduction of a Major program will allow students to pursue part-time study and will also allow those who do not satisfy the academic requirements of the Honours program to obtain a 4 year B.Sc. in this discipline.
3. The proposed Major is a modification of the existing Honours program. Students with a B.Sc. (Major) will be eligible to apply to graduate studies.

Recommendation

The Senate Committee on Curriculum and Course Changes recommends THAT:

Senate approve and recommend to the Board of Governors, the proposal to introduce a Bachelor of Bachelor of Science (Major) and Co-op Major Degree in Biotechnology

Respectfully submitted,

Professor H. Frankel, Chair
Senate Committee on Curriculum and Course Changes

/mb

Report of the Senate Planning and Priorities Committee on the proposal to introduce a Bachelor of Science (Major) and Co-op Major in Biotechnology

Preamble

1. The terms of reference of the Senate Planning and Priorities Committee (SPPC) are found on the website at:
http://www.umanitoba.ca/admin/governance/governing_documents/governance/sen_committees/508.htm, wherein SPPC is charged with making recommendations to Senate regarding proposed academic programs.
2. The Faculty of Science has approved its proposed Bachelor of Science (Major) Major and Co-op Major in Biotechnology and it recommends that Senate approve these new degree majors.

Observations

1. The proposed program will provide students with a strong basic science background and specialization in their choice of analytical, environmental/biosystems or molecular biotechnology. This proposed four year major in biotechnology provides a new option for students who do not wish or are unable to take full-time study and for those who either must exit or choose to exit the Honours Biotechnology Program. These proposed majors would bring Biotechnology in line with related programs such as Microbiology and Biochemistry which have both Honours and Major Programs. In addition, the committee noted that this program will assist in meeting the growing demand in the Province of Manitoba and other parts of Canada for biotechnicians.
2. The committee noted that the proposal indicated that there are no new resources required to implement this program. The program would use existing instructional resources including instructors, computers and other laboratory equipment to deliver the program.
3. The committee also noted that the program would require no new classroom, laboratory or student study space.
4. The Director of Libraries has indicated that the current library resources are adequate to meet the needs of the proposed new majors in biotechnology.
5. Further, the committee noted that the current cooperative agreements that the University of Manitoba has with other institutions and organizations throughout the world will provide a wide range of learning opportunities for students who would enroll in the proposed Co-op major.
6. The committee noted that there was strong evidence of support for these proposed majors as indicated by the letters of support from many faculties, departments and research facilities including the Faculties of Arts, Agricultural and Food Sciences, the Clayton H. Riddell Faculty of the Environment, Earth, Resources, and Cangene Canada which were included in the proposal.

Recommendations:

The SPPC recommends that:

Senate approve and recommend to the Board of Governors that it approve the proposed Bachelor of Science (Major) and Co-op Major in Biotechnology.

Respectfully submitted,

Norman R. Hunter, Chair
Senate Planning and Priorities Committee



UNIVERSITY
OF MANITOBA

OFFICE OF THE
VICE-PRESIDENT (RESEARCH)

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MEMORANDUM

TO: Mr. Jeff Leclerc, University Secretary

FROM: Digvir S. Jayas, Vice-President (Research)
and Chair, Senate Committee on University Research

DATE: June 2, 2009

SUBJECT: Proposals to establish Professorships in Spinal Cord Research

Attached, please find the proposal to establish a Professorship in Spinal Cord Research. The Dean of Medicine, the Vice-President (Academic) and Provost, and the Senate Committee on University Research (SCUR), have endorsed this proposal, in accordance with the University's policy on Chairs and Professorships.

Please include this report and recommendation on the next Senate agenda. Please feel free to contact me should you require any further information.

Thank you.

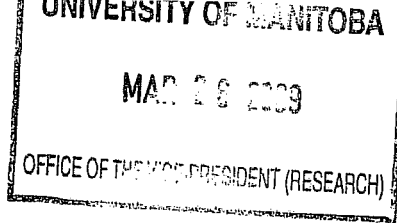
DSJ/nis
Encl.

Comments of the Senate Executive Committee:
The Senate Executive Committee endorses
the report to Senate.



UNIVERSITY
OF MANITOBA

Office of the
Vice-President (Academic) & Provost



4.3

208 Administration Building
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Canada R3T 2N2
Telephone (204) 480-1408
Fax (204) 275-1160

March 26, 2009

To: Digvir Jayas, Acting Vice-President (Research)
From: Joanne C. Keselman, Interim Vice-President (Academic) and Provost
Re: Professorship in Spinal Cord Research

Dr. J. Dean Sandham, Dean of the Faculty of Medicine, has provided a letter of support for the proposal to establish a professorship in spinal cord research in the Department of Physiology.

The policy on Chairs and Professorships specifies that:

- (1) the professorship be established consistent with the academic goals and objectives of the University;
- (2) the professorship be fully funded from external sources, rather than University operating funds, and that the funds be sufficient to cover the salary and benefits of the incumbent and provide for an appropriate level of unrestricted research/scholarly support;
- (3) the funds for the professorship be provided by way of an endowment or through a schedule of annual expendable gifts for a defined period of not less than five years, or by an appropriate combination of endowment and annual expendable gifts;
- (4) the professorship shall be attached to a department, faculty, school, college, centre or institute of the University, and have goals consistent with the unit to which it is attached;
- (5) the establishment of the professorship is not tied to the appointment of a particular individual;
- (6) individuals appointed to the professorship normally shall have the academic qualifications commensurate with an appointment at the rank of Professor; and
- (7) the initial term of the appointment of the professorship shall be 3-5 years, and if renewal is permitted, such renewal shall be subject to a successful performance review and the availability of funds.

The proposed professorship in spinal cord research satisfies all of the above requirements, with the exception of (6) above. Whereas the policy specifies that the rank normally shall be at the Professor level, the proposal from Medicine indicates the rank shall be at the Assistant Professor level.

Notwithstanding this exception to the University policy, I am in support of the proposal from Medicine, and request that you present it to the Senate Committee on University Research for consideration and recommendation to Senate and then to the Board of Governors.

If you have any questions or concerns, I would be pleased to meet with you.

/encl.

c. Dr. J. Dean Sandham, Dean, Faculty of Medicine
Dr. Janice Dodd, Head, Department of Physiology



UNIVERSITY
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Faculty of Medicine

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Room 260 Brodie
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Fax (204) 789-3928

March 11, 2009

Dr. Joanne Keselman
Interim Vice President (Academic) & Provost
208 Administration Building
University of Manitoba

Dear Dr. Keselman:

Re: Professorship in Spinal Cord Research

On behalf of the Faculty of Medicine, I am writing this letter of support for the attached proposal to establish a Professorship in Spinal Cord Research in the Department of Physiology, Faculty of Medicine.

The proposal for the Professorship was presented at Medicine's Faculty Executive Council (FEC) today, March 11, 2009 by Dr. Dave McCrea, Department of Physiology, on behalf of Department Head, Dr. Janice Dodd. FEC members voted unanimously to support this initiative.

The establishment of the Professorship will be an asset to the Department and the Faculty and will enhance our endeavours to advance research and increase research capacity.

Please advise if you have any questions.

Thank you.

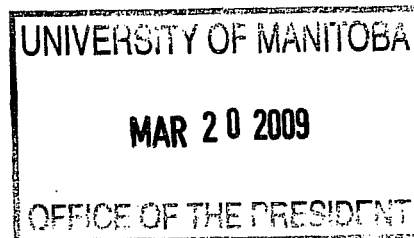
Yours Truly,

J. Dean Sandham, MD, FRCPC, FACP
Dean of Medicine

Attach.

c.c. Dr. D. Jayas, Acting V.P. Research
Mr. Jeff LeClerc, University Secretary
Dr. Janice Dodd
Dr. Dave McCrea
Ms. Barbara Becker

JDS/kh



Proposal to Establish a Professorship in Spinal Cord Research in
the Department of Physiology, Faculty of Medicine

Preamble:

Over the past 25 years the Will to Win Classic charity golf tournament has contributed significantly to the Winnipeg Spinal Cord Research Centre raising over \$900,000.00 for spinal cord research. These funds are administered by the Manitoba Paraplegia Foundation which provides charitable receipts and oversight of applications for the use of these monies.

Recent successes in fundraising have allowed the Manitoba Paraplegia Foundation to approach the Director of the Spinal Cord Research Centre (SCRC) on behalf of The Will to Win Golf Tournament with an offer to establish a contingent professorship in the Faculty of Medicine.

Purpose:

The Professorship will be used to recruit and support an Assistant Professor in the Department of Physiology engaged in a research program complimentary to research at the Spinal Cord Research Centre. The successful applicant will develop an independent laboratory housed in the Department of Physiology, secure external research funding and train and supervise graduate students in their area of specialty.

It is expected that this faculty member would participate fully as regular member of the Department of Physiology with appropriate teaching, administration and research duties assigned by the Department Head. The faculty member appointed under this Professorship would be eligible to apply for a tenure track appointment if available.

Recruitment.

Advertising in national and international publications will be used to attract applicants. A Faculty of Medicine selection committee will be struck to guide the search and selection for this position. The committee will adhere to University and Faculty procedures for conducting such a search.

The successful applicant will have an M.D. or Ph.D degree or similar qualifications in a field related to spinal cord research and a period of postdoctoral training. Selection will be based on the potential for developing an independent research program and contributing to the academic environment at the University of Manitoba. Expertise in the area of human and animal motor and sensory integration is strongly preferred.

Term of Appointment

The term of the appointment will be for 5 years.

Annual salary and benefits up to \$100,000 will be provided by Will to Win through the Manitoba Paraplegia Foundation for 5 years. The Professorship is contingent on funding being available.

Research Facilities

Independent research laboratory space will be provided within the Department of Physiology in the Basic Medical Sciences Building in proximity to other laboratories in the Spinal Cord Research Centre.

The full shared resources of the SCRC including microscopes, histology facilities, shared technical support and equipment will be made available to the new recruit as an equal member of the SCRC.

Additional funds, up to \$100,000, will be provided by Will to Win through the Manitoba Paraplegia Foundation for establishment, outfitting and initial operation of the laboratory.

Other sources of start up funds will include \$50,000 from the Dean of Medicine and \$25,000 from the Department of Physiology.

Moving expenses and interview expenses will be borne by the University.

