Senate
Senate Chamber
Room 245 Engineering Building
WEDNESDAY, June 28, 2000
1:30 p.m.

## AGENDA

I MATTERS TO BE COASIDERED IN CLOSED SESSION
II MATTERS RECOMMENDED FOR CONCURRENCE WITHOUT DEBATE

1. Report of the Senate Committee on Awards Page 17
2. Report of the Senate Committee on Curriculum and Course Changes

Page 25
3. Report of the Faculty Council of Graduate Studies on Course Proposals, Modifications, Deletions Page 36

III MATTERS FORWARDED FOR INFORMATION

1. Senate Membership 2000-2001 Page 40
2. Statement of Intent:

Minor in Catholic Studies
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IV REPORT OF THE PRESIDENT

1. President's Report 16 June 2000

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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 BZAE MINUTES
OF THE MEETING OF MAY 10,2000
VII BUSINESS ARISING FROM THE MINUTES
VIII ELECTION OF SENATE REPRESENTATIVES
TO THE BOARD OF GOVERNORS AND TO THE SENATE EXECUTIVE COMMITTEE

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

1. Report of the Senate Executive Committee

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2. Report of the Senate

Planning and Priorities Committee
The Chair will make an oral report on the Committee's activities.
$X$ REPORTS OF OTHER COMMITTEES OF SENATE, FACULTY AND SCHOOL COUNCILS

1. Report of the Faculty

Council of Dentistry on the
Proposal to Re-Instate the Department of Preventive Dental Sciences Page 67
a) Report of the Senate
Planning and Priorities Committee
Page 73
2. Report of the Faculty

Council of Graduate Studies
on the Proposal to Convert the Diplomas
in Oral and Maxillofacial Surgery and
Periodontics to Master's Degrees in Oral and Maxillofacial Surgery and Periodontics

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a) Report of the Senate Planning and Priorities Committee Page 108
3. Report of the Faculty

Council of Graduate Studies
on the Proposal for a
Master's Program in Music
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$\begin{array}{ll}\text { a) Report of the Senate } & \\ \text { Planning and Priorities Committee } & \text { Page } 160\end{array}$
4. Report of the Faculty

Council of Graduate Studies
on the Proposal for a Ph.D. in
Natural Resources and Environmental Management Page 162
a) Report of the Senate

Planning and Priorities Committee
5. Report of the Faculty

Council of Architecture on the Third Year: Environmental Design
a) Report of the Senate Committee on Curriculum and Course Changes Page 209
b) Report of the Senate Planning and Priorities Committee Page 213
6. Report of the Senate

Committee on Rules and Procedures with Respect to Senate Elections

Page 214
7. Report of the Senate

Committee on Approved Teaching Centres
Hand-out
This report will be available at the meeting.
8. Report of the Senate

Committee on Nominations
Hand-out
This report will be available at the meeting.
XI ADDITIONAL BUSINESS
XII ADJOURNMENT
/sgp

TIE UNIVERSITY OF MANITOBA
ENROLMENT SERVICES
Winnipeg, Manitoba
Financial Aid \& Awards
Cannular R.3T 2N2
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May 11, 2000

## 17

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## REPORT OF THE SENATE COMMITTEE ON AWARDS

## PREAMBLE

1. The Senate Committee on Awards last reported to Senate on April 12, 2000. The Committee convened again on May 8, 2000.
2. The terms of reference for the Senate Committee on Awards are found in the Senate Handbook on pages 10.11 and 10.12 .

## OBSERVATION

1. The Committee reviewed six offers of new awards. All six new offers are being forwarded to Senate for approval. The Committee also reviewed nine amendments and all nine amendments are being forwarded to Senate for approval. Finally, the Committee noted one withdrawal.

## RECOMMENDATION

That the six new offers, nine amendments and one withdrawal be approved as submitted by the Senate Committee on Awards.

Respectfully submitted,

K. Vessey, Chair

Senate Committee on Awards
KV/em

## Comments of the Executive Committee:

The Executive Committee endorses the report to Senate.

## OFFERS

## SPORTS PHYSIOTHERAPY CENTRE BOOK PRIZE

The Sports Physiotherapy Centre of the Pan Am Sports Medical Centre offers an annual prize valued at $\$ 200$ to a student in the School of Medical Rehabilitation at the University of Manitoba who has made outstanding contributions to the field of sports physiotherapy. The prize, in the form of either a book gift certificate or a cash award, shall be offered by the donor directly to the prize recipient at the School of Medical Rehabilitation Awards Ceremony associated with convocation. The prize shall be offered to the third year physiotherapy student (who is eligible for graduation) with the highest weighted score as calculated using the following formula:
(HRS/200 $\times 50 \%$ ) $+($ GRADE $14.5 \times 50 \%)=$ weighted score.
HRS represents the total number of registered volunteer hours for sport physiotherapy accumulated over the three year program prior to April 1 of the graduating year and logged with Sports Physiotherapy Canada, Manitoba Division.

GRADE represents the final grade in the Sports Directed Studies Module (currently numbered 67.371 , Unit ii).

The selection committee shall be the Awards Committee of the School of Medical Rehabilitation.

## ROBERT J. PARKER GRADUATE FELLOWSHIP IN SWINE SCIENCE

In honour of Dr. Robert (Bob) J. Parker, a beloved administrator, professor and mentor, a fund has been established by his former students, his colleagues and his friends on the occasion of his retirement from the Faculty of Agricultural and Food Sciences on October 31, 1997. The purpose of the fund is to provide a renewable graduate fellowship to an M.Sc. or a Ph.D. student in the Department of Animal Science who is conducting graduate research in the area of swine science.

Bob Parker was born and raised on a small farm in Scotland. He graduated from the University of Glasgow with a Bachelor of Science in 1958 and continued his studies at Reading, where he obtained a post-graduate diploma in 1959. As a youngster, Bob bred bantam chickens but his later academic interests took him in the direction of livestock genetics and breeding. In 1959, Bob came to Manitoba to work as a Research Assistant and soon moved to the Ontario Agricultural College in Guelph to continue his studies. He went on to obtain an M.Sc. from the University of Toronto in 1962 and a Ph.D. from Michigan State University in 1966. Following graduation from Michigan State University, Dr. Parker was appointed Assistant Professor at the University of

Manitoba, in the Department of Animal Science. He was promoted to full Professor within ten years and went on to serve as Associate Head of the Department of Animal Science, later as Associate Dean (Research) of the Faculty and, from 1991 to 1996, as Head of Animal Science. He also served as Director of the Glenlea Research Station from 1986 to 1997. He led the Curriculum Task Force in the Faculty in developing and implementing a new curriculum for the Faculty in 1995.

Dr. Parker is being honoured for the administrative contributions that he made to the Faculty of Agricultural and Food Sciences, for his excellence in research (swine genetics and breeding), his giftedness in teaching and his great respect for and encouragement of students, both at the graduate and undergraduate levels. He was a true professor who always had or made time for this students, who challenged them and taught them to appreciate the subject matter which they were learning. He was exceptionally skilled as a graduate advisor, always encouraging, praising and guiding students in a manner that allowed them to excel.

Effective for first offer in the academic session 2000-2001, a graduate fellowship valued at the available annual income from the fund shall be offered to a student who has filed an application for this Fellowship in the Department of Animal Science and who meets the following criteria:
(1) has been accepted to and has enrolled full-time in the Faculty of Graduate Studies in the Department of Animal Science, either at the M.Sc. or Ph.D. level;
(2) is conducting or has proposed to conduct research in the area of swine science;
(3) has been deemed by the selection committee to show great promise in the field of swine science.

If, in the judgement of the selection committee, no candidate of sufficient merit is found, the award may not be offered in that year.

The recipient of the fellowship is eligible for a renewal of this award. An M.Sc. student can hold the award for a total of two consecutive years and a Ph.D. student may hold the award for a total of three consecutive years. In the years in which the award is being renewed for a previous winner, no new winner will be selected. In order to be eligible for the renewal of the award, the recipient must have demonstrated satisfactory progress in the program through the formal progress report submitted to the Faculty of Graduate Studies.

The selection committee shall be the Awards Committee of the Department of Animal Science, which shall consult with the Dean of the Faculty of Graduate Studies (or the Dean's delegate) on recipient and renewal decisions.

## ASH TEMPLELTD. PRIZE

The Department of Pediatric Dentistry at the University of Manitoba offers an annual prize in honour of a contribution made to the Department by Ash Temple Ltd. The prize is a plaque which is offered to a student who:
(1) has completed all of the requirements for the Bachelor of Science in Dentistry degree;
(2) has achieved high academic standing in the courses Pediatric Dentistry (currently numbered 103.305 and 103.405), with a minimum grade of a $\mathrm{B}+$ in each course;
(3) demonstrates a high level of respect for, care and management of Pediatric Dentistry outreach program patients;
(4) has the potential and, where possible, indicates an interest in Public Health Dentistry for Children or Graduate Pediatric Dentistry studies.

The selection committee shall be the Awards Committee of the Faculty of Dentistry.

## AMAZIS LOUKA AWARD IN OPERATIVE DENTISTRY

Dr. Amazis Louka, a member of the Department of Restorative Dentistry since 1974, who has taught primarily in the area of Operative Dentistry, wishes to commemorate the occasion of completing 25 years with the Faculty of Dentistry by establishing a student award in this field.

Annually, an award of $\$ 200$ will be offered to the student who:
(1) is enrolled in the second year of study in the Faculty of Dentistry at the University of Manitoba;
(2) has submitted the top essay in a competition on a topic related to the concepts of bonding to tooth structure.

Each year, guidelines for the writing of the essay and the topic (which will vary from year to year, but will always be related to bonding to tooth structure) will be provided to all students in the second year of the program in Dentistry. This competition is organized as an exercise separate to course requirements in Operative Dentistry, and is thus voluntary. The top essay shall be selected by the selection committee.

The selection committee shall be named by the Chair of the Scholarship Committee in Dentistry and it shall include the donor, the Course Coordinator for the course Operative Dentistry (currently numbered 102.205), and the Section Head of Operative Dentistry. Any of these individual may name a delegate to the committee in their
absence.

## MANITOBA CANOLA GROWERS' ASSOCIATION AWARD

In order to reduce financial burdens, as well as to recognize and encourage the continued academic achievement of students within the Faculty of Agricultural and Food Sciences, the Manitoba Canola Growers' Association has established an endowment fund at the University of Manitoba, with a contribution from the Manitoba Scholarship and Bursary Initiative. The fund will support a bursary for a student in the Faculty of Agricultural and Food Sciences. The first bursary will be offered in the fall of 2000 and it shall be valued at $\$ 1000$ in its first year. In subsequent years, the bursary will be valued at the available annual income from the fund.

The Manitoba Canola Growers Association was originally established as the Manitoba Rapeseed Growers Association in 1970. In 1983, the organization was incorporated as the Manitoba Canola Growers Association (MCGA). The MCGA is a non-profit organization comprised of producers who share the goal to develop and promote the production and marketing of Manitoba-grown canola. The MCGA works to represent the interests of Manitoba canola growers in matters relating to canola research, development, and extension. Through the establishment of this bursary, the MCGA hopes to ensure that the next generation continues on with the important work being carried out in the canola industry.

This bursary shall be offered to a student who:
(1) is enrolled full-time in the third or fourth year of study toward a Bachelor degree in the Faculty of Agricultural and Food Sciences;
(2) has achieved a minimum cumulative grade point average of 3.0 ;
(3) has demonstrated involvement in extra-curricular activities via a brief, onepage letter outlining the extent of this involvement;
(4) has demonstrated financial need on the standard University of Manitoba bursary application form.

Applicants will be required to submit their letter along with the completed bursary application form on or before the designated deadline date.

The selection committee shall be named by the Dean of the Faculty of Agricultural and Food Sciences.

## ERNEST FISCHER BURSARY IN ENGINEERING

Mr. Ernest A. Fischer has established a fund at the University of Manitoba to provide financial support to students in the Faculty of Engineering. Mr. Fischer graduated from
the Faculty of Engineering at the University in 1950 and secured employment with Underwood \& McLellan for the installation of a water and sewage system in Flin Flon, Manitoba. He was later commissioned as a Saskatchewan land surveyor, first employed by Underwood \& McLellan and later by Saskatchewan Power. He worked on surveying an extensive system of transmission lines for natural gas. Mr. Fischer went on to work for British Columbia Hydro from 1965 to 1984 and was involved in laying out proposals for major electrical $T$ lines and major electrical substation sites.

This fund shall provide bursaries, the number and value of which shall be determined by the selection committee, which will be offered to students who:
(1) are enrolled full-time in the second or third year of a program in the Faculty of Engineering at the University of Manitoba;
(2) have achieved a minimum cumulative grade point average of 2.5;
(3) have demonstrated financial need on the standard University of Manitoba bursary application form.

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

## AMENDMENTS

## DONALD PARKER REID BURSARY IN MEDICINE

The terms of reference for this award are to be amended. Rather than supporting one bursary, the available annual income from the fund shall be used to support a number of bursaries, the number and value of which shall be determined by the selection committee in the Faculty of Medicine.

## FACULTY OF LAW ENTRANCE SCHOLARSHIPS

The Faculty of Law is amending its entrance scholarship offerings. Previously, the Faculty offered 10 scholarships at \$1,000 each. Starting in the 2000-2001 academic session, the Faculty will offer two entrance scholarships, each to be valued at $\$ 5,000$.

## DR. W. WALKER SHORTILL PRACTICE MANAGEMENT MEMORIAL PRIZE

The terms of reference for this award are to be amended to state that the award will now be valued at the available annual income, rather than at $\$ 500$.

## JAMES ARTHUR PAYNE AND VERA C. PAYNE SCHOLARSHIP

The terms of reference for this scholarship are to be amended to allow for three scholarships to be offered instead of two. The available annual income shall be split equally between these three awards. Previously, each of the two scholarship had a set value of $\$ 1000$ each.

## CSCE DEPARTMENT OF CIVIL AND GEOLOGICAL ENGINEERING THESIS COMPETITION PRIZE

The terms of reference for this CSCE (Canadian Society for Civil Engineers) award are to be amended in a number of ways. Firstly, the name of the award is to be changed in order to more accurately depict the current administration of and purpose for this award. It shall now be called the CSCE (Manitoba Chapter) Graduation Project Presentation Award. Secondly, the terms will clarify that the award is provided by the Manitoba Student Chapter of the CSCE and that is supported financially by this group. Furthermore, the selection criterion pertaining to the relevance and importance of the research topic and the quality of the oral thesis defence presentation shall be removed from the terms and replaced with the criterion that the winner of the award must be the presenter whose presentation ranked as one of the top three presentations in the graduation project competition. Also, the selection committee shall now include the Chair of the CSCE Manitoba Chapter and shall include four professional engineers representing a cross-section of the various civil engineering sub-disciplines. The students who advance to the CSCE Graduation Project Presentation Competition will be chosen by the Department Undergraduate Committee. Normally, the Undergraduate Committee will recommend five presentations for the competition based on the oral presentation evaluation forms.

## MANITOBA DENTAL HYGIENISTS ASSOCIATION AWARD

The terms of reference for this award are to be amended. Firstly, the award will now be offered to a student with high academic standing (minimum cumulative grade point average of 3.5 ) who best recognizes and manages a client's pain and anxiety by selecting appropriate pain interventions. Secondly, the selection committee for the award shall be named by the coordinator of the course Pain Management (currently numbered 70.238) and shall include other instructors of this course. The award remains valued at $\$ 100$.

## M. CHARLES COHEN PRIZE

The terms of reference for this prize are to be amended. Firstly, the award will now be offered to Film Studies or Theater Studies students who have written the most outstanding original stage or screenplay of the year at the University of Manitoba. Secondly, the prize will now be offered through a competition, in that interested students will be required to submit their piece on or before the designated date to either the Coordinator of the Film Studies program or the Coordinator of the Theater Studies
program at the University. Finally, the selection committee will now be named by the Coordinator of the Theater Studies program and shall include both the Coordinator of the Film Studies program and a member of the faculty in the Department of English who specializes in the area of creative writing.

## FACULTY OF AGRICULTURAL AND FOOD SCIENCES ENDOWMENT BURSARIES.

The terms of reference for these bursaries are to be amended. Currently, the terms state that a bursary of $\$ 500$ shall be offered to a student at each of the following levels:

1) first year in the diploma program;
2) in University 1, enrolled in 65.150, and intending to enter the Faculty of Agricultural and Food Sciences at the University of Manitoba;
3) second year in degree program;
4) third year in the degree program.

Starting in the fall of 2000, two bursaries of $\$ 500$ each (rather than one) shall be offered at each of the above outined levels (i.e., eight bursaries in total).

## MEXICO STUDY TERM BURSARY

The terms of reference for this bursary program are to be amended to state that the bursaries shall be valued at between $\$ 500$ and $\$ 2500$, rather than the pervious range of $\$ 500$ to $\$ 1000$.

## WITHDRAWAL

## CANADIAN BACK INSTITUTE SCHOLARSHIP

As requested by the donors of this award, it is to be withdrawn.

May 15, 2000

## Report of the Senate Committee on Curriculum and Course Changes - Submitted to Senate for Concurrence Without Debate

## Preamble

The Senate Committee on Curriculum and Course Changes (SCCCC) met on the above date to consider a curriculum change in the Faculty of Human Ecology, three proposals from the Continuing Education Division, and revisions to the course change form.

## Observations

## 1. Faculty of Human Ecology

## Child Studies Concentration

At present, the set of outside electives for all students in the Child Studies Concentration is configured as four groupings, from each of which students must select one course. These groupings were intended to encourage breadth in the selection of electives available to the Faculty.

However, due to curriculum changes taking place outside the Faculty (e.g. courses being deleted and not replaced), some groupings are or soon will be comprised entirely of courses which are no longer available. Accordingly, the Faculty is proposing that the four groupings be consolidated into a single list from which students will select any four courses.

## 2. Course Change Form

The Committee has made a number of revisions to its course change form, in an effort to streamline its activities and to decrease the amount of paperwork required.

The substantive change is the addition of a Part $E$, which pertains to courses that are being deleted, renumbered or placed into the "Not Currently Offered" category. The intent is that, when a number of courses are being deleted or renumbered, it will no longer be necessary to complete a separate form for each course. Instead, all the courses being deleted, or renumbered, or placed into "Not Currently Offered", can simply be listed under Part $E$, thereby significantly reducing the amount of paper the Committee must review each year.

## 3. Continuing Education Division

On December 13, 1989, Senate approved the following addition to the terms of reference of the SCCCC: To recommend to Senate on the introduction, modification or abolition of Advanced Certificate Programs and to approve, on behalf of Senate, similar actions with regard to Certificate Programs.

## Certificate in Applied Management: Organizational Effectiveness

The Certificate in Applied Management, which was approved by Senate in 1996, was developed to provide professional development opportunities for those working and/or
interested in management positions in specialized markets. It currently offers specialization in six areas, with each specialization being made up of six courses - three core courses and three unique to the specialization.

The Continuing Education Division is now proposing a new specialization in Organizational Effectiveness. It was developed in partnership with the Manitoba Quality Network (Q Net).

The core courses of the certificate program provide students with basic management concepts. The specialization courses, which are comprised of specialized seminars offered through Q Net and their partners, will provide more specific training in improving organizational effectiveness. The seminars, which are roughly analogous to the University's special topics courses, will vary each year to reflect current market conditions and trends.

The seminars vary in length from 1 to 4 days, with each day equating to 7.5 hours of instruction. Students are required to complete at least 108 hours of seminar instruction in order to achieve the specialization requirements.

The Senate Committee on Curriculum and Course Changes approved the specialization in Organizational Effectiveness, which in the Spring 2000 series was comprised of the following:

## Measuring and Managing Customer Satisfaction and Loyalty - 2 days

A two-day course designed to present and illustrate the use of tools for effective measurement and management of customer satisfaction and loyalty - information valuable to the success of any organization.

## Emotional Intelligence: Developing the High Performing Organization - 1 day

This one-day program allows you to access a data-driven business case for assessing and developing emotional intelligence to improve performance in the workplace. Research shows that emotional intelligence is twice as important as IQ and technical abilities combined in determining who will be a star. Emotional intelligence distinguishes which organizations will outperform the competition, due in part to higher retention rates, increased sales and improved culture. You will also learn practical tools that will improve your own emotional intelligence and allow you to live a more deliberate life.

## Process Mapping: A Foundation for Improvement - $11 / 2$ davs

This workshop will help you understand when and how to use process mapping. Through exercises, you will practise this very simple yet powerful process improvement tool. You will learn how this tool can be used to engage individuals and encourage teamwork to derive bottom-line benefit.

## Re-Thinking Leadership: Today's Concepts for Tomorrow's Solutions - 1 day

The role of leaders is becoming increasingly important in today's society where organizations are continually adapting at the speed of change. Leaders must facilitate a
shared vision, communicate openly throughout the organization, inspire people through trust and a sense of creative urgency, and let people work without unnecessary interference. Increasingly, individuals at all levels in an organization in non-leadership roles are exercising leadership.

Those in leadership roles should understand how to create and sustain a positive. leadership environment, one that encourages and supports leaders throughout the organization. An autocratic style of leadership does not work well in most organizations anymore.

## Knowledge Management: From Assessment to Strategy - 1 day

This workshop provides an interactive process to develop a strategy for introducing knowledge management (KM) practices and technologies. Participants will work through an assessment and consider how the sharing of knowledge could bring improvement to their operations, product development cycle, or customer interactions. The workshop includes KM strategy development, successful KM practices, and technology demonstrations.

## Teams and Teambuilding - 2 days

Steering an organization's course in today's complex and rapidly changing business environment requires effective teamwork. Teams are one of the most important structures available to mobilize the organization to maximum effectiveness. Teambuilding is a process in which a team builds its awareness of the key factors that influence team performance, examines its own functioning with respect to those factors, and takes action to improve its effectiveness. It improves a team's ability to establish common goals, make decisions, communicate, resolve differences, and solve problems.

## Strategic Planning and Quality-11/2 days

This program deals with the fundamentals of strategic planning, with a particular emphasis on those elements of leadership and planning that are outlined in the Canadian Quality Criteria (Manitoba Quality Awards and Canada Awards for Excellence).

## Train the Trainer-2 days

Part I: Applying Continuous Improvement to Adult Learning. Given the resource material, a participant will learn 10 principles of adult learning and discuss ways to apply them to their new or existing training programs.

Part II: Planning and Designing Training. Given the resource material, a participant will be able to conduct a needs assessment, write a behavioural objective, develop a lesson plan, and create a results-based evaluation form.

## Quality Improvement Using Statistical Methods I and II-4 days

Quality improvement cannot be achieved when actions are based solely on perception - we need to study the process and get facts. Hard evidence provided by data and extracted by statistical analysis can point us in the direction of continuous quality improvement.

## Certificate in Applied Management: Retail Management (MLCC)

The Continuing Education Division is proposing another new specialization in its Certificate in Applied Management (CAM). The specialization in Retail Management was developed in partnership with the Manitoba Liquor Control Commission (MLCC), which is interested in introducing this model to its store managers and prospective store managers.

This specialization is designed to be offered to staff of the MLCC who are or will be in a supervisory position within the liquor store environment. Many of the current managers have been promoted through the ranks of the store with limited management training. MLCC management wants these in-store managers (and prospective managers) to develop more formalized management training. They also want their in-store managers to be exposed to other Continuing Education Division management students to learn how management is approached in other organizations. Finally, the program of study is to reflect some of the in-house training these managers receive through their employer.

In addition to the three core CAM courses, the specialization in Retail Management will consist of three specialization courses of 36 contact hours.

The specialization courses are as follows:

- 36 hours from Introduction to Marketing
- 36 hours from Managerial Communication
- 36 hours from approved courses offered or approved by the MLCC Training Department.

The courses in Introduction to Marketing and Managerial Communication already exist; they are offered through the Management, Community and Professional Programs area of the Continuing Education Division.

The Senate Committee on Curriculum and Course Changes approved the specialization in Retail Management, together with the introduction of the following course:

## Selected Topics in Retail Management (MLCC) - 36 contact hours

Credit in this course will be granted on the basis of a Standing Agreement with the Manitoba Liquor Control Commission. This co-sponsor offers and/or sponsors in-house staff development programs. Registrants in this course must be an employee of the Manitoba Liquor Control Commission, and must successfully complete specified, approved components of the MLCC's in-house staff development program in order to qualify for credit in this course.

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## Certificate in Apparel Design ! and II

The Continuing Education Division is proposing that the contact hours be increased in a number of courses in the Certificate in Apparel Design I and II. These changes are based on instructors' experiences over the past few years and on students' comments on the need to add additional time.

The Senate Committee on Curriculum and Course Changes approved the following course changes:

Courses to be deleted:
Apparel Design I, Pattern Design 46002: 35 contact hours
Apparel Design I, Textiles 46003: 20 contact hours
Apparel Design I, Advanced Pattern and Construction: 25 contact hours
Apparel Design il, Tailoring Women's and Men's Wear 46006: 25 contact hours
Courses to be introduced:

## Apparel Design 1, Pattern Design AB. $X X X-36$ contact hours

Drafting basic blocks in women's wear; designing with basic darts; designing skirts, bodices and dresses; and developing sample designs are the techniques you will develop in this course. 14 sessions 36 hours.

## Apparel Design 1, Textiles AB. $X X Y$ - 24 contact hours

Topics include textile terminology, characteristics and uses of fibres, types of yarns, fabric construction and fabric finishes. 8 sessions 24 hours.

## Apparel Design 1. Advanced Pattern and Construction $A B, X X Z-25$ contact hours

You will develop skills to be able to draft women's wear and children's wear; develop and construct sample designs; and grade patterns. Pre-requisite: Pattern Design AB. $X X X .10$ sessions 25 hours.

## Apparel Design II, Tailoring Women's and Men's Wear $A B . X Y X-27.5$ contact hours

Techniques required for making a tailored garment will be demonstrated. Topics include selection of fabrics; layouts and cutting; marking techniques; stitching, pressing and shaping; pad stitching; design details; buttonholes, collars and sleeves; and hems and linings. Pre-requisite: Tailored and Draped Apparel Design. 11 sessions 27.5 hours.

## Recommendations

1. The Senate Committee on Curriculum and Course Changes recommends that Senate approve the following consolidated list of electives for all students in the Child Studies Concentration in the Faculty of Human Ecology:

| 129.180 | Psychology of Learning and Instruction 1 |
| :--- | :--- |
| 043.203 | Psychology of Exceptional Development |
| 043.304 | Introduction to Mental Retardation |
| 043.305 | Children with Learning and Behavioural Problems |
| 043.307 | Language Development in Early Childhood |
| 063.211 | Instrumental Music 1 |
| 063.212 | Children's Literature |
| 063.217 | Art Workshop |
| 057.310 | Design and Assessment of Physical Activities |
| 062.437 | Exceptional Development: Behavioural and Social-Emotional |
| 057.255 | Disorders |
| Growth and Motor Development |  |
| 009.154 | Cross-Cultural Education |
| 009.110 | Introductory Financial Accounting |

2. The Senate Committee on Curriculum and Course Changes recommends that Senate approve the revised undergraduate course change form (see Schedule "A").

Respectfully submitted,

Dean B. L. Dronzek, Chair
Senate Committee on Curriculum and Course Changes

Terms of Reference: Senate Handbook (revised 1992), pp. 70-71.
/sgp

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

## PROPOSAL FOR THE INTRODUCTION, MODIFICATION OR REACTIVATION OF UNDERGRADUATE OR CERTIFICATE COURSES

## A. TO BE COMPLETED FOR ALL COURSES BEING INTRODUCED, MODAFIED OR REACTIVATED.

Faculty: $\qquad$ Department: $\qquad$

## Course Name:

$\qquad$
Format: Department number, course number, course name and credit hours. For certificate (Continuing Education) courses, use contact hours instead of credit hours.

This course is to be:
$\qquad$ Introduced __ Modified ___ Reactivated
To become effective in the $\qquad$ session.

To be included in the 20 $\qquad$ 120 $\qquad$ General Calendar.

Is this course listed as a required course or a formal elective course in any University program?
YES ( ) NO ( )

Existing Calendar/Brochure Entry
(Only for a modified or reactivated course)
(Exactly as it appears in the Calendar or Continuing Education brochure)

## Reasons for Change

If this change leads to changes in programs in your own unit, or in other faculties, provide supporting documentation as noted in the Guidelines.
Frequency of Offering (See Guidelines)

## Signatures

Department
Approval:
Faculty/School
Approval: $\qquad$
Print Name
Signature
FORM APPROVED BY SENATE - JUNE 2000

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# PROPOSAL FOR THE INTRODUCTION, MODIFICATION OR REACTIVATION OF undergraduate or certificate course change 

## B. TO BE COMPLETED FOR COURSES BEING INTRODUCED (See Guidelines)

|  | Suggested | Abbreviated Course Title | Credit |
| :--- | :--- | :--- | :--- |
| Dept. No. | Course No. | (15 characters or less) | Hours |

## C. TO BE COMPLETED FOR COURSES BEING INTRODUCED OR MODIFIED

 Proposed Calendar/Brochure EntryExactly as it will appear in the Calendar or Continuing Education brochure - See Guidelines

## D. TO BE COMPLETED FOR ALLCOURSES INTRODUCED OR MODIFIED AS APPROPRIATE (See Guidelines) Supporting Documentation

The following items are attached to and form part of this proposal:
$\qquad$ Course outline
Format: list lecture, laboratory and tutorial hours per week; provide an outline of topics covered in lectures; and include a brief description of laboratories, tutorials and assignments. Identify required textbook(s) if applicable. Note: No more than one page in length.

Statement from subject librarian(s) as to library resources
Note: The library must be provided with a course outline as described above. As well, the proposing unit and the subject librarian should discuss and agree upon the bibliography to be used in assessing the strength of the library's collection in the field. The library will need at least one month notice of course proposals, and six months notice of program proposals, in order to prepare its statement.

Statement of additional costs, workload, and/or supplies
Statement(s) from other Departments, Faculties or Schools on possible overlap
Statement(s) from other Departments, Faculties or Schools on possible changes in their programs
Revised Program Descriptions for all programs using this course
Additional documentation

## THE UNIVERSITY OF MANITOBA

## PROPOSAL FOR THE DELETION, DEPARTMENTAL RE-NUMBERING OR THE PLACING INTO "NOT CURRENTL. OFFERED" OF UNDERGRADUATE OR CERTIFICATE COURSES

E. TO 日E COMPLETED FOR COURSES BEING DELETED, RENUMBERED OR PLACED INTO "NOT CURRENTLY OFFERED".

Faculty: $\qquad$ Department: $\qquad$

List the courses to be deleted or placed into "Not Currently Offered": (include department number, course number, course name and credit hours). Please indicate when these changes will become effective. (For certificate (Continuing Education Division) courses, use contact hours instead of credit hours.)

List the courses which are being re-numbered, and include reasons for the changes. Please indicate in which edition of the Calendar they will be included.

Use a separate sheet if necessary.

## Signatures

Departmental
Approval:
Faculty/School Approval:
(Print Name) (Signature)

# GUIDELINES FOR COMPLETION OF PROPOSAL FOR UNDERGRADUATE OR CERTIFICATE COURSE CHANGE FORM 

- Part A must be completed for all courses being inlroduced, modified or reactivated.

Part B musi be completed only for courses being introduced.
Part C must be completed for courses being introduced or modified.
Part 0 must be completed for all changes as appropriate (see below).
Part E must be completed for all courses being defeted, renumbered or placed inio Not Currenily Offered.

- Where more than one proposal is submitted by a unit, the proposals must be accompanied by a summary sheet which clearly lists all course numbers, names and credit hours grouped by calegory (i.e. courses deleted, introduced, modified, elc.) as well as a statement of the net change in credit hours.
- Changes in a proposing unil's offerings resulting in a net increase of more than 9 credit hours must be separately submitted to the Senate Planning and Priorities Committee, and should include a statement from the Dean/Director concerning the resource implications of the proposal.
- As the proposals must be photocopied a number of times, it is important that they be originals and that they be not slapled but paper clipped together.


## PARTA

- The course number, name and credit hours (contact hours for certificate courses) must be indicated. For new courses enter the department number followed by the lirst digit (year level) and two capital letters (6.g. AA, AB, AC, etc.). The course name, credit hours and whether or not a laboratory (L) accompanies the course must follow the course number.
- Mark with an " $X$ " the type of proposal. Nole that the modification category is to be used only for minor changes in course description. Changes in tille and/or credit hours are to be submitted as deletion and introduction pairs (i.e submit two forms).
- Indicate for which session (e.g. 2001/02 Regular) the proposed change is to be effective.
- Indicate in which Calendar (e.g. 2001/02) the proposed change will first appear.
- Indicate if the course appears/will appear on any list of required or elective courses in any University program.


## Reasons for Change

- Reasons for change should be briel and meaningful. For example:
- Introducing new material into a program in keeping with advances and/or changes in the fociof the particular field or department;
- To accommodate expertise of new staff members;
- Division of full course into half course; state the rationale for this.

The above examples are neither exhaustive nor complete and it is appreciated that there may be other reasons pertaining to the change proposed.

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## Frequency of Offering

- State whether the course was or will be offered on an annual or some other basis. Give details.


## Signatures

- Print or type names and sign: the Head should sign for the department and the Dean/Directior for the facully/school. In cases where there is more than one faculty/school involved, the form should be co-signed by the Deans/Directors of the faculties/schools involved, or the equivalent statement provided.


## PART B

- For new courses ONLY, enter the department number, a suggested course number, a 15 character (or less) abbreviation of the course title, and the credil hours. The abbreviated title should be as distinctive as possible using a maximum of 15 characters including blanks and puncluation.


## PART C

Proposed Calendar/Brochure Entry

- Provide a course description of no more than four (4) lines (approximately 75 characters per line, inciuding spaces), including tille, in the standard Calendar format. Note that the course number, title and credit hours must be in bold and precede the description and any restrictions and/or pre-requisites must follow it.
- If the proposed course is 10 be graded on a Pass/Fail basis, that lact must be included in the Calendar entry.

PARTD
Supporting Documentation

- Normally, all proposals for new courses must be accompanied by a one page (maximum) course outline.
- A statement from the subject librarian must accompany all proposals for new courses and significant course revisions. In the case of topics courses, in which the subject material varies from offering to offering, the proposing unit is responsible for securing the prior agreement of the library that appropriate holdings are available to support the particular topics to be deall with in each olfering.
- Provide a statement of additional costs if there is a change in any of the following:
- Workload of academic or support staff or reassignment of workload from one faculy/school to anolher.
- Requirements for additional space, renovations to existing space or changes in the usage of space.
- Costs of supplies and expenses including any specific media requirements associaled with the teaching of the course.
- Where there is possible curricular overlap or infringement or conflict of jurisdiction, the proposing unit must obtain written agreement to the change from all parties concerned.
- Provide letters of comment from other faculties/schools whose programs would be affected by this proposal.
- Describe, by providing both current and revised program descriptions, the effecis of the proposed course change on programs within your lacully/school. Where appropriate, describe what arrangements will be made for the students affected by the transition to a new program structure.