Other Provisions

1. The selection and appointment of an individual to the proposed Professorship shall be conducted in accordance with the University Policy on Chairs and Professorships.
2. The duties and responsibilities of the individual appointed to the proposed Professorship will be in accordance with the University Policy on Chairs and Professorships. The holder of the Professorship will develop a well-defined program of research; secure external research funding; teach graduate courses; and supervise graduate students in their area of specialty. Additional responsibilities will include contributing to the Department of Physiology and may include some teaching of undergraduate students.
3. Annual reporting requirements shall also be in accordance with University Policy on Chairs and Professorships.
4. In accordance with University Policy on Chairs and Professorships, the performance of the Professorship holder shall be reviewed annually in the same manner as other faculty members.

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 on the web at:
http://umanitoba.ca/admin/governance/governing_documents/governance/sen_committees/502.htm
wherein SCIE is charged with advising faculties/schools with respect to professional unsuitability bylaws.
2. The Committee met on the above date to consider proposals from the Faculty of Education and from the Faculty of Social Work for Professional Unsuitability By-laws.

Observations:

1. There was extensive discussion and consultation by the committee on these proposed by-laws over the course of several meetings.
2. Senate may approve bylaws granting Faculties the authority to require a student to withdraw on the grounds of unsuitability to serve in the profession.
3. The Faculty of Education has developed a Professional Unsuitability By-law to govern undergraduate students in the Faculty including those in the Bachelor of Education, the Post-Baccalaureate Diploma in Education, and the Internationally Educated Teachers programs.
4. The Faculty of Social Work has developed a Professional Unsuitability By-law to govern undergraduate students in that faculty.

Recommendations

The Senate Committee on Instruction and Evaluation recommends:

THAT Senate approve the Professional Unsuitability By-law from the Faculty of Education.

THAT Senate approve the Professional Unsuitability By-law from the Faculty of Social Work.

Respectfully submitted,

Dr. Richard A. Lobdell, Acting Chair
Senate Committee on Instruction and Evaluation

/mb

Comments of the Senate Executive Committee:
The Senate Executive Committee endorses the report to Senate.

Professional Unsuitability By-Law for Students in the Faculty of Education

June 4, 2009

Preamble

In general, students are obligated to act with integrity and diligence in carrying out their professional responsibilities, and their behaviour and conduct in relation to others ought to be characterized by consideration, respect and good faith.

1.00 Jurisdiction

- 1.01 This By-Law applies to teacher candidates enrolled in the Bachelor of Education (B.Ed.) program, students in the Post-Baccalaureate Diploma in Education (PBDE) program, and students in the Internationally Educated Teachers (IET) program.
- 1.02 The Faculty of Education may require a student in any of the programs named in 1.01 hereof to withdraw from the Faculty, pursuant to the procedures set out in this By-Law when the student has been found unsuited, on consideration of competence or professional fitness, for the practice of teaching. A student may be required to withdraw at any time throughout the academic year or following the results of examinations at the end of any academic term. The right to require a student to withdraw prevails notwithstanding any other provision in the Faculty's Rules or Regulations.
- 1.03 Grounds which may require disciplinary action

A student may require disciplinary action from the Faculty when he/she has:

- practiced incompetently in a teaching or school setting in spite of efforts to support his/her development; and/or
- compromised his/her professional judgment through self-interest or a conflict of interest; and/or
- demonstrated behaviour or conduct with respect to pupils and/or teachers in schools, his/her colleagues, faculty or staff, or a member of the general public which is exploitive, destructive, or injurious; and/or
- been under the influence of alcohol or illegal drugs or has abused prescription drugs while participating in any activity related to the practice of teaching; and/or
- acquired a criminal conviction which is of such a nature as to place in question his/her fitness for teaching; and/or
- a physical or mental condition which impairs essential teaching performance, recognizing that reasonable accommodation for the special needs of individuals is required by the Manitoba Human Rights Code; and/or

- engaged in behaviour or conduct that if engaged in by a practising certified teacher would likely result in disciplinary action, including suspension or revocation of the certificate to teach, by the appropriate authorities.

1.04 Conflict of Jurisdiction

If a question arises as to whether a matter falls within the academic regulations of the Faculty or this By-Law, or as to whether a matter is within the jurisdiction of the Student Discipline By-Law of the University or this By-Law, as the case may be, the question shall be referred to the President of the University for final decision.

2.00 Professional Unsuitability Committee (PUC)

2.01 There shall be established within the Faculty a standing committee of six members known as the Professional Unsuitability Committee (PUC) to hear and determine matters of competence and/or professional fitness of undergraduates for the practice of teaching. Membership in the PUC shall be as follows:

- Chair (non-voting, except in the case of a tie): a tenured faculty member to be appointed by the Dean, Faculty of Education;
- two full-time faculty members, at least one of whom shall be tenured/tenure track, elected by the Council of the Faculty of Education;
- one B. Ed. student from the Faculty of Education, appointed by the Faculty of Education Student Council, and one PBDE student from the Faculty of Education, appointed by the Assistant Dean PBDE, or his/her designate; and
- two certified teachers, one appointed by the *Manitoba Teachers' Society* and one appointed by the *Manitoba Federation of Independent Schools*.

2.02 The length of term of committee members shall be as follows:

- Faculty members shall be appointed for a two-year term;
- Representatives from the teaching profession shall be appointed for a two-year term; and
- Undergraduate students and PBDE students shall be appointed for a one-year term.

2.03 Except for the provision contained in section 4.03, a quorum of the PUC shall be four (4) members of the Committee and the Chair, as set out in section 2.01.

3.00 Referral

3.01 Anyone affiliated with the Faculty of Education or the schools and/or institutions with which the Faculty works who has a concern about the professional unsuitability of any student defined in 1.01 shall complete the Professional Unsuitability Referral Form (see attached) and shall append a typed report to the form documenting the alleged incident(s). The form and the attached report shall be submitted to the Associate Dean (Undergraduate Programs) who, if he/she deems it appropriate, will refer the matter to the Dean or his/her designate.

- 3.02 The Dean (or his/her designate) shall refer matters within five (5) working days, which in his/her opinion involve conduct or circumstances described in Article 1.01 and 1.02 herein, to the PUC.
- 3.03 On receipt of a referral from the Dean of the Faculty or his/her designate, the PUC shall:
- i) consider whether just cause exists to suspend the student while the matter is being determined and if so, to issue an interim suspension to the student;
 - ii) send a Notice of Hearing with a copy of the submitted Professional Unsuitability Referral Form, the attached report signed by the individual who has filed the complaint, and any commentary from the Dean or Associate Dean to the student named pursuant to article 4.01.
 - iii) at all times act expeditiously to complete the hearing;
 - iv) determine whether any of the grounds requiring withdrawal under Article 1.01 and 1.02 exist after hearing the matter pursuant to this By-Law; and
 - v) make a disposition in accordance with Article 6.00 herein.
- 3.04 Once a referral has been made to the PUC, its proceedings may continue notwithstanding that the student has subsequently voluntarily withdrawn from the Faculty or has refused to participate in the proceedings.

4.00 Notice and Due Process

- 4.01 Within ten (10) working days after receipt of the referral, the Chair of the PUC shall inform the student in writing of the grounds for referral to the PUC, as well as the membership of the PUC and the date, time, and place for the hearing by the PUC of the matters set out in the referral. Such a hearing will be held no sooner than 10 working days from the date the student is notified of the referral and the notice of the hearing shall be sent by registered mail to the last known address of the student as found on the Faculty's records. The notice from the Chair shall include a statement to the effect that if the allegations contained in the referral are established to the satisfaction of the PUC, the student may be required to withdraw from the Faculty.
- 4.02 The student may provide a written response to the alleged grounds. Such written response shall be provided to the chair of the PUC no later than five (5) working days before the hearing date.
- 4.03 The student also has the right no later than five (5) working days before the hearing date to raise concerns to the Chair in writing about any member on the PUC whom the student believes will not be able to be objective in the consideration of his/her case. Where the Chair of the PUC receives such concerns, he/she shall, before the hearing, convey the concerns to every member of the PUC and inform any member identified by the student that he/she has the right to respond to the concerns in writing. The Chair shall convene the PUC, excluding

any Committee member identified by the student, to determine whether or not a change in the membership of the PUC shall be made. In the event that the quorum specified in 5.06 is not achieved for this determination, the remaining Committee membership may decide this matter and, if circumstances dictate, the Chair may make this determination alone. Where the PUC or its Chair decide that a change in the membership of the PUC shall be made, a replacement or replacements will be made in accordance with 2.01 unless the quorum specified in 5.06 exists.

- 4.04 A member of the PUC shall not be disqualified from sitting as a member of the PUC hearing the matter by reason only that such member has had previous contact with the student or has prior personal knowledge of the matter.

5.00 Hearing Procedures

- 5.01 The student may appear in person and may choose to be represented or accompanied by a Student Advocate, UMSU representative, legal or other counsel. Should the student choose to be represented or accompanied by a Student Advocate, legal or other counsel, written notification must be provided to the Chair no later than five (5) working days prior to the hearing date. In cases where legal counsel is involved, it shall act solely in an advisory capacity.
- 5.02 The Faculty may also choose to have legal counsel present to act in an advisory capacity and where it does so, the Chair of the PUC shall advise the student no later than five (5) working days prior to the hearing date.
- 5.03 The student and the Faculty, and/or their respective representatives excluding legal counsel) shall have the right to call, hear and cross-examine witnesses, to submit other evidence, and to have access to all documents submitted to the PUC for consideration. Written notice to call any witness shall be given to the other party prior to the hearing.
- 5.04 The hearing shall be closed to all persons except the members of the PUC, the student, the designated representatives of the student and/or Faculty, and any witness, as he/she is called.
- 5.05 The student, who is the subject of the hearing, shall not be required to give evidence but if he/she elects to do so, then the student may be questioned by members of the PUC.
- 5.06 A simple majority of Committee members hearing the matter is required for any finding or for the determination of the appropriate disposition of the matter.
- 5.07 The Chair of the PUC shall vote only to break a tie.

- 5.08 Members of the PUC shall be bound by confidentiality in respect of information received in Committee. Information will be disclosed only as is reasonably necessary to implement the investigation, the resolution or the terms of any disposition imposed, or as required by law.

6.00 Disposition of the Matter

- 6.01 After hearing all the evidence, the PUC shall meet in closed session to:
- i) consider the evidence;
 - ii) make its findings using a balance of probabilities standard (i.e. the claim against the student is more likely to be true than not true based on the evidence presented);
 - iii) if the allegations are established to the satisfaction of the PUC, determine the appropriate disposition of the matter; and
 - iv) if the allegations are not established to the satisfaction of the PUC, dismiss the matter and/or make any other recommendation that the PUC deems appropriate.
- 6.02 The PUC may make any disposition it deems appropriate in the circumstances. Without limiting the generality of the foregoing, the following options, alone or in combination, may be recommended to the Dean:
- i) determine that no further action be taken;
 - ii) allow the student to remain in the program and attach conditions prescribing future conduct by the student. Such conditions to remain in effect for any period of time the PUC deems appropriate;
 - iii) reprimand the student in writing;
 - iv) require the student to withdraw from the Faculty for a specified period of time;
 - v) require the student to withdraw from the Faculty indefinitely;
 - vi) attach conditions that must be fulfilled before any application for re-admission to the Faculty will be considered;
 - vii) require the student to withdraw from the Faculty with no right to apply for re-admission to the Faculty; and
- 6.03 Sections 6.02 (iv), (v), and (vii) may be noted on the student's transcript.
- 6.04 At the time of graduation, the student may request to the PUC to have the notation removed from the transcript.
- 6.05 The results of the hearing and the reasons for the disposition of the PUC shall be conveyed in writing to the student, the Student Advocate, and/or the designated representative of the student where applicable, with copies to the Dean of the Faculty.

7.00 Appeals

- 7.01 If the student wishes to appeal a disposition of the PUC (including any notation on his/her transcript), such appeal may be made to the Senate Committee on Appeals in accordance with the procedures of that body.
- 7.02 In the event of an appeal, the PUC may recommend that the implementation of the decision be suspended until such time as the matter has been disposed of by the Senate Academic Appeals Committee.
- 7.03 Notwithstanding the above, if the President of the University is satisfied that it is in the best interests of the University, the President may at any time make an order, subject to final disposition of the appropriate review authority, suspending the student from participating in any program of the University.
- 8.00 Records**
A record of any finding of professional unsuitability and/or disposition related thereto shall be kept on the student's academic file. All information relating to the case shall be kept confidentially in the Dean's office for one year after the appeal period has ended. After that date, all documents related to the matter will be destroyed.
- 9.00 Amendments**
- 9.01 This By-Law may be amended by Senate alone, or by Senate after approval of such amendment(s) by the Education Faculty Council.

Revised June 4, 2009

UNIVERSITY OF MANITOBA
FACULTY OF SOCIAL WORK PROFESSIONAL UNSUITABILITY BY-LAW

1.00 JURISDICTION

This By-Law applies to students enrolled in the BSW program. This includes students who have accepted an offer of admission, those who are currently registered in a course, or those who have been previously registered in a course and who have not withdrawn or been withdrawn from the program.

1.1 General

The Faculty of Social Work may make a recommendation, including the requirement to withdraw from the Faculty pursuant to the procedures set out in this By-Law when the student has been found unsuited, on considerations of competence or professional fitness, for the practice of Social Work. A student may be required to withdraw at any time throughout the academic year or following the results of examinations at the end of any academic term. This right to require withdrawal prevails notwithstanding any other provision in the Faculty's Rules or Regulations.

1.2 Grounds which may Require Withdrawal

A student may be required to withdraw from the Faculty when the student has:

- a) Been found guilty of such conduct which would result in a violation of the Code of Ethics of the Canadian Association of Social Workers or other document as amended; and/or
- b) Acquired a conviction due to a violation of the criminal code of Canada which is determined to be of such a serious nature as to demonstrate a lack of integrity, poor judgment, or other professional unsuitability; and/or
- c) Been found guilty of such conduct which would result in a violation of the Human Rights Code of Manitoba which is determined to be of such a serious nature as to demonstrate a lack of integrity, poor judgment, or other professional unsuitability; and/or
- d) Been found guilty of such conduct which would result in registration as an offender on a child abuse register; and/or
- e) Demonstrated behaviour with respect to service users/clients, other students, colleagues, faculty or the public which is exploitive, irresponsible or destructive; and/or
- f) Practiced incompetently due to impairment of functioning. Incompetence¹ can be defined as:
 - i. A lack of knowledge, skill or judgment, or a general disregard for the welfare of the public of such nature or extent as to demonstrate that the student is unfit to carry out the responsibilities of a person engaged in the practice of social work;

¹ Based with modifications, on the definition used by the Canadian Association of Social Workers (CASW) *Code of Ethics* © 2005.

- ii. A physical or mental condition which impairs essential social work performance, recognizing that reasonable accommodation for the special needs of individuals is required by the Manitoba Human Rights Code.
- 1.3 Should a student be found guilty of conduct as outlined in 1.2a)-f), whether prior to admission to the Faculty, or during the course of the program, it is the responsibility of the student to notify the Chair of the Professional Unsuitability Committee (PUC) of charges and/or investigations immediately. A failure to do so may require the student to withdraw from the Faculty and will result in a hearing before the PUC.
- 1.4 Conflict of Jurisdiction
If a question arises as to whether a matter falls within the academic regulations of the Faculty or this By-Law, or as to whether a matter is within the jurisdiction of the Student Discipline By-Law of the University or this By-Law, as the case may be, the question shall be referred to the President of the University for final decision.

2.00 PROFESSIONAL UNSUITABILITY COMMITTEE MEMBERSHIP

- 2.1 There shall be established within the Faculty a standing committee known as the Professional Unsuitability Committee (PUC), whose membership shall be as follows:
 - a) The Chair of the Faculty of Social Work Committee on Academic Standings or designate, who shall act as Chair of the PUC;
 - b) Three members of the Faculty of Social Work Committee on Academic Standings;
 - c) A practicing social worker who is a member in good standing of the Manitoba Association of Social Workers and the Manitoba Institute of Registered Social Workers (MASW/MIRSW), and who shall be recommended to the Dean of the Faculty by the MASW/MIRSW for a three year term;
 - d) One undergraduate student member recommended by the Student Council to the Dean of the Faculty for a one year term. Student members may be enrolled at any program sites of the University of Manitoba, Faculty of Social Work.
- 2.2 If a member of the Committee is unable to act for any reason, a replacement shall be appointed by the Dean or designate.
- 2.3 A quorum for the PUC shall be two thirds of the membership thereof.
- 2.4 Faculty member shall not be disqualified from sitting as a member of the PUC by reason only that such Faculty member has had previous contact with the student or has prior personal knowledge of the matter.

3.00 PROCEDURE

- 3.1 Matters which involve conduct or circumstances described in Section 1.2 shall be referred to the Dean of the Faculty in written format. The Dean shall refer matters which in his/her opinion involve conduct or circumstances described in Section 1.2 herein, to the PUC in a written report, setting out the name of the student involved, the alleged facts and the ground(s) allegedly warranting withdrawal pursuant to Sections 1.1 and 1.2.
- 3.2 Upon receipt of the Dean's report, the Chair of the PUC shall, within ten (10) working days:
 - a) Consider whether just cause exists to suspend the student while the matter is being determined and, if so, to issue an interim suspension to the student;
 - a) Send a Notice of Hearing to the named student as set out under Section 4.0;
 - b) Determine whether any of the grounds requiring withdrawal under Sections 1.1 and 1.2 exist at a hearing of the matter pursuant to this By-Law and; and
 - c) Grant a disposition in accordance with Section 6.0 herein.
- 3.3 Once a referral has been made to the PUC the proceedings will continue notwithstanding that the student has subsequently voluntarily withdrawn from the Faculty, or has refused to participate in the proceedings.

4.00 NOTICE TO STUDENT

- 4.1 The Chair of the PUC shall, within ten (10) working days after receipt of the referral;
 - a) Provide the student concerned with a copy of the report;
 - b) Inform the student in writing of the alleged grounds which may require withdrawal;
 - c) Inform the student in writing of the membership of the PUC;
 - d) Forward a copy of the Faculty of Social Work's Professional Unsuitability By-Law to the student;
 - e) Inform the student in writing of the date, time, and place for consideration by the PUC of the matters set out in the reference.
 - f) Allow for ten (10) working days from the time the student is notified and the hearing is scheduled.
- 4.2 Such notice shall be by registered mail to the last known address of the student as found on the Faculty's records.
- 4.3 The notice from the Chair shall include a statement that if the allegations contained in the reference are established to the satisfaction of the PUC then the student may be required to withdraw from the Faculty.

- 4.4 The student has the right, no later than five (5) working days before the hearing date, to raise concerns to the Chair in writing about any member of the PUC whom the student believes will not be able to be objective in the consideration of his/her case. Where the Chair of the PUC receives such concerns, he/she shall, before the hearing, provide the concerns to every member of the PUC and inform any member identified by the student that he/she has the right to respond to the concerns in writing. The Chair shall convene the PUC, excluding any member identified by the student, to determine whether or not a change in the membership of the PUC is warranted. If circumstances require, the Chair may make this determination alone.
- 4.5 The failure of the PUC to comply with any or all of these requirements of 4.1 shall not affect the validity of further proceedings in connection with the matter. However, such failings may be considered in further proceedings.

5.00 HEARING PROCEDURES

- 5.1 The student shall have the right to make a presentation in person, with or without the assistance of designated representatives, for example a Student Advocate from Student Advocacy and Resource Services, University of Manitoba, or an Elder. Legal counsel may be present in an advisory capacity and may provide advice to the student. The designated representatives and legal counsel shall have no voting privileges, and shall not be party to the deliberations of the PUC.
- 5.2 The student must inform the PUC five (5) working days prior to the hearing as to the identity of any person accompanying the student under the provisions of 5.1.
- 5.3 The Faculty may choose to have legal counsel present in an advisory capacity and where it does so, the Chair of the PUC shall advise the student no later than five (5) working days prior to the hearing date.
- 5.4 The hearing shall be closed to all persons except the members of the PUC and the student. Where applicable, the designated representatives of the student, and/or the legal counsel of the student shall be included. Where applicable legal counsel of the Faculty shall be included.
- 5.5 The student and/or his/her representative shall have the right to hear and to cross-examine witnesses, to have access to all documents submitted to the PUC for consideration, to call witnesses, and to submit evidence. Written notice to call any witness shall be given to the other party five (5) working days prior to the hearing.
- 5.6 The student shall not be required to give evidence but if the student elects to do so, then the student may be cross-examined by members of the PUC.