## PARTE

- It is not necessary to complete a separate form for each course when a number of courses are being deleted or renumbered.
- Please include the reasons for the change(s). modifications, deletions.


## Preamble

The Programs and Planning Committee of the Faculty of Graduate Studies met on April 4, 2000 and made the following recommendation regarding the introduction of course $39.7 \times x$ in the Faculty of Agricultural and Food Sciences.

## Observations

1. A statement of library support was included with the new course proposal form.
2. It was approved by the Faculty of Agricultural and Food Sciences Graduate Studies Committee.
3. Reasons for the changes accompany the course number and title, which are included below.

## Recommendation

The Programs and Planning Committee of the Facuity of Graduate studies recommends that the Faculty Council of Graduate Studies approve the course proposals/modification/deletions as indicated below.

## Course to be introduced:

Reason for new course:
39.7xx Bioinformatics (3) An introduction to theory, strategies, and practice of data management, analysis and utilization in molecular biology. Topics inciude DNA and protein sequence analysis, biological databases, genomic mapping, and analysis of gene expression data. Prerequisite: 039.314 or 039.450 or consent of instructor. Given in 2001-2002 and alternate years.

Bioinformatics is perhaps the most rapidily growing field in biology. Genomics technologies are generating enormous amounts of data such as genetic maps, genomic sequences, and expression data on hundreds or thousands of genes at a time. The sheer scale of these projects requires a rethinking of experimental strategies and an increased use of computers for management of data. At the same time, the availability of biological databases has led to a wide range of projects that fall into the category of 'data mining', in which already existing data can be analyzed to learn more about areas such as genome structure and evolution, or patterns of gene expression in response to stimuli. Most biologists are greatly lacking in the theoretical background and practical computer skills needed to work in most areas related to genomics. Both universities and biotechnology companies are competing for a very small pool of scientists skilled in bioinformatics.

## Net Change: $\quad+3$ Credit Hours

Copies of the course proposal forms are available in the Faculty of Graduate Studies Office for review.
Endorsed by the Faculty of Graduate Studies Executive Committee, May 4, 2000.
Approved by the Faculty Council of Graduate Studies, May 18, 2000.

# 37 <br> Report of the Faculty Council of Graduate Studies to Senate on course proposals/modifications/deletions. 

## Preamble

The Programs and Planning Committee of the Faculty of Graduate Studies met on April 4, 2000 and made the following recommendation regarding the deletion of course 132.713 and the introduction of course 132.7xx in the Faculty of Education.

## Observations

1. The changes were approved at the Faculty of Education Council.
2. Course 132.713 has not been offered by the Department in the past.
3. A statement of library support accompanied the new course proposal form mentioning that additional funds would not be required by the libraries.

## Recommendation

The Programs and Planning Committee of the Faculty of Graduate studies recommends that the Faculty Council of Graduate Studies approve the course proposals/modification/deletions as indicated below.

## Course to be deleted:

Reason for the deletion:

Course to be introduced:
132.713 Popular Genres Adaptation Pedagogy (3)

Course has not been offered by the Department in the past and will not be offered in the future.
132.7xx Curriculum Development and Implementation in Language and Literacy (3) A study of historical antecedents issues, theory, and research - in relation to both the reading and writing curriculum contrasted with current structuralist, poststructuralist and deconstructivist views of knowledge construction with emphasis on discourse synthesis, individual cognitive processes and social influences on literacy learning.

Reason for additions: $\quad$ This new 3 credit course is the only new course required in the revised Language and Literacy M.Ed. Program in the Faculty of Education. The remaining courses in the 30 credit hour area of specialization already exist. The new course examines the influence of both historical antecedents in reading and writing curriculum and instruction and contemporary curriculum theory on current theory and practice in Language and Literacy.

Net Change: 0 Credit Hours
Copies of the course proposal forms are available in the Faculty of Graduate Studies Office for review.
Endorsed by the Facuity of Graduate Studies Executive Committee, May 4, 2000.
Approved by the Faculty Council of Graduate Studies, May 18, 2000.

## Preamble

The Programs and Planning Committee of the Facuity of Graduate Studies met on April 4, 2000 and made the following recommendation regarding the deletion of courses 123.702 and 57.709, and the introduction of courses 57.7xy and 123.7xy in the Faculty of Physical Education and Recreation Studies.

## Observations

1. The rationale for the deletions is so that the facuity can eliminate two separate, but overlapping courses so that a single, cross-listed course can be introduced.
2. This course will be cross-listed in the M.Sc. And M.A. programs in the Faculty of Physical Education and Recreation Studies.
3. Reasons for the changes accompany the course number and title, which are included below.

## Recommendation

The Programs and Planning Committee of the Faculty of Graduate studies recommends that the Faculty Council of Graduate Studies approve the course proposals/modification/deletions as indicated below.

| Course to be deleted: | 57.709 Research and Quantitative Methods in Physical Education (3) |
| :---: | :---: |
| Reason for the deletion: | Eliminate two separate but overlapping courses so that a single, cross-listed course can be introduced. |
| Course to be deleted: | 123.702 Thesis Preparation Seminar (3) |
| Reason for the deletion: | Eliminate two separate but overlapping courses so that a single, cross-listed course can be introduced. |
| Course to be introduced: | 57.7xy/123.7xy Research in Exercise/Sport Science and Recreation Studies (3) Concepts and issues in designing, implementing, and disseminating research in areas broadly related to leisure, exercise and sport science. It is recommended that students complete this compulsory course within their first year of enrolment in the program. |
| Reason for additions: | By jointly offering this cross-listed course to students in our M.A. and M.Sc. programs, we will: (a) enhance our students' understanding of concepts and issues essential to research in leisure studies and exercise/sport science; (b) provide our students with an integrated forum in which to explore possible thesis topics while focusing on the process of developing the |

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thesis proposal; (c) heighten consistency between the requirements of our two graduate degrees; and (d) conserve resources (teaching) while preserving the integrity and quality of both programs.

## Net Change: 0 Credit Hours

Copies of the course proposal forms are available in the Faculty of Graduate Studies Office for review.
Endorsed by the Faculty of Graduate Studies Executive Committee, May 4, 2000. Approved by the Faculty Council of Graduate Studies, May 18, 2000.

## Comments of the Executive Committee:

The Executive Committee endorses the report to Senate.

# 40 <br> SENATE MEMBERSHIP 2000-2001 

| (a) | President | Emöke Szathmáry | 01.07 .96 |
| :---: | :---: | :---: | :---: |
| (b) | Chancellor | Arthur Mauro | 01.06.92 |
| (c) | Vice-Presidents | Jim Gardner | 01.07 .91 |
|  |  | Michael McAdam | 01.10 .98 |
|  |  | Joanne Keselman | 01.09 .97 |
| (d) | Deans of Faculties |  |  |
|  | Agricultural \& Food Sciences | Harold Bjarnason | 01.07.99 |
|  | Architecture | Michael Cox | 01.01 .89 |
|  | Arts | Robert O'Kell | 01.07.99 |
|  | Dentistry | Johann DeVries | 01.10 .98 |
|  | Education | Romulo Magsino | 01.07 .96 |
|  | Engineering | Doug Ruth | 01.07 .99 |
|  | Graduate Studies | Fernando deToro | 01.07.98 |
|  | Human Ecology | Nelma Fetterman | 01.07.99-30.06.00 |
|  | Law | Harvey Secter | 01.07.99 |
|  | Management | Jerry Gray | 01.01 .96 |
|  | Medicine | Brian Hennen | 01.07 .99 |
|  | Nursing | David Gregory | 01.09 .98 |
|  | Pharmacy | David Collins | 01.07.99 |
|  | Phys Ed \& Rec Studies | Dennis Hrycaiko | 01.04.97 |
|  | Science | Jim Jamieson | 01.08 .94 |
|  | Social Work | Don Fuchs | 01.07 .92 |
| (e) | Directors of Schools |  |  |
|  | Art | Dale Amundson | 01.07 .93 |
|  | Music | Richard Wedgewood | 01.07.89 |
| (f) | Dean, Continuing Education | Anne Percival | 15.11.99 |
| (9) | Director, Libraries | Carolynne Presser | 01.10.90 |
| (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 | John Stapleton | 01.07.95 |
|  | University College | Eugene Walz | 01.09.97 |
| (j) | Vice-Deans of Arts and Science |  |  |
| (k) | Appointed by the Board of Governors | Wendi Thiessen | 01.07.99-30.06.01 |
|  |  | Linda Archer | 01.07.98-30.06.00 |
| (1) | President of UMSU | Steven Fletcher | 01.05.00-30.04.01 |

(m) Appointed by Alumni Association

$$
\begin{array}{ll}
\text { Mabel Lee } & 01.06 .99-31.05 .00 \\
\text { Delcy-Ann Selymes } & 01.06 .99-31.05 .00
\end{array}
$$

(n) Members-at-large
(o) Elected by Faculty and School Councils ( $\mathrm{R}=$ Re-elected)

| Agricultural \& Food Sciences | Bernie Dronzek (R) <br> Robert Roughley Kevin Vessey (R) | $\begin{aligned} & 01.06 .00-31.05 .05 \\ & 01.06 .00-31.05 .01 \\ & 01.06 .99-31.05 .02 \end{aligned}$ |
| :---: | :---: | :---: |
| Architecture | Alan Tate | 01.06.00-31.05.03 |
| Art | Ted Howorth (R) | 01.06.99-31.05.02 |
| Arts | Elizabeth Comack | 01.06.98-31.05.01 |
|  | Dennis Cooley | 01.06.00-31.12.00 |
|  | Michael Feld (R) | 01.06.00-31.05.03 |
|  | Mark Gabbert (R) | 01.06.00-31.05.03 |
|  | Ellen Judd | 01.06.00-31.05.03 |
|  | Rod Kueneman | 01.06.98-31.05.01 |
|  | Barbara Payne (R) | 01.06.00-31.05.03 |
|  | Moshe Stern (R) | 01.06.00-31.05.03 |
|  | Michael Thomas | 01.06.99-31.05.02 |
|  | John Whiteley | 01.06.00-31.05.01 |
|  | Arlene Young | 01.06.00-31.05.03 |

Continuing Education Division, Counselling Services \& Natural Resources Institute

Dentistry

| Education | John Long (R) | $01.06 .98-31.05 .01$ |
| :--- | :--- | :--- |
| Lynn Tayior | $01.06 .00-31.05 .02$ |  |
| Engineering | Aniruddha Gole (R) | $01.06 .99-31.05 .02$ |
|  | Brian Stimpson (R) | $01.06 .99-31.05 .02$ |
| Douglas Strong | $01.06 .98-31.05 .01$ |  |
| Human Ecology | Lena Horne | $01.06 .98-31.05 .01$ |
| Law | John Irvine | $01.06 .00-31.05 .01$ |
| Libraries | Nicole Michaud-Oystryk | $01.06 .00-31.05 .03$ |
|  | Pat Nicholls | $01.06 .00-31.05 .03$ |
| Management | Sarath Abeysekera | $01.06 .98-31.05 .01$ |
|  | Charles Mossman | $01.06 .99-31.05 .02$ |


| Medicine | lan Adamson Judy Anderson (R) Aubie Angel Brian Blakley Deepak Bose Ratna Bose (R) Jamie Boyd Donna Chow (R) Juliette Cooper (R) John Gartner (R) Lorna Grant <br> Patricia Kaufert (R) Edwin Kroeger Grant McClarty (R) Norman Pettigrew (R) William Rennie (R) Donald Smyth (R) Klaus Wrogemann (R) Peter Zahradka | 01.06.98-31.05.01 <br> 01.06.00-31.05.03 <br> 01.06.00-31.05.03 <br> 01.06.99-31.05.02 <br> 01.06.00-31.05.03 <br> 01.06.98-31.05.01 <br> 01.06.99-31.05.02 <br> 01.06.99-31.05.02 <br> 01.06.00-31.05.03 <br> 01.06.99-31.05.02 <br> 01.06.00-31.05.03 <br> 01.06.98-31.05.01 <br> 01.06.99-31.05.02 <br> 01.06.98-31.05.01 <br> 01.06.98-31.05.01 <br> 01.06.00-31.05.03 <br> 01.06.98-31.05.01 <br> 01.06.98-31.05.01 <br> 01.06.99-31.05.02 |
| :---: | :---: | :---: |
| Music | Richard Burleson (R) | 01.06.98-31.05.01 |
| Nursing | Marion McKay Lorna Guse (R) | $\begin{aligned} & 01.12 .98-31.05 .01 \\ & 01.06 .99-31.05 .02 \end{aligned}$ |
| Pharmacy | Keith Simons (R) | 01.06.99-31.05.02 |
| Phys Ed \& Rec Studies | Kelly MacKay | 01.07.00-30.06.01 |
| Science | Mark Abrahams Harry Duckworth (R) John Page ( R ) Tony Secco (R) Juris Svenne George Tabisz John van Rees Joseph Williams | 01.06.99-31.05.02 <br> 01.06.00-31.05.03 <br> 01.06.00-31.05.03 <br> 01.06.99-31.05.02 <br> 01.06.00-31.05.03 <br> 01.06.98-31.05.01 <br> 01.06.00-31.05.03 <br> 01.06.00-31.05.03 |
| Social Work | Len Kaminski Brad McKenzie (R) | $\begin{aligned} & 01.06 .98-31.05 .01 \\ & 01.06 .99-31.05 .02 \end{aligned}$ |
| Heads of Affiliated Colleges |  |  |
| St. Andrew's College <br> St. Boniface College | Vivian Olender Paul Ruest | $\begin{aligned} & 01.07 .99 \\ & 10.08 .81 \end{aligned}$ |
| Deputy Minister of Education | Ben Levin |  |

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## ELECTED BY THE STUDENTS (April 1, 2000 to March 31, 2001 )

| Agricultural \& Food Sciences | Glen Forster |
| :---: | :---: |
| Architecture | Vacant |
| Art | Vacant |
| Arts | Garth Hilderman <br> Heather McKeen (re-elected) <br> Patrick Saydak (re-elected) <br> Slava Yurashchuk |
| Dentistry | Blair Dalgliesh |
| Education | Karen Inskjp Jeffrey Leclerc (re-elected) |
| Engineering | January Gnitecki |
| Graduate Studies | Narjit Chadha <br> Tami Kowal-Denisenko Mabel Magsino (re-elected) |
| Human Ecology | Natasha Sabljic |
| Law | Gurinder Bains |
| Management | Jason Kuffner Amanda Outingdyke |
| Medical Rehabilitation | Laura Goldenberg |
| Medicine | Vacant |
| Music | Joel Aird |
| Nursing | Vacant |
| Pharmacy | Todd Laluk |
| Phys Ed \& Rec Studies | Vacant |
| Science | Quy Luu <br> Rob Patterson Vacant |
| Social Work | Robynne Kazina |


| Vice-Provost (Academic Affairs) | Karen Ogden |
| :--- | :--- |
| Vice-Provost (Programs) | Richard Lobdell |
| Associate Vice-President (Research) | Gary Glavin |
| Associate Dean of Grad Studies | Ranjana Bird |
| Associate Dean of Continuing Education | Bill Kops |
| Chair of SPPC | Norm Halden |
| UMFA Representative | Peter Blunden |
| St. Boniface College | R. Legai |
| Director of Admissions | Peter Dueck |
| Director of Student Records | Richard Levin |
| Natural Resources Institute | Slobodan Simonovic |
| President, Canadian Mennonite | G. Gerbrandt |
| Bible College | Jonathan Raymond |
| President, William \& Catherine |  |
| Booth College | Colleen Bready (01.05.00-30.04.01) |
| Vice-President of UMSU | Amanda Jones (01.05.00-30.04.01) |
| President of Grad Students Association | Bev Cameron |
| University I |  |

/sgp

1 June 2000

Dr. Leo LeTourneau
Executive Director
Council on Post-Secondary Education
410-330 Portage Avenue
Winnipeg, Manitoba
R3C 0C4
Dear Dr. LeTourneau,

## Statement of Intent: Minor in Catholic Studies

On behalf of The University of Manitoba, I submit a Statement of Intent with respect to a proposed new Minor in Catholic Studies in the Faculty of Arts.

The goal of this new program is to develop an intellectual and academic approach to Catholicism which does justice toits full human reality and integrity as a culture. This goal is central to the mission of St. Paul's College, and it will address a need as expressed by the Catholic Community of Manitoba.

As described in the Statement of Intent, no additional financial resources would be needed to implement this new minor.

If additional information is required for your Council's consideration of this Statement of Intent, please let me know.

Sincerely yours,


Vice-Provost (Programs)
Encl.

cc Emöke J.E. Szathmáry, President James Gardner, Vice-President (Academic) \& Provost<br>Rick Linden, Associate Dean, Faculty of Arts<br>John Stapleton, Rector, St. Paul's College<br>Bev Sawicki, University Secretary

## STATEMENT OF INTENT

Institution

| $\square$ | Brandon University |
| :--- | :--- |
| Universily of Manitoba |  |
| 0 | University of Winnipeg |
| Collège universitalre de Saint-Boniface |  |


| ㅁ. | Assiniboine Community College |
| :--- | :--- |
| ㅁ. | Keewatin Communify College |
| Red River Communlly College |  |

Program Overview

- Program Name: Catholic Studies (Minor)
eCredential to be offered: B.A. (Minor)
- Does the program require accreditation from a licencing group? a YES NO If yes, name group
-Length of the program:_18 credit hours_ aYears $\square$ Months a Semesters
- Proposed program start date: $\quad \begin{gathered}\text { O1/ } / 09 / 2001 \\ \text { Day/Month/Year }\end{gathered}$
-Which department(s) within the institution will have responsibility for the program?
Faculty of Arts (St. Paul's College)
-As compared to other programs your institution will be proposing, is the priority of this program:
OTHigh
- Medium
- Low
- Is this a new program?
n YES
- NO
- ls this a revision of an existing program:
- YES
$\pm$ NO
- II YES, name program

What are the impacis of changing this progrem?

Will the program be available to part-time students?
B YES

- NO
-Will this program have a cooperative education component?
- YES
$\boxminus \mathrm{NO}$
If YES, how long with the field placement be?
-Will the program contain an option to assess the prior learning of students, to grant credit for the skills/knowledge already present?
- YES
$\infty$ NO
Provide Delails

Will there be distance delivery options?
Provide Details
[1 YES

- NO

Distance delivery options will be developed but not in the first two years of operation.

- Will this program be delivered jointly with another inslitution?
If YES, name the institution
-Are similar programs offered in Manitoba or other jurisdictions? YES
- NO

If YES, indicale why this program is needed (e.g., area of specialization)
No similar programs are offered in Manitoba. Three other Canadian universilies offer similar programs as do approximately 60 American institutions. The proposed program is central to the mission of St. Paul's College, and it will address a need as expressed by the Catholic Community of Manitoba.

developing for this program?
Transfer of credit for course work completed at other accrediled universities will be possible through existing credit transfer arrangements.

Specific Program Information

1. Program Description

- Describe the program and its objectives:

The stary of the Roman Catholic Church and its members, and the story of their interactions with history, the arts and sciences, human thinking and belief-all these together, in the dynamism and richness of their interplay, form the substance of the human cufture which is Catholicism. That cullure is the subject matter of Catholic Studies.

The goal of Catholic Studies at St. Paul's College, University of Manitoba, is to develop an intellectual and academic approach to Catholitism which does justice to its full human reality and integrity as a culture. This goal both explains the reason for having a Catholic Studies Program within the University, and also dictates the interdisciplinary approach which the program takes. Because Catholitism is not just an institution, a set of moral or ritual practices, a body of doctrine, or an individual or even communal experience, but all of these logether and more, no one discipline or many disciplines functioning separately can properly understand il as a culture. An approach which not only collects but integrates the findings of the many academic disciplines which offer crucial perspectives on Catholic culture is required. The Catholic Studies Program is the vehicle within the University which offers students and faculty the opportunily to pursue an understanding of Catholicism through the type of genuinely interdiscipilinary approach which its subject matter requires.

- Provide an overview of the content to be taught in this program:

To minor in Catholic Studies a student must complete $1 B$ credit hours. All students are required to complete a new course $99.1 x x$ - Introductlon to Catholic Studies (3 credils), normally at the beginning of their program. After this introductory course, students take 12 credit hours from a list of Approved Courses focussed specifically on themes and issues in Catholic Studies. Finally. in Senior year students take a Capstone Course - 020.457: The Thought of Bernard Lonergan.

## 2. Enrollment

-What is the program's initial projected enrollment? 25

What is the projected enroliment for the $2^{\text {nd }}$ and $3^{\text {rd }}$ years?
Same.
-Describe the expected student profite?

- Undergraduate students who are members of St. Paul's College (There are B67 in 19g92000) would be the primary cilientele.
- Adults in communities of Manitoba who would enrol in individual courses through the Division of Continuing Education.


## 3. Labour Market Information

-What labour market need is the program expected to meet?
While this credential is not intended to serve a specific labour market, holders of it nevertheless will find it a benefit if they seek employment in Catholic institutions - schools, health care facinties, social agencies, parish/diocesan offices, foundations - in Manitoba and elsewhere.

- Are there currently jobs in Manitoba in this field?

色 YES $\quad$ NO
If yes, where (geographic location and industry)?
See above.

As the numbers of clerical people who work in Catholic institutions continue to decline, opportunities for lay people will increase. Holders of the credential will have an advantage in competing for available positions.

- How does this program fit with Manitoba's stated economic, social and other priorities?

Approximately 300,000 Catholics live in Manitoba, and they have created a number of institutions. The operation and development of these institutions require people who have an understanding of the intellectual, moral, and spiritual traditions of Catholicism. This program will help develop this understanding.
-What agencies, groups, institutions will be consulted regarding development of the program?
At the University of Manitoba, consultations will take place between St. Paul's College and the Faculty of Arts and its Department, the Faculty of Science, the School of Art, the Office of the President, and St. John's College. Outside the University, consultations will be held with the Catholic Archdiocese of Manitoba, with Catholic school organizations, and with other Catholic agencies. Consultation will also take place with the Faculty of Theology at the University of Winnipeg.

- Is there any other information relevant to this program ?

This program proposal is submitted in accordance with the terms of the 1970 Agreement between the University of Manitoba and St. John's College and St. Paul's College.

## 4. Financial Information

The program is new in that it is currently impossible for a student to obtain a Minor in Catholic Studies. However, all the courses except for the 99.1 XX are currently available at the University of Manitoba.

| - Projected Program Costs: | Salary | 0 |
| :--- | :--- | :--- |
|  | Operating | 0 |
|  | Capital | 0 |
|  | Total cost | 0 |
| Projected Program Revenue: | Tuition |  |
|  | Other |  |
|  | Total revenue |  |

## Submitted by:


Name (print)
VIEE-Provost (Plogictus)
Position

1 Feme 2000
Date

## PRESIDENT'S REPORT:16 June 2000

My last report to the Board of Governors was submitted for its meeting on April 25, 2000. This report is organized into two sections. Part A deals with Academic, Research, Administrative and External matters. Part B is the President's Activity Report, which details her external activities only.

## PART A

## I. ACADEMIC MATTERS

## Sample of Activities and Special Achievements

## Faculty of Agricultural and Food Sciences

- A new Dean was appointed in July, 1999. Since then the Faculty has revisited its existing academic plan, and continues with strategic planning. A revised mission statement and a new visions statement have been developed. Sub-committees are now in the process of developing action plans in the areas of research; curriculum, teaching \& accreditation; enrolment and recruitment; facilities and off-station research sites, cooperative education; distance education \& continuing education; outreach relations; and marketing. By mid-June the majority of the plans are expected to be completed at which time the Strategic Planning Steering Committee will integrate the individual plans into a master plan.
- Among recent distinctions and honours awarded to members of the Faculty and its students are the following:

1) Dr. Robert Hill received the Prix Georges Morel at INRA (equivalent of France's Agriculture Canada) for 1999 from the Government of France.
2) Dr. John Cranfield received the Outstanding Doctoral Thesis Award from the American Agricultural Economics Association. This award is presented to three recipients a year graduating from American universities.
3) A number of teaching awards were presented to members of the Faculty: Mr. Gary Martens and Mr. Don Johnson were recipients of the 2000 Teaching Excellence Awards from the Canadian Association of Diploma Agricultural Programs. Dr. Loreen Onischuk was this year's recipient of the National Association of Colleges and Teachers of Agriculture Teaching Award of Merit.
4) Roberta Gentile, a recent Bachelor of Science in Agriculture graduate (May 2000), received the first Bentley Fellowship from the International Development

Research Centre (IDRC) for $\$ 20,000 /$ year. She will be going to Uruguay to participate in a joint research venture looking at how increased usage of forage crops in cropping systems can improve agricultural production by farmers in developing countries.
5) Three students studying in the area of Animal Science have won significant awards from the United States. Desmond Ballance, third year B.Sc., has won the Pacific Egg and Poultry Award for studies in poultry science. Travis Williams, fourth year B.Sc., and Trevor Lawson, graduate student, have won two of the only twenty-two International Awards available from the International Livestock Congress.

## FACULTY OF ARCHITECTURE

- Professor Faye Hellner was the recipient of the Dr. and Mrs. Ralph Campbell Outreach Award, which was presented at the spring Convocation.


## DIVISION OF CONTINUING EDUCATION

- The Division has a number of external partnerships of long duration, with which it offers a Four Year Certificate in Management. Two such partners are the following:

1) Canadian Institute of Management ( 36 years): on June 17 over 60 students will graduate, with a large number from Bristol Aerospace.
2) Manitoba Municipal Administrators Association (30 years): 27 students graduated in April, 2000.

- The yearly student selection process for ACCESS programs is now underway. To date, over 100 applications have been received for the three Programs: ACCESS, Special Premedical Studies Program and the Professional Health Program. Funding for the ACCESS Programs has been changed from Manitoba Education and Training to the Council on Post Secondary Education (COPSE).
- FACULTY OF EDUCATION
- Dr. Charlotte Evans of the Educational Administration, Foundations and Psychology Department in Education received the 1999-2000 Doctoral Dissertation Award from the Canadian Association for Educational Psychology. The thesis, entitled "Literacy Development in Deaf Students:Case Studies in Bilingual Teaching and Learning," was judged the top dissertation in Canada in the field of Educational Psychology.


## FACULTY OF MUSIC

- Many recent graduates have been admitted to study in Masters degree programs nationally and internationally. Ten grads will be studying at a wide range of universities, among them Arizona, British Columbia, Oregon, Toronto, and Washington, as well as the Glenn Gould Professional School, Manhattan School of Music and the San Francisco Conservatory. The talent of these graduates is illustrated by the fact that some receive multiple offers for study, with support, from a number of universities. For example, Flutist Claire Chapman (B. Mus. Performance) chose between scholarship offers of $\$ 8000$ plus other assistance (Glenn Gould Professional School), US $\$ 1000$ (Indiana U), and US $\$ 10,620$ (Northwestern U). Pianist Jeremy Samolesky (Bachelor of Music in Performance, 1999 ) could choose between US $\$ 32,000$ (U Washington), US $\$ 16,700$ (Rice U), US $\$ 12,000$ (The Eastman School of Music) and no financial assistance (Peabody Conservatory).
- FACULTY OF SCIENCE
- On May 23, 2000 the Gordon Bell Freshstart Program for Aboriginal Students attended an introductory class in Earth and Planetary Science.
- Former Science student and current Medicine student, David Gratzer, was awarded the Donner Prize worth $\$ 25,000$, which is given annually by the Donner Foundation to the best book on public policy. Mr. Gratzer's book was entitled "Code Blue: Reviving Canada's Health Care System."


## II. RESEARCH MATTERS

## Honours and Distinctions

- Dr. Leslie Degner, Nursing, has received one of six invited Professorships in Nursing Research through the Canadian Health Services Research Foundation Capacity for Applied and Developmental Research and Evaluation program (CHSRF-CADRE). This was an extremely competitive process. A formal announcement will be made by CHSRF in the coming months. This award will have a significant salary component for a period of up to 10 years. The title of Dr. Degner's research program is "Development of Evidence Based Nursing Practice in Cancer Care, Palliative Care and Cancer Prevention."
- Dr. Karen Grant, Associate Dean (Research) Faculty of Arts and Sociology, has been appointed by federal Health Minister Alan Rock to the Science Advisory Council of Health Canada. Dr. Grant's research focuses on the social and structural factors that bear on women's health.


## Grants/Contracts Received

- Thirteen awards were made in the recent Standard Research Grant competition of the Social Sciences and Humanities Research Council (SSHRC), totalling \$957,390 over three years, including 6 research time stipends (RTS). Four of these awards are to new scholars: Dr. Robert Hoppa, Anthropology, received a total of $\$ 75,000$ for his work on "Historical interactions of environment, behaviour and mortality among the Western James Bay Cree"; Dr. Gady Jacoby, Accounting and Finance, received a total of $\$ 64,294$ for research on "Management of corporate bond portfolios: the impact of default and call risks"; Dr. Christina Sue-Chan, Business Administration, received a total of $\$ 45,794$ for her work on "A social cognitive model of coaching: the mediating role of cognition and affect in coaching and individual behaviour"; and postdoctoral scholar, Dr. Mary Malainey, Anthropology, received a total of $\$ 50,000$ for her project "Establishing the function of precontact North American pottery. For 2000/01, 30 university researchers now hold SSHRC standard grants totalling $\$ 693,614$. Ten applications have been placed on the supplementary list. SSHRC will announce these results at a later date.
- Dr. Peter Watson, Pathology, received a three-year grant, totalling $\$ 337,388$, from the Canadian Breast Cancer Research Initiative (CBCRI) for his research on "The role of psoriasin in progression of early breast cancer."
- Dr. Gilbert Arthur, Biochemistry and Medical Genetics, received a three-year grant, totalling $\$ 296,130$, from the National Cancer Institute of Canada (NCIC), Canadian Cancer Society Grant Program, for his work on the "Mechanism of inhibition of cancer cell proliferation by edelfosine and related analogues."
- Four contracts were awarded by the Manitoba Association of Agricultural Societies Inc. (MAAS) to provide partial funding from the Canada/Manitoba Agri-Food Research and Development Initiative (ARDI). The total contributions from all sponsors are outlined as follows:
- To investigate "Development of low saturate canola: Brassica napus" a three-year contract (Apr/99-Mar/02), which is under the direction of Dr. Rachael Scarth, Plant Science, the U of M will receive $\$ 223,498,000$ from ARDI; $\$ 180,000$ from Canola Council and $\$ 23,498$, from Manitoba Canola Growers; for a total of $\$ 446,996,000$.
- To investigate "Reducing disease losses in stored potatoes" a threeyear contract (Jan/00-Mar/03), which is under the direction of Dr. Lakhdar Lamari, Plant Science, the U of M will receive $\$ 83,500$ from ARDI; and $\$ 7,500$ from Keystone Vegetable Producers

Association; $\$ 7,500$ from Midwest Food Product Ltd.; $\$ 7,500$ from McCain Foods Ltd.; $\$ 6,000$ from Stanchem; $\$ 13,500$ from Gustafson Canada; and $\$ 1,800$ from Biocide; for a total of $\$ 127,300$.

- To investigate "Fusarium head blight resistant winter wheat germ plasm development," a four-year contract (Jan/99-Mar/03), which is under the direction of Dr. Anita Brûlè-Babel, Plant Science, the U of M will receive $\$ 105,105$ from ARDI; $\$ 48,000$ from Canterra Seeds Ltd.; \$53,154 from Western Grain Research Foundation; and $\$ 4,000$ from NSERC; for a total of $\$ 210,259$.
- To investigate "Dandelion biology and control in conventional and zero-tillage Roundup Ready canola,' a two-year contract ( $\mathrm{Feb} / 00$ Mar/02), which is under the direction of Dr. Rene Van Acker, Plant Science, the $U$ of $M$ will receive $\$ 30,800$ from ARDI; and $\$ 20,500$ from Monsanto; and $\$ 27,600$ from NSERC; for a total of $\$ 78,900$.
- A contract was awarded by Province of Manitoba, Department of Highways and Government Services for the project "Traffic Information System." The five-year contract (April/00 - Mar/05), which is for a total of 430,000 , is under the direction of Dr. Alan Clayton, Civil and Geological Engineering.


## Other Related Research Initiatives

- Manitoba has been selected to pioneer a new research study called Maximizing Osteoporosis Management in Manitoba (MOMM) and two University of Manitoba researches are co-chairing the project. Dr. Kin Yuen, Family Medicine, and Dr. Colleen Metge, Pharmacy, are co-chairing the project which is aimed at tackling the growing burden of osteoporosis - a 'brittle' bone disease that is expected to afflict three times more Canadian women in the next few decades. The study, which was announced on April 13 at the Winnipeg Convention Centre by Health Minister Dave Chomiak, is expected to involve nearly 3,000 Manitoba women and is funded by a $\$ 1$ million grant from Merck Frosst Canada \& Co.
- The world's largest recorded complete trilobite fossil was unveiled at the Wallace Building on May 26 in front of a large crowd of members of the university community, curious onlookers and the media. Dr. Bob Elias, Geological Sciences, was one of the field project leaders who discovered the "monster bug." Most trilobites are about 12 milimeteres in length, and the one the team discovered along the shores of Hudson Bay near Churchill, measured in at 70 centimetres. The discovery was a joint project between the university, the Manitoba Museum of Man and Nature and the Royal Ontario Museum. Trilobites are long-extinct arthropods with hard, articulated external skeletons, distantly related to crabs,
scorpions and insects.
- Legislation to establish the Canadian Institutes of Health Research (CIHR) has received Royal Assent, setting the stage for CIHR to become operational. The CIHR will serve as the Government of Canada's main funding agency for health research in Canada. They will help to integrate a broad range of health research activity in Canada, including basic biomedical and applied clinical research, research into health services and health systems, as well as research related to the health of society, culture and populations. CIHR's mandate, as outlined in the legislation, is to "excel, according to internationally accepted standards of scientific excellence, in the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products and a strengthened health care system." The Medical Research Council Act will be repealed and MRC, which has played a pivotal role in supporting health research in Canada for the past 40 years, will be folded into the CIHR.