- 5.7 A simple majority of the members hearing the matter is required for any finding and for the determination of the appropriate disposition of the matter.
- 5.8 The Chair of the PUC shall vote only to break a tie.
- 5.9 Members of the PUC shall be bound by confidentiality in respect of information received in Committee and materials will be handled pursuant to Section 8.0. Information will be disclosed only as is reasonably necessary to implement the investigation, the resolution of the terms of any disposition imposed, or as required by the law.
- 5.10 The results of the hearing and the grounds for the determination of professional unsuitability shall be conveyed in writing, by the Chair of the PUC, to the Dean of the Faculty of Social Work, the student, or when consent is given by the student, to the designated representative of the student, within ten (10) working days of the hearing. In addition, the Dean of the Faculty of Social Work shall provide information to relevant faculty members identifying conditions which must be fulfilled by the student prior to any application to the Faculty for reconsideration, and/or specific conditions prescribing future conduct by the student. The Dean may also provide relevant information to the student's course instructors, the Field Liaison, the Field Instructor, and the field placement Agency Director.

6.00 DISPOSITION OF THE MATTER

- 6.1 The PUC shall, after hearing all the evidence, meet in closed session with its members only to consider its findings and the disposition to be made of the matter.
- 6.2 The PUC shall make a recommendation as per findings 6.2a)-g). The PUC may:
- a) Determine that no action should be taken in respect of the matter and allow the student to remain in the Faculty;
 - b) Reprimand the student and allow the student to remain in the Faculty;
 - c) Require the student to withdraw from the Faculty, for a specified period of time;
 - d) Require the student to withdraw from the Faculty, indefinitely;
 - e) Require the student to withdraw from the Faculty and attach conditions which must be fulfilled before any application for re-admission to the Faculty would be considered;
 - f) Require the student to withdraw from the Faculty with no right to apply for re-admission to the Faculty;
 - g) Attach conditions to 6.2a)-f) prescribing future conduct by the student;
- 6.3 Sections 6.2 (c),(d),(e), and (f) may be noted on the transcript.

- 6.4 Pursuant to 6.2 the PUC shall make a recommendation to the Dean of the Faculty of Social Work to appoint one or more PUC members to monitor compliance with the specified conditions. After the conditions have been met, or the timeframe completed, the PUC shall be reconvened to review the student's compliance. In the event of a dispute over compliance, or total failure to comply, the PUC shall be reconvened to determine further action. Should the student fail to comply with the specified conditions within an identified timeframe, the student will be required to withdraw from the Faculty of Social Work.

7.00 APPEALS

- 7.1 The disposition of the matter may be appealed to the Senate Committee on Appeals in accordance with the Senate Academic Appeals Procedures and Guidelines.
- 7.2 In the event of an appeal, the implementation of any decision of the PUC shall be suspended until the matter has been disposed of by the body hearing the appeal.
- 7.3 Notwithstanding the above, if the President of the University is satisfied that it is in the best interests of the University, the President may at any time make an order, subject to final disposition of the appropriate review authority, suspending the student from participating in any program of the University.

8.00 RECORDS AND DESTRUCTION OF MATERIAL

- 8.1 A record of any finding of professional unsuitability and/or disposition related thereto shall be kept in the student's academic file within the Faculty of Social Work. This finding of professional unsuitability may result in a notation on the student's transcript. All other material relating to the hearing shall be kept confidentially in the Dean's office. This material shall be destroyed one year after the expiration of the appeal period. In individual cases where appeals have been initiated, the holding period may be extended.

9.00 AMENDMENTS

- 9.1 This By-Law may be amended by Senate alone, or by Senate after approval of such amendment(s) by the Faculty of Social Work Council.

Revised January 2009.

Approved by Faculty Council June, 2007.

Report of the Faculty Council of Graduate Studies on Program Curriculum Changes

Preamble

1. The Faculty of Graduate Studies has responsibility for all matters relating to the submission of graduate course, curriculum and program changes, and new graduate programs. Recommendations for new programs or changes are submitted by the Faculty Council of Graduate Studies for the approval of Senate.
2. The Faculty Council of Graduate Studies met on the above date to consider proposals from the Dept. of Soil Science.

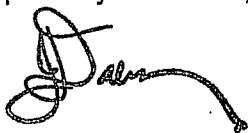
Observations

1. The Dept. of Soil Science is proposing a reduction in credit hours in its M.Sc. and Ph.D. programs. Please see Attach. A.

Recommendations

Faculty Council of Graduate Studies endorses the program revisions to the Dept. of Soil Science and recommends that they be approved by Senate:

Respectfully submitted,



Dean J. Doering, Chair
Graduate Studies Faculty Council

Comments of the Senate Executive Committee:
The Senate Executive Committee endorses
the report to Senate.



UNIVERSITY
OF MANITOBA

Faculty of Agricultural
and Food Sciences

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February 9, 2009

Faculty of Graduate Studies
Programs and Planning Committee

Course changes to the Graduate Programs in Soil Science

The Department of Soil Science has proposed changes to their supplementary guidelines, which includes changes to the course requirements. These changes are proposed in response to an external review of our graduate program that took place in March 2005. In particular, the committee made the specific suggestion for improvement that:

- "An M.Sc. student would be required to take 6 credit hours of course work..."
- "For the Ph.D. program, there should be no course work..."

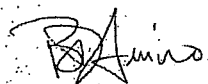
This recommendation was based on the committee's review of requirements in other similar programs in Canada, which are outlined in the attached page. It is clear that these recommendations prescribed much less course work than the current policy of the Faculty of Graduate Studies.

The Soil Science Departmental Council is recommending a change that partially addresses the area of course work. Our proposal is to reduce our M.Sc. course requirement by 3 ch, so it will now be a minimum of 12 ch, consistent with the policy of the Faculty of Graduate Studies. However we propose to reduce the course work in our Ph.D. program to 9 ch, which is 3 ch less than the policy of the Faculty of Graduate Studies.

We appreciate that the reduction in course requirements is modest and does not fulfill the recommendations of the external review committee. However, it is a move in the right direction compared to similar programs in Canada. We also hope that the slight reduction will help improve the time-to-completion of our graduate students.

Program	Previous Minimum Course Work	Proposed Minimum Course Work
M.Sc.	a) M.Sc. Thesis Course (SOIL7000), b) Principles of Scientific Research and Communication (SOIL722) and c) a minimum of twelve additional credit hours of course work, with a minimum of six credit hours at the 700 level (at least 3 credit hours from the Department of Soil Science).	The minimum of 12 credit hours will consist of: SOIL7220 (Principles of Scientific Research and Communication), plus 9 additional credit hours, of which 3 credit hours must be from the Department of Soil Science at the 700/7000 level.
Ph.D.	A minimum of twelve credit hours at the 700 level (excluding the Thesis Course, Candidacy Exam, and Principles of Scientific Research and Communications) beyond the course requirements for the Master's degree or its equivalent is required. Each student's program is individually tailored, but still must satisfy those requirements prescribed by the Department. The course work will include: a) Doctoral Thesis Course (069.800), b) Candidacy Exam (069.801), c) Principles of Scientific Research and Communications (040.722) and d) a minimum of twelve additional credit hours of course work at the 700 level, with a minimum of six credit hours from the Department of Soil Science.	Each student's program is individually tailored, but still must satisfy those requirements prescribed by the Department. The course work will include a minimum of 9 credit hours at the 700/7000 level or higher, consisting of: SOIL7220 (Principles of Scientific Research and Communication; note that this course is waived if taken within the previous 5 years), plus 6 additional credit hours, of which 3 credit hours must be from the Department of Soil Science. Where admission to the Ph.D. is directly from an Honours Bachelor Degree or equivalent, a minimum of 21 credit hours plus a thesis is required. The coursework must include SOIL7220 (Principles of Scientific Research and Communication), plus a minimum of 15 credit hours at the 700/7000 level or higher (of which 6 credit hours is from the Department of Soil Science) with the balance of the coursework at the 300/3000 level or above.

Sincerely,



Brian Amiro
Head, Department of Soil Science

University	M.Sc.	Ph.D.
University of British Columbia Soil Science	<ul style="list-style-type: none"> Minimum of 18 credits of course work 	<ul style="list-style-type: none"> Appropriate course work selected in consultation with candidate's supervisory committee
University of Alberta Soil Science	<ul style="list-style-type: none"> Based on student's previous training and anticipated needs in student's area of specialization Minimum requirements are REN R 603 and 604 plus 12 credits of course work acceptable for graduate credit of which 6 must be at the 500 level or above and at least 3 must be in research methods, statistics, and/or experimental design Participate in Department seminar series each year 	<ul style="list-style-type: none"> Based on student's previous training and anticipated needs in student's area of specialization Total course load at the discretion of the student's supervisory committee Must take REN R 603 and 604
University of Saskatchewan Soil Science	<ul style="list-style-type: none"> 15 credit units, including SL SC 990, 992, 994 	<ul style="list-style-type: none"> 6 credit units, including SL SC 990, 996
University of Manitoba Soil Science	<ul style="list-style-type: none"> Principles of Scientific Research and Communication (040.722) and minimum of 12 additional credit hours of course work with a minimum of 6 credit hours at the 700 level (at least 3 credit hours from the Department of Soil Science) 	<ul style="list-style-type: none"> Principles of Scientific Research and Communications (040.722) and Minimum of 12 additional credit hours of course work at the 700 level, with a minimum of 6 credit hours from the Department of Soil Science
University of Guelph Land Resource Science	<ul style="list-style-type: none"> Required to enroll in the two course sequence Research Issues I and II 	<ul style="list-style-type: none"> Must complete Research Issues I, LRS*6900, and Research Issues II, LRS*6910, as minimum course requirements Additional courses determined by the advisory committee
McGill University Renewable Resources	<ul style="list-style-type: none"> 6 credits minimum will include at least 2 graduate-level courses, at least one of these courses must be a graduate-level course in statistics 3 one-credit seminar courses 	<ul style="list-style-type: none"> Course requirements are specified by staff in the discipline but are flexible and depend largely on student's background, immediate interest and ultimate objectives 4 one-term seminar courses
Laval University Soil Science	<ul style="list-style-type: none"> Cours 13 crédits Les étudiants à la maîtrise avec mémoire doivent suivre les cours SLS-64895 Projet de mémoire de maîtrise, et SLS-63429 Séminaire de mémoire de maîtrise (sols) 	<ul style="list-style-type: none"> Cours 15 crédits Les étudiants doivent suivre les cours suivants par ordre chronologique: SLS-65076 Séminaire de thèse de doctorat I, SLS-65753 Examen de doctorat (sols) et SLS-65811 Séminaire de thèse de doctorat II

Report of the Faculty Council of Graduate Studies on Regulation Changes

Preamble

1. The Faculty of Graduate Studies has responsibility for all matters relating to the revising of the FGS Academic Guide. Recommendations for academic changes are submitted by the Faculty Executive of Graduate Studies for the approval of Faculty Council.
2. The Faculty Council of Graduate Studies met on the above date to consider changes to its regulations:
 - A. **SECTION 5: General Regulations: Ph.D. "Candidacy Exam"**
 - B. **SECTION 4: General Regulations: Master's Admission**

Observations

1. The Candidacy Examination and the Thesis Proposal each place different expectations upon a student, and, hence, must be separate exercises with distinct purposes. This is now reflected in the regulation.
2. The major content change of the Master's Admission section of the FGS Academic Guide is the consideration of four-year undergraduate degree programs (or equivalent) from Canadian institutions empowered by law to grant degrees.