## New Federal Research Funding Program

- Program details and notional allocations for the Canada Research Chairs Program were announced. The University of Manitoba's notional allocation is 53 chairs over the 5 year program [26 in the MRC/CIHR category; 21 in the NSERC category and 6 in the SSHRC category]. The University of Manitoba's chair allocation is further broken down into 28 Tier 1 (senior) chairs and 25 Tier 2 (junior) chairs. The Canada Research Chairs program requires that a strategic research plan for the University of Manitoba be filed with the program secretariat by September 1 , along with nominations for chairs for the first year of the program (the University of Manitoba has been allocated 9 chairs in the first year). Tier 1 chairs are funded at $\$ 200,000$ per year for up to seven years and are renewable. Tier 2 chairs are funded at $\$ 100,000$ per year for up to five years and are renewable once. Each chair is eligible for a CFI infrastructure request of $\$ 125,000$ (reflecting CFI's $40 \%$ contribution, similar to existing CFI matching programs).


## III. ADMINISTRATIVE MATTERS

## Campus Beautification Day

- More than 750 people took part in Campus Beautification Day 2000, held on May 24 at the Bannatyne and Ft. Garry campuses. Although the forecast was gloomy, the weather was not a factor in the transformation of the campus from grey to colour. Staff who normally worked inside were out beautifying the grounds surrounding their respective buildings, picking up paper, raking, sweeping, pulling weeds and planting flowers. The campuses were transformed in a matter of hours.

At Ft. Garry, the day's festivities included two scheduled coffee breaks, and a barbecue at lunch, with door prizes on the Duckworth Quadrangle. Twenty-five companies donated items for the day, including cash, beverages, food, and plants. Material for planting included gifts from A.J. Lacoste Garden Centre, City of Winnipeg Forestry Branch, Fort Whyte Garden Centre, Gerbrand Sod Supply, Paddon Florists, Shelmedrine Nurseries and Garden Centre, Thomson Sod, T \& T Seeds Ltd., Vanderveen's Greenhouses Ltd., and Vanstone Nurseries Ltd.

## IV. EXTERNAL MATTERS: SPECLAL EVENTS AND COMMUNICATIONS

## 1. Special Events

- May and early June are normally consumed by ceremonial activities marking convocation and associated events. In spring 2000 there were five sessions of Convocation (May 31, June 1 and June 13), as well as a number of other graduation ceremonies for a variety of certificate programs. Over 2,300 students received University of Manitoba degrees. Honourary degrees were conferred upon Chief Justice Richard Scott, Mrs. Evelyn Shapiro, Ms. Dian Cohen and Mr. Lloyd McGinnes.
- An unusual number of Ambassadors visited the University during May and June. The countries represented were Brunei, China, Hungary, Ukraine, and Thailand. In all instances the ambassadors seek information about the University of Manitoba, as well as activities stemming from academic exchange agreements that may exist between universities in their countries and the University of Manitoba.


## 2. Media Coverage

- The Department of Public Affairs has put into place a plan to improve coverage of the University of Manitoba. By way of illustration of the success of these attempts, I list some details for the period May 24-June 7:

The University of Manitoba received a total of 75 "hits" in print and electronic media, with stories covering convocation, the discovery of the largest known trilobite fossil in Churchill, and the naming of the Faculty of Management the I.H.Asper School of Business. The number of "hits" are tracked and noted by a
private firm. Hits were up by $53.1 \%$ compared to the same two week period in 1999.

The tone of these hits has been positive, and have included front page coverage in the Winnipeg Free Press and the Globe \& Mail. The dollar value of the print, television and radio reportage can be calculated using the rates charged for equivalent "print space" and "air time" advertising. The positive coverage generated by Public Affairs has a value of $\$ 150,000$. For example, placing TV ads equal to the amount of air time received over $U$ of $M$ news stories would have cost $\$ 41,106$. Radio advertising equivalency would have cost $\$ 8,512$, and Free Press advertising space would have cost $\$ 102,581$.

- Prime placement of stories occured in newspapers and magazines. For example:

1) Globe \& Mail: In one week, the front page of the "Report on Business" section carried University of Manitoba stories. One was on Terry Dick, Zoology, and development of caviar, and the other was on the Asper School of Business-Faculty of Management's conferral of the International Distinguished Intrepreneur Award to Li Ka -Shang, from Hong Kong.
2) The research of Mark West, Faculty of Architecture, was featured in Saturday Night magazine (June 3 issue).
3) National Post: Front page coverage (May 1) went to Dr. Judith Anderson, Faculty of Medicine for her discovery of how muscles can be made "to grow". Her work was covered by newspapers in Vancouver, Edmonton, Calgary, Winnipeg, Toronto and Montreal. There has been extensive radio and television coverage not only locally, but also nationally.

## PART B

## President's Activity Report

The report details the President's involvement in events that have a significant number of participants external to the University of Manitoba. The diversity of the events, small and large, illustrate well the levels at which the University of Manitoba must have a presence.

## PART B - Notable Events (External)

## Emöke J. E. Szathmáry

Tuesday, April 25, 2000

- Attend meeting of St. Boniface Hospital Board of Directors

Wednesday, April 26, 2000

- Make remarks at cheque presentation of Louis Riel Institute
- Bring Greetings to guests at Faculty of Science Graduation Dinner \& Dance

Thursday, April 27, 2000

- Attend meeting of Manitoba Museum of Man and Nature Board
- Make remarks at Manitoba Medical Service Foundation Reception for 2000 Awardees

Friday, April 28, 2000

- Bring Greetings to guests at School of Agriculture Dinner $+$

Sunday, April 30, 2000

- Attend William \& Catherine Booth College Graduation Ceremony

Monday, May 1, 2000

- Attend meeting of Council of University Presidents of Manitoba (COPUM)
- Attend meeting of Order of Manitoba Advisory Council, Government House
- Meet with representatives of Churchill Northern Studies Centre
- Attend opening of Hundson's Bay Company Gallery @ Manitoba Museum of Man and Nature

Thursday, May 4, 2000

- Attend meeting of National Diabetes Strategy Implementation Advisory Committee

Saturday, May 6, 2000

- Visit Star Lake Geological Field Station, Whiteshell

Monday, May 8, 2000

- Attend breakfast meeting hosted by Mayor Glen Murray

Tuesday, May 9, 2000

- Host luncheon in honour of His Excellency Sandor Papp, Hungarian Ambassador to Canada, Mrs. Klara Papp

Thursday, May 11, 2000

- Meet with Premier Doer, with Chancellor Mauro

Friday, May 12, 2000

- Provide remarks at opening of Prairie Provincial Fetal Alcohol Syndrome Conference

Saturday, May 13, 2000

- Bring greeting to guests at Career Trek Graduation and present certificates to graduates
- Bring greetings to guests at Aboriginal Business Education Program Graduation Ceremony

Wednesday, May 17, 2000

- Attend luncheon in honour of Pierre Berton

Tuesday, May 23, 2000

- Meet with President of the Norman Bethune University
- Attend meeting of St. Boniface Hospital Board of Directors
- Attend Consecration and Installation of The Venerable Donald David Phillips as Bishop of Rupertsland

Wednesday, May 24, 2000

- Provide remarks at Naming of Faculty of Management as the I. H. Asper School of Business
- Attend lunch and tree planting ceremony, Campus Beautification Day
- Attend annual General Meeting of J. W. Dafoe foundation

Friday, May 26, 2000

- Provide remarks at announcement of Trilobite discovery, Department of Geological Sciences

Saturday, May 27, 2000

- Attend Brandon University Convocation Ceremony and Lunch

Monday, May 29, 2000

- Attend State Dinner in Ottawa in honour of Konstantinos Stephanopoulos, President of the Hellenic Republic

Tuesday, May 30, 2000

- Provide remarks at First nation Community Wellness Diploma Graduation Celebration
- Host dinner for Deans and Directors, 37 King's Drive

Wednesday, May 31, 2000

- Host Convocation Lunch, 37 King's Drive
- Host Convocation dinner in honour of Honorary Degree Recipients, University Centre

Thursday, June 1, 2000

- Host Convocation Lunch, 37 King's Drive
- Attend Scholars' Night Dinner, Manitoba Club

Friday, June 2, 2000

- Meet with His Excellency Sunai Bunyasiriphant, Ambassador of Thailand to Canada
- Bring greetings to guests at Faculty of Dentistry Graduation Dinner and Dance

Saturday, June 3, 2000

- Attend lecture given by Andrée Putnam, Interior Design Jubilee Celebration
- Attend dinner hosted by Dr. Stan Cheung and Mrs. Eleanor Cheung

Sunday, June 4, 2000

- Attend University of Winnipeg Spring Convocation

Monday, June 5, 2000

- Participate in Panel Discussion on University Accountability at Campus 2000 Conference
- Attend meeting of Council of Presidents of Universities in Manitoba (COPUM)
- Attend farewell dinner for Dr. Dennis Anderson, President, Brandon University

Tuesday, June 6, 2000

- Welcome Dr. Li Ka-shing at Faculty of Management
- Meet with His Excellency Mei Ping, Ambassador of the People's Republic of China in Canada
- Meet with His Excellency Dato Jocklin Kongpow, Ambassador of Brunei to Canada
- Make remarks and present medal and certificate at I.D.E.A. Dinner for Dr. Li Ka-shing

Wednesday, June 7, 2000

- Meet with representatives of the University College of the North steering committee
- Attend reception for Dr. Li Ka-shing at Government House
- Attend Annual General Meeting of the Friends of the Libraries, and make remarks and present award to Dr. Robert Ross

Thursday, June 8, 2000

- Bring greetings, opening ceremonies for Health Research Day 2000, Faculty of Medicine
- Attend meeting of J.W. Dafoe Foundation Committee

Friday, June 9, 2000

- Bring greeting at the opening ceremony of the Canadian Symposium on Neuroimmune Biology

Thursday, June 15, 2000

- Host informal lunch for Dr. Marcel Desautels, a benefactor of our university

Friday, June 16, 2000

- Campus tour and discussion with Mr. Don Robertson, Chair of COPSE, and Dr. Leo LeTourneau, Executive Director (with Mr. Paul Soubry and Vice-Presidents Gardner, Keselman and McAdam)


## 62

## Election of Senate Representatives to the Board of Governors and to the Senate Executive Committee

## General

The Senate Handbook, Section 8.22, outlines the procedures for the election of members of Senate to the Board of Governors and the Senate Executive Committee. Among the more important procedures are the timing of election, the procedures governing nominations, the means of balloting, and the procedures to be followed in the event of a tie vote.

Special attention is directed to Clause 8.22.3, which reads in part "...If the person nominated is not present, the nominator must state that the person nominated has consented to the nomination." This rule applies to nominations for either the Board of Governors or the Senate Executive Committee.

## A. Election of Senate Representatives to the Board of Governors

1. The following resolution was approved by Senate on June 4, 1997: "That Senate rescind its resolution of March 9, 1976 reserving one of its seats on the Board of Governors for a student Senator".
2. The following resolution was approved by Senate on June 4, 1997: "That in the future, as openings occur, Senate assure itself that at least one of the three individuals who represent it on the Board of Governors has no administrative responsibilities greater than those of department head at the time of election".
3. Members-at-large

According to Section 27(4) of The University of Manitoba Act (the "Act"), a member of Senate elected by a faculty or school council who has been subsequently elected by Senate to the Board and whose term of office on Senate expires before his or her term of office on the Board, shall be appointed by Senate to be a member-atlarge of Senate for the remainder of his or her term on the Board unless re-elected to Senate.
4. Students and Ex Officio Members

Students and ex officio members who are elected to represent Senate on the Board of Governors, but whose membership on Senate expires prior to their membership on the Board are dealt with under the terms of the Act (Section 10(2)) and Section 13.4 of the Senate Handbook, approved by Senate on June 6, 1990.

Pursuant to Section 10(2) of the Act, the Senate Executive Committee shall bring to Senate a motion to grant assessor status on Senate for the remaining portion of a student or ex officio member of Senate who was elected to represent Senate on the Board of Governors and whose term on Senate has expired prior to the person's term on the Board. Should such a motion fail, a motion to terminate the membership on the Board of Governors as a Senate representative shall be adopted.
5. Present Senate representatives on the Board:

Professor B. L. Dronzek (Agriculture) 2000
Professor J. Hoskins (St. John's College) 2001
Professor H. W. Duckworth (Science) 2002
6. Not eligible for election are: the Chancellor; the President; and the Board representatives on Senate, Ms. L. Archer and Ms. W. Thiessen.
7. Terms of Senate representatives on the Board are normally for three years.

## Procedures

1. Nominations for the position shall be received from the floor.
2. Senators shall vote for no more than one candidate on the ballot provided.
3. The candidate receiving the largest number of votes shall be declared elected for a three-year term.
4. in the event of a tie, the question shall be resolved by another ballot involving those candidates who have tied.

## B. Election of Senate Representatives to the Executive Committee

1. One representative is to be elected from among the Vice-Presidents, Deans of Faculties and Directors of Schools, to be elected for a three-year term (June 1, 2000 - May 31, 2003) to replace Dean D. Ruth, whose term of office ends on May 31, 2000.
(1) Eligible for election are:
(a) Vice-Presidents: J. Keselman, M. McAdam
(b) Deans: H. Bjarnason, A. Percival, J. de Vries, R. Magsino, D. Ruth, F. de Toro, H. Secter, J. Gray, B. Hennen, D. Gregory, D. Collins, D. Hrycaiko, J. Jamieson and D. Fuchs
(c) Directors: D. Amundson and R. Wedgewood
(2) Presently serving:

| Dean D. Ruth (Engineering) | 2000 |
| :--- | :--- |
| Dean M. Cox (Architecture) | 2001 |
| Dean R. O'Kell (Arts) | 2002 |

(3) Procedures:
(a) Nominations for the position shall be received from the floor.
(b) Senators shall vote for no more than one candidate on the ballot provided.
(c) The candidate receiving the largest number of votes shall be elected for a three-year term.
(d) In the event of a tie, the question shall be resolved by another ballot involving those candidates who have tied.
2. Three elected faculty representatives to be elected for three-year terms (June 1, 2000 - May 31, 2003), to replace Professors T. Booth, D. Chow and A. Percival, whose terms on the Executive Committee expire on May 31, 2000.

Professor Percival is not eligible for re-election under this section, as she is now a Dean. Accordingly, she is eligible to be elected under section B.1.

Professor Booth is not eligible for re-election, as he is no longer a member of Senate.
(1) Presently serving:

| Professor T. Booth (Science) | 2000 |
| :--- | ---: |
| Professor D. Chow (Medicine) | 2000 |
| Professor A. Percival (Continuing |  |
| Education Division) | 2000 |
| Professor B. Stimpson (Engineering) 2001 |  |
| Professor A. Secco (Science) | 2001. |
| Professor J. E. Cooper (Medicine) | 2002 |
| Professor M. Feld (Arts) | 2002 |
| Professor M. Stern (Arts) | 2002 |

(2) Procedures:
(a) Nominations for the positions shall be received from the floor.
(b) Senators shall vote for no more than three candidates on the ballot provided.
(c) The three candidates receiving the largest number of votes shall be elected for three-year terms.
(d) In the event of a tie, the question shall be resolved by another ballot involving those candidates who have tied.

## 65

June 14, 2000

## Report of the Senate Executive Committee

## Preamble

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

## Observations

## 1. Speaker for the Senate Executive Committee

Professor D. Chow will be the Speaker for the Executive Committee for the June meeting of Senate.

## 2. Appointment of Chair of the Senate Committee on Appeals

Warden J. Hoskins' (St. John's College) term as Chair ended on May 31, 2000. The composition of the Committee on Appeals calls for one member appointed by Senate Executive as Chair. The appointee need not be a member of Senate.

The Executive Committee approved the reappointment of Warden Hoskins as Chair.

## 3. Certificate Programs

In 1989, the Senate Committee on Curriculum and Course Changes (SCCCC) was asked to assume responsibility, on behalf of Senate, for the introduction, modification or abolition of certificate programs, and to recommend to Senate on advanced certificate programs. This was to be done for a two-year trial period, followed by a review and evaluation. That review and evaluation did not take place.

During the 1990s, SCCCC approved a number of proposals for certificate programs, most of them from the Continuing. Education Division. Over the years a format was developed whereby SCCCC feels it is given the information it needs in order to arrive at recommendations with regard to these Cont Ed proposals.

However, the Committee has also been asked to approve certificate proposals from other units, and here it has felt uncomfortable with the role it is being asked to play. In many instances, the Committee is being asked to grant approval at the $11^{\text {th }}$ hour without being given adequate information.

There have also been numerous difficulties. For example, the tracking of certificate students on a University-wide basis; the categories which have been listed as falling within certificate programs; and the differences between certificates, advanced certificates and diplomas.

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Report of the Senate Executive Committee

Accordingly, the Senate Committee on Curriculum and Course Changes recommended that a cross-functional Committee, with broad representation from across the campus, be created to address the issue of certificate programs.

The Senate Executive Committee endorsed the creation of an ad-hoc cross-functional Committee to address issues relating to certificate and diploma programs at the University of Manitoba and make related recommendations to Senate.

## 4. Comments of the Executive Committee

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

Respectfully submitted,

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

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OFFICE OF THE PRESIDENT

202 Administration Building
Winnipeg, Manitoba
Canada RJT 2N2
Fax: (204) 261-1318

April 13, 2000

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To: Dr. Johann de Vries, Dean Faculty of Dentistry
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From: Dr. James S. Gardner


Subject: Memo of April 10: Re-Instatement of Department of Preventive Dental Sciences

I am acknowledging receipt of the above noted memo, and your request of Senate approval to re-instate the Department of Preventive Dental Sciences.

I support this request, and by copy of this memo, I am forvarding your request to Ms. B. Sawicki, University Secretary, for consideration.

## Comments of the Executive Committee:

The Executive Committee endorses the report to Senate.
JSG/gp
c.c. Ms. B. Sawicki
encl.

The University of manitoba

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To: Dr. James S. Gardner, Vice-President (Academic) and Provost Office of the President

From:

Date:
April 10, 2000

## RE: RE-INSTATEMENT: DEPARTMENT OF PREVENTIVE DENTAL SCIENCES

As indicated in the attached summary prepared by Dental Faculty Council Executive, the Department of Preventive Dental Sciences (PDS) and the Department of Dental Diagnostic and Surgical Sciences (DD\&SS) were merged in 1995. The merger was made for reasons of administrative efficiency and budgetary savings and to address the problems associated with operating the small (3 member) Department of PDS.

Over the past five years, it has become apparent that the circumstances within the merged Department of DD\&SS have changed and the rationale for amalgamating the two departments no longer exists. For example:

1) It was believed that in a merged department, secretarial support could be reduced. One secretarial position was reduced to halftime in 1995; however, over the past four years, the position has been increased to 90 percent.
2) The merger eliminated the need for one Department Head stipend. However, management of the merged department required the one Head to spend a considerable amount of additional time beyond the management of one department.
3) In 1995, there were only three full-time academics in PDS and one of these members resigned shortly thereafter leaving only two. Over the past five years, the positions within the previous Department of PDS have been filled. The result is that there are three full-time members of the Section of Orthodontics; one full-time member of Community Dentistry plus a senior scholar; and one full-time member of Pediatric Dentistry, totaling six members. In addition, there are currently over 30 part-time instructors providing instruction within these Sections.

## IMPLICATIONS ASSOCIATED WITH RE-INSTATING THE DEPARTMENT OF PDS:

1) FINANCIAL RESOURCES: No additional financial resources will be required to re-instate or operate the Department of PDS beyond the requirement of one Department Head stipend. The Faculty of Dentistry agrees to provide the funds necessary for the stipend.
2) SPACE/EQUIPMENT RESOURCES: No additional space or equipment will be required to re-instate or operate the Department of PDS. Existing space will be re-organized according to the previous logical framework to best serve members of both departments.
3) EFFECTS ON PROGRAMS: It is anticipated that only positive effects will resuilt from re-instating the Department of PDS. a) Faculty members who collaborate with one another most frequently will be located in office space that promotes close interaction. b) Each department will be better able to formulate specific goals and objectives and means by which to accomplish them.

The Department of DD\&SS reviewed its current structure over the past year. Based on the results of this reassessment, the Faculty believes that it is reasonable to take action to reverse the 1995 decision to merge the two departments. We request approval from Senate to re-instate the Department of Preventive Dental Sciences at the earliest possible date. Thank you for your consideration.

ATTACHMENTS:
Dental Faculty Council Agenda, March 27, 2000
Dental Faculty Council Executive Summary and Recommendation
Dental Faculty Council Minutes, March 27, 2000

Cc: Dr. S. Gelskey, Acting Head, DD\&SS

THE UNIVERSITY OF MANITOBA

## Inter-Departmental Correspondence

DEANS OFFICE - FACULTY OF DENTISTRY

TO: Dental Faculty Council
FROM: Johann De Vries, Dean
DATE: March 20, 2000
RE: NOTICE OF FACULTY COUNCIL MEETING

This memo is to advise you that there will be a special Faculty Council Meeting to be held at the following time:

DATE: March 27, 2000
TIME: $\quad 1: 00$ P.M.
LOCATION: Theatre E

## AGENDA

1. Approval of Agenda.
2. For Discussion

- Dental Diagnostic and Surgical Sciences Re-Structuring (attached, please find information).

3. Adjournment.

## Attach/

# RE-CREATION OF THE DEPARTMENT OF PREVENTIVE DENTAL SCIENCES 

March 20, 2000

## BACKGROUND:

On April 24, 1995, DFC passed the following motion, "That the Department of Preventive Dental Science be merged with the Department of Dental Diagnostic and Surgical Sciences". The merger was made for reasons of administrative efficiency and potential budgetary savings. In addition, the small number of full time faculty in PDS at that time required a heavy committee commitment of department faculty since many Faculty committees required department representation.

## RECENT DEVELOPMENTS:

Over the past year, the Department of DD\&SS has been reassessing its structure. As part of the reassessment, the Department analyzed the action taken by the Faculty in 1995 to amalgamate the departments of DD\&SS and PDS. It was determined that the rationale for amalgamation no longer exist, i.e., No budgetary savings have been realized and the number of full time faculty in the Sections of Community Dentistry, Orthodontics and Pedodontics has increased.

## ACTION:

Based on the Department's reassessment, it is reasonable to take action to reverse the 1995 decision of DFC. The outcome would be that the Sections of Community Dentistry, Orthodontics and Pedodontics and their associated faculty and staff would be part of the re-established Department of Preventive Dental Sciences. The remaining Sections of Hospital Dentistry, Medicine, Oral Diagnosis \& Radiology, Oral Pathology, Oral \& Maxillofacial Surgery, Pain \& Anxiety Control, and Periodontology and their associated faculty and staff would be part of Dental Diagnostic and Surgical Sciences.

## RECOMMENDATION TO DENTAL FACULTY COUNCIL FROM DENTAL FACULTY COUNCIL EXECUTIVE

"That the Faculty of Dentistry re-instate the pre-existing Department of Preventive Dental Sciences"

# 72 <br> DENTAL FACULTY COUNCIL MEETING MINUTES 

## MEeting Date: March 27, 2000

1. Approval of Agenda.

M/S/C LAVELLE / FLEMING
"That the Agenda be approved as circulated".
2. Re-Structuring of Diagnostic and Surgical Sciences

Relevant information regarding this topic was distributed with the Agenda.
M/S/C GELSKEY / SINGER
"That the Faculty of Dentistry re-instate the pre-existing Department of Preventive Dental Sciences".
3. Adjournment.

M/S/C SUZUKI/LAVELLE

## Report of the Senate Planning and Priorities Committee on the Faculty of Dentistry proposal to re-instate the Department of Preventive Dental Sciences.

## Preamble

1. In its terms of reference found in the Senate Handbook (Rev. 1993), pp. 10.21-22, the Senate Planning and Priorities Committee (SPPC) shall assist Senate in its role to advise and make recommendations to the Board with respect to academic planning.
2. In 1995 the Faculty of Dentistry merged the Department of Preventive Dental Science (PDS) and Department of Dental Diagnostics and Surgical Sciences (DD\&SS). At the time the merger was to generate administrative efficiencies and budgetary savings.

## Observations

1. Administrative efficiency in terms of secretarial support was not achieved.
2. The merger eliminated the need for a Departmental Stipend. Apparently, the Head of the amalgamated department spends a considerable amount of additional time beyond what is needed to run one Department.
3. PDS is now a six member Department with over 30 part-time instructors.
4. No additional financial resources are required beyond a Heads Stipend. The Faculty of Dentistry will assign the funds.
5. Existing space will be reorganized to accommodate the change.
6. Effects on programs are likely to be positive as both Departments can formulate more specific goals and objectives.
7. The proposal has the support of the Vice-President (Academic) and Provost.

## Recommendation

SPPC endorses the proposal of the Faculty of Dentistry to reinstate the Department of Preventive Dental Science.

Respectfully submitted,

Norman Halden, Chair, Senate Planning and Priorities Committee
Robert Tait, Chair, Subcommittee on Program and Curriculum Planning

University of Manitoba

## MEMORANDUM

Date: March 16, 2000
To: Ms. Bev Sawicki, Senate Secretariat, 310 Administration Bldg.
From:
Dr. Fernando de Toro, Dean, Faculty Council of Graduate Studies (-
Subject: Recommended Motion for Senate's consideration

At the March 15, 2000, meeting of the Faculty Council of Graduate Studies, the membership endorsed the following motion and requested that it be forwarded to Senate for its consideration:

THAT the Diploma in Oral and Maxillofacial Surgery and the Diploma in Periodontics be converted to a Master of Dentistry (Oral and Maxillofacial Surgery) and a Master in Dentistry (Periodontics). (See attachment for rationale).

Thank you for your attention in this matter.
/jc

## Comments of the Executive Committee:

The Executive Committee endorses the report to Senate.


## Preamble

The Programs and Planning Committee of the Faculty of Graduate Studies met on December 9, 1999 to consider a credential change from the Diploma Program in Periodontics to a Master's Program in Dentistry specialising in Periodontics and the Diploma Program in Oral and Maxillofacial Surgery to a Master's Program in Dentistry specialising in Oral and Maxillofacial Surgery.

## Observations

1. The main justification for the requested change is that both programs exceed all the requirements of the University of Manitoba for a Master's degree.
2. In both programs the students must pass Course 103.722 (Essay/Research Project). This involves either the completion of a research project of a detailed literature review on an assigned topic. In both cases the student must write up their work in the form of a scientific paper and present and defend it in a public seminar. This is considered to be equivalent to the preparation and defense of a thesis.
3. The main reason for the request is the desire to attract the best possible graduate students. Since other comparable programs in Canada offer a Master's degree to successful graduates, our programs are at a severe disadvantage in attracting the best students, as these students would naturally prefer to be awarded a degree rather than a diploma.
4. Both programs are fully accredited by the Commission on Dental Accreditation of Canada and the graduates have the same specialist standing as graduates of Master's programs.
5. The programs would not be changed, other than the credential offered, and the change in credential would not be made retroactive.

## Recommendation

The Programs and Planning Committee of the Faculty of Graduate Studies recommends that the Faculty Council of Graduate Studies approve the change in credential from the Diploma Program in Periodontics to a Master's of Dentistry in Periodontics, as well as the Diploma Program in Oral and Maxillofacial Surgery to a Master's of Dentistry in Oral and Maxillofacial Surgery.

EDOUREED LU EXpO. HE. JOE /VO

## COntrol $\rightarrow$

## REQUEST FOR CHANGE OF CREDENTIAL AWARDED:



Dr. John B. Curran, Head \& Program Director
Section of Oral and Maxillofacial Surgery
Graduate Progran in Oral and Maxillofacial Surgery
:

Proposal to Change the Diploma Program in Oral and Maxillofacial Surgery to a Masters Degree Program in Oral and Maxillofacial Surgery

History and Rationale for this Proposal:
The Diploma Program in Oral and Maxillofacial Surgery of the University of Manitoba was initiated in 1977 following approval by the Senate of the University and other external bodies whose approval was required. The program was three years in length (outline attached) ${ }^{1}$, and on successful completion of the requirements, students received the Dip. OMS. The length of the program was extended by one year in 1989 and a number of additional course requirements were added. There was a substantial increase in credit hours including the addition of a departmental course 103.722 which is an essay / research project. A further change, this time, a reduction in the number of course requirements occurred in 1998, to arrive at the current level of courses as currently listed (outline attached) ${ }^{2}$. The program still remains four years in length.

The Oral and Maxillofacial Surgery (OMS) Graduate Program as the University of Manitoba is one of five such programs in Canada and the only oce west of Toronto. Dalhousie. University, McGill University, and the Universici of Toronto all offer a master's level degree which is completed within the minimum four years required for the training of an oral and maxillofacial surgeon. (Summaries of two of these programs and their requirements are appended ${ }^{3 .}$..) Laval University is currently in the process of considering raising its OWS program to a master's degree level.

Ever since the program was increased in length with added requirements, successive students have indicated that they feel that they are not adequately recognized for the volume and quality of their academic achievement, and that their peers in similar programs in Canada and the United States are being
awarded MSc degrees for generally similar requirements. It should also be noted that OMS graduate students pay full fees for four years.

Students who inquire about the program often note the lack of opportunity to obtain a masters degree and given the length of the program and its current requirements, this is seen as a major negative by prospective applicants. The fact that most other similar Canadian and American programs offer a master's degree no doubt causes us to lose some very well qualified applicants.

A close examination of the requirements for the master's degrees for equivalent programs in Canada will show that those for the University of Manitoba's Diploma Program in OMS are equivalent to the requirements of other institutions except for the thesis requirement. There are no additional funds required by the Section of Oral and Maxillofacial Surgery specifically related to the awarding of the M. Dent in OMS.

The outline of the oral and maxillofacial program is attached.

It is also requested that the new credential be implemented in the aex: academic year and furthermore that students currently registered in the diploma OMS program who complete all the requirements as listed for the M. Denc OMS program prior to their graduation, be eligible to receive the new credential.

# ORAL \& MAXILLOFACIAL SURGERY GRADUATE PROGRAM <br> Program Outline 

Department of Dental Diagnostic \& Surgical Sciences, Faculty of Dentistry Department of Surgery, Faculty of Medicine<br>Faculty of Graduate Studies<br>University of Manitoba<br>Winnipeg, Manitoba

Program Director:
John B. Curran, BDS, FFDRCS(Irel), FRCD(C)
Clinical Instructors:
Ronald M. Boyar, DMD, MSc
Timothy J. Blight, DMD, Dip. OMS, FRCD(C)
Mark A. Cohen, BDS, M Dent, FFD(SA), FRCD(C)
Leland R. McFadden, DDS, MSc, Dip. OMS, FRCD(C)


## MASTER'S PROGRAM IN ORAL \& MAXILLOFACLAL SURGERY

## INTRODUCTION

The most widely accepted definition of Oral and Maxillofacial Surgery is that adopted by the American Dental Association in 1991.
"Oral and Maxillofacial Surgery is the specialty of dentistry which includes the diagnosis, surgical and adjunctive treatment of diseases, injuries and defects involving both the functional and esthetic aspects of the hard and soft tissues of the oral and maxillofacial regions".

The scope and volume of work in Oral and Maxillofacial Surgery is expanding and the varied reasons for this include the marked improvement in surgical therapy which is now available for the management of facial deformities, temporomandibular joint disorders, prosthetic problems, and dento-alveolar abnormalities, some of which were once beyond the scope of surgical treatment. Trauma is also associated with a greater number of maxillofacial injuries requiring oral surgical management.

Furthermore, the improvement in dental and oral health has led to fewer teeth being lost in childhood with a concomitant increase in dental overcrowding and a subsequent increase in the incidence of impacted teeth requiring surgical intervention.

## HISTORY

The Diploma Program in Oral and Maxillofacial Surgery at the University of Manitoba was initiated on July 1, 1977 as a three-year program and its peincipa! objective was to train Oral and Maxillofacial Surgeons for specialisr practice in Canada. An additional objective was the preparation of crainees for the successful completion of the Fellowship examinations of the Royal College of Dentists of Canada.

The Program was granted full accreditation by the Commission on Dental Accreditation in 1980 when the first resident graduated, but during the next six Years, the Program underwent some staff changes and had its accreditation reduced in 1986 to that of conditional approval. Dr. John B. Curran assumed responsibility for the Program in July 1986 when he became Acting Head and in 1989 he accepted the position of Head of the Section of Oral Surgery and Director of the Oral and Maxillofacial Surgery Graduate Program.

The Program was extended to four years in length in 1989 in accordance with the revised requirements for training from the Commission on Dental Accreditacion of Canada and in 1991, full accreditation was restored. Full accreditaiton was reaffirmed in 1993 following a site inspection.

Resident positions are assigned to our Program from the pool of positions iunded by the Government of Manitoba through the Winnipeg Hospital Authoricy, and administered by the Post-Graduate Medical Education Committee of the Faculty of Medicine. The PGME Committee. in fact. assions a snecifir numher of rositents
to the Department of Surgery of the Faculty of Medicine of which Oral and Maxillofacial Surgery is a Section and from that pool, the assignment is made directly to us. It is at this level that most of the decisions are made which directly affect the residency appointments on a year-to-year basis. This program is assigned a total of three funded positions. This also dictates the number of graduate students although in special circumstances an externally funded foreign student may be accepted.

## OBJECTIVES OF THE PROGRAM

This program was instituted with the primary objective of training oral and maxillofacial surgeons who would practice in their community, as ethical; dedicated and competent surgeons, and who as such would act as leaders, teachers, and role models for their fellow dental professionals especially in the area of hospital practice. The program, therefore, must reflect the broad scope. of oral and maxillofacial surgery and expose the resident in a meaningful way to the widest possible range of diagnostic problems and surgical experience while ensuring that surgical principles and technique are well learned. It is stressed at all levels of training that patient care and well-being is paramount and supercedes all other considerations. It is considered important that the program inculcates in the residents the recognition that their training program is only the beginning of a learning experience that will continue throughout. cheir professional careers as oral and maxillofacial surgeons. It must also provide residents with an experience in the area of academic research, in order to allow them the opportunity to explore more deeply, and to understand the increasing importance of scientific inquiry in the development of the specialty and in the continuation or deletion of surgical therapies. The overall structure and direction of the program must be such that students receive a balanced, complete training: with appropriate time spent on every area of the major components, and it is the duty of the Program Director to ensure that all important areas of che specials: are included, and that the quality of training in all areas is maintained. This should be done by including a number of teaching faculty active in clinica! practice with special interest and expertise in particular segments of the specialty of oral and maxillofacial surgery. It is also vital to continue dialogue with the specialty in the community, and with other health professionals with whom the oral and maxillofacial surgeon cooperates in the care of people.

In summary, the purposes of the Oral and Maxillofacial Surgery Program are to:

1. train dentists to become competent oral and maxillofacial surgeons;
2. provide academic training which will ensure that program gradua:es will have the ability to assess and transfer knowledge of their specialty to others involved in health care, and to provide a basis for those graduates who choose to pursue more advanced scholarly activities;
3. provide an adequate base of medical knowledge for the practice of the specialty and also to develop the analytical skills needed for the assessmen: of the merits of scientific and technological advances reported in the litere:ure or promoted by industry;
4. prepare graduates to be candidates for the Fellowship examination in Oral and Maxillofacial Surgery, of the Royal College of Dentists of Canada.

On completion of the program, the student will receive a degree from the University of Manitoba and a certificate of hospital residency from the Division of Post Graduate Medical Education of the University of Manitoba.

## ADMISSION REQUIREMENTS

The applicants must be Canadian citizens or permanent residents of Canada and be eligible for licensure as a dentist in a province of Canada. They must comply with provincial requirements for licensing of interns and residents. Exceptions to these requirements must fulfill additional demands and are not within the scope of this document.

## SELECTION CRITERIA

All criteria are listed in order of priority (most important to less important).
A. Academic Record

1. Dental school graduating year rank
2. Awards, scholarships
3. Other degrees
B. Clinical Experience
4. Hospital based residency / internship
5. Private Practice
6. Oiher relevant clinical experience
C. Other
: 1. Interview evaluation
7. Satisfactory completion of one or more academic exercises in the area of scientific literature analysis and library research
8. Letters of recommendation
9. Research experience
10. TOEFL - all candidates whose primary language is not English are required to achieve a score of 550 .

## SELECTION PROCEDURES

(i) All applications are reviewed individually by members of the selection committee and ranked.
(ii) Based on ranking and where necessary, further consultation with committee members, a number of applicants, not usually exceeding six, is invited for neranal interviour
(iii) In the event of a candidate withdrawing from the interview, or declining the invitation, the program director will decide whether to select additional candidates for the interview.
(iv) The interviews will usually be held in November. The committee will usually make its decision at the end of the interviews.

## SUMMARY OF CURRICULUM

The requirements for the M. Dent OMS, as outlined in the current calendar of the University of Manitoba are:

1. Satisfactory completion of all clinical rotations and assignments as set out in the forr years of hospital residency training.
2. Successful completion of courses $103.723,103.724,103.725,103.726,103.727$, 103.728, and 103.729.
3. Successful completion of ancillary course 80.706 and other basic science" courses as selected by the department.
4. An essay / research project 103.722 in a specifled area selected in consultation with the department.

## ORAL AND MAXILLOFACIAL SURGERY COURSE OFFERINGS

## REQUIRED COURSES:

80.706 Advanced Human Anatomy - Including Embryology and Histology

The emphasis in this subject is detailed surgical anatomy of the head and nect: with an introductory course in the anatomy of the limbs, thorax and abdomen. The course consists of lectures and entails dissection of designated areas and is taught by the Department of Anatomy.

Time: . . . . 6 credit hours

### 103.722 Essay / Research Project, Year 4

A requirement for the Diploma in Oral and Maxillofacial Surgery is an essay and/or research project on a topic selected in consultation with the Head of the Program carried out in the fourth and final year of the program. The essay will consist of a thorough analysis of a significant problem related to oral and maxillofacial surgery. A review of the relevant literature, and a presentation of methods could be used for its objective investigation.
103.723 Advanced Oral Pathology

The four major etiopathogenic categories of diseases affecting the oral and paraoral structures are discussed with emphasis on common conditions and entities significant to various dental specialties. Lectures cover epidemiology,
clinical and laboratory features and management principles with supplementation by seminars or laboratories.

Time: . . . . 6 credit hours

### 103.724 Advanced Oral and Maxillofacial Surgery Seminar, Year 1

This first year course includes a thorough review of the applied scientific basis for the practice of oral and maxillofacial surgery and emphasizes surgical pathology, diagnosis and technique. Instruction will be given by means of lectures, seminars case presentations and a critical review of literature.

Lecture/seminars are held weekly (Mondays 2:00 pm - 4:30 pm) and at other times by arrangement. A sample of the topics covered listed below:

1. Minor oral surgery and impacted teeth
2. Cystic lesions of the jaws
3. Odontogenic tumors
4. Diseases of bone
5. Diseases of salivary glands
6. Diseases of nose and paranasal sinuses
7. Cervicofacial infections
8. Malignant disease
9. Development abnormalities
10. Orthognathic surgery
11. Reconstructive surgery
12. Maxillofacial trauma
13. Implants and transplants
14. Mucosal lesions and oral manifestations of systemic disease
1.5. Disorders of haemostasis and coagulation
15. Facia! pain
16. Disorders of temporomandibular joints
17. Maxillofacial prosthetics
18. Ethical Issues
19. Risk Management Issues

Time: . . . . . 6 credit hours

### 103.725 Clinical Advanced Oral and Maxillofacial Surgery, Year 1

The first year of the hospital residency includes:
a) introduction and training in history taking and physical diagnosis; hospital protocols and ward procedures; minor oral surgery procedures and pain control techniques; operating room procedures and general in-patient care;
b) out-patient minor oral surgery under local anaesthesia - held in the Section of Dentistry and Oral Surgery of the Health Sciences Centre which includes procedures such as advanced exodontic techniques, alveolectomy and removal of impacted teeth;
c) major and minor oral surgery procedures under general anaesthesia as an in-patient - this includes the more difficult oral and maxillofacial surgery procedures not suitable for local anaesthesia, such as multiple impactions, radical alveolectomies, full mouth deformities, e.g. prognathism, micrognathia, etc.;
d) out-patient general anaesthesia for minor oral surgery - experience is gained in operating under anaesthesia and sedation techniques on ambulatory patients in the NFA Theatre of the Health Sciences Centre and the Oral Surgery Clinic at the Faculty of Dentistry;
e) Management of Maxillofacial Trauma - responsibility is this area is shared with the Section of Plastic Surgery of the Health Sciences Centre. Fractures involving the facial skeleton are treated in the maxillofacial unit;
f) Hospital Rounds - teaching rounds are held regularly throughout the year. The student will work up and present cases operated on and be responsible for post-surgical care. In addition, there are daily rounds by individual residents and staffmen;
g) Head and Neck Tumor Conference and Clinics - these are held once a week in the Manitoba Cancer Foundation where presentations and treatment planning of all cases of head and neck cancer are carried out. Staffmen and residents attend as part of the team and arrange surgical treatment where necessary. A follow-up clinic is held after the conference at which patients are seen by all staff taking part in their treatment (Thursday mornings).
h) Clinico-Path meetings - are held as part of the seminar program and section rounds.
i) Maxillofacial Prosthodontic Clinic - these are held weekly in the D=aral Clinic of the Fealth Sciences Centre jointly with the Section of Prosthodontics. They include the dental management of cases of cancer of the head and neck.
j) Miaxillofacial Prosthodontic Techniques - instruction in some of the prosthetic techniques used in fracture and facial deformity work.
k) Orthognathic Surgery Seminar - regular seminars on comoined Orthodontics and Oral and Maxillofacial Surgery problems are currencly given to graduate orthodontics student by the Section of Oral Surgery. Students in the Oral and Maxillofacial Surgery Program participate in them together with case presentations at planning conferences, for discussion by the Sections of Oral Surgery and Orthodontics (Thursdays).

Time: . . . . 6 credit hours
103.726 Advanced Oral and Maxillofacia! Surgery Seminar, Year 2

Lectures, seminars, case presentations and reviews of current literature will emphasize the state of current knowledge regarding the clinical practice of advanced oral and maxillofacial surgery.
103.727 Clinical Advanced Oral and Maxillofacial Surgery, Year 2

The second year of the hospital residency training program includes training in minor oral surgery, including dentoalveolar, pre-prosthetic surgery and implantology. It also provides an introduction to advanced oral and maxillofacial surgery and experience in maxillofacial radiology, and a rotation in Internal Medicine.

Time: . . . . . 6 credit hours

### 103.728 Clinical Advanced Oral and Maxillofacial Surgery, Year 3

The third year of the hospital residency training program includes rotations in the following services:

Internal Medicine
Anaesthesia
General Surgery \& Allied Training

- Surgical Intensive Care
- Plastic Surgery
- S.urgical Oncology
- E.N.T. / Elective
- Emergency Medicine / Surgery

Advanced Clinical Oral and Maxillofacial Surgery

8 weeks (Year 2)
12 weeks
28 weeks

Time: ..... 6 credit hours
103.729 Clinical Advanced Oral and Maxillofacial Surgery, Year 4

The fourth year of the hospital residency training program is devoted to advancec oral and maxillofacial surgery. The student is designated Senior Resident anc assumes a greater degree of responsibility in patient-care activities and administrative duties.

Time: . . . . . 6 credit hours

Assigned on an Individual Basis by the Program Director:

### 90.724 Medical Physiology

A lecture, seminar, tutorial, and demonstration course dealing with fundamental biophysical processes, the function of major organ systems, physiological control mechanisms. Disordered physiological functions and their relation to disease will be discussed where appropriate. Taught by the Department of Physiology.

Time: . . ... . 6 credit hours

### 93.747 Biostatistics

Statistical approach to the evaluation of observations in basic medical sciences: experimental design, sampling, probability, and testing of hypotheses. Taught by the Department of Community Health Sciences.
100.709 Pharmacology and Therapeutics

A combined lecture and seminar course on the pharmacological basis of therapeutics. Special attention will be paid to drugs used commonly in the practice of dentistry, their side effects and their interaction.

Objective of 100.709:
The course has as its prime objective the training of students in those areas of pharmacology and therapeutics of practice in dentistry. In this respect, following a series of discussions devoted to general pharmacological principles, areas such as analgesia, anaesthesia, chemotherapy and sedation are discussed fully from the point of view of both their basic pharmacology and their appropriate therapeutic application. Throughout the course the emphasis is to provide a critical evaluation of contemporary drug usage. Taught by the Department of Oral Biology.

$$
\text { Time: . . . . . } 3 \text { credit hours }
$$

### 100.711 Infectious Diseases and the Oral Cavity

The description of the etiology of microbial infections in the mouth and infections elsewhere in the body which involve oral bacteria. The control of such infections. by vaccines, antibiotics and antimicrobial drugs. Treatment of infections in the immunosuppressed, post-operative infections and nosocomial infections. The relationships of the host immune system to the oral flora. Taught by the Department of Oral Biology.

Time: . . . . . 3 credit hours

## OMSITE REGULATIONS

In addition to the program. requirements outlined commencing with the student accepted into the program on the 1st of July 1993, all graduate studencs will ba required to sit the annual oral and maxillofacial surgery in-training examination (OVISITE). This examination, which is administered by the American Association of Oral and Maxillofacial Surgeons, has been widely accepted as an excellent guideline to residents in training of their standing when compared with residents at similar levels of training throughout North America. The examination fee is the responsibility of the student who will be provided with all the necessary information annually.

## ADVANCED CARDIAC LIFE SUPPORT (ACLS)

In keeping with the overall training requirements for an oral and maxillofacia! surgeon, all residents will be expected to successfully complete a course in ACLS prior to their graduation from their program at the end of their fourth year. Residents who have obtained certification in ACLS prior to entering the program will be credited with this training upon submission of proper documentation. The cose of obtaining the ACLS is the responsibility of the resident-in-training.

## SEMINARS, GRAND ROUNDS, TRAUMA ROUNDS, CASE PRESENTATIONS, ETC.

The student attends for topics relevant to the specialty. These are presented on a regular basis and are part of the educational process of all residents in all the medical areas and include seminars on maxillofacial radiology.

## JOURNAL CLUB

Regular monthly reviews of the current literature relevant to oral and maxillofacial surgery are held, which staff and residents attend.

## RESEARCH

An essay / research project (103.722) in a specific area selected in consultation with the program director is completed in the fourth and final year of the program.

## NATIONAL MEETINGS

The student may attend at least one major oral and maxillofacial surgery meeting throughout his/her residency and is encouraged to submit a scientific paper at that meeting. Financial support may be available but is not guaranteed.

## NUMBER OF STUDENTS

A maximum of one student per year is accepted into the program.

## EQUIPMENT AND FACILTIES

The clinical facilities at the Faculty of Dentistry of the University of Manitoba and the out-patient dental and oral surgery clinics, wards, and operating rooms of the Health Sciences Centre provide the principal environment for residency training. These institutions have met the requirements of the Commission on Dental Accrediation of Canada regarding their suitability as training facilities for an advanced education program in Oral and Maxillofacial Surgery. Residents, with the approval of the program director, may also attend other medical or dental facilities, under supervision of faculty. These excursions or field trips will be carefully monitored and will not constitute a major component of the resident's time or experience.

## Faculty of Dentistry:

Abra Seminar Room, Graduate Student carrels, Oral Surgery Clinic, other university and hospital library facilities, and seminar rooms.

Health Sciences Centre:
(i) Ambulatory Care Clinic, Adult Dentistry - This is a fully equipped denta! clinic with office facilities, operatories, $x$-ray facilities, a well-equipped dental laboratory which is exclusively for staff and resident use. Threa halfday sessions are allocated for staff/resident consultation, follow-up and treatment clinics.
(ii) Ambulatory Care Clinic, Pediatric Dentistry - Access to a fully equipped pediatric dental clinic is available when required.
(iii) Adult Day Surgery Facility including an operating room is used by oral and maxillofacial surgery residents and staff for the performance of minor oral surgical procedures with local anaesthetics and I.V. sedation one day per week.
(iv) The wards and operating rooms of the General (Adult) Centre and Children's Centre and appropriate support services are utilized to provide a suitable environment for resident training. Hospital facilities also include in-patient beds which are available for use. Operating rooms both at the Children's Hospital and the General Centre are readily utilized. Outpatient facilities in the form of operatories, clinical waiting room, x-ray room and dental technician's room are also available together with facilities at the Children's Out-Patient Clinic when necessary.

## LABORATORY FACILITIES

## Faculty of Dentistry:

- Oral Biology Graduate Student Research Laboratories - D31A (basement) and D312 (third floor) Dental Building
- Oral Pathology Laboratory - D338 Dental Building
- Orthodontic Research Laboratory - D303 Dental Building
- .. Restorative Dental Materials Research Lab-D23I Dental Building .


## Health Sciences Centre:

- Plastic Surgery - Microsurgery laboratory
-     - Orthopaedic Surgery - Orthopaedic anatomy laboratory
- .. Skills laboratory
- Laser lab


## BUDGET FOR THE PROGRAM

Residents are members of the Provincial Association of Residents and Interns of Manitoba (PARIM), which is the collective bargaining unit for residents and interns in Manitoba. The budget for resident salaries is controlled through the Winnipeg Hospital Authority which provides funding for a finite number of trainees in the teaching hospitals of Manitoba. The total number of such positions is established by agreement between the Government of Manitoba and the University of Manitoba. The distribution of positions is the responsibility of ine Post Graduate Medical Education Committee of the Faculty of Medicine. Students also may apply for financial support for travel and other approved expenses related to their program.

## CODE OF RESMENT AND INTERN BEHAVIOR

Residents are required, at all times, to maintain a professional manner of behavior in their relations with patients, dental staff and other medical and support staff of the Hospital. Quarterly and summary evaluations of interns and residents include criteria relative to professional attitudes. Besides interpersonal relationships, residents are monitored for sense of responsibility, which is measured by reliability, punctuality and participation. Consistent failure to meet
minimum acceptable standards of behavior may result in reprimand, suspension or dismissal from the Program. A verbal or written warning from the Director of the Program, which fails to correct unacceptable behavior, will result in at least a permanent record of misconduct. Suspension or dismissal recommendations must be heard by the Postgraduate Education Committee which will determine any action to be taken.

## LABILTTY INSURANCE

Students are covered by the University of Manitoba's insurance policy while registered students of the University.

Note:
This document is intended to provide prospective applicants with an overall description of the program. It is subject to change and while every effort is made to ensure that the information contained in it is current and accurate, it should not be interpreted as an official University of Manitoba document. Reference should be made to University regulations where indicated.

## FFOGRAM OUTLINE

| YEARI |  |
| :---: | :---: |
| A. Applied Basic Sciences (Nate 1, 4) <br> - Anatomy: Gross, Microstopic Embryology Surgical Anatomy <br> B. Introduction to Clinical Shills (Note 3) (incorporating Physical Diagnasis) <br> C. Advanced OMS Seminar Program <br> D. Advanced Clinical OMS (iviote 2) | September - April <br> September - April <br> September - April <br> July - June |
| 母-4 | R |
| A. Applied Basic Sciences <br> - Pathology - General / Dral <br> - Microbiology / Immunology <br> - Medical Physiology <br> B. Advanced OMS Seminar Program <br> C. Advanced Clinical OMS <br> D. Internal Medicine (8 weekst (Giote 3) | September - April <br> January - April <br> September - April <br> September - April <br> July - June <br> May - June |
| YEAR III |  |
| A. Anaesthesia ( 12 weeks) <br> B. General Surgery \& Allied Training (28 weeks) <br> - Surgical Intensive Care <br> - Head and Neck / General Surgery <br> - Plastic Surgery <br> - Emergency Room <br> - Elective Rotation <br> C. Advanced Clinical OMS 12 weels) (including research paper - note-4) | July - September <br> October-March <br> April - June |
| YEARN |  |
| Senior Resident Year <br> Advanced Clinical OMS ( 53 werks) | July - June |

## NOTES:

1. Academic didactic courses are completed during the University's normal academic year, and a minimum $B$ average is required in all courses (see note 5).
2. Advanced Clinical Oral and Maxillofacial Surgery comprises 30 months of clinical training in which the resident is progressively afforded increased experience and responsibility in the specialty.
3. Training in Clinical Diagnostic Skills, Internal Medicine, General Surgery and Allied Specialties and Clinical Anaesthesia occupies a total of 12 months.
4. Applied Basic Sciences and assigned research time occupies six months of the program.
5. Evaluation of didactic courses varies according to course outlines. Clinical training performance is evaluated either at six-monthly intervals or at the end of individual rotations by the appropriate individuals. All evaluation procedures are carried out in accordance with University regulations.
6. Vacation Periods: According to existing collective agreements with the Manitoba Association of Teaching Hospitals, all residents are permitted a total of 24 days vacation in each year. Certain restrictions are imposed as to when vacations may be taken and authorization by the Program Director is required in all cases.
7. Research: Students will be required to undertake scholarly researci: as par: of the requirements for the awarding of the M.Dent. Degree in Oral and Maxillofacial Surgery.
8. Course content and timetabling are subject to alteration and are reviewed : annually. Students are responsible for ensuring that they register annually for the correct courses.
9. Annual participation in the OMSITE Examination is mandatory.
10. Electives - The program director may authorize an elective rotasion which enhances the training of a student and which complies with guice!!:es laid down by the accreditation body.
11. The program outline is representative of the content and sequence of training. It should not be regarded as an actual timetable.

## ORAL \& MAXILIOFACLAL SURGERY PROGRAM STAFF

The following staff members are responsible for the major courses included in the program.

| Department | Chairman of Department <br> \& Teaching Staff <br> Assigned to OMS | Areas of Instruction |
| :---: | :---: | :---: |
| Dental Diagnostic \& Surgical Sciences | Dr. S. Gelskey, Acting Head <br> Dr. J. Curran, Program Director <br> Dr. T. Blight <br> Dr. R. Boyar <br> Dr. M. Cohen <br> Dr. L. McFadden <br> Dr. A. Stoykewych <br> Dr. S. Ahing <br> Dr. J. Perry <br> Dr. C. Birek <br> Dr. V. Pruthi | Oral Surgery / Oral Medicine Oral Surgery / Oral Medicine Pain aṇd Anciety Control Oral Surgery/Oral Medicine Orthognathic Surgery Oral Surgery / Oral Medicine Oral Pathology Oral Pathology |
| Oral Biology | Dr. N. Fleming, Head Dr. G. Bowden Dr. A. McNicol | Infectious Diseases \& Oral Caticy Pharmacology \& Therapeutics |
| Anatomy | Dr. Thliveris, Head <br> Dr. A. Karim <br> Dr. J. Scote | Aratomy (Growth \& Develop=3n* |
| Physiology | Dr. L. Jordan, Head Dr. E. Kroeger | Physiology - |
| Community Health Sciences | Dr. M. Moffat, Head Dr. T. Hassard | Biostatistics |
| Family Mredicine | Dr. P. Kirk, Head | Introduction to Clinical St:ills [Physical Diagnosis] |
| Dept's of: Surgery Medicine Anaesthesia H.S.C. | Dr. Van Ameyde. Program Director <br> Dr. L. Brownell, Program Director <br> Dr. P. Gray, Service Chief <br> Dr. B. Anderson, Service Chieí <br> Dr. K. Mrurray, Service Chief <br> Dr. W. Palatnick. Service Chief <br> Dr. P. Kerr. Service Chief | Internal Medicine <br> Anaesthesia <br> Surgical Intensive Care Conit <br> Oncolog: Surgery <br> Plastic Surgery <br> Emergency Room <br> Otolarvneology |

## APPENDIX 1

Summary of Diploma Program in Oral and Maxillofacial Surgery 1977-1989

The program is three years in length and includes a three-year hospital residency.

Course required for awarding of Diploma:

|  <br>  |  |  |  |
| :---: | :---: | :---: | :---: |
| 1. | Advanced Human Macroscopic (Gross) Anatomy | 80.706 | 6 |
| 2. | Clinical Oral Pathology | 100.707 | 6 |
| 3. | Pharmacology \& Therapeutics | 100.709 | 3 |
| 4. | Advanced Oral and Maxillofacial Surgery Seminars | 103.706 | 6 |
| 5. | Clinical Advanced Oral \& Maxillofacial Surgery (Years 1-3) | 103.707 | 18 |
|  |  |  |  |

## Mon-Credit Courses:

General Medicine and Surgery, Emergency Medicine and Surgery, Anestinesia.
: The Diploma in Oral and Maxillofacial Surgery is awarded on successitul completion of all requirements.

## APPENDIX 2 :

ORAL \& MAXILLOFACIAL SURGERY GRADUATE PROGRAM
Course Offerings

Requirements:
80.706 Advanced Human Macroscopic (Gross) Anatomy (6) Department of Anatomy - Dr. J.A. Thliveris, Head
103.722 Essay/Research Project (in fourth year)
103.723 Advanced Oral Pathology (6)
103.724 Advanced Oral and Maxillofacial Surgery Seminar 1(6)
103.725 Clinical Advanced Oral and Maxillofacial Surgery 1(6)
103.726 Advanced Oral and Maxillofacial Surgery Seminar 2 (6)
103.727 Clinical Advanced Oral and Maxillofacial Surgery 2 (6)
103.728 : Clinical Advanced Oral and Maxillofacial Surgery 3 (6)
103.729 Clinical Advanced Oral and Maxillofacial Surgery 4 (6)

Examples of Ancillary Courses which may be Assigned on an Individual Basis by the Program Director):

| : 90.724 | Medical Physiology (6) |
| :---: | :---: |
|  | Department of Physiology - Dr. L.M. Jordan, Head |
| 93.747 | Biostatistics (3) |
|  | Department of Community Dentistry - Dr. Mi.E. Moffat, Head |
| 100.709 | Pharmacology and Therapeutics (3) |
|  | Department of Oral Biology - Dr. N. Fleming, Head |
| 100.711 | Infectious Diseases \& The Oral Cavity (3) |
|  | Department of Oral Biology - Dr. N. Fleming, Head |



## Dalhousie University

August 5, 1999

## Dr. John B.Curran

Head, Section of Oral and Maxillofacial Surgery
Director, Graduate Program in Oral \& Maxillofacial Surgery
Faculty of Dentistry
University of Manitoba
780 Bannatyne Avenue
Winnipeg, Manitoba
R3E OW2

Dear Dr. Curran:
I apologize for the delay in sending you this response to your letter of June 2, 1999.
I am enclosing the $\mathrm{MD} / \mathrm{MSc}$. degree programme requirements as outlined in the Dalhousie University calendar to help in your effort to achieve your stated goal. I hope that you will find this helpful; please let me know if you require any Finther information.

Yours truly,


Enclosure

# Oral and Maxillofacial Surgery 

ixatier:<br>3981 University Avenue<br>Halitux, NS BJH 3]5<br>Itlephene:<br>(902) 494-1679<br>Chair<br>त.eciecs, D.5., DSS, MSc, FRCD(C), FICD, FADI, FACD,<br>Progin. .ate Direcor al Gradute Training Progiamme.<br>De:robacial teformities, cleft palate and/or lip

Honourary Prolessor


## Protessors

Cohert MM. 1.., da Mich), DMD (Tults), MSD (Minn), MPH
(Boston). PhD (Minn), ECCMG, Hexd, Division of Oral and
Maxillofacial Pathology. Symdromology, genetic, pediatria
Coor-2, T.j. AD. FRCP(O). Meuroanesthetin
Hotness. R, ase, FRCS(C). DAJNS
جrigar D. 9Sc. MD, CH
LTry, Fini, DCS (Da), MS Mich), FRCDC FICD, FACD
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donirnut D., MD, FRCS(C). Outcomies, research in totil kree Eipulxement and tratures
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Wh. MLe. PhD. DCS, Head, Division of Oral and Madlolacil -Rudioles: T.ace element analysis
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id besillefacal surgery, and to quality them for ocmination by

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## 1. Admission Requirements

Cundidates ta be considered must possess either 4 DOS or DMOD and be eligible for student Licensure in the Piovince of Nova Scotia (as ganted by the Provincial Dental Board of Nova Seotia).
Candidates must register lor the entire six yeirs of the progranume and pay full tuition for the firs five years and thesis only regisistion for the sixth year.
Appitation mut be completed prior to fune 30 of the year preseding mamencenent of the programe.

## II. MO/MSc Degree Programme Requirements

1. Satisheory completion or cedit for the prescibed classes

2 Sasisfacory knowledge and skills in all the phaser of clinial pral and maxillobacial susgery
3. Sabsfactory completion of a research stedy and submission of the result in the forn of a hesis acceptable to the Discerar of the pregranme
In addition to the requirements for successfal exmpiction of the MD degree, the following classes are required to complete the MSe camponent of the progranure.

## III. Classes Offered

Not all classes listed are necosencily offered in any given year.

## ORAL 5000.06: Anatomy.

This class is oifered during the lsi year, consisz of th houn of
 unatomy of the chest, thorsece enviry, ara and iliac cest anew of the pelvis. Deailed aratomy of the head and nect shatl be eovered Enphusis will focus on aratomical structures lad adjacences as they relate to deformitios, iniurie and other pathologial processes of the head and neck

## ORAL 5010.06: Surgleal Anatomy.

This chess is offered during the ist yerr and cansists of 30 hours of . dissection It permits the graduate student sp perforan a vatiefy of surgial procedure on the adaver. The opporanity exis 5 onot only practice the steps of the suzial procedurs but werplore the Enjor aratocic atiacencea
ORAL 5060.06: Oral and waxlllolacial Pathology.

 pathegenesis, clinica, radiogrphic and nicuscopic chuncerisio of disesses affeeng the ord and panraora structires Enphasis 5 placed on recozuicion of aboratifies, formulation of differnisal dingroses, 1 rival at defnitive diagnoses and patient mafagemert CROSS-LISTHYG: ORAL 6030.66, ORAL 700006

## ORAL 5070.06: Oral and Maxlllofacial Surgery

 Seminar. (Audit)This ches is ofeced durts Years 2,3 and $t$ of he MSe coemponent
 Surgel Sevior Steif ard revidens. will: 1) teview. by stifeces, the various enijor teaterent aspess in ite :otal pracice of Oral und Muxillolacial Surgery by Residerr presentaíen and ㄱ) tave gentily case teviews.
CRCSS-LISINTG: ORAL 6C40.06, 7010.06, 8010.06
ORAL 5080.06: Cllnleal Oral and Maxillolacial Surgery.
Is presented during Yeaf $1,2,3$ and 4 of the Whe waporest of the
 ${ }^{3}$ pent in the provisicn of Cral Macillofacal Su-zial werixe for putench Revident will be piven inceasing tepersibility ter the Gre of cut-padent in the Teaching Unit and sill be tepcrsable, thrugh the Seler Retidelt to the Chief of the Service. The Senior Roident hall provide ere for all in-patient ander superisior CROSS-LSTRKO: ORAL 6050.06, 0020.06, 5000.06

## ORAL 6000.06: Anesthesls.

This is a four month robtion. Working with a futor assigned menthly, the Cral and Maxillofacill Surgery Reident will be superised in pre-operstive and post-aperative rounds, and in the zinuleto-minute aderinistration of anesterin in the operating socm

ORAL 6010.06: Medlcino.
The objertives of this one month rotation are: 1) to participate in the maragement of pacient who have either cardiac or respiratory dise ise: 2) to develop skills of assessing patients in order to comsult wnelligently with the Departo ent of Medicine; 3) to prepare for arecthesia fotation

ORAL 6030.06: Oral and Maxillofacial Pathology. CROSS-USTING: ORAL SQ60.C6.

ORAL 6040.06: Oral and Maxllofacial Surgery Seminar (Audit).
CRCSSLSTEMG: ORAL 5070.06
ORAL 6050.06: Cllnleal Oral and Maxllofaclal Surgery.
CROSSLISTING: ORAL SC80.06
Oral 6060.06: Orthopaedlatrics.
This is 2 two-month roution with the rain objectives beingr 1) to provide the resident with sufficient cllnial experience to harvest bere solo from the iliac (cest; 2) to support the clinic sholls in (1) with an appreciation of genera! pringples of bone oragagenent 3) to allow puricipation in the mangement and are of the Folymumatized patient
ORAL 6070.06: InfoctJous Diseasen. (Audt) . $\because \therefore \therefore$
This robtion is one menth. The objectives of the robtion are 1) to participate in the cuangement of patients who have been idmitted to the Infectiou Diselies service 7 ) 10 apply shill and knowiedge acyuired in Dr. Dalton's Microbiology class; 3) to wogurt the 10ills of respensible and appropriate use of antimicobist igents.
ORAL 5080.06: Emergancy Mediclne. (Audh)
Thi is 1 ore s.onth rotation with its objectives beinge 1) to pu-Sipite in the gereal mangerient of patient in an entergency
 =ite =nesgerient of the ernerzexc patient 3) to tanage and Istice Energency room stait in the techniques of fada tracture


ORAL 6090.C6: Neurosurgery. (Audf)
This is a one menth rocition
ORAL 7000.06: Oral and Maxillofacial Pathology. CRCSS-LSIRYG: ORAL 50̈60.C6.

ORAL 7010.06: Oral and Maxillofacial Surgery Seminar.
COCSEDSLIC: ORAL 5070.06
ORAL 7020.06: Clinical Oral and Maxillolaclal Surgery.
CROSSUTAC: ORAL ECso.ć
ORAL 7030.06: Research.
The 弓aduste studert shall complete a reseach project and publish his Endings in a theris, acceptable to the Senior shat, Programene Ciscoce and Faculty of Cradure Sudies. All or animal sudias pexining to reesth refuirements shall be completed prior to innury lof this year. The emplete ins dint of thesis chall be
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## ORA年 8010.06: Oral and Haxillofactels Sominar.

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## IV. Medicine

## First Year

Secord Year
Clinial Years (Obstetrics and Gyneplogy, Fedia: Pyychiatry derkchips only)
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－420－838 Exparmok（12）

－429－42 the Role of Music Eovcatof of Chlo Develof yert．（3）
－ $229-852$ Approaches to Musle Curpsentul．（3）

## 21 Dentistry

Cepartment el Donllatry
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McGin University
36：0 Univarsity Stroak，Foom M18
Mentroal，QC Canada H3A 292
Tohenone：（514）398－7227
Fax：（514）398－3S00
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Asseciara Danan of Cuntistry，Graduato Sludies and Aasearch－ ＋1．E．VEKza
intarn Sitactor，Gradtais Preçram in Oral and Maxilofacial Surjerf－T．W．Head

### 21.1 SLaH

## Prelasscry

N．C．Bushnaili 日．（Marylanc），M．A．．Ph D．（Americen U．）
J．P．Lurid；B．D．S．（Acel．），Ph．D．（W．Onl）
C．E Smith；D．O．S．，Ph．D．（McG．）
H．Warshawskf；B．Sc（Sir G．Wmo．），M．Se．Ph．D．（MeG．）
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M．O．MeKsa；Ph．D．（MeG．）
S．Sehwara；D．M．D．（Monts），M．Se Cert．Pedo．（Boston），F．I．C．D．， FA．C．D．
E．D．Srialts：日．Sc（GalState），D．O．S．，Ft．D．（Ind．）
1．Stangel；D．M．D．（Parn．）
Assistant Fiofassors
P．J．Aituer；3．O．S．，F．O．S．R．C．S．M．Sc（Londoni，Ph．O．（MCG．）
H．Cagandis；O．M．O．（Montr．），Op．Oral Radology（Tar．）
J．A，Emarg O．D．S．M． 5 （MeG．I，F．R．C．O．（C）．OIpL A．E．O．M．S．
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E．Franco；Z．Sc（Estadual de Campinas），M．P．H．， Or．P．H．（N．Carolina）

### 21.2 Programs Offered．

## H．Sce in Oontal Selonces

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M．Se．In Oral and Maxillorachl Surgory
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### 21.3 Admission Requirements

## H．Sc．In Dental Sclances

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## M Sce．In Oral and Maxillolactal Surgory

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### 21.4 Appllealion Prococures

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## GRADUATE PERIODONTICS PROGRAM UNIVERSITY OF MANITOBA

Request for change in credential status from "Diploma" to "Masters in Dentistry (M.Dent.]"

Periodontics has been defined as "that specialty of dentistry which encompasses the prevention, diagnosis and treatment of diseases of the supporting and surrounding tissues of the teeth or their substitutes and the maintenance of the health, function and esthetics of these structures and tissues" (Commission on Dental Accreditation of the American Dental Association, May 1992).

The Graduate Periodontics Program currently offered at the University of Manitoba is a Diploma Program. Its main purpose is to provide dental graduates a comprehensive, scientifically-based program which will enable them to undertake the practice of periodontics and make them eligible for recognition as specialist periodontists in North America. This program is fully approved by the Commission on Dental Accreditation of Canada and, as such, enjoys reciprocal recognition by the Commission on Deatal Accreditation of the American Dental Association.

We are requesting that the credential of the program be changed from a "Diploma" to a "Masters in Dentistry (Periodontics)" - M.Dent. (Periodontics). There would be no change in the purpose of the program of its curriculum and no additional resources would be required.