It was recommended a statement be added to the regulations which clearly indicates that possession of the minimum requirements does in no way guarantee admission into the program.

Recommendations:

The Faculty Council of Graduate Studies endorses the regulation changes listed above and recommends that they be forwarded to Senate for approval.

Respectfully submitted,



**Dean J. Doering, Chair
Graduate Studies Faculty Council**

**Comments of the Senate Executive Committee:
The Senate Executive Committee endorses
the report to Senate.**

[Note: Underlined items have been added to the section; strike-through items are proposed for deletion.]

SECTION 5: General Regulations: Ph.D. "Candidacy Exam"

While the format and content of the Candidacy Exam will vary from unit to unit, the purposes of the Candidacy Exam in doctoral programs is to determine the student's competence in the discipline with respect to understanding and absorbing a broad spectrum of material, and then researching, identifying, analysing, synthesizing, and communicating ideas about that material in depth.

At the time specified by the advisory committee, normally within the first two years after the Master's degree but in no case later than one year prior to expected graduation, the student must take the formal candidacy examination. The format of the candidacy examination may vary with the department.

1. The examination is conducted according to a procedure established by the major department and approved by the Guidelines and Policy Committee of the Faculty of Graduate Studies.

2. This exercise is independent from the Thesis Proposal exercise.

3. 3. The examination procedure must be made known to the students.

3. 4. The Dean of Graduate Studies must be informed whether the candidate has passed or failed the candidacy examination (on the "Report on Ph.D. Candidacy Examination" form).

4. 5. Students must be provided with feedback on their performance and access to the reasons for the pass/fail.

5. 6. A pass decision of the examiners must be unanimous.

6. ~~A department may choose to include a comprehensive examination as a component of the candidacy examination requirement, and if so, the nature of this component would be set and the examination administered according to the supplementary regulations of the unit concerned. The results of this examination would form part of the final grade (pass/fail) accorded the candidacy examination.~~

7. Any student who fails the candidacy examination twice will be required to withdraw from the Faculty of Graduate Studies.

8. On successful completion of this examination, the student will be considered a candidate for the Ph.D. degree.

C. SECTION 4: General Regulations: Master's Admission

~~"Applicants must hold the following minimum requirements for consideration of direct admission to a program of study leading to the Master's degree:~~

~~-A four-year bachelor's degree (or academically equivalent program) from an academic institution recognized by the Faculty of Graduate Studies. (Students who have completed the pre-Master's program or equivalent from the University of Manitoba or another recognized university are also eligible for admission.)~~

~~-Minimum GPA of 3.0 (or the equivalent) based on the last 60 credit hours (or two full-years or equivalent) of university study.~~

~~-Successful completion of appropriate course content for the graduate program to which application is being made, and adequate senior level courses to ensure preparation for graduate work in the chosen field."~~

"Students who are eligible to be considered for direct admission to a program of study leading to the Master's degree include:

- Graduates of four-year undergraduate degree programs (or equivalent) from
 - a. Canadian institutions empowered by law to grant degrees; or
 - b. Colleges and universities outside Canada which are officially recognized by The Faculty of Graduate Studies.
- Students who have completed the pre-Master's program from the University of Manitoba or from another university.

All students applying for a Master's degree program must have attained a minimum GPA of 3.0 in the last two full years (60 credit hours) of study. This includes those applying for direct admission and those entering from a pre-Master's program. Students who meet the minimum requirements for admission to the Faculty of Graduate Studies are not guaranteed admission.

The pre-Master's program is designed to bring the student's standing to the approximate level of an Honours graduate in the major department, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program.

In specific cases where the academic background of the student is judged to be insufficient for the given program in a unit, the department may recommend that the student be admitted to a pre-Master's program of study."

Report of the Senate Committee on Nominations

Preamble

1. Since last reporting to Senate November 5, 2008, the Senate Committee on Nominations (SCN) met on May 14, 2009 to consider nominations to fill vacancies on the standing committees of Senate.
2. The terms of reference for the SCN are found on the University Governance website.

Observation

1. Below are listed all committees having vacancies to be filled, along with the names of the nominees being proposed, their faculty/school, and the expiry date of their terms.

Recommendation

1. THE SCN recommends to Senate the following list of nominees:

Committee	Nominee(s)	Faculty/School	Term Ending
Senate Committee on Academic Computing	Dean Jay Doering	Graduate Studies	2012.05.31
	Prof. Denis Hlynka	Education	2012.05.31
	Prof. Elliot Scott (R)	Dentistry	2012.05.31
Senate Committee on Academic Dress	Prof. Lena Horne (R)	Human Ecology	2012.05.31
Senate Committee on Academic Freedom	Prof. Judy Anderson (R)	Science	2012.05.31
	Prof. Cameron Morrill (R)	Management	2012.05.31
Senate Committee on Academic Review	Prof. Judith Owens (R)	Arts	2012.05.31
	Prof. Murray Ballance (R)	Agricultural & Food Sciences	2012.05.31
	Prof. Andrew MacDiarmid (R)	Medicine	2012.05.31
Senate Committee on Admissions	Prof. Christine Blais (R)	University 1	2012.05.31
	Prof. Charles Mossman (R)	Management	2012.05.31
	TBA		2012.05.31
Senate Committee on Admissions Appeals	TBA		2012.05.31
	Prof. Brenda Hann (R)	Science	2012.05.31
	Prof. Lorna Guse	Nursing	2012.05.31
	Prof. Eveline Milliken (R)	Social Work	2012.05.31
	Prof. David Mandzuk (R)	Education	2012.05.31
Senate Committee on Animal Care	Mr. Brent Thomas (R)	Community representative	2011.05.31

Report of the Senate Committee on Nominations

Committee	Nominee(s)	Faculty/School	Term Ending
Senate Committee on Appeals	Prof. Arlene Young (R)	Arts	2012.05.31
	Prof. Katheryn Levine (R)	Social Work	2012.05.31
	Prof. Brian Amiro (R)	Agricultural & Food Sciences	2012.05.31
	Prof. Sharon Alward (one-year leave replacement)	School of Art	2012.05.31
	Prof. Claudio Stasolla (one-year leave replacement)	Agricultural & Food Sciences	2012.05.31
	Ms. Eunhee Buettner (filling a student vacancy)	Graduate Studies	2009.10.14
Senate Committee on the Calendar	Prof. Phil Hultin (R)	Science	2012.05.31
	Prof. Jan Guise	Music	2012.05.31
Senate Committee on Curriculum and Course Changes	Prof. Danny Mann (R)	Agricultural & Food Sciences	2012.05.31
	Prof. Mark Lawall	Arts	2010.05.31
Senate Committee on the Ethics of Research Involving Human Subjects	Prof. Algernon Karim (R)	Dentistry	2012.05.31
	Prof. Neil McArthur	Arts	2012.05.31
	Prof. Sandra Ingram (R)	Engineering	2012.05.31
	Mr. Scott Armstrong (R)	Community representative	2012.05.31
	Prof. Darcy MacPherson	Law	2012.05.31
Senate Committee on Honorary Degrees	Prof. Janet Hoskins (R)	St. John's College	2012.05.31
Senate Committee on Instruction and Evaluations	Prof. Emily Etcheverry (R)	Medicine	2012.05.31
	Prof. Tee Goh (R)	Agricultural & Food Sciences	2012.05.31
	Prof. Dieter Schonwetter (R)	Dentistry	2012.05.31
Joint Senate Committee on Masters Programs Appeals	Prof. Brian MacNeil (R)	Medical Rehabilitation	2012.05.31
Senate Committee on the Libraries	Prof. John Van Rees (R)	Science	2012.05.31
	Prof. Kevin Coombs	Medicine	2012.05.31

Report of the Senate Committee on Nominations

Committee	Nominee(s)	Faculty/School	Term Ending
Senate Committee on Rules and Procedures	Prof. Mary Brabston (R)	Management	2012.05.31
Senate Planning and Priorities Committee	Prof. Michael Freund	Science	2010.05.31
Senate Committee on University Research	Prof. Paul Hess	School of Art	2012.05.31
	Dean Michael Trevan (R)	Agricultural & Food Sciences	2012.05.31
	Prof. Rick Linden (R)	Arts	2012.05.31
	Prof. Gordon Fitzell	Music	2012.05.31
University Discipline Committee	Prof. Darcy MacPherson (one-year leave replacement)	Law	2010.06.30

(R) = re-elected

Respectfully submitted,

Prof. N. Hunter, Chair

/lrjl



UNIVERSITY
OF MANITOBA

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June 10, 2009

TO: Members of Senate

FROM: David T. Barnard
President and Vice-Chancellor

RE: Strategic Planning Framework

On May 26, I circulated to you a draft of the University's planning framework, which has been the subject of many discussions, both formal and informal, over the past several months. At the time, I indicated to you that it was being sent to you in advance of the normal circulation of materials for Senate, in order to provide you with an opportunity to read it and provide your feedback. The draft was subsequently circulated to the broader university community for their review and comment as well.