The reasons for this request are:

1. The need to be competitive with other programs in North America

- The vast majority of similar (acerediced) programs in North America (1997-93 ASDA/AAP Guide to Postdoctoral Programs in Periodontics) and all other programs in Canada grant a Masters degree.
- The Commissions on Dental Accreditation of both Canada and the Linited States changed the requirements for the duration of the program from two to three years in 1995. Since then there has been a decrease in the number of qualified applicants which has heightened the competition for graduate scudents. Only recently does this trend
- seem to be beginning to be reversed (see Appendix I).
- Foreign applicants, especially, want a Masters degree program.
- New graduate periodontics program are being planned at Dalhousie (depending on availability of faculty) and Laval.

2. The program as it currently exists meets the criteria for a Masters program.

- Our program currently includes 64 Credit Hours of course work and requires that the student passes a comprehensive fina! examination (see COURSE REQUREMENTS below). This readily meets the requirements of Graduate Studies for a Masters degree.
- Our program incorporates a research component, in the form of a course, the outcome of which is a "scientific paper suitable for publication".
- Since reinauguration of the program in 1993, 3 of the 8 papers submited for the research component have been published in firstrate international journals in the field (see Appendix II).

Since reinauguration of the program in 1993, 2 of the 2 papers submitted to the MidWest Society of Periodontology (Chicaga, USA) Annual Graduate Student Research Competition have been chosen as finalists (See Appendix II).

## SUMMARY PROGRAM INFORMATION

## Missien of the Program

To educate and train dentists to be scientifically-based, clinically-competent periodontists.

Querall objective
To provide a program to meet or exceed the standards and requirements of the Commission on Dental Accreditation of Canada for Advanced Specialty Education Programs in Periodontics.

Specific obiectiyes and educational philosonhy

1. To provide an adequate background in the basic biological seiences and to encourage students to seek a scientifically-based rationale for the diagnostic and treatment planning decisions they make in undertaking comprehensive periodontal care.
2. To aid students in developing information retrieval and problem-solving skills useful in evaluating the scientific literature and in making clinical decisions.
3. To provide students the opportunity to develop the diagnostic, treataient planning and treatment capabilities required in the current practice of periodontics.
4. To provide students the opportunity to interact with general dentists and oche: deneal specialists or health care personnel in undertaking periodontal therapy as part of comprehensive dental care.
5. To give students experience in planning and undertaking research and the reporting of the results of research in a form suitable for publication.
6. $\dot{T}_{0}$ aequaint students with periodontal treatment for medically or otherwise compromised patients in hospitals and other appropriate setcings.
7. To gite students the opportunity to explore and contribute to the promotion of periodontal health in the community.
8. To provide students some basic information and insight into managing a periodontal practice.

Teaching Philosophy of the Program

1. Studencs bear primary responsibility for their education.
2. Teachers can learn from students.
3. Studeris are colleagues.
4. Students will participate actively in their education.
5. Solving problems through investigation and consultation is standard procedure.
6. There may be more than one right answer to a problem.

Descriptots of an ideal Periodontics Graduate Student:
A graduate dentist with some clinical experience who is:

- incellectually curious, open-minded and enthusiastic abour learning.
- self-disciplined, organized, responsible and persistent in efforts to undertake elinical therapy and acquire clinical experience and skills.
- able to work well with fellow students, staff and teachers in a collegial manner.
- able to formulate and defend ideas and concepts based on a critical interpretation of the scientific literature.
- able to discern deficiencies in the current scientific basis for therapy and design studies to contribute to the overcoming of these deficiencies.
- continually striving for an echical, patient-centered, comprehensive approach to therapy while demonstrating a sensitivity to the myriad of factors influencing elinical decision-making.


## HISTORY AND ACCREDITATION STATUS

The Dipioma program in Periodontics at the University of Manitoba was initiated in the fall of 1970 . At that time, it was a one-year program which was intended to wain periodontists for academia and had an admission requirement of a graduate degree (MSc or Ph.D.) in a dental basic science. It received Full Approval from the Commission on Dental Accreditation of Canada in 1972 but was discontinued in 1973 due to faculty resiguations.

The program was restarted in 1977 as a two-year program with the objective of training dentists to be practicing periodontists. The new program also had an accreditation status of Full Approval but again was discontinued from 1987 to 1993 due to an insufficient faculty complement in support of the program. Specifically, the Director of the Program assumed a reduced appointment and a new Director could not be found until 1992.

Despite the program being inoperative, it remained a high priority oi tie Faculcy and there was an active search throughout that time for a new Direstor, which culminated in the appointment of the present Director and the acceptance of new students beginning August 1993.

In accord with new accreditation standards, the program was extended to a minimum. of 33 months and again received Full Approval from the Commission on Dental Accreditation of Canada in 1995. The program is next due for acereditation review in 2001.

## ADMISSION REQUIREMENTS

Selecsion Criteria (listed in order of priority)
A. Academic record

- graduating $y=a r$ rank
- awards, scholarships
- dental school cumulative grade point awerage
- other degrees
B. Clinical Experience
- geaeral pracice residency
- geacral practice experience
- part-time faculty at a dental school in periodontics
- clinical awards
C. Other
- interview eqaluation
- letters of recommendation
- personal statement
- research experience
- TOEFL, as required

Minimum stardards

1. Minimum CGPA of $B$.
2. Ranked in top $50 \%$.
3. One-year General Practice Residency or general practice experience.
4. Satisfactory letters of recommendation.

## MINIMUM REQUIREMENTS FOR THE DIPLOMA IN PERIODONTOLOGY*

1. Attendance for a minimum of three academic years of theoretical and practical education.
2. A minimum of 1680 hours of clinical experience.
3. Five treated cases which have been fully documented according to program standards.
4. Demonstration of a high ievel of proficiency in all phases of periodontal diagnosis and therapy and a good understanding of basic concepts which provide the rationale for therapy as evaluated by regular assessment of clinical progress.
5. Attendance at every course, seminar, lecture, or clinic which forms part of the sudent program as defined by the Program Director.
6. Attainment of at least a 3.0 GPA and a 2.5 GP in each course for graduate credit.

* Sudents are responsible for ensuring that they meet degree and diploma program requirements. Please ses the "Regulations for Graduate Student Academic Performance" in the Faculty of Graduate Studies section of the University of Manitoba General Calendar.

COURSES

| COURSE NO. | COURSE | CREDIT HRS |
| :---: | :--- | :---: |
| 103.701 | Biology and Pathology of the Periodontium | 6 |
| 103.705 | Oral Medicine and Orai Diagnosis | 3 |
| 103.712 | Advanced Clinical Periodontics | 4 |
| 103.713 | Occlusion | 3 |
| 103.715 | Review of Periodontal Literature | 6 |
| 103.721 | Clinical Practice in Periodontics | 18 |
| 103.723 | Oral Pathology | 6 |
| 103.724 | Dental Implantology | 3 |
| 103.722 | Essay/Research Project |  |
| 93.747 | Biostalistics | 3 |

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| 100.709 | Pharmacology and Therapeutics | 3 |
| :---: | :--- | :---: |
| 100.711 | Infectious Diseases and the Oral Cavity | 3 |
| 80.706 | Advanced Human Macroscopic Anatomy | 6 |
|  | Total Credit Hours | 64 |


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Scientific Publications by Graduates (1993-99)
Corbett TL, Dawes C. A comparison of the site-specificity of supragingival and subgingival calculus deposition. J Periodontol 1998; 69: 1-8.

Birek C, Grandhi K, McNeill K, Singer D, Ficcara G, Bowden G. Detection of Helicobacter pylori in oral aphthous ulcers. J Oral Path Med 1999;28: 197 -203.

Landry C, Long B, Singer D, Senthilselvan A. Comparison between a short and conventional blade periodontal curet: an in-vitro study. J Clin Periodontol 1999; 26: 548-551.

Research Awards Received by Graduates (1993-99)
K. Grandhi. Finalist - Honorable Mention; Midwest Society of Periodontology Graduate Student Research Forum, Chicago, USA 1998. "Helicobacter pylori in Recurrent Aphthous Ulcers as Detected by PCR".
A. Al-Osman. Finalist - Honorable Mention; Midwest Society of Periodontology Graduate Student Research Forum, Chicago, USA 1999;
"The Efiect of a Regenerative Material on Periodontal Wound Healing in it:a Rat".

Report of the Senate Planning and Priorities Committee on the Faculty of Graduate Studies proposal to convert the Diplomas in Oral and Maxillofacial Surgery and Periodontics to Masters Degrees in Oral and Maxillofacial Surgery and Periodontics

## Preamble

1. The terms of reference for the Senate Planning and Priorities Committee (SPPC) are found in the Senate Handbook (Rev. 1993), pp. 10.21-22. Among its responsibilities, the SPPC is charged with making recommendations to Senate regarding proposed academic programs.
2. The Faculty of Graduate studies proposes to convert the Diplomas in Oral and Maxillofacial Surgery and Periodontics to Masters Degrees in Oral and Maxillofacial Surgery and Periodontics. In the opinion of the SPPC, the appropriate way to deal with this matter is to discontinue the diploma programs and introduce Master's of Dentistry (M.Dent) in Oral and Maxillofacial Surgery and Periodontics

## Observations

1. The work undertaken in the diploma programs is equivalent to that done in other universities where masters' degrees are awarded.
2. The programs are accredited and exceed what is required for a master's degree at the University of Manitoba.
3. There are no resource implications.
4. The University of Manitoba seeks to provide an outstanding education. Where this is done, it is appropriate that students to receive the degree designation that accurately reflects their achievement.
5. The Faculty of Dentistry believes it is at a competitive disadvantage in attracting graduate students to its diploma programs.

## Recommendation

SPPC endorses the discontinuance of the two Diplomas programs in Dentistry (in Oral and Maxillofacial Surgery and in Periodontics) and the introduction of two Masters' of Dentistry (M.Dent) programs, one in Oral and Maxillofacial Surgery and the other in Periodontics.

Respectfully submitted,

Norman Halden, Chair, Senate Planning and Priorities Committee
Robert Tait, Chair, Subcommittee on Program and Curriculum Planning

## Preamble

The Programs and Planning Committee of the Faculty of Graduate Studies met on April 25, 2000 to consider the proposal for a Master's program in Music.

## Observations

1. The external review reports were both very positive. The proposal has been revised according to recommendations by the external reviewers.
2. The proposal includes a libraries statement of support.

## Recommendation

The Programs and Planning Committee of the Faculty of Graduate studies recommends that the proposal for a Master's program in Music be approved by the Faculty Councill of Graduate Studies.

Complete documentation, including CV's, is available in the Faculty of Graduate Studies Office.
Endorsed by the Faculty of Graduate Studies Executive Committee, May 4, 2000.
Approved by the Faculty Council of Graduate Studies, May 18, 2000.

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

SLBMISSION TO THE FACULTY OF GRADUATE STUDIES
from the
SCHOOL OF MUSIC
in support of
THE ESTABLISHMENT OF A MASTER OF MUSIC PROGRAM

## A. PROGRAM DESCRIPTION

## 1. Objectives and fearures.

I. The objective of this program is to provide graduate level pre-professional training for srudents in choral conducting, music composition, and music performance.
II. The innovarive approach embodied in this program is the potencial for professional development for the string players in the Winnipeg Symphony Orchestra, a fully professional orchestra, alongside che academic attainment of a Masters Degree. Though budgers of ocher organizations do not currendy allow such collaboration, choral groups have expressed the incerest in collaboration with choral conducting majors.

## 2. Contex

I. There are many fine musicians in Maniroba who wish to pursue graduate study, but for financial, family, employment reasons are unable to leave Maniroba to achieve the degree. For them this will open a new and highly desirable opportunity.

The string program, especially with orchestra collaboration, is needed. The Winnipeg Symphony indicared thar che last call for applicarions for the orchestra generated very few applications and thar training a larger body of orchestra musicians eligible for these jobs is highly desirable.
II. This program will be known for its strengths in voice and string performance, in choral conducting, and in composition. We have excellent faculty members in each of these areas, faculcy members known for boch their professional performance standards and their ceaching ability. For that reason, we have chosen these areas as the first in which to underake graduate study.
III. As the areas of concencration described above are limited, we believe that all areas will be known by chose ourside che university and the province.
IV. The program builds on the strength and reputation that the current undergraduate program has built over the years. Scudenes in this program will also be able to utilize some of the excellent undergraduate courses as electives.
V. The program does not directly enhance cooperation among Manitoba's universities. However, we have designed the program to be mainly complementary to the program in Brandon. We would evaluare cransfer of courses from Brandon and allow Brandon srudencs to take our courses to transfer chere as is appropriace on an individual basis.
VI. This program will enhance the national reputation of the University by calling more attention to our excellent faculty and producing students at a higher level. While few students move from an undergraduare program into the professional ranks, many more studenes move from a masters program to professional positions. This will enhance our repuration as these students graduare and rake positions across the councry.
VII. The School of Music is one of the remaining two units in the University of Manitoba, the Graduate university of Manitoba, which does nor have a graduate program. The presence of a Faculry of Graduare Studies and the presence of other graduate programs on campus immediately strengthens the value of the Music program and the presence of a Music program allows the School of Music to be a full participant in the range of academic offerings of the University of Manitoba.
3. Specifies
I. A complete detailed listing of this program is attached.
II. The Degrees will be the Master of Music (Composition), Master of Music (Choral Conducting) and Mascer of Music (Performance)
a) The rationale for the Master of Music designation is that it is the srandard designacion across Norch Annerica for such a degree.
b) Our guideline is the Nacional Associarion of Schools of Music handbook which indicates thar: Completion of the [Master's Degree] program is most often identified by awarding the degrees, Master of Music, Master of Ares, or Master of Science, with the major field of scudy specified.

The degree is offered ar numerous universicies in Nork America. The 1998-99 edicion of the Directary of Music Faciulties in Colleges and Universities, U.S. and Canada, indicates thar 390 institutions in North America offer graduate programs. The majority of masters degrees are named Master of Music. Other less frequent designations are Master of Arrs and Master of Fine Arts.
c) $N / A$
d) No accreditation is required

## 4. Projecrions and Implementation

I. The sample program is contained in the derails of the degree proposal. We expect that most students will complete the program in two years.
II. Our estimated enrolment is $6-8$ students in che first year with and addicional $6-8$ in the second year with chis number of $12-16$ sudencs in the program ar any one cime remaining constant. The limicarions of resources and faculty will not at this cime allow the program to be significantly larger. We believe that we will receive many more
applicarions than this limit based on written and oral formal and informal requests for information about the availability of such a program.
III. We do not intend to provide aspects of the program through distance education.
IV. We intend to begin the program in September 2000.

## B. HUMAN RESOURCES

1. Faculry
a) Full-Time Faculcy

Mel Braun, Voice
a) Practicum advisor for voice performance majors
b) Practicum commitree member
c) Teacher for voice major practical study

Richard Burleson, Music History
b) Thesis or Pracricum committee member
c) Course teacher for Music History Seminar or Bibliography course

Henry Engbrecht, Choral Conduction
a) Practicum advisor for choral conducting majors
b) Pracricum committee member
c) Teacher for choral conducting major pracrical study

Richard Gillis
b) Thesis or Practicum commitee member

Charles Horron, Music Theory
b) Thesis or Pracricum commitree member
c) Teacher for Music Theory Seminar

Karen Jensen, Voice
a) Pracricum advisor for voice performance majors
b) Practicum commitree member
c) Teacher for voice major practical srudy

Paul Marleyn, Cello
a) Practicum advisor for cello performance majors
b) Pracricum commitree member
c) Teacher for cello major practical srudy

Michael Matchews, Composition, Music Theory
a) Thesis advisor for composition majors
b) Thesis or Practicum commirtee member
c) Teacher for composition major practical study

Ursula Rempel, Music History
b) Thesis or Practicum commitree member
c) Teacher for Music History Seminar or Bibliography course

David Scewart, Violin
a) Pracricum advisor for violin performance majors
b) Practicum committee member
c) Teacher for violin major practical srudy
b) Sessional Faculty

Tracy Dahl, Voice
a) Pracricum advisor for voice performance majors
b) Teacher for voice major pracrical srudy

Eric Hansen, Scring Bass
a) Pracricum advisor for bass performance majors
b) Teacher for bass major pracrical study

Dan Scholz, Viola
a) Pracricum advisor for viola performance majors
b) Teacher for viola major pracrical scudy

Lois Watson, Voice
a) Practicum advisor for voice performance majors
b) Teacher for voice major practical srudy

## 2. Support Staff

Support staff will assiss in processing applications and in generally providing administrative suppor just as they do for the undergraduate program. The addicional workload will come from addicional scudents. The rype of work will nor change.
3. Other

Not applicable.

## C. PHYSICAL RESOURCES

1. Space
I. Students in the program will need space for individual study. This means practicing their instruments or voice or conducting and composing. While space in the Music Building is not available, there is some space, though nor good quality space, in the Music Annex which graduate students chould share. In the most desirable circumstances, additional space would be provided, but it is not of critical importance to the delivery of a quality program. Computer access, including internet access and music printing programs, is provided in our instructional lab and our computer music lab.
II. No additional adminiscrative space is required.

## 2. Equipment

I. The main thing required for teaching is to provide an adequare budger for equipment is a regular budger for equipment maintenance and replacement and for software upgrades. Ocher areas require lirde equipment.
II. The research facility is the same as the teaching facility.

## 3. Computer

Graduate students would currently have access to a computer instructional lab with word processing and spreadsheet capability as well as music specific software. In addition, there is the computer music lab. These two facilities should provide adequare access to computer facilities for these students.
4. Library

This is also not a library intensive program. We have the basic materials needed for chese programs. Because of our library endowment, it will be possible to respond to specific needs for special marerials which may be needed for research.

## D. FINANCLAL RESOURCES

1. Delivery Coses
I. Addicional Faculty

Using sessional lecrurers and graduate assiscants

| Additional Voice Inscruction | (4 srudents) | $\$ 5334$ |
| :--- | :--- | :--- |
| Viola and Bass Instruction | (2 scudents) | $\$ 2666$ |
| Choral Assiscance | (1 courses) | $\$ 4000$ |
| Theory Inscruction | (2 course) | $\$ 8000$ |
| Music History Instruction | (1 course) | $\$ 4000$ |
| TOTAL |  | $\$ 24000$ |

> OR
> the preferred mechod

Hiring one full-time instructor plus sessionals and/or graduate assistants

| One full-time academic position (salary and benefirs) |  | \$45000 |
| :---: | :---: | :---: |
| Additional Voice Instruction | (4 scudents) | \$5334 |
| Viola and Bass Instrucrion | (2 students) | \$2666 |
| Choral Assiscance | (1 coursek) | \$4000 |
| TOTAL |  | 557000 |

2. Sudent Support

We expect our arrangement with che Winnipeg Symphony Orchestra to provide support for string students. For appropriate choral and voice students, we will be able to provide some support through hiring as course instructors or assistancs. We will pursue with Graduate Studies the provision of some scholarship funds.
3. Idencification of New Financial Resources

The main source of revenue we have idencified is that we will generate additional tuition money. We would expect that some or all of this would be used co provide instruction for che program. In addition, the Winnipeg Symphony affliarion will provide addicional money for scudent supporr.
4. Balance Sheer

Year 1 (Assuming 6 scudencs)
Tuition income (at 1998-99 rate) $\$ 24000$
Estimated sessional cost $\$ 16000$
Balance (For office and compurer $\$ 8000$ equipment and software)

Year 1 (Assuming 12 studencs)
Using sessional lecturers
Tuition income (at 1998-99 rate) $\$ 48000$
Sessional instruction required $\$ 24000$
Balance for student support, office and $\$ 24000$ computer equipment and software

Hiring an additional full-time instructor plus sessionals

| Tuition income | $\$ 48000$ |
| :--- | :--- |
| Instructional cost | $\$ 57000$ |
| Required for srudent support, office and | $\$ 8000$ |
| $\quad$ compurer equipment and software |  |
| Addicional Funds Required | $\$ 17000$ |

## E. SUPPORTING DOCUMENTS

1) Letter from the Winnipeg Symphony Orchestra

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## PROGRAM OUTLINES

MASTER OF MUSIC IN COMPOSITION
Bibliography and Research 3 CH
Music History Seminar ..... 3 CH
Music Theory Seminar ..... 3 CH
Major Practical Study I(Composition) ..... 3 CH
Major Practical Sudy II(Composition) ..... 3 CH
Electro-acoustic Music ..... 3 CH
Advanced Orchestration ..... 3CH
Elective ..... 3 CH
Thesis or Pracricum (Non-credic) TOTAL ..... 24 CH
MASTER OF MUSIC IN PERFORMANCE
Bibliography and Research ..... 3 CH
Music History Seminar ..... 3 CH
Music Theory Seminar ..... 3 CH
Major Practical Study I(Private Performance Study) ..... 3 CH
Major Practical Study II(Private Performance Study) ..... 3 CH
Ensemble ..... 3 CH
Electives ..... 6 CH
(Scring students pariciparing in the Winnipeg Symphony Orchestra will take one Topics in Music course (3CH) in Orchestral Performance).
Thesis or Practicum (Non-credit)
TOTAL
24 CH

## MASTER OF MUSIC IN CHORAL CONDUCTING

Bibliography and Research ..... 3 CH
Music Hisrory Seminar ..... 3 CH
Music Theory Seminar ..... 3 CH
Major Practical Scudy I(Private Conducting Srudy) ..... 3 CH
Major Practical Suudy II(Privare Conducring Study) ..... 3 CH
Ensemble ..... 3 CH
Electives ..... 6 CH
Thesis or Pracricum (Non-credic)TOTAL24 CHCOURSE LIST
REQUIRED COURSES - All Programs
033.7aa Incroducrion to Bibliography/Research (3)
033.7ab Music History Seminar (3)
033.7 ac $\quad$ Music Theory Seminar (3)
033.7ad Major Practical Study I(3) (Lessons in performance, composition, or

```
        conduccing)
033.7ae Major Pracrical Srudy II (3)
    Additional requirements unique to the individual program and electives
        from the elecrive lisr (9) (Including senior level undergraduate
        courses)
    ELECTIVE LIST
```

033.7af Topics in Music (3)
033.7ag Elecrroacoustic Music (3) (Double numbered with undergrad?)
033.7ah Advanced Orchestration (3)
033.7ai Ensemble (3)

Non-Music elective chosen in consulcation with Advisor (3)
NEW COURSES

| 033.7aa | Incroduction to Bibliography and Research (3) |
| :--- | :--- |
| 033.7ab | Music Hiscory Seminar (3) |
| 033.7ac | Music Theory Seminar (3) |
| 033.7ad | Major Pracrical Srudy I (3) |
| 033.7ae | Major Practical Srudy II (3) |
| 033.7af | Topics in Music |
| 033.7ag | Electroacoustic Music |
| 033.7ah | Advanced Orchestration |
| 033.7ai | Ensemble |

## PRACTICUM REQUIREMENTS

## COMPOSITION THESIS

The composition thesis requires the production of a substantial body of work accompanied by a significant analytical paper which explains the structure of the piece(s) and the compositional processes. Normally, a performance of the piece(s) is required. A proposal for this project will be developed by the srudent in consultation with the composition instructor and must be approved by the student's committee. The commitree will consider the extent of the performance forces, the proposed length and the technical requirements of the body of work in adjudicating appropriateness.

## PERFORMANCE PRACTICUM

The performance practicum requires either:
a) one reciral, normally consisting of solo licerature, accompanied by a paper which provides historical or analytical program annotation, or
b) two recitals, one of which is solo literarure and the orher which may include solo and ensemble reperroire with no accompanying paper.

A proposal for this project will be developed in consultation with the major practical srudy instrucror and must be approved by che student's committee. The
committee will consider the stylistic and rechnical appropriateness of the program in its adjudication.

## CHORAL CONDUCTING PRACTICUM

The choral conducting practicum requires a significant repertoire of choral performance which is chosen, rehearsed, scheduled and conducred by che student. The performance of this reperroire will be accompainid by historical or analyrical program annotacion. A proposal for this project will be developed in consultation wich the choral conducting instructor and must be approved by che student's commitree. The commitree will consider the syylistic and rechnical appropriareness of the repertoire in ics adjudication.

## GRADUATE PROGRAM REGULATIONS

## ADMISSION

1) Completed four year undergraduate degree program with a minimum 3.0 GPA in che last two full years of undergraduate study OR

Completion of a conservatory diploma which is offered in residence.
2) Completion of an application procedure appropriate to the area of study.
a) Performance applicants will perform an audition and will submir a CV which includes a list of works performed. Unless there are special circumstances, the audition will be in person. String students auditioning for the joint program with the Wimnipeg Symphony Orchestra will be required to appear in person with che audition to include a standard Winnipeg Symphony Orchestra audition.
b) Composition applicants will present a porffolio and will submit a CV which includes a list of composicions.
c) Conducting applicants will present a videotape and will submit a CV which includes a list of repertoire conducred.

Applicarion marerials will also include:
a) the names of three referees who can be conracted for letrers.
b) a statement of educational and professional goals
c) Copies of transcriprs from all inscitutions - boch pre-university or preconservarory and university or conservatory - in which the applicant rook music instruction relevant to the evaluation of the applicant for admission to graduate study.

## PLACEMENT EXAM

Placement exams in music history and music theory will be required of all entering students. As a result of chese exams, a student will be required to address any deficiencies which are identified.

## LANGUAGE REQUIREMENTS

Reading knowledge of one language ocher chan English is required. The language required will normally be French, German or Italian. Other languages will be accepred if
more appropriate to the student's program. The specific requirement will be determined in consultation with the student's committee. This requirement may be mer chrough one of the following:
a) Evidence of the completion of a full year undergraduate language course at the 100 level or above in the five years preceding acceptance into the program.
b) The translation, using a dictionary, of a passage in che major area of study.
c) Complecion of a course at the 100 or higher level after registration in the Masters Degree program.
d) Determination by the student's committee that the requirement has been mer through previous education and/or experience.
Note: Voice srudents will be required to provide evidence of ar least 6 CH of study at the university level of one or more languages other than English (normally French, German or Italian). If this requirement is not mer before entering the program, the student must meer this requirement during the course of the program.

MAXIMUM TIME LIMIT
5 YEARS

Note: In the case of modifications and new course introductions, one form per proposal should be submitted. If more than one proposal is submitted, a summary sheet should be appended.

1. DEPARTMENT: Music DATE: November 21, 1998
2. COURSES TO BE DELETED:

Course No. Course Title Credit Hours
N/A

State reasons for deletions:
3. COURSE TO BE MODIFIED: (Proposed calendar description and topical outline must be completed - see page 3. )

Course No.
Course Title
Credit Hours N/A

State nature of modifications and reasons for the proposed change:
4. COURSE TO BE INTRODUCED: (Proposed calendar description and topical outline must be completed - see page 3.)
Course No.
Course Title
Credit Hours
033.7xx Bibliography and Research Methods 3
5. State reasons for new course:

This course will form a portion of the curriculum for the new Master of Music degree program
6. PROBABLE ENROLLMENT IN THE NEW COURSE: No. of Students: 5 per year
7. WILL THE NEW COURSE BE OFFERED EACH YEAR: Yes: x No:

If not, on what cycle?

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## 8. DUPLICATION OR OVERLAP WTTH EXISTING COURSE(S):

(A) Any duplication or overlap with existing courses: Yes

If so, a statement from the department offering the existing course must be appended.
The School of Music currently offers an undergraduate music bibliography course 033.305 which is taken mainly by music history majors. The course material sufficiently overlaps that with small enrolments in both courses, these two courses can be offered simultaneously with additional and as appropriate different work required of graduate students.
(B) Is there an equivalent course already offered: Yes

If so, what is the justification for the new course?
To add to the above, this is a standard requirement for graduate study, and the new course both somewhat expands the expectations of the undergraduate course and provides a graduate studies number for the graduate students.
9. ADDITIONAL COST FOR THE NEW COURSE:

Is there any additional cost in terms of staff and/or facilities: Yes:
No: $x$ If so, a statement from the Budget Dean must be appended.
10. LIBRARY RESOURCES FOR THE NEW COURSE:
(A) Are resources adequate to support the course content? Yes: x No:
(B) Cost of library acquisitions: \$
(A statement from the subject librarian is required regarding adequate support, additional copies of holdings, forthcomingpublications, replacement costs, etc.)

NOTE: The library will need one (1) month's notice of course proposals in order to prepare its statement. The library requires six (6) months' notice to assess resources for the implementation of new graduate programs.

## NET <br> 11. CREDIT HOUR SUNMMARY: DELETED: $\operatorname{INTRODUCED:~} 3$ CHANGE: +3

NOTE: When a department is introducing more than nine (9) credit hours, a copy of this form must be sent at the same time to: SPPC, c/o Senate.

Attach a copy of the statement from the Budget Dean regarding any resource implications.

## 12. SIGNED APPROVAL REQUIRED:

Head of Department:
Chair, Faculty Graduate Committee Chair:
Budget Dean:
Chair, Joint Discipline Committee:
(For Joint UW/UMI programs only)

COURSE TITLE: Bibliography and Research Methods

## ABBREVIATED COURSE TITLE: BIB/RES METHODS

This should be a 15 character, abbreviated title which will be used by Student Records and appear on the students' transcripts.

PROPOSED BY: School of Music

PRE-REQUISITES:
YES: $x$
If so, specify the pre-requisites:
Admission to the Master's Degree Program

PROPOSED CALENDAR DESCRIPTION: (Note: Must not exceed 4 lines - 75 characters per line.)

The techniques of bibliography and research methods in music are studied through research projects in selected areas relevant to each student's major field of study. Skill is developed in the use of primary and secondary sources, expository writing, and documentation.

TOPICAL OUTLINE: (Include selected references and/or bibliography - see page 4.) :

Studies will include: use of dictionaires/encyclopedias, histories, biographies, bibliographies, periodical literature, catalogues (library and thematic) historical sets, monuments, collected editions, indexes and abstracts, internet materials (on-line catalogues, web sites, internet lists, data bases), and discographies.

COURSE TITLE:
Bibliography and Research Methods

TEXTS:
Duckles, Vincent H. and Michael A. Keller. Music Reference and Research Materials: An Annotated Bibliography. 5th edition, rev. 1997.
_._The MLA Handbook for writers of Research Papers. latest edition.

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## BIBLIOGRAPHY:

(The proposing unit and the subject librarian should discuss and agree upon the bibliography to be used in assessing the strength of the library's collection in the field.
In the case of topics courses, in which the subject material varies from offering to offering, the proposing unit is responsible for securing the prior agreement of the library that appropriate holdings are available to support the particular topics to be dealt with.)

RLLM Abstracts of Music Literature (hard copy 1967-93; CD-ROM)
Music Index (hard copy 1949-96; CD-ROM 1996-)
Heyer, Anna Harriet. Historical Sets, Collected Editions, and Monuments of Music: A Guide to their Contents. 3rd edition, 1980.
Krummel, D.W. The Literature of Music Bibliography. 1992.

## PERIODICALS:

The School of Music Library currently holds copies of all necessary periodicals for this degree program: thus, our holdings are adequate in the sub-disciplines of musicology, music theory, performance, musical aesthetics, and musical pedagogy. For references, see Duckles and Keller cited above.

## MONOGRAPHS:

The School of Music Library contains ample resources: historical sets, collected editions, monuments of music, miniature scores, full scores, biographies, historical treatises, records/cds, and on-going reference materials. The Eckhardt-Gramatte endowment to the library ensures continuing resources.
(Where necessary, please attach further information on separate pages.) 07/97 corschgn.doc

Proposal for Course Changes and New courses (FGS) FACULTY OF GRADUATE STUDIES
Bonnie Stovel

## 125

FACULTY OF GRADUATE STUDIES
PRIVATE PROPOSAL FOR COURSE CHANGES AND NEW COURSES

Note: In the case of modifications and new course introductions, one form per proposal should be submitted. If more than one proposal is submitted, a summary sheet should be appended.

1. DEPARTMENT: Music

DATE: August 13, 1998
2. COURSES TO BE DELETED:

Course No. Course Title Credit Hours

State reasons for deletions:
3. COURSE TO BE MODIFIED: (Proposed calendar description and topical outline must be completed - see page 3.)

Course No. Course Title Credit Hours

State nature of modifications and reasons for the proposed change:
4. COURSE TO BE INTRODUCED: (Proposed calendar description and topical outline must be completed - see page 3.)

| Course No. | Course Title | Credit Hours |
| :--- | :--- | :--- |
|  | Music History Seminar | 3 |

5. State reasons for new course:

This course will be required in the curriculum for the new Master of Music degree program
6. PROBABLE ENROLLMENT IN THE NEW COURSE: No. of Students: 3-5 annually
7. WILL THE NEW COURSE BE OFFERED EACH YEAR: Yes: $x$ No: If not, on what cycle?

## 126

## 8. DUPLICATION OR OVERLAP WITH EXISTING COURSE(S):

(A) Any duplication or overlap with existing courses: No

If so, a statement from the department offering the existing course must be appended.
(B) Is there an equivalent course already offered: No
If so, what is the justification for the new course?
9. ADDITIONAL COST FOR THE NEW COURSE:

Is there any additional cost in terms of staff and/or facilities: Yes: x No: If so, a statement from the Budget Dean must be appended.
10. LIBRARY RESOURCES FOR THE NEW COURSE:
(A) Are resources adequate to support the course content? Yes: x No:
(B) Cost of library acquisitions:
(A. statement from the subject librarian is required regarding adequate support, additional copies of holdings, forthcomingpublications, replacement costs, etc.)

NOTE: The library will need one (1) month's notice of course proposals in order to prepare its statement.

The library requires six (6) months' notice to assess resources for the implementation of new graduate programs.

NET
11. CREDIT HOUR SUMMARY: DELETED: NTRODUCED: CHANGE:

NOTE: When a department is introducing more than nine (9) credit hours, a copy of this form must be sent at the same time to: SPPC, c/o Senate.

Attach a copy of the statement from the Budget Dean regarding any resource implications.
12. SIGNED APPROVAL REQUIRED:

Head of Department:
Chair, Faculty Graduate Committee Chair:
Budget Dean:
Chair, Joint Discipline Committee:
(For Joint UW/UM programs only)

COURSE TITLE: Music Fistory Seminar
ABBREVIATED COURSE TTTLE: HISTORY_SEMINAR
This should be a 15 character, abbreviated title which will be used by Student Records and appear on the students' transcripts.

PROPOSED BY: School of Music

## PRE-REQUISITES:

## YES

If so, specify the pre-requisites:
Admission to the Master's Degree Program or permission of the School of Music.

PROPOSED CALENDAR DESCRIPTION: (Note: Must not exceed 4 lines - 75 characters per line.)

A scholarly approach to topics in music history which requires each graduate student to undertake research and to present a paper of relevance to the declared major in the Master of Music program.

TOPICAL OUTLINE: (Include selected references and/or bibliography - see page 4.)

Studies will consist of approaches to:
Study of Manuscripts
Comparison study of scholarly editions and performing editions
Study of historical performance instruction books
Study of composers' writings
Study of writings by students of composers
Study of periodical literature on historical style
A study of biographical material on various composers
TEXTS:
None

## BIBLIOGRAPHY:

The School of Music library currently holds:
A large number of scholarly editions of works by numerous composers
A large number of performance scores
A large library of choral scores
A published and manuscript collection of the archives of the Manitoba Composers' Association
A significant collection of biographical materials on many composers

Note: In the case of modifications and new course introductions, one form per proposal should be submitted. If more than one proposal is submitted, a summary sheet should be appended.

1. DEPARTMENT: Music
DATE: August 13, 1998
2. COURSES TO BE DELETED:

Course No. Course Title Credit Hours

State reasons for deletions:
3. COURSE TO BE MODIFIED: (Proposed calendar description and topical outline must be completed - see page 3.)

Course No. Course Tille Credit Hours

State nature of modifications and reasons for the proposed change:
4. COURSE TO BE INTRODUCED: (Proposed calendar description and topical outline must be completed - see page 3.)

Course No.

Course Title
Music Theory Seminar

Credit Hours
3
5. State reasons for new course:

This course will form a portion of the curriculum for the new Master of Music degree program
6. PROBABLE ENROLLMENT IN THE NEW COURSE: No. of Students:
7. WILL TFE NEW COURSE BE OFFERED EACH YEAR: Yes: No:

If not, on what cycle?

## 8. DUPLICATTON OR OVERLAP WITH EXISTING COURSE(S):

(A) Any duplication or overlap with existing courses: No If so, a statement from the department offering the existing course must be appended.
(B) Is there an equivalent course already offered: No If so, what is the justification for the new course?

## 9. ADDITIONAL COST FOR THE NEW COURSE:

Is there any additional cost in terms of staff and/or facilities: Yes: $\quad \mathrm{x} \quad$ No: If so, a statement from the Budget Dean must be appended.

## 10. LIBRARY RESOURCES FOR THE NEW COURSE:

(A) Are resources adequate to support the course content? Yes: No:
(B) Cost of library acquisitions: \$
(A statement from the subject librarian is required regarding adequate support, additional copies of holdings, forthcomingpublications, replacement costs, etc.)

NOTE: $\quad$ The library will need one (1) month's notice of course proposals in order to prepare its statement.

The library requires six (6) months' notice to assess resources for the implementation of new graduate programs.

NET
11. CREDIT HOUR SUMMARY: DELETED: INTRODUCED:

CHANGE:
NOTE: When a deparment is introducing more than nine (9) credit hours, a copy of this form must be sent at the same time to: SPPC, c/o Senate.

Atach a copy of the statement from the Budget Dean regarding any resource implications.
12. SIGNED APPROVAL REQUIRED:

Head of Deparment:

Chair, Faculty Graduate Committee Chair:

## Budget Dean:

Chair, Joint Discipline Committee:
(For Joint UW/UM programs only)
COURSE TITLE:

## ABBREVIATED COURSE TITLE: MUS_THEORY_SEM

This should be a 15 character, abbreviated title which will be used by Student Records and appear on the students ${ }^{1}$ transcripts.

PROPOSED BY: School of Music
PRE-REQUISITES: YES
If so, specify the pre-requisites:
Admission to the Master's Degree Program

PROPOSED CALENDAR DESCRIPTION: (Note: Must not exceed 4 lines -75 characters per line.)

This course is comprehensive survey of 20th-century analytical methodologies of tonal and posttonal music.

TOPICAL OUTLINE: (Include selected references and/or bibliography - see page 4.)

Studies will consist of approaches to:
Structural analysis (harmony, motive, form, rhythm and hierarchy),
as well as the application of methodologies from other disciplines, including:
Psychology
Linguistics
Philosophy
Mathematics

COURSE TITLE:
Music Theory Seminar

## TEXTS:

Bent, Ian. Analysis. New York: W. W. Norton \& Co., 1980.
ISBN: 0-333-41732-1
Cook, Nicholas. A Guide to Musical Analysis. New York: W. W. Norton \& Co., 1987.
ISBN: 0-393-96255-5

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## BIBLIOGRAPHY:

(The proposing unit and the subject librarian should discuss and agree upon the bibliography to be used in assessing the strength of the library's collection in the field.
In the case of topics courses, in which the subject material varies from offering to offering, the proposing unit is responsible for securing the prior agreement of the library that appropriate holdings are available to support the particular topics to be dealt with.)

The School of Music Library currently holds copies of all primary sources referred to in the standard texts which survey music theory/analysis in the 20th century. For reference, refer to the bibliography in Nicholas Cook, A Guide to Musical Analysis

## PERIODICALS:

Joumal of Music Theory
In Theory Only
Spectrum
Perspectives of New Music
Musical Analysis
Musical Quarterly

## MONOGRAPHS:

We have a significant number of analytical studies of individual pieces, genres and composer's works.
(Where necessary, please attach further information on separate pages.) 07/97 corschgn.doc

FACULTY OF GRADUATE STUDIES
PRIVATE PROPOSAL FOR COURSE CHANGES AND NEW COURSES

Note: In the case of modifications and new course introductions, one form per proposal should be submitred. If more than one proposal is submitred, a summary sheet should be appended.

1. DEPARTMENT: Music

DATE: Sept. 1, 1998
2. COURSES TO BE DELETED:

Course No. Course Title Credit Hours
State reasons for delerions:
3. COURSE TO BE MODIFIED: (Proposed calendar description and topical outline must be complered - see page 3.)

Course No. Course Tirle Credit Hours
State nature of modifications and reasons for the proposed change:
4. COURSE TO BE INTRODUCED: (Proposed calendar description and topical ourline must be completed - see page 3.)

Course No. Course Title Credir Hours
033.7xx Major Practical Scudy I 3
5. Scate reasons for new course:

This course is an important component of che new program Master of Music Program.
6. PROBABLE ENROLLMENT IN THE NEW COURSE: No. of Students: 3-5 per year, up to a total of 6-10 at any one time.
7. WILE THE NEW COURSE BE OFFERED EACH YEAR:

Yes: x No:
If nor, on what cycle?
8. DUPLICATION OR OVERIAP WITH EXISTING COURSE(S):
(A) Any duplication or overlap with existing courses: Yes: No: $x$

If so, a statement from the department offering the existing course must be appended.
(B) Is there an equivalent course already offered: Yes: No: $x$

If so, what is the justification for the new course?
9. ADDITIONAL COST FOR THE NEW COURSE:

Is there any additional cost in terms of staff and/or facilities: Yes: x No:
If so, a starement from the Budger Dean must be appended.
10. LIBRARY RESOURCES FOR THE NEW COURSE:
(A) Are resources adequate to support the course content? Yes: $x$ No:
(B) Cost of library acquisicions: $\$$
(A statement from the subject librarian is required regarding adequate supporr, addirional copies of holdings, forthcoming publications, replacement costs, etc.)

NOTE: The library will need one (1) monh's notice of course proposals in order to prepare its statement.
The library requires six ( 6 ) monchs' notice to assess resources for the implementation of new graduate programs.
11. NET CREDIT HOUR SUMMARY: DELETED:

INTRODUCED: 3
CHANGE: +3
NOTE: When a department is incroducing more than nine (9) credir hours, a copy of this form must be sent ar the same time to: SPPC, c/o Senate.

Attach a copy of the statement from the Budget Dean regarding any resource implications.
12. SIGNED APPROVAL REQUIRED:

Head of Deparment:
Chair, Faculty Graduate Commitree Chair:
Budget Dean:
Chair, Joint Discipline Committee:
(For Joint UW/UM programs only)

COURSE TITLE: Major Practical Scudy I

## ABBREVIATED COURSE TITLE: MAJOR_PRACT_I

This should be a 15 character, abbreviared cide which will be used by Student Records and appear on the students' transcripes.

PROPOSED BY:

School of Music

PRE-REQUISITES: YES: $\mathbf{x}$ NO:
Admission to the Master of Music program.

PROPOSED CALENDAR DESCRIPTION: (Note: Must not exceed 4 lines - 75 characters per line.)

Private studio instruction and monitored pre-professional training activities in one of the following: composition conducting, or any one of the standard instruments or voice.

TOPICAL OUTLINE: (Include selected references and/or
bibliography - see page 4.)
I. Sample Composition Topics
a) Review of current portfolio of work.
b) Writing assignments made after taking into account current porffolio and areas of interest.
c) Reading and listening assignments to expand knowledge of current developments in the field.
d) Topics in craditional and contemporary techniques: counterpoint, harmony, melody, orchestration, texture, rimbre, erc.
e) Topics in traditional and contemporary aspects of music notation.
f) Topics in compositional aestherics.
II. Sample Choral Topics
a) Study and conducting of short choral works in a variery of scyles
b) Preparation of performances of some of the works
c) Work wich a variery of ensembles including large and small mixed choirs, women's choirs and men's choirs.
d) Score study and if possible conducting of major choral works.
e) Analytical and historical annoration of choral works.
III. Sample Performance Topics
a) Technical development through specific exercises
b) Study of major solo repertoire from various style periods
c) Srudy of works for the instrument or voice with orchestra.
d) Srudy of performance styles of major performers
e) Analytical and historical annotation of the works performed.

COURSE TITLE: Major Practical Srudy I
TEXIS: as required by instructor

## BIBLIOGRAPHY:

(The proposing unit and the subject librarian should discuss and agree upon the bibliography to be used in assessing the strength of the library's In the case of topics courses, in which the subject marerial varies from offering to offering, che proposing unit is responsible for securing the prior agreement of the library that appropriate holdings are available to support the particular topics to be deale with.)

PERIODICALS:
MONOGRAPHS:
(Where necessary, please attach further information on separate pages.) 07/97 corschgn.doc

Proposal for Course Changes and New courses (FGS)

FACULTY OF GRADUATE STUDIES
PRIVATE PROPOSAL FOR COURSE CHANGES AND NEW COURSES

Note: In che case of modifications and new course incroductions, one form per proposal should be submitted. If more than one proposal is submitted, a summary sheer should be appended.

1. DEPARTMENT: Music

DATE: Sepr. 1, 1998
2. COURSES TO BE DELETED:

Course No. Course Tide Credit Hours
State reasons for deletions:
3. COURSE TO BE MODIFIED: (Proposed calendar description and topical oudine musr be completed - see page 3.)

Course No. Course Title Credir Hours
Stare nature of modificarions and reasons for the proposed change:
4. COURSE TO BE INTRODUCED: (Proposed calendar description and .
ropical ourline must be completed - see page 3.)
Course No. Course Tidle $\quad$ Credit Hours
033.7xx Major Practical Scudy II 3
5. Stare reasons for new course:

This course is an important component of the new program Master of Music Program.
6. PROBABLE ENROLLMENT IN THE NEW COURSE: No. of Scudents:

3-5 per year, up to a total of 6-10 at any one time.
7. WILL THE NEW COURSE BE OFFERED EACH YEAR:

Yes: x No:
If not, on what cycle?
8. DUPLICATION OR OVERLAP WITH EXISTING COURSE(S):
(A) Any duplication or overlap with exiscing courses: Yes: No: $x$

If so, a statement from the department offering the exiscing course must be appended.
(B) Is there an equivalent course already offered: Yes: No: $x$

If so, what is the justification for the new course?
9. ADDITIONAL COST FOR THE NEW COURSE:

Is there any additional cost in terms of staff and/or facilities: Yes: $x$ No:
If so, a starement from the Budger Dean must be appended.
10. LIBRARY RESOURCES FOR THE NEW COURSE:
(A) Are resources adequate to support the course contenr? Yes: $x$ No:
(B) Cost of library acquisitions: \$
(A statement from the subject librarian is required regarding adequate support, additional copies of holdings, forthcoming publications, replacement costs, etc.)

NOTE: The library will need one (1) month's notice of course proposals in order to prepare its statement.
The library requires six (6) months' notice to assess resources for the implementation of new graduate programs.
11. NET CREDIT HOUR SUMMARY: DELETED: INTRODUCED: 3 CHANGE: +3

NOTE: When a department is introducing more than nine (9) credir hours, a copy of this form must be sent at the same time to: SPPC, clo Senate.

Arrach a copy of the statement from the Budger Dean regarding any resource implications.
12. SIGNED APPROVAL REQUIRED:

Head of Department:
Chair, Faculty Graduace Commitree Chair:
Budger Dean:
Chair, Joint Discipline Commitree:
(For Joint UW/UM programs only)

COURSE TITLE: Major Practical Study II

This should be a 15 characrer, abbreviated citle which will be used by Studenc Records and appear on the students' transcripts.

PROPOSED BY:

School of Music

PRE-REQUISITES:
YES: $x$ NO:
033.7xx Major Pracrical Sudy I

PROPOSED CALENDAR DESCRIPTION: (Nore: Must not exceed 4 lines - 75 characters per line.)

This course is a continuation of Major Practical Study I.

TOPICAL OUTLINE: (Include selected references and/or
bibliography - see page 4.)
COURSE TITLE: Major Practical Sudy II
TEXTS: as required by instructor

BIBLIOGRAPHY:
(The proposing unit and the subject librarian should discuss and agree upon the bibliography to be used in assessing the scrength of the library's In the case of topics courses, in which the subject material varies from offering to offering, the proposing unit is responsible for securing the prior agreement of the library that appropriare holdings are available to support the particular topics to be deale with.)

## PERIODICALS:

MONOGRAPHS:
(Where necessary, please artach further information on separate pages.)
07/97 corschgn.doc
Proposal for Course Changes and New courses (FGS)

Note: In the case of modifications and new course introductions, one form per proposal should be submitted. If more than one proposal is submitted, a summary sheet should be appended.

1. DEPARTMENT: Music

DATE: November 21, 1998

## 2. COURSES TO BE DELETED:

Course No. Course Title Credit Hours
N/A

State reasons for deletions:
3. COURSE TO BE MODIFIED: (Proposed calendar description and topical outline must be completed - see page 3.)

Course No. Course Title Credit Hours
N/A

State nature of modifications and reasons for the proposed change:
4. COURSE TO BE INTRODUCED: (Proposed calendar description and topical outline must be completed - see page 3.)
Course No.
Course Title
033.7xx
Topics in Music
Credit Hours
3
5. State reasons for new course:

This course will form a portion of the curriculum for the new Master of Music degree program
6. PROBABLE ENROLLMENT IN THE NEW COURSE: No. of Students: 2 per year
7. WILL THE NEW COURSE BE OFFERED EACH YEAR: Yes: $x$ No: If not, on what cycle?

## 8. DUPLICATION OR OVERLAP WTTH EXISTING COURSE(S):

(A) Any duplication or overlap with existing courses: No If so, a statement from the department offering the existing course must be appended.
(B) Is there an equivalent course already offered: Yes If so, what is the justification for the new course?

There is an undergraduate ensemble course, but no course at the graduate level

## 9. ADDITIONAL COST FOR THE NEW COURSE:

Is there any additional cost in terms of staff and/or facilities: Yes:
No: $x$
If so, a statement from the Budget Dean must be appended.

## 10. LIBRARY RESOURCES FOR THE NEW COURSE:

(A) Are resources adequate to support the course content? Yes: $x$ No:
(B) Cost of library acquisitions: \$
(A statement from the subject librarian is required regarding adequate support, additional copies of holdings, forthcomingpublications, replacement costs, etc.)

NOTE: $\quad$ The library will need one (1) month's notice of course proposals in order to prepare its statement.

The library requires six (6) months' notice to assess resources for the implementation of new graduate programs.

NET
11. CREDIT HOUR SUMMARY:
DELETED:
INTRODUCED:
3 CHANGE:

NOTE: When a department is introducing more than nine (9) credit hours, a copy of this form must be sent at the same time to: SPPC, c/o Senate.

Attach a copy of the statement from the Budget Dean regarding any resource implications.
12. SIGNED APPROVAL REQUIRED:

Head of Department:
Chair, Faculty Graduate Committee Chair:
Budget Dean:
Chair, Joint Discipline Committee:
(For Joint UW/UM programs only)

COURSE TTTLE: Topics in Music
ABBREVIATED COURSE TITLE: TOPICS_IN_MUSIC
This should be a 15 character, abbreviated title which will be used by Student Records and appear on the students' transcripts.

## PROPOSED BY: School of Music

## PRE-REQUISITES:

YES $x$
If so, specify the pre-requisites:
Admission to the Master's Degree Program and approval by the student's graduate advisor and committee of the topic proposal.

PROPOSED CALENDAR DESCRIPTION: Note: Must not exceed 4 lines -75 characters per line.) This course will vary depending on the needs and interests of instructors and students.

TOPICAL OUTLINE: (Include selected references and/or bibliography - see page 4.)
This will be approved for each individual offering of the course.
COURSE TITLE: Topics in Music

## TEXTS:

N/A

## BIBLIOGRAPHY:

(The proposing unit and the subject librarian should discuss and agree upon the bibliography to be used in assessing the strength of the library's collection in the field.
In the case of topics courses, in which the subject material varies from offering to offering, the proposing unit is responsible for securing the prior agreement of the library that appropriate holdings are available to support the particular topics to be dealt with.)

N/A
PERIODICALS:
N/A
MONOGRAPHS:
N/A

FACULTY OF GRADUATE STUDIES PRIVATE PROPOSAL FOR COURSE CHANGES AND NEW COURSES

Note: In the case of modifications and new course introductions, one form per proposal should be submitted. If more than one proposal is submitted, a summary sheet should be appended.

1. DEPARTMENT: Music

DATE: August 13, 1998
2. COURSES TO BE DELETED:

Course No. Course Title

Credit Hours

State reasons for deletions:
3. COURSE TO BE MODIFIED: (Proposed calendar description and topical outline must be completed - see page 3.)

Course No. Course Title Credit Hours

State nature of modifications and reasons for the proposed change:
4. COURSE TO BE INTRODUCED: (Proposed calendar description and topical outline must be completed - see page 3.)

Course No. Course Title Credit Hours
033.7xx Advanced Orchestration 3
5. State reasons for new course:

This course will form a portion of the curriculum for the new Master of Music degree program
6. PROBABLE ENROLLMENT IN THE NEW COURSE: No. of Students: 1-2
7. WLL THE NEW COURSE BE OFFERED EACH YEAR: Yes: $x$ No: If not, on what cycle? Or as needed depending on enrolment and timing of candidates program.

## 8. DUPLICATION OR OVERLAP WITH EXISTING COURSE(S):

(A) Any duplication or overlap with existing courses: No

If so, a statement from the department offering the existing course must be appended.
(B) Is there an equivalent course already offered: No If so, what is the justification for the new course?

## 9. ADDITIONAL COST FOR THE NEW COURSE: .

Is there any additional cost in terms of staff and/or facilities: Yes: $x$ No: If so, a statement from the Budget Dean must be appended.

## 10. LIBRARY RESOURCES FOR THE NEW COURSE:

(A) Are resources adequate to support the course content? Yes: $x \quad$ No:
(B) Cost of library acquisitions: $\$$
(A statement from the subject librarian is required regarding adequate support, additional copies of holdings, forthcomingpublications, replacement costs, etc.)

NOTE: The library will need one (1) month's notice of course proposals in order to prepare its statement. The library requires six (6) months' notice to assess resources for the implementation of new graduate programs.

## 11. NET

CREDIT HOUR SUMMARY: DELETED: INTRODUCED: 3 CHANGE:

NOTE: When a department is introducing more than nine (9) credit hours, a copy of this form must be sent at the same time to: SPPC, c/o Senate.

Attach a copy of the statement from the Budget Dean regarding any resource implications.

## 12. SIGNED APPROVAL REQUIRED:

Head of Department:

## Chair, Faculty Graduate Committee Chair.

Budget Dean:

Chair. Joint Discipline Committee:
(For Joint UW/UM programs only)

## ABBREVIATED COURSE TTTLE: $\underline{A} \underline{\underline{V}} \underline{A} \underline{N} \underline{C} \underline{D}$ _ORCHES

This should be a 15 character, abbreviated title which will be used by Student Records and appear on the students' transcripts.

PROPOSED BY: School of Music

TOPICAL OUTLINE: (Include selected references and/or bibliography - see page 4.)

Approaches to scoring melodic material, including klangfarbenmelodie
Backgrounds and foregrounds
Scoring of harmonic structures
Voice leading and counterpoint
Approaches to textures, including mikropolyphony and sound-mass
Instrumental balance
Professional standards for the preparation of orchestral materials
Computer-assisted preparation of materials
PRE-REQUISITES: YES $x$ NO
If so, specify the pre-requisites:
Admission to the Master's Degree Program
PROPOSED CALENDAR DESCRIPTION: (Note: Must not exceed 4 lines - 75 characters per line.)

Advanced practical work in orchestration for various-sized large ensembles up to and including full orchestra. Detailed study of selected scores and work on individual orchestration projects.

## COURSE TITLE:

Advanced Orchestration

## TEXTS:

Schoenberg: Five Pieces for Orchestra, Op. 16
Stravinsky: The Rite of Spring
Debussy: La Mer
Mahler: Symphony No. 6

## BIBLIOGRAPHY:

(The proposing unit and the subject librarian should discuss and agree upon the bibliography to be used in assessing the strength of the library's collection in the field.
In the case of topics courses, in which the subject material varies from offering to offering, the proposing unit is responsible for securing the prior agreement of the library that approptiate holdings are available to support the particular topics to be dealt with.)

BOOKS:
Adler, Samuel, The Study of Orchestration, 2nd. ed., New York: W.W. Norton \& Co., 1989.
Berlioz, Hector, and Richard Strauss, Treatise on Instrumentation, trans. Theodore Front, New York: Dover Publications, Inc., 1991.

Blatter, Alfred, Instrumentation and Orchestration, 2nd. ed., New York: Schirmer Books, 1997.
Brindle, Reginald Smith, Contemporary Percussion, Oxford: Oxford University Press, 1970.
Cope, David, New Music Notation, Dubuque, Iowa: Kendall/Hunt, 1976.
Del Mar, Norman, Anatomy of the Orchestra, London: Faber \& Faber, 1981.
Delone, Richard et al., Aspects of Twentieth-Century Music, Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1975.

Kennan, Kent, and Donald Grantham, The Technique of Orchestration, 4th ed., Englewood Cliffs, N.J.: Prentice Hall, 1990.

Piston, Walter, Orchestration, New York: W.W. Norton \& Co., 1955.
Read, Gardner, Music Notation: A Manual of Modem Practice, Boston: Allyn and Bacon, 1969.
Stiller, Andrew, Handbook of Instrumentation, Berkeley: University of California Press, 1985.
Stone, Kurt, Music Notation in the Twentieth Century, New York: W.W. Norton \& Co., Inc., 1980.

## SCORES AND RECORDINGS

(N.B. It is essential to have matched scores and recordings):

Schoenberg: Five Pieces for Orchestra, Op. 16 (both original and revised versions)
Stravinsky: The Rite of Spring (both original and revised versions)
Debussy: La Mer
Mahler: Symphony No. 6 (score from the Mahler critical edition)
Complete symphonies by:
Beethoven
Brahms
Mahler
Shostakovich

Selected Symphonies by:
Bruckner
Hansen
Haydn
Henze
Maxwell Davies
Mendelssohn
Mozart
Piston
Prokofiev
Schnittke
Schubert
Schumann
Sessions
Tubin
Vaughn Williams
Selected orchestral works by:
Adams
Andriessen
Bartok
Berg
Berio
Birtwistle
Boulez
Carter
Copland
Debussy
Dutilleux
Elgar
Gorecki
Gubaidulina
Hindemith
Ives
Ligeti
Lutoslawski
Messiaen
Murray Schaffer
Penderecki
Ravel
Christopher Rouse
Schoenberg
Richard Strauss
Stravinsky
Webern
PERIODICALS:
MONOGRAPHS:
Proposal for Course Changes and New courses (FGS)
FACULTY OF GRADUATE STUDIES
Bonnie Stovel

Note: In the case of modifications and new course introductions, one form per proposal should be submitted. If more than one proposal is submitted, a summary sheet should be appended.

1. DEPARTMENT: Music

DATE: November 21, 1998
2. COURSES TO BE DELETED:

Course No. Course Title Credit Hours

## N/A.

State reasons for deletions:
3. COURSE TO BE MODIFIED: (Proposed calendar description and topical outine must be completed - see page 3.)

Course No. Course Title Credit Hours
N/A

State nature of modifications and reasons for the proposed change:
4. COURSE TO BE RNTRODUCED: (Proposed calendar description and topical outline must be completed - see page 3.)

| Course No. | Course Title | Credit Hours |
| :--- | :--- | :---: |
| $033.7 \times x$ | Ensemble | 3 |

5. State reasons for new course:

This course will form a portion of the curriculum for the new Master of Music degree progran
6. PROBABLE ENROLLMENT IN THE NEW COURSE: No. of Students: 3-5 per year
7. WILL THE NEW COURSE BE OFFERED EACH YEAR: Yes: $x$ No:

If not, on what cycle?
8. DUPLICATION OR OVERLAP WITH EXISTING COURSE(S):
(A) Any duplication or overlap with existing courses: No If so, a statement from the department offering the existing course must be appended.
(B) Is there an equivalent course already offered: Yes If so, what is the justification for the new course?

There is an undergraduate ensemble course, but no course at the graduate level

## 9. ADDITIONAL COST FOR THE NEW COURSE:

Is there any additional cost in terms of staff and/or facilities: Yes:
No: x If so, a statement from the Budget Dean must be appended.

## 10. LIBRARY RESOURCES FOR THE NEW COURSE:

(A) Are resources adequate to support the course content? Yes: $x$ No:
(B) Cost of library acquisitions:
\$
(A statement from the subject librarian is required regarding adequate support, additional copies of holdings, forthcomingpublications, replacement costs, etc.)

NOTE: The library will need one (1) month's notice of course proposals in order to prepare its statement.

The library requires six (6) months' notice to assess resources for the implementation of new graduate programs.

## NET <br> 11. CREDIT HOUR SUMMARY: DELETED: INTRODUCED: 3 CHANGE:

NOTE: When a department is introducing more than nine (9) credit hours, a copy of this form must be sent at the same time to: SPPC, c/o Senate.

Attach a copy of the statement from the Budget Dean regarding any resource implications.

## 12. SIGNED APPROVAL REQUIRED:

Head of Department:
Chair, Faculty Graduate Committee Chair:
Budget Dean:
Chair, Joint Discipline Committee:
(For Joint UW/UM programs only)

COURSE TITLE: Ensemble

## ABBREVIATED COURSE TITLE: ENSEMBLE

This should be a 15 character, abbreviated title which will be used by Student Records and appear on the students' transcripts.

PROPOSED BY: School of Music
PRE-REQUISITES: YES x
If so, specify the pre-requisites:
Admission to the Master's Degree Program and successful audition for the instructor of the ensemble course. The instructor may extend permission to register for this course to qualified undergraduate students.

PROPOSED CALENDAR DESCRIPTION: (Note: Must not exceed 4 lines - 75 characters per line.) Studio instruction and monitored pre-professional training activities in chamber music, leading to the presentation of ensemble performance.

TOPICAL OUTLINE: (Include selected references and/or bibliography - see page 4.)
Repertoire at a level appropriate to the performers in the ensemble will be selected to provide study of a wide range of musical styles.

## COURSE TTTLE: Ensemble

## TEXTS:

Music as selected by the instructor

## BIBLIOGRAPHY:

(The proposing unit and the subject librarian should discuss and agree upon the bibliography to be used in assessing the strength of the library's collection in the field.
In the case of topics courses, in which the subject material varies from offering to offering, the proposing unit is responsible for securing the prior agreement of the library that appropriate holdings are available to support the particular topics to be dealt with.)

N/A.

## PERIODICALS: <br> N/A

MO: YOGRAPHS:
N/A

Note: In the case of modifications and new course introductions, one form per proposal should be submitted. If more than one proposal is submitted, a summary sheet should be appended.

1. DEPARTMENT: Music DATE: August 30, 1999
2. COURSES TO BE DELETED:

Course No. Course Title Credit Hours

State reasons for deletions:
3. COURSE TO BE MODIFIED: (Proposed calendar description and topical outline must be completed - see page 3.)

Course No. Course Title Credit Hours
4. COURSE TO BE INTRODUCED: (Proposed calendar description and topical outline must be completed - see page 3.)

Course No. Course Title Credit Hours
33.7xx Electroacoustic Music 3
5. State reasons for new course:
6. PROBABLE ENROLLMENT IN THE NEW COURSE: No. of Students: 5
7. WILL THE NEW COURSE BE OFFERED EACH YEAR: Yes: No:

If not, on what cycle?
Alternate Years

## 8. DUPLICATION OR OVERLAP WITH EXISTING COURSE(S):

(A) Any duplication or overlap with existing courses:

If so, a statement from the department offering the existing course must be appended.

The School of Music currently offer undergraduate courses in electroacoustic music.
(B) Is there an equivalent course already offered:

If so, what is the justification for the new course?
9. ADDITIONAL COST FOR THE NEW COURSE:

Is there any additional cost in terms of staff and/or facilities: Yes: x No: If so, a statement from the Budget Dean must be appended.
10. LIBRARY RESOURCES FOR THE NEW COURSE:
(A) Are resources adequate to support the course content? Yes: $x$ No:
(B) Cost of library acquisitions: \$
(A statement from the subject librarian is required regarding adequate support, additional copies of holdings, forthcomingpublications, replacement costs, etc.)
NOTE: $\quad$ The library will need one (1) month's notice of course proposals in order to prepare its statement.

The library requires six (6) months' notice to assess resources for the implementation of new graduate programs.

NET
11. CREDIT HOUR SUMMARY: DELETED:
CHANGE:

NOTE: When a department is introducing more than nine (9) credit hours, a copy of this form must be sent at the same time to: SPPC, c/o Senate.

Attach a copy of the statement from the Budget Dean regarding any resource implications.
12. SIGNED APPROVAL REQUIRED:

Head of Department:

## Chair, Faculty Graduate Committee Chair.

Budget Dean:

Chair, Joint Discipline Committee:
(For Joint UW/UM programs only)
COURSE TITLE:

## ABBREVIATED COURSE TITLE: ELECTROACOUSTIC

This should be a 15 character, abbreviated title which will be used by Student Records and appear on the students' transcripts.

PROPOSED BY: School of Music

## PRE-REQUISITES:

YES
If so, specify the pre-requisites:
Admission to the Master's Degree Program or Permission of the Instructor

PROPOSED CALENDAR DESCRIPTION: (Note: Must not exceed 4 lines -75 characters per line.)

A study of the techniques of Electroacoustic Music

TOPICAL OUTLINE: (Include selected references and/or bibliographỳ - see page 4.)
Topics will be chosen from the following.
History and Literature of of the field
Bibliography and Discography
Principles of digital and analog music
Mixing and recording
Musical Instument Digital Interface (MDD)
Topics in aesthetics
Digital Sampling
Software synthesis
Analysis, Synthesis, and Perception of Timbre (incl. psychoacoustics)
Analysis of Musical Systems (algorithmic composition, artificial intelligence and cognitive sciences, harmony and experimental intonation, set theory)
Digital Signal Processing
Computer Music Architecture and Software Design
Application of methodologies from other disciplines, including, Psychology, Linguistics Philosophy and Mathematics

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## COURSE TITLE:

## Electroacoustic Music

## TEXTS:

## BIBLIOGRAPHY:

(The proposing unit and the subject librarian should discuss and agree upon the bibliography to be used in assessing the strength of the library's collection in the field.
In the case of topics courses, in which the subject material varies from offering to offering, the proposing unit is responsible for securing the prior agreement of the library that appropriate holdings are available to support the particular topics to be dealt with.)

## PERIODICALS:

Computer Music Joumal
Leonardo
Perspectives of New Music

## MONOGRAPHS:

Selected analytical studies of individual pieces, genres and composer's works.
(Where necessary, please attach further information on separate pages.) $07 / 97$ corschgn.doc

Proposal for Course Changes and New courses (FGS)
FACULTY OF GRADUATE STUDIES
Bonnie Stovel

## Library Support

## LIBRARY SUPPORT FOR PROPOSED COURSE CHANGES

(The signatures appended indicate that those signing support the statement made by 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: Music
Department:
Course no. and name: Graduate Programs in Music

SUPPORT STATEMENT
PREPARED BY: Vladimir Simosko (Bibliographer)

APPROVED BY: $\frac{\text { FTh } \mathrm{ft} \text { true }}{\text { (Coordinator, Collections Management }}$ (signature)

(Director of Libraries)

DATE: November 5, 1998

TO: Dr. Richard Wedgewood, Director, School of Music
DATE: 4 November 1998
FRCM: Vladimir Simosko, Head, Music Library An
SUBJECT: Library Support for Proposed Graduate Programs in Husic

The proposed Master of Music programs (as attached) are:

1) Master of Music in Composition
2) Master of Music in Performance
3) Master of Music in Choral Conducting

All three are "performance-oriented" with certain curriculum contents in common:
Bibliography and Research
Music History Seminar
Music Theory Seminar
Major Practical study (i.e.: private lessons) Electives (as below)
Thesis
The Electives list includes the following choices:

> Topics in Music
> Electroacoustic Music (required for Composition program)
> Advanced Orchestration (required for Composition program)
> Independent Study
> Ensemble (required for Performance \& Conducting programs)
> Non-music ElectivEs

Eecause of the similar nature of the curriculum for all three programs and their demands on the Music Library as a resource, they can be considered together for certain general observations. For example it is obvious most of these courses are intended to be focused as needed on specific topics which could vary from student to student as well as between the programs. From that point of view, it would certainly be easy for someone to design courses called "Music History Seminar" or "Music Theory Seminar" (not to mention "Topics in Music" or "Independent Study") winch could be supported by our existing collection conpletely to an advanced graduate level; but, just as easily, if scmething like "popular music" were chosen, would be represented in our collection at only a very basic survay levei. Eimilarly, the Music Library could support MA Thesis research on many topics without further resources being needed, or would be weefuliy inadequat for in-depth research on popular music. In addition, the music Library's collection in jazz and ethro-music is very uneven, being very strong in ceriain areas such as Indian music and weak in others. Also, the needs of "Ensemble" pericmers could be met by the Music Liorary far beyond the requirements of the program; or, depending on the choics of repertoire the individual might meke, ne could have none of the items requesied.