Attached please find a revised planning framework that incorporates a great deal of the feedback that we have received. I am pleased by the interest that has been demonstrated by members of Senate and by the broader university community and I appreciate the time and care that people have taken in formulating their responses.

Overall, the feedback we have received has indicated that there is substantial support for the shape and approach of the framework. The majority of the suggestions either related to specific initiatives or areas that were proposed as additions, or represented proposed improvements to the text. We have made every effort to incorporate as much feedback as possible, while remaining true to the document's purpose as a framework rather than a detailed strategic plan and while recognizing that the perspectives that have been shared are not, in all cases, held consistently. In addition, there were many detailed suggestions that we believe could be of interest to units, departments and faculties as they proceed with their individual planning efforts and we will synthesize those suggestions and make them available to all who may have an interest.

It is my intent to seek Senate's endorsement, for the purposes of planning, of the attached framework at our meeting later this month. I look forward to our discussion.

Thank you.

cc. Kerry McQuarrie Smith

University of Manitoba Strategic Planning Framework 2009-2014

June 10, 2009

President's Message

This framework is intended to guide the major decisions we make at the University of Manitoba: what programs to have (teaching, research, administrative, co-curricular), what organizational structures are best suited to mounting those programs, how to find the necessary resources, and so on. For many of us this framework will be in the background – sometimes distantly – as we do our daily work.

By analogy, if a family or a group of friends were to take a road trip, the decision about whether to head east from Winnipeg to Toronto or west to Vancouver is the kind of major direction-setting found here. How the person responsible for driving chooses a vehicle, or the one responsible for food chooses the meal, will derive from wisdom informed by experience in each academic or administrative unit.

The major ideas presented here have been synthesized from many formal and informal consultations over the past academic year. Responses to this document have been solicited from the University community and to the extent possible, incorporated into this version. The wealth of constructive suggestions that were submitted could not all be addressed here, but the framework is a starting point for where we go from here as a community. We will ensure that the suggestions that have been made – about how departments and faculties see themselves contributing to the priorities articulated in the framework, or about how ideas could be implemented – are made available to the university community, so that they can be considered by units, departments and faculties as they go about their detailed planning.

It must be emphasized that the University of Manitoba's commitment to teaching and to basic and applied research, in both traditional and professional programs, remains strong. What we are proposing is that we also take advantage of the opportunities that have been identified for us to focus specific attention on areas of particular relevance in today's world.

The next several years will require prudent direction setting and diligent detailed work from all of us. During these years we will shape the continuing development of a wonderful and important institution, and if we do our work well we will see this University increasingly recognized for its greatness.

Let's work together to make the University of Manitoba one of a handful of outstanding universities in Canada, with international significance, and let's provide the evidence for others to see us that way. As we make each decision, let's keep in mind making the University a better place, not being satisfied with the *status quo*.

Contents

1. WHY DOES THE UNIVERSITY OF MANITOBA EXIST?	1
2. WHERE ARE WE NOW?	1
3. HOW WILL WE BEHAVE?.....	3
4. WHAT FUTURE ARE WE CHOOSING TO CREATE?	4
5. WHAT WILL WE DO TO BRING THIS ABOUT?	4
6. HOW WILL WE KNOW HOW WELL WE'RE DOING?	9
7. WHAT HAPPENS NEXT?	10

Perhaps what is inexplicable is this:

The huge faint height beyond the shadowed heart
Against which we must measure lives,
the possibility of truth.

[from Rosro, County Galway by Jan Zwicky in *Wittgenstein Elegies*]

1. Why does the University of Manitoba exist?

The pursuit of knowledge is a fundamental part of the human experience. We are on a voyage of shared exploration and imagination, expanding the boundaries of our ability to create, to learn and to understand. In support of this voyage, universities have embraced a three-fold mission based on communicating knowledge through teaching, pursuing knowledge through research and applying knowledge to serve society. Over time, we have come to recognize that this mission also includes the important role that universities play in educating for the knowledge economy. This is reflected in the comprehensive menu of high-calibre professional programs that have become a core feature of the university, and which are unique among the post-secondary institutions in Manitoba. These perspectives all are upheld in the mission of the University of Manitoba:

To create, preserve and communicate knowledge, and thereby, contribute to the cultural, social and economic well-being of the people of Manitoba, Canada and the world.

The University of Manitoba was established less than a decade after the province was born and has grown and evolved along with the province. Over 130 years later, we remain “Manitoba’s university”, with close connections to its people and communities and a strong desire to preserve while at the same time nurture and grow these bonds. Our strong interest in working with and serving Manitoba’s Aboriginal communities is an important case in point. We believe that education has transformative power for the individual student, their families and communities. There is more that we can contribute to Manitoba’s Aboriginal people and their communities and we will work with them to determine how we can best contribute to meeting their needs. Similarly, we are committed to being an active contributor to solutions to the challenges faced by our province and its citizens, and in the enduring discourse about how to shape its future. We do not believe we should work in isolation, but should explore opportunities for cooperation and collaboration both within the university community and beyond it – with our partners in the community, in government and in other post-secondary institutions.

We also have become part of the global community, welcoming faculty and students from other countries along with the unique perspectives they offer, and considering how our experiences and viewpoints together can benefit the world. We live in a world of extraordinary potential and countless interconnections that can “contribute to cultural, social and economic well-being”.

2. Where are we now?

Manitoba is a place of great diversity: from prairie to the Canadian Shield, from our international border, to the Arctic coast. We live within a major system of rivers that offer both enormous potential for energy development and constant environmental challenges. We experience a global climate ranging from the deepest depths of winter to the warmth of the extended twilight of summer.

Manitoba is a multi-ancestral province, with roots extending deeply into every country in the world. It is also home to a large Aboriginal population that has fundamentally shaped the history and will fundamentally shape the future of the province.

In 2009 the University is in a significant period of change, partly in response to a global economic situation unlike anything that has occurred in our lifetimes, the ending of the previous planning period and changes in the senior administrative ranks including the installation of a new President. We have been presented with an opportunity to assess how the university has been achieving its mission and to identify desired adjustments to move into the next decade and to evolve as a learning organization that can respond and adapt to an unpredictable and turbulent external environment

Charting a path forward requires an understanding of where the path begins. *Building for a Bright Future: Final Report on the Strategic Plan for the University of Manitoba* presented the starting point for assessing the current situation. It was supplemented by a detailed analysis of weaknesses and strengths, where future opportunities may lie, and what threats may need to be confronted (SWOT). This table presents, at a very high level, the most significant points made during these discussions¹.

	Positive	Negative
Internal	Strengths <ul style="list-style-type: none"> • Broad mandate: medical and doctoral university with professional programs • Important role in graduate education • High quality faculty and staff • Connected with the community • Broad range of programs and choice • Nationally recognized/world class research • Academically strong, diverse students • Supportive learning/work environment • SmartPark • Large expanse of land • Geographically dispersed • Open to partnerships • New information systems • Commitment to accessibility 	Weaknesses <ul style="list-style-type: none"> • Inadequate operating and capital funding • Inadequate student financial support • Infrastructure deficit / need to modernize buildings • Silo mentality • Inadequate staff development systems • Limited student engagement • Lack of clear direction or priorities • Inequity in services between campuses • Morale issues due to national rankings • Strained labour relations • Aging staff • Respect issues • Inconsistent service • Inefficient governance processes • Afraid to think big
External	Opportunities <ul style="list-style-type: none"> • Interest from external community • New or renovated facilities • Increased visibility – Human Rights • Enrolment growth from economic uncertainty • University of first choice for all Manitobans • Large alumni base • Connections with the Aboriginal community • International student recruitment • Global citizenship • Experiential learning • Research / programming partnerships • Innovation engine of the province 	Threats <ul style="list-style-type: none"> • Competition for students and faculty • Increasing workloads • Rapidly changing technology • Fee restrictions • Economic uncertainty • Changing demographics • Tolerance for incivility and anti-intellectualism • Not on national radar intellectually • Taken for granted locally • Duplication of programs provincially • Potential for difficult government relations

¹ The more detailed SWOT will be posted on the website as a supporting document

In assessing the outcomes of this review, a few broad themes emerge:

- *Existing Excellence:* the University has many programs and research foci that are nationally or internationally recognized. There are also innovations in how we offer learning opportunities to our students, such as interdisciplinary and inter-professional programs, the unique University 1 program, and a commitment to accessibility. These accomplishments should be celebrated.
- *Employees:* Our faculty and staff exemplify tremendous skill, dedication and excellence. They are the key resource that fuels all activity on campus. But we have not yet found the best approach to identifying and developing employee potential. We also face a high degree of competition from other institutions in attracting talent. As this competition increases, we must devote greater attention to how talented people might be persuaded to join us, and how to retain the excellent people already on faculty and staff. We need to do a better job of succession planning, and improve our hiring processes.
- *Manitoba Community:* The university contributes to the community on an ongoing basis through a wide range of initiatives, including inner-city outreach, advising government on important areas of public policy, and providing interesting and innovative learning opportunities for children. Our strong relationships with local business, community and political leaders carry with them a willingness to develop partnerships. We have been able to pursue initiatives that benefit the University and the broader community alike, such as the new football stadium and recreational facility, SmartPark, the indoor soccer complex and a transformation of the Southwood golf course. We also see tremendous potential to explore additional partnerships, such as with the Canadian Museum for Human Rights.
- *Funding:* like other publicly-funded institutions, the University of Manitoba faces ongoing concerns about funding and how to allocate available resources effectively. Despite its challenges, the University has a substantial funding base and benefits from a considerable level of support from government, the community and alumni. As a result, there is a great deal that *can* be done.
- *Priority-setting:* With about 27,000 students, 7,700 faculty and staff and 90 degree programs, the University is an extremely diverse organization. This complexity creates difficulties in identifying, adjusting and supporting core priorities. It also suggests we should consider the adaptation of existing programs to meet changing needs, when contemplating program additions. By considering how better to do this, we can pursue opportunities to innovate in how we structure and deliver priority programs.
- *Public Perceptions:* There is a sense that we do not convincingly sell our advantages. Recognizing that the University has many supporters, both on- and off-campus, it is a challenge for them to counter certain perspectives, such as that the University is too far removed from the heart of the community, or that our two locations are not connected enough. We are a good partner with others in the larger community outside the University and we must work for broader acceptance and respect.
- *Administrative Resources:* underpinning all academic, research and community outreach efforts is the machinery of the university: the information technology to enable effective analysis, the capacity to consider the future staffing needs of the institution, and financial management expertise. Investments in these areas may need to be assigned higher priority. It will be critical for us to consider the most effective ways for administrative resources to inform decision-making, whether through improved budget processes, analysis of student enrolment trends, or other mechanisms.