Three of the above courses require further discussion:
1: Eibliography and Research
2: Electro-acoustic Music
3: Advanced Orchestration

1) "Bibliography and Research" is again a broad general topic which can be focused in any direction. The question of how well the Music Library can support a Masters Degree level course on Bibliography and Research is most clearly answered by noting that the Conspectus analyses indicated that in this area (ML100-ML158) we have been at a level defined as "Beginning Research Level" (according to the "Key to Collecting Levels" developed by the Libraries' Collection Management Office) which translates in the Conspectus guidelines as "3c: Advanced Instructional Support Level (support for Master's level programs)" and that INTERNET and WWW access (for example, to the "International Index to Music Feriodicals" scheduled to be on-1ine through NETDOC in the immediate future) is also available, although not within the Music Library as we have no public access terminals with these functions (except for NETOOC access) at this time.
2) "Electro-acoustic Music" is an existing course which would be double-numbered with both undergraduate and graduate classifications. Our resources have been more than adequate and are consistently improving, as this area is of considerable current interest. However, the material is scattered throughout the collection: biographies, histories, scores, recordings, and consjderable material in various MT call number areas. Note that this course is required only in the Composition program and is an elective for the other, more performance-oriented programs.
3) "Advanced Orchestration" is a new course but the bibliography and course recuirements provided, are already almost completely satisfied in the Music Library collection. We hava all the material specjicically listad, and are fairly representative in the vaguely-defined "Selected Symphonjes" and "Seiected Orchestral Works" sactions (although we are not compleze with ALL the works by ALL these composers, completeness is not required). Any additional recordings needed to supplement our score collection or vice-versa would not require large expenditures and could easily be met using our Endowment Funds without depriving other areas of our normal acquisitions strategy.

The pregram proposals submitted also inciude a more speciaic description oi the "Music Theory Seminar" as it is also a new course. However, the Tcpical Outline in the proposa? retains the "general" character of the course title as discussec above. Areas of interest are listed as: "approaches to structural analysis (harmony, motive, form, rhythm and hierarchy) as well as the application of methodologies from other disciplines, including psychology, iinguistics, philosophy, mathematics" and we have all the required teats and periodicals, all primary sources reierred to in the standard texts which survey music thecry/analysis in the $20^{\circ}=$ Century, and a significant number of analytical studies of incivicuai pieces, genres, and combosers' works. This meterial alse clearly oyerijes with the Advanced Orchestration course.
it should oe stressed that these three Masters' programs are all essentially performance-oriミnted: conducting, or creating a composition, can be considered

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"performing" as much as playing an instrument is. The private lessons and ensemble activities which make up the course lists are not very dependent on libraries, but in any case we have large collections of ensemble music repertoire, scores, and recordings, and the School of Nusic maintains a Targe symphonic and orchestral music library.

CONCLUSION: The Music Library can support these programs with very little additional expenditure, which can easily be absorbed by the Endowment Funds.

Although the Music Library naturally does not have EVERYTHING, and is strong in various areas while weak in others, for the purposes of these courses as cjted, there should be no difficulty supporting a great many selected topics (which, as noted above, are very open). Of course, the faculty is well aware of our strengths and weaknesses and as discussed, the courses will be built around the areas in which we are strong. The faculty concerned should be advised that checking the library collection before making assignments is essential, and that while we can order new material, it does take time to arrive.

## Response to Programs t

Planning Committee

THE UNIVERSITY OF MANITOBA

SCHOOL OF MUSIC
65 Dato Road
Winnipeg, Manitoba
Canada R3T 2N2
rel: (204) 474-9310
Fax: (204) 275-0834
email: wedgew@cc.umanitoba.ca

December 13, 1999
To: Tony Secco, Associate Dean, Graduate Studies
From: Richard Wedgewood, Director
Re: Graduate Course and related Budget Proposals

## NEW COURSES

033.7aa Introduction to Bibliography and Research (3)
$033.7 \mathrm{ab} \quad$ Music History Seminar (3)
033.7ac Music Theory Seminar (3)
033.7 ad Major Practical Study I (3)
033.7ae Major Practical Study II (3)
033.7af Topics in Music
033.7ag Electroacoustic Music
033.7ah Advanced Orchestration
033.7ai Ensemble

1. Delivery Costs
I. Additional Faculty

Using sessional lecturers and graduate assistants
Additional Voice Instruction (4 students) \$5334
Viola and Bass Instruction (2 students) \$2666
Choral Assistance (1 courses) $\$ 4000$
Theory Instruction (2 course) $\$ 8000$
Music History Instruction (1 course) $\$ 4000$
TOTAL \$24000
OR
the preferred method
Hiring one full-time instructor plus sessionals and/or graduate assistants
One full-time academic position $\$ 45000$ (salary and benefits)
Additional Voice Instruction (4 students) \$5334
Viola and Bass Instruction
Choral Assistance
(2 students) \$2666
( 1 courses) $\$ 4000$

The following is the method by which the proposed courses will be offered. This should explain the difference between the proposed funding and the full list of new courses.

1) The Introduction to Bibliography and Research is a course which we offer also on the 300 level. It is a course with an enrolment of less than 5 so that graduate students can be integrated into the course and receive specialized assignments relating to increased expectations for graduate students without initiating an additional special course in this area. This involves no increase in teaching load of the School.
2) Music History Seminar will be a special graduate course taught by one of our musicologists. This will require the hiring of a replacement for one of our undergraduate courses to make room on the teaching load.
3) The Music Theory Seminar will likewise be offered as a special course taught by one of our theorists. In addition, our composer currently teaches one of our undergraduate theory courses and he would have to be replaced for this course to take on graduate composition students and the teaching of the electroacoustic music for graduate students. This explains the need for replacements for two theory courses.
4) Both Major Practical Study courses and the Ensemble course would be taught as one hour of instruction weekly. Currently our voice faculty have loads filled and therefore, we would need to hire extra voice instruction to accept graduate students.

We use part-time instruction for viola and bass, and therefore these instructors are hired on a per student basis.

The string instruction for violin and viola currently has some room in the teaching load for some graduate students. Any requirement for hiring additional instructors would come about because we had too many students whom we would have to hire additional instructors for in any case. They do not represent an additional teaching budget item unique to the graduate program.
5) Electroacoustic music will be taught by our composer either as an independent study or integrated into our 400 level electroacoustic music course with appropriate work for the graduate level student assigned independently.
6) The Topics in Music course will be essentially an independent study course as will the Advanced Orchestration since we do not believe there will be large numbers of composers in the program at any one time.
7) The Choral Conducting faculty member will supervise the choral conducting students. In order to make this happen, we need to relieve him of one of his courses. Therefore, the requirement to hire in this area.

I believe that this explains all of the budget items. As noted, our preferred method is to hire an additional academic staff member which will simply give us flexibility to reallocated teaching loads in the academic areas. We can do this with part-time instructors.

Note also that the budget is based on six students. This is conservative. We believe that our intake will be more like 8 to 10 as we have proposed. 10 students will supply enough tuition for a break-even budget.

## Report of the Senate Planning and Priorities Committee on the School of Music proposed Masters of Music Programs

1. The terms of reference of the Senate Planning and Priorities Committee (SPPC) are found in the Senate Handbook (Rev. 1993), pp. 10.21/22 wherein SPPC is charged with making recommendations to Senate regarding proposed academic programs.
2. The School of Music is proposing to introduce three Masters' of Music programs: Master's of Music (Composition), Master's of Music (Choral Conducting), and Master's of Music (Performance).

The School of Music has been planning for a graduate program for a number of years. The proposal outlines a two-year program of study containing a core curriculum which is augmented by specialized courses that lead to one of the three degrees. Each program involves 24 credit hours of course work and a non-credit thesis or practicum. The practica involve individual instruction and culminate in a public performance which is adjudicated. The programs are designed to extend academic training to higher levels in areas of existing strength within the School. The proposed programs provides opportunity for students to take graduate study in music in areas not currently available in Manitoba.

## Observations

1. The School receives regular enquiries from potential students about the availability of graduate training. Potential employers, such as the Winnipeg Symphony Orchestra, are having increased difficulty in soliciting applications for positions for which graduates of the programs would be competitive.
2. The School is proposing nine new courses as part of the program. Bibliography and Research Methods will be co-taught with a senior undergraduate course and Major Practicum Study / and Major Practicum Study // will be offered on an individual basis by all faculty members.
3. The School has eleven full-time and four sessional faculty members. With current responsibilities taken into consideration, there are not a sufficient number of faculty members to mount the proposed programs. The proposal contains a request for the needed extra funding and several options on how this funding could be obtained. Depending on the option pursued, the revenue from tuition generated would offset a major proportion of the increased expenses.
4. The School has space for graduate student offices.
5. The Library has sufficient resources to support the proposed programs.
6. Support for the proposal has been received from the School of Music, Brandon University; the Winnipeg Symphony Orchestra, and several choral organizations.

## SPPC Report, Cont'd.

## Recommendation

The SPPC endorses the recommendation of the School of Music that
a) the Master's of Music (Composition), Master's of Music (Choral Conducting), and Master's of Music (Performance) programs be approved; and
b) that courses: 33.7xx Introduction to Bibliography and Research, 33. 7ab Music History Seminar, 33.7ac Music Theory Seminar, 33.7ad Major Practicum Study I, 33.7ae Major Practicum II, 33.7af Topics in Music, 33.7ag Electroacoustic Music, 22.7ah Advanced Orchestration, and 33.7ai Ensemble be approved
under the condition that the Vice-President (Academic) and Provost not authorize implementation of the program until the resource needs of the programs are met.

Respectfully submitted,

Norman Halden, Chair, Senate Planning and Priorities Committee
Robert Tait, Chair, Subcommittee on Program and Curriculum Planning
/ss


University of Manitoba
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FACULTY OF GRADUATE STUDIES Professor Fernando de Toro, Ph.D. Dean

500 University Centre Winnipeg, Manitoba CANADA, R3T 2N2
Phone: (204) 474-8086 Fax: (204) 474-7553
E-Mail: culliganems.Umanitoba.ca

## MEMORANDUM

Date: March 16, 2000

| To: | Ms. Bev Sawicki, Senate Secretariat, 310 Administration Bldg. |
| :--- | :--- |
| From: | Dr. Fernando de Toro, Dean, Facuity Council of Graduate Studies |
| Subject: | Recommended Motions for Senate's consideration |

At the March 15, 2000, meeting of the Faculty Council of Graduate Studies, the membership endorsed the following motion and requested that it be forwarded to Senate for its consideration:

THAT the proposed Ph.D. In Natural Resources and Environmental Management be endorsed by Faculty Council and forwarded to Senate for approval. (See attached proposal)

Thank you for your attention in this matter.
/jc

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


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$$

# A PROPOSAL FOR A PH.D. DEGREE PROGRAM 

 IN
# NATURAL RESOURCES AND ENVIRONMENTAL MANAGEMENT 

Prepared by:

Natural Resources Institute
University of Manitoba

April 1999

## EXECUTIVE SUMMARY

'
This proposal describes the formulation of a Ph.D. program in Natural Resources and Environmental Management to be offered through the Natural Ressources Institute at the Unikersity of Manitoba. The program's areas of specialization will build upont the existing strengths of the Unstitute, namely the sustainable management of water resources, community-based decision-making, and the management of wildife and their habitats. Targeted candidates will be those students seeking a Ph.D. degree in order to strengthen their academic abilities. Three or four new students are anticipated on an annual basis. These students will be drawn from existing Master's level programs at the University of Manitoba, as well as from otherCanadian and International Universities. This program is expected to fill a general gap in natural resources and environment hanagement offerings throughout Canada, and particularly in west-central Ganada. The new Ph.D. program will require minimal additional resources from the University of Manitoba in the form of a 0.5 FTE academic position. The existing administrative and academic structure of the Natural Resources Institute is fully capable of absorbing the additional student load engendered by this program. ' .

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## EXECUTIVE SUMMARY

## Proposed Change:

This proposal describes the formation of a Ph.D. program in Natural Resources and Environmental Management to be offered through the Natural Resources Institute at the University of Manitoba. The program's areas of specialization will build upon the existing strengths of the Institute, namely the sustainable management of water resources, community based decision-making, and the management of wildlife and their habitats.
Rationale:

- Natural resource and environmental issues have a high priority with government, industry and the public. Students currently wishing to pursue a Ph.D. in this area have to leave the province to do so. The NRI would like to offer Ph.D. opportunities at the University of Manitoba for these students.
- The development of a Ph.D. at the NRI was initiated following the release of the Final Report of the University Task Force on Strategic Planning. This document specifically addressed the need for a Plı.D. at the Natural Resources Institute. It recommended that the NRI "develop and serve as the home unit for an interdisciplinary Ph.D. degree in the area of environment and resource studies".
- The Dean's of all related departments have been consulted and their letters of support are attached to the proposal.
- In addition to the eight students that are currently showing an interest in the program, the NRI carried out a survey of graduates, as described below, and found that of thirty-nine respondents four students were currently pursuing Ph.D.'s and ten were very interested if such a program were being offered at the NRI.
- A Ph.D. degree will be required to meet the requirements of a diverse, range of natural resource and environmental management jobs, whether they be in academia, government, or the private sector. There are only three interdisciplinary programs in Canada which offer a Ph.D. in resource and environmental management.
Scope and Resource Implications:
- Faculty involved are prepared to start the program in September of 2000 and continue it from that point forward.
- It is estimated that during the first three years, 3 or 4 students will be admitted to the Ph.D. program on an annual basis. The anticipated stationary state enrollment would be approximately 10 students.
- There are no new staffing or resource implications. The three study concentration areas will initially involve a potential instruction pool of five NRI permanent staff. As with the Master's program, the Ph.D. program will also draw from the very strong pool of Adjunct staff members.
Accreditation Issues:
- The proposal is in response to a national initiative to accredit environmental programs.
- No new human or financial resources are required. The Ph.D. students may replace some Master's level students, but no more than 2 or 3 annually.
- The NRI is currently in the process of converting a 0.5 FTE to a 1.0 FTE to augment the proposed program. Delivery of the program does not rest on this conversion.
- The program is not expected to impact on Ph.D. student enrollment in other departments. Letters of support are attached.
- As noted, the proposed program was a recommendation of the University Task Force on Strategic Planning.


# A PROPOSAL FOR A PH.D. DEGREE PROGRAM IN NATURAL RESOURCES AND ENVIRONMENTAL MANAGEMENT 

## A. PROGRAM DESCRIPTION

## A. 1 Rationale and Objectives

## a). Rationale

Natural resources issues and environmental concerns involve an interactive mixture of social, economic, political, and ecological factors. These complex issues and concerns are best addressed at multiple scales which cross traditional barriers, both disciplinary and political (Kessler 1995). The inherently interdisciplinary nature of natural resources and environmental studies means that it cannot be identified with any single discipline. This fact has been recognized at least since the 1977 Tblisi Declaration on Environment and Education, which noted that:

The interdisciplinary approach seeks to give a more comprehensive and less cursory picture of problems. It does not consist of juxtaposing different disciplines on an a priori basis but in grasping the process in its entirety and [then] proceeding to analyze and solve specific problems.
As such, the interdisciplinary approach differs fundamentally from the multidisciplinary approach, which involves the pulling together of aspects from different disciplines in the hope that the end product of this process will be an holistic understanding of a particular issue.

Within the academic community, addressing interdisciplinary areas of study such as natural resources and environmental management means that the outmoded, rigid departmental structure found in most universities must be replaced. To address real issues in the environment and natural resources sector, departmental walls must be made at least "semipermeable." Without this change, academia will continue to seem like "a fringe player rather than a leading force in addressing the complex social-ecological issues that confront us at the close of the twentieth century" (Meffe 1998: 259).

## Recent Evolution of the Field of Natural Resources and Environmental Management

The traditional focus of natural resource management on production for export has been replaced over the past few decades by a more holistic approach. This change has occurred in response to growing concerns among citizens, politicians, academics, and industry experts regarding the social, economic and ecological impacts of resource use. Greater recognition of the complexity of factors affecting natural resources and environmental management has led to the emergence of new ideas and terms such as ecosystem-based management, ecological economics, sustainability, biodiversity, and community-based planning. Coinciding with the increasingly complex nature of natural resources and environmental management has been a growing need for professional experts at the local, provincial, national, and international level. To ensure that an holistic, ecologically sustainable approach is taken in the planning, development, evaluation and protection of natural resources and the environment, sophisticated guidance is increasingly required.

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## The Response of the Academic Community

Out of the significant changes in conceptual understanding of resource and environmental management has emerged a distinct area of academic interest. Like other disciplines which combine knowledge from a diversity of subject areas, such as anthropology', natural resources and environmental management has developed a unique body of knowiedge. Students have increasingly sought out programs which provide access to this knowledge. Consequently, many universities across North America now offer undergraduate and graduate level programs dedicated to the study of the environment and natural resources. At the University of Manitoba, for instance, an estimated 150 bachelor and 50 master's students annually graduate from related programs in the Natural Resources Institute and the Faculties of Science, Agriculture, Architecture, Arts, and Engineering.

As noted previously, professionals with doctoral level training in natural resources and environmental management are increasingly needed, both in the private sector and within academia itself. In Canada, eleven universities have responded to this need by offering a Ph.D. program related to natural resources and environmental management. These programs, though, remain insufficient to meet the anticipated demand for highly qualified practitioners by government agencies, research centres, non-governmental organizations, and the natural resource and environment industry. To meet this demand, particularly for professionals with the expertise and knowledge critical to the sustainable development of Manitoba, an independent, Ph.D. program is needed at the University of Manitoba (UM).

## The Natural Resources Institute

The University of Manitoba responded to the growing importance of the natural resources and environment field over 30 years ago when it began to offer a Master of Natural Resources Management (MNRM) degree through the Natural Resources Institute (NRI). This interdisciplinary program is now well established and has gained an international reputation for quality. Its more than 500 graduates currently occupy positions with various levels of government, non-governmental organizations, and industry. Until now, graduates of the MNRM program interested in continuing to pursue interdisciplinary studies in the natural resources area have had two choices: either enter the Individual Interdisciplinary Ph.D. Program offered by the University of Manitoba ${ }^{2}$, or leave the province and pursue studies at a university which offers a natural resources and environmental management program. Many of these graduates have chosen to pursue doctoral studies at other universities. To counter this trend, the NRI believes that a third option should be made available - the pursuit of a Ph.D. in natural resources and environmental management at the University of Manitoba.

[^0]Discussions surrounding the establishment of a Ph.D. program at the NRI have been held at various levels of the University of Manitoba almost since the Institute's inception in 1968. Until recently, through, little or no action, had been taken in response to these discussions. This inertia changed following the release of the Final Report of the University Task Force on Strategic Planning. This document specifically addressed the need for a Ph.D. at the Natural Resources Institute. It recommended that the NRI "develop and serve as the home unit for an interdisciplinary Ph.D. degree in the area of environment and resource studies" (UM 1998, 65). In response to this recommendation, the NRI has consulted with various people both inside and outside the University of Manitoba to develop a Ph.D. program which is both innovative and realistic in its scope. This document represents the final outcome of these consultations. The proposed program will be housed in the Natural Resources Institute, complementing its successful Master of Natural Resources Management program. As with all graduate programs, the Faculty of Graduate Studies will provide the additional administrative support and expertise needed to ensure the success of the program.

## b). Objectives

The proposed program will be a Doctor of Philosophy degree in the field of natural resources and environmental management. The primary objective of the program will be to provide doctoral studies in the environment and nalural resources through an holistic and interdisciplinary approach. An interdisciplinary doctoral program of this type currently is not offered in Manitoba, northern Ontario, Saskatchewan, or Alberta. The proposed Ph.D. program will address the need in Manitoba, Canada, and beyond for highly qualified professionals in the natural resources and environmental management sector ready to confront the complex issues facing our world environment into the $21^{4 t}$ century. To improve the quality of graduate student research and associated activities in natural resources and environmental management, the program will seek to enhance collaboration among university departments. It will draw upon a wide range of faculty resources from within the UM community and outside to complement the existing strengths found within the Natural Resources Institute. As such, the proposed program will strive to achieve a fundamental change in the way that academics and researchers have traditionally conducted their activities at this University. The key to the growth of the program will be an appreciation and respect for the disciplinary heritage of others.

Specific objectives of the program will be to:

- provide excellent doctoral-level education in natural resources and environmental management to students from a wide variety of academic backgrounds;
- foster a learning environment conducive to the intellectual and personal growth of students, as well as, where appropriate, their professional development;
- enable critical inquiry and debate regarding natural resources and environmental policies, while protecting academic freedom and intellectual independence;
- enhance the existing body of natural resources and environmental management knowledge through applied research and original scholarship of the highest quality;
- provide opportunities for students to serve the University of Manitoba and the communities external to the UM by helping to solve problems related to the environment and natural resources; and
- create opportunities for students to interact with individuals in other UM units, academic institutions, governments, non-governmental organizations, and industry.


## A. 2 Notable Features

The program will make a unique contribution to the academic and general community of Manitoba. It will be the only Ph.D. program at the University of Manitoba and in central Canada with a focus upon preparing graduates for interdisciplinary research and teaching in natural resources and environmental management. The program initially will emphasize areas of research relevant to Manitoba and west-central Canada, but will build upon strong and developing international linkages to secure its place worldwide.

One area in which Ph.D. level training opportunities in Canada related to resource and environmental studies are particularly short is programs dealing with Aboriginal peoples and northern resources and environmental management issues. As Aboriginal peoples continue to move toward more self-control of the planning and management of their natural and environmental resources, and develop more culturally-based management practices, there will be an increasing demand for Aboriginal peoples with management skills based on advanced graduate studies.

This trend is especially relevant to Manitoba where the self-government process has been escalated. Our province is currently the home of one of the largest and most politically active aboriginal communities in Canada ${ }^{3}$. As this community grows, a greater number of Aboriginal youth will seek undergraduate and graduate level education. The University of Manitoba already has an established reputation in the provision of education to Aboriginal peoples. The presence of the Centre for Indigenous Environmental Resources in Winnipeg should further ensure that a growing number of Aboriginal students decide to pursue studies related to natural resources and the environment at the university level.

Topics of concern to Aboriginals will constitute a common thread throughout the proposed program. Specific issues of importance to Aboriginal peoples may be examined through all three of the program's intended areas of concentration: sustainable management of water resources, community-based resource management, and the management of wildife and their habitats. As well, the proposed program will make special efforts to recruit First Nations students through well-established faculty contacts. To facilitate this process, specialized linkages with First Nations communities will be developed and special presentations will be made to First Nations students at each of Manitoba's Universities.

Shortages in the availability of qualified female faculty members in the area of natural resources

[^1]and environmental management are also evident (from our own experience). The proposed Ph.D. program will enable more female students to pursue an accessible academic career option of relevance to Manitoba. Special effort will be made to recruit and support these students through the program. The NRI is well placed to achieve this goal. While initially male dominated, in recent years the number of women enrolled in the NRI's MNRM program has outstripped the number of men5. In recent years, many of the Institute's female graduates have expressed an interest in furthering their education. To encourage their application, direct communication with female graduates of the Natural Resources Institute, and other related programs, will be undertaken to encourage their application. As well, specialized award options will be developed.

## A. 3 NeEd For the Program

## a). Labour Demand in Manitoba and Canada

The environment and environmental issues are a high priority for governments, agencies, industry, and the general public, all of which has resulted in a tremendous growth in the environment sector. According to a March 1997 Government of Manitoba information release:

- it is estimated that the global market for environmental technology, products and services will grow to US $\$ 600$ billion by the year 2000;
- the Canadian environmental industries sector now employs about 150,000 people and is growing at a rate of about $11 \%$ per year. It is expected to generate revenues of CDN $\$ 12$ billion by the end of 1997.
The release also noted that more than 300 Manitoba companies have indicated that they are now involved in some aspect of the environment industries sector. This involvement represents about 2000 jobs and annual revenues of over CDN $\$ 240$ million. It was noted that many of these small companies will be seeking assistance to develop technologies and processes which address both domestic and international environmental problems. Individuals with undergraduate and graduate degrees and with certificates from accredited programs will be ideally suited to provide this assistance.


## Commitment within Manitoba

Manitoba has been at the forefront in its commitment to sustainable development for a number of years. This commitment has been demonstrated through the establishment of the Manitoba Department of the Environment, the Sustainable Development Committee of Cabinet, and the Sustainable Development Innovations Fund, which provides grants in support of innovative projects, activities, research and developments that further the sustainability of Manitoba's economy, environment, human health and social well-being and support environmentally sustainable economic growth." As well, in 1998, Manitoba became the first province in Canada to enact a Sustainable Development Act. This act enabled the establishment of a Sustainable Development Coordination Unit and may assist the province to become the first to move towards sustainability assessment. Other indications of the Province of Manitoba's commitment to sustainable development are the presence of the International Institute for Sustainable Development in Winnipeg, and the 1991 amendment of the City of Winnipeg Act to require Plan

[^2]Winnipeg to include consideration of sustainable use of land and other resources. There is no doubt that the government's emphasis on sustainable development will continue ${ }^{\text {b }}$.

## b). Need in Comparison with Other Canadian Universities

Increasingly, a Ph.D. degree will be required to meet the requirements of a diverse range of natural resource and environmental management jobs, whether they be in academia, government, or the private sector. There are number of Canadian Universities offering Ph.D. programs in related areas (see Table 1). However, there are only three interdisciplinary programs in Canada which offer a Ph.D. in resource and environmental management: Simon Fraser University, University of Northern British Columbia (a very small and new program), and York University. Consequently, many Canadians interested in pursuing a doctoral program in natural resources and environmental management in Canada have a very limited number of universities from which to choose.

## Interdisciplinary Ph.D. Programs in Natural Resources and Environmental Management

The Ph.D. program in resource and environmental management at Simon Fraser University was established in 1979, and has been maintained as a general interdisciplinary program covering a wide range of natural and social sciences. This program provides an opportunity for carrying out interdisciplinary research and training in resource community planning, water management, environmental toxicology and management, water management, environmental impact assessment, ecological risk assessment, energy economics and management forest ecosystem dynamics, population ecology, conservation biology and landscape ecology, tourism planning and management, institutional design, fisheries management, and outdoor recreation and parks planning.

The Ph.D. program in natural resource and environmental studies at the University of Northern British Columbia is offered within the Faculty of Natural Resources and Environmental Studies. It is a new and evolving program which has been developing over the past few years. Students are often funded through industry-University collaboration, and much of the research is focused on northern British Columbia.

The Ph.D. program in environmental studies at York University is offered through its Faculty of Environmental Studies. The program focuses on a broad definition of environment, which encompasses natural, built, organizational, and social environments.

## Other Related Ph.D. Programs

In addition to these programs in natural resources and environmental management, there are related interdisciplinary programs that provide opportunities for Ph.D. degrees. These include programs at the University of Calgary, the University of Alberta, the University of Toronto, the University of Guelph, and McGill University.

The Resources and Environment Program at the University of Calgary offers a multidisciplinary

[^3]Ph.D. to self-motivated learners using a non-departmental approach, apparently similar to the University of Manitoba's IIP program.

The Ph.D. program in renewable resources at the University of Alberta offers a program with a wide range of offerings. Students may choose one of the following specializations: conservation biology, forest biology and management, land reclamation and remediation, protected areas and wildlands, water and land resources, and wildlife ecology and management.

The Environmental Studies Collaborative Program at the University of Toronto offers a Ph.D. program in three areas: Environment and Health, Environmental Engineering and Toxicology.

The University of Guelph offers an interdisciplinary Ph.D. through the Rural Studies Program with a focus on sustainable rural communities.

The Ph.D. program in natural resource sciences at the McGill University is an interdisciplinary program within the Faculty of Agricultural and Environmental Sciences with a range of offerings. Students may choose from one of the following specialization's: Agrometeorology, Entomology, Forest Science, Microbiology, Soil Science, and Wildlife Biology.

In addition, there are a number of interdisciplinary environmental engineering programs in several Canadian universities that offer Ph.D.'s in related areas (see Table 1).

## c.) Survey Results

At the end of 1998, the Natural Resources Institute undertook a survey of its 1990 to 1998 MNRM graduates. A total of 39 graduates residing in five provinces and one territory were interviewed. As part of this survey, graduates were asked about their interest in pursuing a Ph.D. degree. Four of the graduates contacted stated that they are already enrolied in a Ph.D. program, one of whom is pursuing this designation through the University of Manitoba's Individual Interdisciplinary Program. Two former students indicated that they had decided not to pursue a Ph.D. degree in part because of the absence of a program at the UM related to their areas of interest. Notably, ten of the graduates currently not undertaking doctoral studies expressed an interest in entering a Ph.D. program if one was offered by the Natural Resources Institute.

## A. 4 Extension to Existing Programs

The University of Manitoba is at the forefront in the breadth of offerings in environmental studies and also in the human resources that are devoted to them. This commitment has been recognized, for example, with the NRI receiving the Sustainable Development Award of Excellence for Education in 1994. There are currently about 200 courses at the UM which deal with some aspect of the environment. The UM also has undergraduate programs in Environmental Science, Agroecology, and Environmental Engineering. What is clearly missing is a high quality Ph.D. program which can build on the existing strengths within the University community.

The proposed program will also enhance the Master of Natural Resources Management
program at the University of Manitoba by providing additional expertise through teaching assistantships, and by enhancing research activities among faculty members. No other probable effects on existing programs are anticipated.

## A. 5 Strategic Partnerships with Other Manitoba Universities

The proposed program will enhance cooperation among the Universities of Manitoba, Winnipeg, and Brandon. All three of these universities offer programs related to the environment at the undergraduate level. Complemented by the existing MNRM program, the establishment of the new Ph.D. program in environment and resources at the UM will provide Manitoba's best and brightest graduates greater opportunity to further their training while remaining in their home province.

The NRI will strive to ensure that its students have access to the greatest expertise available in the province. This goal will be accomplished by furthering linkages among faculty members at all three universities who have an interest in the environment and resources, and encouraging students to become involved with initiatives such as the University of Winnipeg's Forest Research Centre. As well, adjunct appointments will continue to strengthen the core faculty membership of the NRI.

## A. 6 Enhancement of the Reputation of the University of Manitoba

The proposed Ph.D. program will clearly further the reputation of the University of Manitoba in national and international arenas. As was discussed earlier, Ph.D. programs of this sort are lacking:at Canadian universities. Provision of an advanced post-graduate program at our University will likely be acknowledged through enhanced provision of support from national granting agencies. At the international level, the availability of a Ph.D. degree in this growing area will provide a clear path for top level students from other countries to gain advanced knowledge at the University of Manitoba, and likely contribute through their research projects to international development efforts worldwide.

## A. 7 Strengths of the Program

Building on the strengths of the model followed by the successful MNRM program, the proposed program will reflect the inherently interdisciplinary nature of natural resources and environmental management in its overall concept and design. It will consider the complete picture in environmental matters from the perspective of several disciplines at the same time. Graduate students enrolled in the Natural Resources institute will be able to seek advice and expertise for their graduate research from a wide range of academics in a variety of departments at the University of Manitoba. As such, the proposed program will better allow students to bring together ideas from an array of university disciplines and synergistically address the emerging issues of the next century. This approach requires that the traditional walls among University departments be lowered or eliminated for the benefft of the research and the student. Our capability as a unit to support the proposed program will thus be complemented by our associates across the university community.

## A. 8 Areas of Concentration or Specialization

The proposed Ph.D. program will be management-oriented and will build upon the areas of research interest as demonstrated by current facully members and complemented by other researchers across the University. Current NRI course offerings will be used and directed toward specific topics annually to meet the expressed intentions of the graduate student body of the day.

The proposed program will focus on research in three areas of natural resources and environmental management:

1. Sustainable management of water resources. Socio-political, economic and policy aspects of freshwater usage. Modeling of natural resource and environmental systems. Decision support for water and environmental systems management.
2. Community-based resource management. Natural resource conservation. Natural resources and environmental policy and decision-making.
3. Management of wildlife and their habitats. Conservation of biodiversity. Ecosystem-based approaches to natural resources and environmental management.

The above areas of interest are described more completely in Appendix B, which presents information on the staff resources available for advising Ph.D. students in the proposed program. This group of faculty members extends the knowiedge and expertise of the Natural Resources Institute beyond the confines of the traditional departmental structure and paves the way for enhancing collaboration and partnerships among University units.

The three research areas listed above are part of the curriculum of the current Master of Natural Resources Management program. Since 1968, the NRI program has enabled more than 500 graduate students to complete their requirements for a Master's degree in Natural Resources Management at the University of Manitoba. Considering this relatively high level of graduate student interest, the three specialized areas identified above are recognized as a high priority for concentration in the Ph.D. program.

## A. 9 Collaboration with Other UM Programs

The NRI has very close collaborative ties with various departments at the University of Manitoba that have the capacity to provide instruction and participate in the supervision of Ph.D. students in Natural Resources and Environmental Management. These departments include:

- the Department of Civil and Geological Engineering, including the Environmental Engineering Option program, in the Faculty of Engineering;
- the Departments of Anthropology, Geography, Psychology, Native Studies, Sociology and Economics in the Faculty of Arts;
- the Departments of Zoology and Botany, and the Environmental Sciences Program, in the Faculty of Science;
- the Departments of Agricultural Economics and Plant Science in the Faculty of Agriculture and Food Sciences;
- the Departments of Environmental Design and City Planning in the Faculty of Architecture, and;
- Recreation Studies in the Faculty of Physical Education and Recreation Studies.


## A. 10 Program Details

Ph.D. candidates in natural resources and environmental management will be required to:

- conduct original research.
- synthesize and state the relevance of their research in a thesis, and
- demonstrate a contribution to the logic and practice of natural resource and environmental management.
Prior to their admission into the NRI, students will be required to specify their area of research interest and name their advisor. Unlike the current IIP process, though, students will not necessarily be required to develop a detailed Ph.D. proposal or select their advisory committee prior to entering the program. This process should allow students more leeway when initially planning their Ph.D. program. During this critical time, students will be able to undertake some courses and possibly gain further insights and develop creative concepts by participating in learned Conferences and Workshops. At the same time, students will be able to meet potential advisory committee members and gain a more thorough knowledge of their respective skills and abilities. Through these experiences and consultations with their advisors, students will be able to think about the ultimate direction and details of their research projects. Overall, this process will provide greater opportunity for Ph.D. students to interact with others and discusss their research projects as they are evolving.


## a). Admission Requirements

To qualify for admission to the Ph.D. program, an applicant must meet the University of Manitoba Graduate Studies general regulations and must have:

1. high academic standing in previous university work;
2. a Master's degree in a related discipline, as determined by the Natural Resources Institute Selection Committee; and
3. an area of research interest which may be supported by an NRI faculty member. Students must be accepted by an advisor prior to submitting an application to enter the program.

Applications will include letters of recommendation, including one from the student's intended advisor, and a natural resources work experience statement indicating that the applicant has demonstrated suitability and preparedness for Ph.D. studies. A Selection Committee will assess all applications, applying a usual standard of a minimum grade point average of 3.50 in the most recent 60 credit hours of course work, and evidence of scholarly ability (e.g. publications and other written works). It is critical to note that applicants will be assessed on an individual basis to ensure they are qualified to undertake the program which they have planned. For example, students planning to undertake Ph.D. studies in wildlife management will be expected to have the appropriate scientific and ecological background.