3. How will we behave?

Words like “institution”, “academy”, or “place of higher learning” do not convey the full impact of the University of Manitoba. A university can be seen as a living organism, fuelled by the energy of the ideas generated within its walls and conscious, through its members, of its values and responsibilities.

To achieve our vision, we require a commitment to a common set of ideals. The University of Manitoba places a high degree of importance on the following principles:

- *Excellence*: We aspire to excellence in teaching and in research, scholarship and creative work. We expect superior performance of our faculty, students and staff.
- *Innovation*: Experimentation and exploration foster discovery; so we encourage them. We must continue to evolve to maximize opportunities for learning and to achieve excellence in teaching.
- *Responsibility to society*: Our teaching, research and service will be in the best interests of the people of Manitoba, will improve quality of life and will assist in the economic, social and cultural development of our province and the world.
- *Selectivity*: We will respect and build upon the foundational strength of traditional programs and disciplines and provide an outstanding environment in focused areas of academic strength.
- *Equity and diversity*: All who have the potential to succeed at our University should have access to it. We promote equity in access to our programs and employment, and in the conduct of the University's affairs. Similarly, we ascribe a high value to a profusion of ideas. We believe in rational and respectful debate and in the importance of understanding alternate perspectives. We promote peaceful discussion, the consideration of alternatives, and the forging of consensus.
- *Integrity*: We are committed to intellectual honesty.
- *Academic freedom*: We will protect the right of everyone in our academic community to intellectual independence and critical inquiry. Advancement of understanding in research, scholarship and creative work and the transmission of that knowledge to students require the privilege of speaking and writing freely. Members of our University have a personal and institutional commitment to academic freedom, responsibly pursued in the performance of their academic duties.
- *Accountability*: We are accountable for what we do: we can and should be required to answer for the use of public resources. We have a responsibility to facilitate research, scholarship and creative works that are of high quality as judged by international standards.
- *Environmental Sustainability*: We believe in the importance of operating in an environmentally sustainable manner and we lead by integrating this principle into our operating decisions.
- *Humanity*: We will maintain a safe and welcoming environment where we will offer respect and consideration to all, and expect it to be demonstrated by our students, faculty, researchers and staff.

4. What future are we choosing to create?

We will uphold these values in pursuing our vision:

The University of Manitoba will lead through excellence, challenging the finest students, teachers, scholars and researchers to approach the pursuit of knowledge with vigour, imagination, innovation, discipline and respectful debate. Our university will be a vibrant, innovative and connected place to learn, live and work, recognized for a dynamic student experience, for the confidence and pride it instills in students, faculty, staff and alumni, for its tradition of excellence, and for its positive contributions to Manitoba and beyond.

Simply put: We want our students, scholars, staff and alumni to have an association with the University of Manitoba that is transformative and we want their discoveries to be of the greatest possible benefit to their own lives, and to the lives of others.

5. What will we do to bring this about?

The University of Manitoba is a large, diverse and complex organization. This diversity is one of the tremendous strengths of the University and one that should be preserved.

At the same time, in the discussions that have taken place with faculty, staff and students it has been clear that there is both willingness and a need to target priority areas where, by devoting focused attention and resources, we can make the most progress toward achieving our mission and vision.

Leadership in the academy comes from many sources. So too do the many contributions required to assure a vibrant, cohesive whole. As a result, this planning framework represents a call to action; its lack of prescriptive approaches is a signal of our confidence that members of the University community will use their imaginations to see how they can best contribute to meeting its broad objectives.

Our vision evokes a community of excellence and excitement: an environment to which people want to belong. For this reason, our focus of attention needs to be on people: on creating fertile ground for *teaching and research*; on developing the wealth of *student experience*, especially for *Aboriginal achievement*; and on being a place *where people are proud to work*.

I. Academic Enhancement: Innovations in Academic and Research Programs

From the consultations that took place with faculty and school members emerged a consistent message: that there were opportunities to focus on areas of particular relevance in today's world without abandoning the wealth of opportunities for learning and discovery that are offered at the University of Manitoba. This framework is built upon that basic premise. It does not, however, negate the importance of a continued emphasis on basic and applied research and teaching, in both traditional and professional programs.

In considering areas that could be specifically enhanced over the next few years, a number of criteria have been used:

- The uniqueness of the activity
- The potential to draw on strengths from across the University
- The potential to exploit being a great research university and thus to combine teaching, research and public service activities; and
- Provincial imperatives.

This is Manitoba's university and, as such, we should focus on those disciplines that are of vital interest to the province. The expertise we are gaining by pursuing these priorities should be of excellent quality, applicable nationally and globally. The following themes will be particularly important in the next stage of our development.

Each theme is described briefly by showing some of the activities that can be considered under the general heading. Departments and faculties will find many ways to enrich our participation in these areas, and our descriptions of them.

a. Healthy, safe, secure and sustainable food and bioproducts: With projected increases in the world's population, increasing fuel costs and growing concerns about climate change, the provision of healthy and safe food on a global scale and in an environmentally sustainable way is a major challenge for the 21st century. Further, the development of environmentally-friendly bioproducts, including alternate energy, from renewable bioresources is seen as an innovative way to reduce society's reliance on petroleum-based products.

The University, through its diversity of current activity and expertise, is well placed to contribute innovative solutions to these challenges. These solutions would, in turn, significantly enhance Manitoba's and Canada's agri-food industry. Current academic strengths include: sustainable cropping and animal production systems;

biofuels; functional foods and nutraceuticals; and post-harvest technology, particularly as it relates to grain storage. Work in these areas is centered at unique state-of-the art facilities, including Richardson Centre for Functional Foods and Nutraceuticals, the Canadian Centre for Agri-Food Research in Health and Medicine, the George Weston Ltd Sensory and Food Research Centre, the National Centre for Livestock and the Environment, and the Canadian Wheat Board Centre for Grain Storage Research.

b. Sustainable Prairie and Northern Communities: Manitoba has long been known as the gateway to the West, but as the only western province with an Arctic sea coast, it also has a unique connection to the North. This connection can provide potential benefits to Manitoba and Canada but will require enhanced understanding of the impact of increased activities and of climate change on communities. As most of Manitoba's industrial and wealth generating processes and activities involve water, water stewardship, particularly as it relates to the Lake Winnipeg watershed, is a key factor in sustaining prairie and northern communities. So, too, is expertise in alternative energy and hydroelectric development, water quantity, flood mitigation and flood architecture.

Sustaining prairie and northern communities is the focal point of exploration and discussion among academics from many disciplines. Current academic strengths, which span several faculties, include: climate change and Arctic adaptation; community-based resource management; energy generation and transmission of electricity; understanding and managing biodiversity; water quality, policy, protection and infrastructure; rural and northern health; and northern infrastructure, including transportation.

c. Human Rights: Public attention in Manitoba has been focused on efforts to establish the Canadian Museum for Human Rights, which will explore the subject of human rights in order to enhance public understanding, promote respect for others and encourage reflection and dialogue. It will be a centre for international education, dedicated to the promotion and respect of human rights and diversity.

These goals are entirely consistent with the core values of the University. We have a dedicated source of expertise and research focus at the University of Manitoba's St. Paul's College: the Arthur Mauro Centre for Peace and Conflict Studies. It was established with an initial emphasis on the cultural, religious, and philosophical dimensions of peace; social, economic, and environmental justice; peace education; human rights; and the role of international organizations and standards in the quest for peace and justice. In addition, expertise in several faculties such as Arts, Education, Law and Social Work further enhance the uniqueness of research and education programs through integrated approaches.

With the approval of a new joint master's program in peace and conflict studies, Manitoba will have a full suite of academic programming spanning undergraduate to doctoral studies. This unique concentration of studies, combined with support provided through a partnership between Winnipeg's universities and Rotary International, positions Winnipeg to be a globally recognized centre in this area.

d. Innovations in Public and Population Health: Our expertise in the areas of public health and infectious disease research is well-established and globally competitive. The excellence of the program has been built through strategic investments in people and infrastructure over 30 years and by developing a strong partnership with the Public Health Agency of Canada's National Microbiology Lab.

Our expertise in public and population health cuts across both of our campuses and can be found in a wide range of faculties. Some of our work in this area is focused on how diverse characteristics of individuals, communities, and large populations contribute to the local and global distribution of communicable and non-communicable diseases. For instance, the University has established the Centre for Global Public Health, which is focused on the improvement of public health systems, programs and activities in diverse global settings. In addition, the University is an identified leader in the area of Aboriginal health research,

and supports the CFI-funded Manitoba First Nations Centre for Aboriginal Health Research, which plays a national leadership role in this field.

University health researchers have pioneered the use of health information databases to identify population and social determinants of health and to recommend health policy changes and directions. The University's Manitoba Centre for Health Policy is an internationally recognized centre of excellence in this field.

e. New Materials and Technologies: Naturally occurring and processed materials are required to build infrastructure, houses, and communication, medical and transportation devices. To do so, there is a need to understand the structure of materials and to develop efficient processing techniques for new materials. Efficient exploration of earth materials and an understanding of manufacturing processes using composite materials are also necessary. Finally, understanding the structure and function of proteins offers enormous market potential and infinite applications, from personalized medical diagnosis to solving crop diseases.

The University's strength in this area is diverse and cross-disciplinary, encompassing work in the fields of science, engineering, architecture, environment, textile science and medicine. This effort is supported by an extensive inventory of instrumentation associated with several unique facilities, including the Manitoba Regional Materials and Surface Characterization Facility, the Manitoba Centre for Proteomics and Systems Biology, the Composite Innovation Centre, the Nanosystems Fabrication Laboratory and the W.R. McQuade Structural Engineering Laboratory, several of which serve as regional or national facilities.

f. Culture and Creativity: The cultivation of creativity permeates the work of the university. It is found in the limitless range of questions being explored through research, in all disciplines. It is similarly demonstrated by the importance ascribed to innovation, technology commercialization and entrepreneurship in the way we think about how our work can contribute to the social, cultural and economic growth of our province.

It also forms the basis of an emphasis on art and music, which have long been core features of our offerings. The importance of their continued prominence is demonstrated by a number of projects that are either underway, or planned.

The centerpiece of Project Domino, the University's major infrastructure redevelopment effort, is the rebirth of Taché Hall as the new home of the Marcel A. Desautels Faculty of Music and the School of Art. The University is the first in western Canada to offer a Bachelor's degree in Jazz Studies. Our Centre for Creative Writing and Oral Culture is the first of its kind in the country. Senate has approved the introduction of a Master of Fine Arts degree.

More than strictly being a particular focus for scholars or researchers, performance and creative works are key elements in creating vibrant communities and in contributing to cultural strength and diversity, both nationally and internationally.

The University of Manitoba will be nationally and internationally recognized for its teaching, research and creative excellence, sought after by students and faculty alike as their preferred site for study.

II. Outstanding Student Experience

The rich academic opportunities provided to students are the foundation upon which their university experience is built. The pursuit of knowledge that forms the basis of the university's mission must be sharply focused on the needs of students.

That said, the student experience needs to transcend a rigorous focus on a particular discipline. Much of the learning that takes place at university does not occur in its classrooms, but in the many other opportunities offered for creative debate, exposure to a multiplicity of viewpoints, involvement in campus associations and activities and interactions with other members of the university community.

As a two-campus university with less-than-obvious physical linkages to the broader community, the University of Manitoba must consider how to overcome the challenge of its geography and develop stronger interconnections between its campuses and with the community at large. Although the University of Manitoba is located in Winnipeg, Manitobans from outside Winnipeg should have a sense of the University being there to serve their needs as well. The University's focus on specific priorities for its academic and research programs should carry through to its recruitment processes, to target those students with a particular interest in pursuing these fields.

In our efforts to enrich the student experience at the University of Manitoba, we will focus on: an enrolment management plan; a quality service orientation in all our interactions with students; greater opportunity for undergraduate students to participate in research programs; and engagement in the Bologna process in concert with providing international opportunities for our own students and focused international student recruitment. Work has already begun on an international strategy for the University of Manitoba which will provide a focal point for these efforts.

The University of Manitoba will be a student-focused research university from the time of recruitment: a life-long academic home where students contribute to a diversity of ideas and experiences.

III. Aboriginal Achievement

Manitoba has a large and growing Aboriginal population. According to the Manitoba Bureau of Statistics, the Aboriginal population of Manitoba was estimated to comprise 14.8% of the population in 2004. By 2026, it is projected that the Aboriginal community will form 18.9% of the total population of Manitoba and will be an even greater proportion of the Manitoba population under age 40 than it is today.

In Manitoba, the percentage of Aboriginal people without a high school diploma is considerably greater than that of the general population: only 44% of Aboriginal Manitobans have graduated from high school, compared with 64% of the non-Aboriginal population. University degrees have been attained by 4% of Aboriginal people as compared with 14.1% of the non-Aboriginal population.

Increased educational success of Aboriginal people is critical to the social, cultural and economic development of Manitoba and of Canada. We are well placed to build on a longstanding focus on working with and serving this particular student community here at the University of Manitoba. While the many efforts in the past have had some wonderful results, there is more to be accomplished

Specifically, while the rate at which Aboriginal graduates of secondary school go on to university is good, the rate at which such students complete secondary school is unacceptably low. We need to work with others to increase this rate. We believe we can play a positive role in work to ensure students succeed in the middle school and secondary school environments. Similarly, the rate at which Aboriginal students who come to the University actually complete their academic programs needs to be increased. And we need to make it attractive for Aboriginal students to participate successfully in the full range of programs available here.

We will make it a priority to identify correctly the impediments to participation and success, to develop measures to address these impediments, and to assign resources to put these measures into action. We acknowledge that there is no universal approach and that our efforts need to take into account a diverse

range of factors, such as the differing challenges faced by rural, remote and urban communities. We cannot work in isolation: we believe it is critical to work in collaboration with a variety of partners, including Aboriginal leadership and communities, the provincial government, secondary schools, community agencies, and other post-secondary institutions, to ensure that we are correctly identifying what they believe is needed from us.

The University of Manitoba will work with a variety of partners to make Winnipeg the national centre of excellence in Aboriginal education, and in particular to allow Aboriginal students to be prepared for and to achieve educational success in the full range of academic programs that we provide.

IV. Outstanding Employer

The university work environment is unlike any other. It offers a huge range of activity, all linked in the pursuit of a common purpose. All those who work in the university are contributing to its threefold mission of teaching, research and public service. The pursuit of this mission is a vocation for some, presenting the university with the opportunity to attract bright and engaged faculty and staff simply by virtue of what it represents.

Our continued vitality depends on recruiting, retaining and developing committed and engaged faculty and staff. We will make this a priority consideration throughout the University. We want people who work here to be successful, and to have opportunities to develop their capacity and their careers. We want people to enjoy coming to work, and to have fun when they are here. We want people to have competitive compensation and benefits. We want collegial decision-making to be vital and engaged. We will celebrate achievements. We will promote open and respectful communication. We also want to ensure that the people who work at the University of Manitoba have the right tools at their disposal.

Transforming *how* we do things – to ensure we are doing them as effectively and efficiently as possible, so we are not hindered in our efforts to do our jobs – must be an ongoing consideration for us in our efforts to be an outstanding employer.

The University of Manitoba will be an employer of first choice, offering and expecting respect for all staff and faculty, providing opportunities for leadership, growth and development, and recognizing the contributions made at all levels of the organization.

6. How will we know how well we're doing?

Just as this is a planning framework – a high-level tool to be used by members across the university to sharpen their focus and help assess what they're doing and how it connects to our core institutional priorities – we need a measurement framework as well.

We have said that units can and should innovate in how they contribute to the University's strategic priorities. Where their activity links to these priorities, it will also be critical for units to share information about what they are doing, and how it is working. As a result, units will connect their internal planning efforts to the strategic planning framework and resource allocation requests and identify their progress in meeting strategic priorities in their annual reports.

To understand the impact of all of these activities and to see if we are making a difference, it will be useful to identify some observations that we could make that would indicate to us – and to others – whether we are making progress. The observations should be few in number and easy to understand. Sometimes organizations talk about a “dashboard” of indicators; these are like the dashboard in a car: only some of the

relevant information is presented, but it's enough to know if progress is being made. More detailed information can be examined for other purposes.

One observation used by many organizations is the Net Promoter Score (NPS). This is formed by asking the question, "To what extent would you recommend us to others?" The answers are on a 10 point scale; answers from 1 to 6 are considered detractors, 7 and 8 neutral with 9 and 10 promoters. The Net Promoter Score is the number of promoters (those who answered 9 or 10) minus the number of detractors (those who answered 1 through 6). This question can be used with those to whom services are provided – students, for us (would you recommend that someone come to the University of Manitoba as a student?) – or with employees (would you recommend us as an employer?).

Here are some possible observations for the major themes identified above, with some observations applying to broader aspects of the University's work than simply the focus areas themselves:

Theme	Observation	Target in 5 years*	Annual Objective
Academic Enhancement	Research funding	Top 10 in Canada	Increase of \$10M
	Community NPS	70%	Increase toward target
	Self-assessment NPS	80%	Increase toward target
	Some measure of academic success	?	?
Student Experience	NPS	80%	Increase toward target
Aboriginal Achievement	% of cohort at UM	Halve gap to equality with others	Increase toward target
	% completing programs	Halve gap to equality with others	Increase toward target
	Distribution by program	Halve gap to similarity to others	Increase toward target
Outstanding employer	Employee NPS	80%	Increase toward target

Setting targets for the Aboriginal Achievement observations is very difficult; a significantly large change in a complicated set of causes and outcomes should occur, but it may be difficult or impossible to produce observable changes quickly. The long range targets should be equality of participation (entry, graduation, access to the range of programs) with non-Aboriginal students, but the targets to be achieved in 5 years should perhaps be more modest.

7. What happens next?

This planning framework is being produced in a period of economic downturn and uncertainty. But, while we do not know what the medium to long term will be, we do know that in the short term – certainly for the next few years – funding will be less than we have been accustomed to, and budgeting will require larger adjustments to bring activities and costs into alignment with priorities than has been the case in the recent past. This gives us an exciting opportunity – an unavoidable opportunity – to think differently about the configuration of our work and imposes on us the responsibility to do so.

These steps will be taken in the next weeks and months:

1. Endorsement of this document for planning purposes is being sought, both by Senate and by the Board of Governors.
2. While the observations suggested in section 6 above represent the beginnings of a self-assessment framework and can be helpful in getting a rough sense of how we are doing on the major themes, further work will be done to establish a series of indicators that can help us understand how our

story is progressing, including a meaningful measure of academic success. In addition, more detailed observations will be needed in many units and for many individuals in leadership roles. These will need to be worked out and approved as part of existing planning processes. Faculties, departments and units may devote some attention to considering how they already connect to the broad areas of priority articulated in this framework.

3. Work will be continue on formulating ideas that are consistent with this framework and that respond to the expected funding pressures of the next few budget cycles. We will seek out members of the university community who are interested in playing a role in this process, and involve them. Ultimately, ideas will be discussed in units and worked into unit plans and central plans as appropriate.
4. We will seek out external partners to work with us on some of these major themes. For example, the Aboriginal Achievement theme will require funding partners and new working relationships. We expect to announce a potential funding partnership in this area shortly.
5. Work will be done to evaluate the infrastructure, tools and processes that support institutional growth and change, including our information technology needs, physical infrastructure and administrative support processes, and consider the most effective ways for us to operate.
6. We will enhance our efforts to speak directly to the community outside of the University of Manitoba to communicate our advantages, to solicit their views on what they feel should be important for the university, and to seek active participation in the wide range of ongoing work that is connected to addressing priorities for Manitobans.
7. Open and effective communication will be needed in order to make significant progress in meeting our objectives. We will continue to engage with the university community as we move forward.

The University of Manitoba is a very large and very significant contributor to the social, cultural and economic development of the province and of the nation. The current circumstances present us with opportunities to do important work in all three of these areas because there is significant need in them for the teaching, research and public service to which we have committed ourselves. The next few years can be exciting and fulfilling for all of us if we are willing to seize these opportunities.