On admission, the advisor named by each Ph.D. student in their application will be formally appointed by the Director. The chosen advisor will serve as the chairperson of the student's

Ph.D. advisory committee. The advisory committee will be appointed as early as possible in the first term of study, and will consist of at least three members of the Faculty of Graduate Studies, at least one of whom must have their major affiliation with a unit other than the NRI. The advisory committee will assist the candidate to prepare an individualized study program that includes course requirements and thesis research requirements.

## b). Course Requirements

All Ph.D. candidates will be required to complete a minimum of 12 credit hours of course work at the 700 -level. Individual programs of study will vary from candidate to candidate depending on each student's research interest and the recommendations of each student's advisor and Ph.D. advisory committee. Students will be encouraged to use the pool of NRI required and elective courses as well as appropriate graduate courses available outside of the NRI in order to select the best set of courses to complement their programs.

Through the NRI, students are annually able to take 21 different courses related to the social, economic, and ecological management of natural resources and the environment. These courses are delivered by both full-time and Adjunct staff members. The supplemental teaching capacity provided by Adjunct staff members ensures that alt courses offered by the institute are delivered each year. Appendix. A lists the current Master's degree program requirements of the Institute, as well as courses currently offered through the Natural Resources Institute.

As with most Ph.D. programs, students will also have the opportunity to take ancillary courses offered outside the NRI, allowing them to take advantage of the expertise and knowledge of faculty members in other academic units. Through this method, the NRI is able to ensure that each student has access to the courses he or she needs. A list of relevant courses offered by various academic units on campus is provided in Section 2 of Appendix A.

Student academic progress will be reported annually to the Faculty of Graduate Studies. A minimum Grade Point Average of 3.0 , with no grade below $\mathrm{C}+$, must be maintained in order to continue in the program.

## c). Candidacy Examination

As part of their research requirements, each student will be required to complete a candidacy examination, a Ph.D. thesis, and an oral defense of the Ph.D. thesis. The candidacy examination will normally be taken within the first two years of full time registration after admission to the Ph.D. program. The purpose of the candidacy examination will be:

- to assess the student's background knowledge in the field of specialization and to give advice concerning the ability of the student to complete the Ph.D. program; and
- to assess the proposed research program itself and to make recommendations on it. The student's advisor will be responsible for initiating all steps necessary for completion of the candidacy examination.

Prior to the examination, each student will be expected to submit a candidacy document outining his or her intended area of study. The document will constitute the student's thesis proposal, and should include the following four sections, with modifications as necessary to meet individual student and/or research requirements:

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1. Statement of the nature of the study, including research objectives;
2. Review and analysis of the related literature; and
3. Outline of methods and procedures to be used.
4. Demonstration of ability to undertake independent research at the doctoral level, such as through a pilot study or statement of initial research findings.

The oral candidacy examination will be conducted by the advisory committee and chaired by the student's advisor. Its structure will be a formal presentation by the student, followed by questions from the committee related to the student's field of specialization. The advisory committee will assist the advisor in ensuring that the candidacy examination has satisfied appropriate requirements for each student and the general requirements of the Faculty of Graduate Studies.

Once the candidacy examination has been successfully completed, the advisory committee will assist the candidate throughout the remainder of his or her thesis research. The general regulations of the Faculty of Graduate Studies will govern this research. The Ph.D. thesis defense shall be conducted a minimum of one year after the candidacy examination.

## d). Thesis Procedures and Regulations

## Ph.D. Thesis Requirements

Students are able to conduct research which involves the theoretical analysis of a topit or issue, or the practical application of strategies to address a topic or issue, or a combination of these two concepts.

The thesis must be written in standard style acknowledged by a particular field of study and approved by each student's thesis committee. The thesis should be lucid and well written, and be reasonably free from typographical and other errors. Additional details respecting submission of the thesis should follow the Thesis Guidelines booklet provided by the Faculty of Graduate Studies.

## Ph.D. Thesis Oral Defense

The general regulations of the Faculty of Graduate Studies will govern thesis preparation and the final examination for the Ph.D. degree. The Ph.D. thesis defense shall be conducted after a minimum of one year after the candidacy examination. A Thesis Examination Committee will be appointed as per the Faculty of Graduate Studies guidelines. This committee will typically include all members of the student's advisory committee, plus a member external to the University of Manitoba.

During their defense, candidates will be expected to clearly demonstration their competence to complete a research project and present its findings. The thesis must constitute a distinct contribution to knowledge in the natural resources and environmental management field, and the material must be of sufficient merit to be acceptable for publication.

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## e). Transfer of Courses

Advance credit for courses completed prior to admission to the Ph.D. program will be considered on an individual basis, following the guidelines of the Faculty of Graduate Studies.

## A. 11 Credential to be Granted

The proposed credential is a Ph.D. degree, in the area of Natural Resources and Environmental Management. This degree will build upon the highly successful and management-oriented Master's program which has been offered at the University of Manitoba since 1968. The Doctorate degree in this expanding field is offered under different names at other institutions; our selection is based on our record and areas of expertise. Along with faculty members at the University of Manitoba, professional resource managers from a variety of organizations were consulted and concurred with our recommendation. Currently, accreditation for the Ph.D. is not required but is being developed by the Canadian Council of Human Resources in the Environmental Industry, and the proposed program of study exceeds their requirements.

## A. 12 Sample Programs

The program of students who enter the Ph.D. program in natural resources and environmental management will be tailor-made to meet their unique interests and aspirations. As such, each of their programs will be different. Furthermore, students who enter the program from the Master of Natural Resources Management program or equivalent, may have already gained sufficient background knowledge of natural resources and environmental management from an interdisciplinary perspective to be able to immediately focus their studies. Keeping in mind these limitations, the following represents a possible sample program for a new Ph.D. student:

## Year 1

56.726 Thesis Research Seminar (3)
56.724 Resource and Environmental Management Processes (3)
53.728 Geographic Approaches to Land Resource Conflict Resolution (3)

Preparation of Proposal
Year 2
56.725 Resource and Environmental Management Tools (3)

Preparation for Candidacy Exam
Year 3
Thesis Research/Defense

## A. 13 Anticipated Enrollment

It is estimated that during the first three years, 3 or 4 students will be admitted to the Ph.D. program on an annual basis. In addition, a transfer of $4 \mathrm{Ph} . \mathrm{D}$. students from the current Interdisciplinary Studies program and 2 Ph.D. students from disciplinary programs is expected.

The anticipated stationary state enrollment would be approximately 10 students.
Applicants from each study concentration area will be accepted on a rotating basis according to the dynamics of students currently in the program, availability of supervising capacity, and availability of research projects. This will serve to yield greater efficiencies in course sizes and consolidate provision of elective courses to cohorts of at least five students.

## A. 14 Distance Education

Potential for offering some courses through Distance Education will be investigated, as some of the Institute's offerings are provided using Internet resources.

## A. 15 Implementation Schedule

The proposed Ph.D. program is estimated to be fully operational by September 1999, as no additional University program requirements are expected. All courses and faculty members are in place. Some collaborative efforts with other University departments will need to evolve in future months as complementary faculty resource allocations are investigated.

## A. 16 Evaluation Procedures

Students enrolled in the Ph.D. program will evaluate courses in the same format as other students at the Natural Resources Institute, and in accordance with University Policy and Procedures. The SEEQ Evaluations are done for all Institute courses eachterm, and results are published according to University procedures. In all cases, students are and will continue to be encouraged to use the Additional Comments section of the form to expand upon their thoughts.

Table 1: List of relevant Ph.D. programs in Canada.

| University | Faculty | Department/ Division | Ph.D. "Designation" | Area of Specialization |
| :---: | :---: | :---: | :---: | :---: |
| Simon Fraser University | Environment and Resources |  | Resources and Environmental Management | Open |
| University of Northern British Columbia | Resources and Environmental Studies |  | Resources and Environmental Studies | Open |
| York University | Environmental Studies |  | Environmental Studies | Open |
| University of Alberta | Facuity of Agricullure, Forestry and Home Economics | Renewable Resources | Renewable Resources | Renewable <br> Resources |
| Wilfred Laurier | Arts and Science | Geography and Environmental Studies | Geography | Resources Management |
| University of Toronto | Graduate Studies | instituta for Environmental Studies | Environmental Studies | Toxicology |
|  |  |  | Forestry | Forestry |
|  |  |  | Engineering | Environmental Engineering |
| University of Westerm Ontario | Science | Earth Sciences | Geology and Environmental Science | Geology |
|  |  |  | Geophysics and Environmental Science | Geophysics |
| University of Saskatchewan | Engineering | Environmental Engineering | Engineering | Environmental Engineering |
| Memorial University | Engineering | Environmental Engineering and Applied Science | Engineering | Environmental Engineering |
| University of New Brunswick | Forestry and Environmental Management |  | Forestry | Forestry Management |
| University of Regina | Engineering | Environmental Systems Engineering | Engineering | Environmental Systems Management |

## B. HUMAN RESOURCES

The Natural Resources Institute's faculty members, complimented by adjunct faculty members, are more than adequate to provide the proposed Ph.D. program in natural resources and environmental management. Concern has been raised, though, regarding the size of the NRI's faculty membership. Naturally, any new program must ensure that a 'critical mass' of faculty expertise exists prior to its implementation. The essence of this critical mass is the presence of the appropriate expertise and faculty availability required for a program to meet its contractual obligations to students. As such, the critical mass of an academic unit must be determined by its ability to meet its obligations, not defined in terms of an ad hoc number. A given unit, for example, may have 25 FTE positions but be unable to accept a student because it does not have the critical mass required to support his or her interest in a particular area of study. As outlined below, the NRl has the ability to meet its obligation to students, and hence has the critical mass required to successfully implement the Ph.D. program proposed.

## B. 1 Faculty Members

The Natural Resources Institute has established a strong educational reputation in the field of natural resources and environmental management. The Institute has consistently received positive comments on the quality of its graduates. The employment rate of NRI graduates has been maintained at virtually $100 \%$, with graduates achieving government and senior industry positions in this province and across the country. Since its establishment in 1968, the number of applications for admission received by the NRI from highly qualified applicants has generally exceeded enroliment capacity. All of these strengths were recognized by the University Task Force on Strategic Planning, which noted that the MNRM program is well organized and has been successful in meeting its pedagogical needs.

The NRI has a modestly sized but academically very strong and active staff complement. The three study concentration areas will initially involve a potential instruction pool of five NRI permanent staff (S.P. Simonovic, F. Berkes, R.K. Baydack, J. Sinclair, and T. Henley), four of whom hold Ph.D. degrees. As with the Master's program, the Ph.D. program will also draw from the very strong pool of 14 NRI Adjunct staff members ( $D$. Bodaly, A. Chapeskie, H. Creech, $H$. Fast, B. Fenton, J. Gardner, G. Johnson, N. Kenkel, J. Mathias, P. Miller, E. Onyebuchi, F. Rohwer, B. Troutt, and D. Young). Twelve of these members have a Ph.D. degree. With their background expertise in environment and resources, all of the NRI's Adjunct members are well positioned to serve as members of both Master's and Ph.D. student advisory committees.

As particular areas of expertise become more critical to an holistic understanding of natural resources, the NRI has, and will continue to, increase the number of courses it offers and its corresponding faculty complement.

## Advising Capacity

Current enrollment of graduate students within the institute numbers approximately 60 . As a consequence, a relatively high advisor to student ratio of approximately 12 students per faculty member may appear to exist. The actual workload for each advisor, although significant, is moderated somewhat by two factors: our inclusion of adjunct professors and other associates of
the Institute on most student advisory committees; and the absence of undergraduate teaching responsibiities by NRI faculty members. As well, Adjunct staff members serve as primary supervisors for Master's students in the MNRM program. Currently, four of the NRI's fourteen adjunct members have elected to fulfill this role. The NRI's advising approach has historically been successful in providing high caliber advising to a relatively large graduate student cohort. The addition of Ph.D. students to this mix will likely result in a reduction of the number of Master's level student's that any faculty member may accept in a given year. Overall, we anticipate that our annual incoming Master's class of 18-20 students will likely decrease to 1518, with a concurrent increase in Ph.D. students of 3-4 annually.

Based upon these considerations, we have concluded that with the proposed slight adjustment in our graduate student complement, the NRI will be able to continue to support the needs of its students and maintain the high reputation of the Institute. As well, all NRI students will benefit from the mixing of those pursuing a Master's degree and those undertaking doctoral studies. For instance, Ph.D. students will have the opportunity to pass on their knowledge to Master's students in both formal (i.e. seminars, lectures) and informal settings.

## Experience in Advanced Work

Several faculty members have proven records in the supervision of Ph.D. students through the Faculty of Graduate Studies' Individual Interdisciplinary Program and through various disciplinary programs. They have served as both committee members and external examiners in other faculties at the University of Manitoba, as well as at other Canadian universities and universities abroad. At present, S.P. Simonovic is supervising five Ph.D. students while F. Berkes is supervising four Ph.D. students. R. Baydack is currently serving on two Ph.D. advising committees, and is in the process of admitting three new Ph.D. students who he will be supervising. Clearly, they have the expertise and capacity to support students enrolled in a Ph.D. program offered by the NRI.

Further information regarding their experience is provided in Appendices B and C , which respectively include the curriculum vitae and list of thesis and practica supervised by each faculty member.

## Curriculum Vitae and Publication Record

The academic, research, consulting and publication records of members of the Natural Resources Institute clearly demonstrate that they have the necessary expertise and experience to deliver the proposed Ph.D. program. Details regarding this capability is provided as follows:

- Appendix B includes curriculum vitae of each faculty member who will be associated with the proposed program;
- Appendix C contains a listing of thesis and graduate practica supervised by each faculty member over the past five years; and
- Appendix D contains a listing of Research Grants and Contracts and other research projects reported by each faculty member.

Teaching Loads
The Natural Resources Institute delivers a Master's degree program in which 60 students were
registered as of December 1998. Appendix E contains a statement of individual teaching loads for all faculty members during the academic year of 1998-1999.

## B. 2 SUPPORT STAFF

No additional demands on our two support staff are anticipated as a result of the introduction of the proposed Ph.D. program.

## B. 3 Participation of External Members

The Naturai Resources institute has developed and will draw upon extensive linkages with a variety of organizations working in the natural resource and environmental management field across the province. Individuals from a diverse array of agencies currently serve as Adjunct Professors or Associates of the Institute. In particular, the Manitoba Department of Natural Resources, Canada Department of Fisheries and Oceans Freshwater Institute, the Intemational Institute for Sustainable Development, Ducks Unlimited Canada at Oak Hammock Marsh, Deita Waterfowl Foundation, and the Fort Whyte Centre provide support in-kind to faculty and student research. Letters of support from these agencies are included in Appendix F.

## C. PHYSICAL RESOURCES

## C. 1 Space

No additional space requirements for the Ph.D. program are anticipated. Existing graduate student offices will be available for Ph.D. students. Courses and seminars will be scheduled in available time slots in seminar rooms available to the Institute. A statement from the Director of Space Planning is included in Appendix $F$.

## C. 2 EQUIPMENT

No extraordinary requirements for instructional equipment are anticipated. Use of the existing NRI slide projector, overhead projector, and computer projector is planned, and this can be supplemented by University equipment if required. A statement from the Director of Educational Support Services is included in Appendix F.

## C. 3 COMPUTERS

With the recent addition of a Computer Laboratory, the NRI is now well equipped to serve all NRI graduate students (Master's and Ph.D.) well. The facility has 13 high-end networked PC stations and a selection of software packages to support research needs in the field of natural resources and environmental management. The type of packages available to students include: systems modeling; geographic information systems; database management; statistical analyses; social analyses; interactive graphics; and publishing.

A specialized Computer Facility for Intelligent Decision Support (FIDS) in water resources management will be exclusively used by Ph.D. students undertaking research in this area of concentration. FIDS provides a high-end computing environment for faculty and students engaged in modeling water and environmental systems, and similar computationally intensive research. The facility provides for the integration of (a) water resources expertise and systems modeling to facilitate decision making, and (b) mathematical models with geographic information systems to facilitate spatial decision making. FIDS lab machines run a variety of software for: creating, compiling, and debugging numerical algorithms; symbolic mathematics and numerical analysis; optimization and simulation; interactive graphics; geographic information systems; database management; and publishing.

## C. 4 LIBRARY

A statement from the Director of Libraries is included in Appendix F. The NRI has already committed itself to the immediate provision of $\$ 5,000$ to the funds necessary to support the acquisition of needed library materials. Plans to raise additional funds in partnership with the Director of Libraries and the Department of Private Funding have already been initialed by the Institute. General strategies will be employed to enhance library resources for the proposed program.

## D. FINANCIAL RESOURCES

## D. 1 Delivery Costs

No immediate or projected additional costs are anticipated in running the program. The additional student load will simply be absorbed into the existing teaching, research, and extension activities of the Natural Resources Institute. The Ph.D. students may replace some Master's level students, but no more than 2 or 3 Master's places annually are expected to be lost. In short, the program will redirect its focus to include Ph.D. students.

Thus, the proposed program can be implemented with limitgd additional cost to the University at large, and without any reduction in current Ph.D. opportunities within existing programs. The only condition is completion of the process (currently under way) of converting a 0.5 FTE position at the NRI into a 1.0 FTE position before the implementation of the program.

## D. 2 Student Support

Sources of external funding to support Ph.D. students are available at the Natural Resources Institute through specific arrangements with faculty members. The Social Sciences and Humanities Research Council and the Natural Sciences and Engineering Research Council will continue to be important sources of support. In addition, the NRI will explore other potential external sources of funding and encourage Institute faculty members to generate support for Ph.D. students.

As well, there will be access to the usual internal sources of support such as graduate student research scholarships and teaching and research assistantships. The NRI will also provide funds from its Endowment Fund to finance Ph.D. research. Existing NRI Scholarships and Awards from Manitoba Hydro, NRI Alumni, Manitoba Natural Resources, and the Karen Palidwor Memorial Award will serve as supplementary sources of Ph.D. support.

## D. 3 Ioentification of New Financial Resources

The requirement for additional financial support is limited to the provision of funds to convert an existing 0.5 FTE academic appointment to full-time status. Approximately $\$ 25,000$ to $\$ 35,000$ of baseline support will be required for this initiative.

## E. SUPPORTING DOCUMENTS

Statements from the Deans of various Faculties, the Director of Educational Support Services, the Director of Information Services and Technology, the Director of Student Records, the Director of Space Planning, the Director of Libraries, and other interested parties are attached in Appendix F.

## List of References

Faculty of Graduate Studies (FGS). Individual Interdisciplinary Programmes. http://www.umanitoba.ca/faculties/oldgrad/programs/idpregs/index.htön. April 1996.

Kessler. Winifred B. "Wanted: A new generation of environmental problem-solvers." Wildife Society Bulletin. 23 (4): 594-599. 1995.

Manitoba Round Table on Environment \& Economy (MRTEE). Towards a Strategy for Aboriginal People Living in Winnipeg: Priorities for Action. Final report, conclusions, findings and recommendations of the Manitoba Round Table on Environment and Economy Urban Aboriginal Strategy Public Consultation Process. n.d.

Meffe, Gary K. "Softening the boundaries." (Editorial). Conservation Biology. 12 (2): 259-260. April 1998.

University of Manitoba (UM). Building on Strengths: Final Report of the Task Force on Strategic Planning. February, 1998.

## Section 2:

Representative List of Relevant Courses offered at the University of Manitoba

## Faculty of Agriculture

Deparment of Agricultural Economics and Fam Management
61.743 Advanced Theory of Resource Economics
61.744 Renewable Resource Economics
61.745 Non-Renewable Resource Economics
61.746 Resource Management

Department of Soil Sciences
40.718 Environmental Chemistry of Pesticides and Related Compounds
40.719 Environmental Chemistry of Humic Substances

Faculty of Architecture
Department of City Planning
$73.703 \quad$ Planning Theory I (6)
73.741 Planning Design I (6)
$73.742 \quad$ Planning Design II (6)
$73.746 \quad$ Urban Ecology and Environmental Management
73.708 Landscape and Conservation
$73.745 \quad$ Concepts in Sustainable Planning and Design
73.708 Topics in Environmental Process and Design

Deparment of Interior Design
51.709 Human and Environmental Factors

Depatment of Landscape Architecture
31.716 Landscape Architectural Field Ecology
31.717 Landscape Ecology in Design I

## Faculty of Arts

Deparment of Anthropology
76.713 Cultural Ecology
76.772 Seminar in Human Adaptability
76.777 Human Population Structure I
76.778 Human Population Strucure II

Department of Economics
18.743 Advanced Theory of Resource Economics

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Department of Geography
    053.704 Seminar in Population Geography
    053.706 Urban Land Issues
    053.716 Environmental Resources and Population
    053.727 Physical and Synoptic Climatology
    053.728 Geographic Approaches to Land Resource Conflict Resolution
    053.729 Energy Analysis
    053.730 Urban Transportation Geography
    053.733 Historical Evidence of Climatic Change
Department of Native Studies
    036.721 Issues in Colonization and Decolonization
    096.722 Community Development: Working with Aboriginal Communities
    036.723 Methodology and Research Issues in Native Studies
    036.728 Native Studies Colloquium
Deparment of Political Studies
    019.741 Selected Topics in Political Behaviour I
    019.776 Canadian Government
    019.777 Seminar in Public Administration
Department of Psychology
    017.744 Social Influences on Behaviour
    017.745 Psychology of Group Behaviour
    017.746 Altitude Development and Change
    017.801 Intergroup Behaviour
Department of Sociology
    077.705 Seminar in Urban Sociology
    077.746 The Sociology of Comparative Industrial Relations
```

Faculty of Engineering
Department of Biosystems Engineering
$034.721 \quad$ Numerical Modeling of Biosystems
Department of Civil and Geological Engineering
023.720 Topics in Environmental Engineering
023.791 Sanitation Chemistry
023.792 Theory of Water Treatment
023.793 Theory of Waste Treatment
023.795 Environmental Engineering Laboratory
023.796 Environmental Engineering Design
023.716 Geotechnical Aspects of Environmental Impact Assessment
023.732 Topics in Groundwater Hydrology
023.736 Landslides and Slope Failures: Identification of Causes and Control
023.772 Groundwater and Solute Transport Modeling
023.709 Water Resource Systems
023.717 Modeling of Surface Water Quality Development
023.728 Intelligent Decision Support in Water Resources
023.760 Water Quality Management
023.765 Selected Topics in Water Resources Development

| 023.766 | River Engineering |
| :--- | :--- |
| 023.770 | Water Resources Planning |
| 023.771 | Coastal Hydraulics |
| 023.782 | Operational Hydrology |

## Faculty of Management

Department of Business Administration
027.712 Organizational Power and Politics
027.737 Managing Innovation
027.747 The Fundamentals of Public Policy Analysis
027.748 Public Sector Decision Making
027.749 Regulatory Processes and Policies
027.767 Business Decision Analysis

Interdepartmental Courses
098.702 Managing for Sustainable Development

## Faculty of Medicine

## Department of Community Health Services <br> 093.722 Health and Health Services of Native and Northern People 093.746 Environmental and Occupational Health

## Faculty of Science

Department of Botany
001.713 Advanced Plant Ecology
001.724 Wetland Ecology
$001.788 \quad$ Ecology Project Course
Department of Geological Sciences
007.723 Geophysics of the Earth's Crust and Mantle
007.735 Remote Sensing in the Earth and Planetary Sciences
007.764 Folding of Rocks
007.765 Fracturing of Rocks
007.768 Physical Volcanology

Department of Zoology
022.713 lchthyology (6)
022.716 Animal Ecology (6)
022.735 Problems in Biological Statistics
022.738 Advanced Limnology (6)
022.739 Advanced Mammology (6)
022.740 Biological Resource Management I
022.741 Biological Resource Management II
022.788 Ecology Project Course

Room [56
Elizabeth Dafoc Libras:
Winnipeg, Manitoba
Canada R3T 2N2
Tel: (204) $474-9881$
Fax: (204) 474-7583

DATE: December 6, 1999
TO: Dr. Slobodan Simonovic, Director, Natural Resources Institute

FROM: Carolynne Presser, Director of Libraries


RE: Library support for the NRI PhD Program

As a follow up to our formal evaluation of library support available for the proposed program, I wanted to let you know that the Libraries will be supporting your efforts to launch the new PhD program.

It is not been, nor will it ever be our intention under the current Senate guidelines to indicate that a program should not be offered due to lack of library resources. I know of no program at this University nor at any other Canadian University, that was not approved because of lack of library resources.

We are working closely with the NRI and the Department of Private Funding to raise the needed funds to improve areas of the collection and to create an endowment to sustain and support the continuing purchase of materials. The Libraries' Development Officer is devoting at a minimum, $30 \%$ of her activities on this project. We are both confident that the funds will become available and that there will be the collections to support your program.

Until all the funding is in place, we will begin to purchase items needed from our special "new courses fund" although the amount available at this time is very limited.

[^4]
## LIBRARY SUPPORT FOR PROPOSED COURSE CHANGES

(The signatures appended indicate that those signing support the statement made by 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: Interdisciplinary: Natural Resources Institute Department:
Course no. and name: Ph.D. Program: Natural Resources and Environmental Management

APPROVED BY:


DATE: March 26, 1999

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THE UNIVERSITY OF MANITOBA
Elizabeth Dafoe Library
Inter-Departmental Correspondence

Date: $\quad 26$ March 1999
To: $\quad$ Dr. S. Simonovic, Director, Natural Resources Institute
From:
N. Michaud-Oystryk, Head, Elizabeth Dafoe Library (yyntil)

Subject: Proposal for the Development of a PhD Program in Natural Resources and Environmental Management

Attached is the Libraries' response to the proposed PhD program in natural resources and environmental studies.

## A. INTRODUCTION

The Natural Resources Institute proposes to introduce a PhD program as recommended in the Final Report of the University Task Force on Strategic Planning: "That the Natural Resources Institute ... develop and serve as the home unit for an interdisciplinary PhD degree in the area of environment and resource studies" (Recommendation 59B). A proposal prepared by the Natural Resources Institute states that the "program in natural resources and environmental management will be unique at the University of Manitoba in its overall concept and design" in that it "will enable graduate students to enrol in the Natural Resources Institute and seek advice and expertise ... from a wide range of academics in a variety of Departments at the University of Manitoba." The program will emphasize areas of research relevant to Manitoba and Western Canada and will focus on research in three areas of natural resources and envitonmental management:

Sustainable management of water resources. Natural resource and environmental systems modeling (simulation, optimization and multi-criteria analysis). Decision support for water and environmental systems management.

Community-based resource management. Natural resource conservation. Natural resources policy and decision-making.

Managernent of wildlife and their habitats. Conservation of biodiversity. Ecosystem-based approaches to natural resources and environmental management.

This collecrion evaluation is an assessment of the ability of the University of Manitoba Libraries to support research and teaching at the PhD level in these subject areas.

Because of the interdisciplinary nature of the subject areas, the resource base for natural resources and environmental management is found in a number of libraries throughout the Libraries system, but concentrated primarily in the Elizabeth Dafoe Library, the Sciences and Technology Library, the Donald W. Craik Engineering Library, and the William R. Newman Agriculture Library.

## B. COLLECTION ANALYSIS

## Monographs

In order to determine suppor within the University of Manitoba Libraries for study and teaching at the PhD level in natural resources and environmental management, a systematic survey of the monograph literature was undertaken. Seven bibliographic :cols were checked either in their entirety or partially by sampling. The titles of these bibliographies or of the works in which bibliographies were found and the results of the checking follow:

Fortner, Diane M. Environmental Studies: An Annotated Bibliography. Metuchen, N.J.: Scarecrow Press, 1994.

$$
238 / 504=47 \%
$$

Encyclopedia of Environmental Information Sources: A Subject Guide to About 34,000 Print and Other Sources of Information on All Aspects of the Environment. Ed. By Sarojini Balachandran. Detroit: Gale Research, 1993.

$$
\text { (randon sample) } 72 / 295=24 \%
$$

Environmental Encyclopedia. $1^{n}$ ed. Ed. by William P. Cunningham et al. Detroit: Gale Research, 1994.

$$
\text { (random sample) } 68 / 114=60 \%
$$

Classics in Environmental Studles: An Overview of Classic Texts in Environmental Studies. Ed, by Nico Nelissen, Jan van der Straaten, and Leon Klinkers. Utrecht: International Books, 1997.

$$
21 / 30=68 \%
$$

Pal, Gabriel. How to Find Information on Canadian Natural Resources: A Guide to the Literature. Ottawa: Canadian Library Association, 1985.

$$
451 / 810=36 \%
$$

Leitch, Jay A. and Brenda L. Ekstrom. Wetland Economics and Assessment: An Annotated Bibliography. New York: Garland Pub., 1989.

$$
14 / 64=23 \%
$$

Freese, Curtis H. Wild Species as Commodities: Mfanaging Markets and Ecosjstems for Sustainability. Washington, D.C.: Island Press, 1998.

$$
85 / 209=41 \%
$$

A total of 2026 individual titles were checked. The Libraries hoids 949 of these titles or 47\%.

In addition to the checking of bibliographies, searches of the Libraries' automated catalogue, BISON, were conducted using significant subject headings or title keywords reflecting the proposed broad areas of study and reseacci. The searches and the number of items retrieved in BISON follow:

```
"sustainable" and "development" \(=515\) items
"sustainable" and "development" and "management" = 104
"water" and "management" \(=266\)
"natural" and "resources" and "management" \(=130\)
"wi!ddife" and "management" \(=173\)
"ecosystem" and "management" \(=46\)
"Irdians" (term used in the LC subject headings) and "natural" and "resources" \(=36\)
"Indians" and "resources" \(=54\)
```


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$$
\begin{aligned}
& \text { "Indians" and "land" and "use" }=6 \\
& \text { "biodiversity" (title keyword) }=77
\end{aligned}
$$

$$
\text { TOTAL }=1457
$$

At first glance, the total number is impressive, but it should be noted that some of the searches retrieved the same titles and some keyword searches retrieved a relarively low number of items. However, on a positive note, the majority of the publications retrieved in these searches were published in the last decade.

The current annual allocation for the purchase of firm order books for the Elizabeth Dafoe Library in support of the Natural Resources Institute's programs is approximately $\$ 2025$, which at an average price of $\$ 50.00$ per title, allows for the purchase of some 40 books per year. It should be noted, however, that given the interdisciplinary nature of natural resources and environmental management, many materials purchased in areas such as geography, economics, and native studies, also support the Natural Resources Institute programs. As well, the budget funds allocated specifically for the Natural Resources Institute programs are supplemented by two approval plans, one covering the social sciences and humanities, the other Canadian Studies. The social sciences and humanities approval plan which includes the topics sustainable development, economics of natural resources, environmental studies, environmental policy, and natural disasters has provided some 120 titles in these subject areas for a value of approximately 56370 in 1998/99. The considerably smaller Canadian Studies approval plan which includes environmental studies, and the related fields of land, agriculture and industry, geography, physical geography, has generated over 50 titles for a value or about 51370 during the same time period. While the level of supplementary suppor through the approval plans is fairly impressive, one must remember that these approval plans have been in place for less than 5 years and in the case of certain profile areas for ore year only.

Other libraries support the environmental sciences and studies programs through the purchase of monographs with regular budget funds. While generally the exact amount spent on this discipline cannot be broken out, the Sciences and Technology Library has allocated $\$ 1000$ in the last year for the purchase of monograpins specifically for Environmental Sciences.

## Serials

Journals are vital to study and research in natural resources and environmental management. For the puipose of this assessment, two lists of journals were checked against the Libraries' holdings: the journal list of Environment Abstracts, and the Journal Citation Report 1997 of :he Science Citation Inder. [Unforturately the Libraries does not hold a recent edition of the Journal Citation Report of the Social Sciences Citation Index to check against its holdings.]

In checking the journals indexed in Environment Abstracts, it was revealed that of the 796 titles, the Libraries has holdings for 357 or $45 \%$. However, the Libraries does not have current subscriptions to all of these. Of the 97 primary tirles, i.e. journals heavily
focused on environmental issues, from which substantial selections are regularly made, the Libraries holds only 35 eurrent subscriptions. (Attachment 4)

A check was made of the Journal Citation Report 1997 to compare the Libraries' collection of journals with the top 39 ranked by an impact factor of greater than 1 (these represent the most frequently cited journals in the field) in the "environmental sciences" category. Of the 39 titles, the Libraries currently subscribes to only 16 titles or $41 \%$. An additional title is available free of charge through the ZIPDOC document delivery service. The results for all 117 titles cited in that same "environmental sciences" category show that the Libraries currently holds 30 titles or $25.4 \%$. In the "geography" category, the Libraries holds all 4 titles with an impact factor of greater that 1.

If the Libraries' collection of journals is poor, its access to the journal literature through indexes and abstracts is excellent. The relevant indexes and abstracts now available in several different formats (print, CD-ROM and on the World Wide Web) include Environment Abstracts Annual, Selected Water Resources Abstracts, Current Contents: Agricultural, Biological and Environmental Sciences (articles in journals not held can be ordered free), Science Citation Index, Social Sciences Citation Index, General Sciences Inder, Agricola, Canadian Periodical Index, PAIS International in Print, Population Index, and Economics Abstracts. The Libraties does not subscribe to Geobase, a bibliographic database of the global literature in earth science, ecology, geography and marine science. The database, costing approximately $\$ 7,600$ annually, is an excellent tool for searching multidisciplinary topics such as environmental studies. Its current coverage of 3000 journals and approximately 2000 other sources (books, proceedings, reports, irregular publications, maps, and theses) goes jack to 1980. A proposa! is currently being developed to have this database added to the NETDOC service. If the proposal is unsuccessfill, the purchase of this database is highly recommended for support of the natural resources and enviconmental managenent program.

## Government Publications

The naiural resources and environmental management program will benefit from the rich and diverse collection of government publications held in the Elizabeth Dafoe Library. As a depository for all Canadian federal gove:nment publications and for the Manirota provincial government, the Library automaticaily receives the majority of the publications of the deparments, branches, agencies, commissions, etc. related to the environment and natural resources. Publications currently received from these government sources are catalogued and searchable in BISON. These government publications will be a valuable resource particularly as they relate to natural resources and environmental management issues in Manitoba and Canada.

Another significant resource are the data files available through the Libraries' membership for the Data Liberation Initiative The DLI provides a wide range of numeric data files including puolic use microdara files (e.g. Census files, Aboriginal Peoples Survey), major databases (e.g. Census profiles, CANSLM), and geographic files (e.g. boundary files).

## Qther Resources

The Manitoba provincial geographical data recently acquired by the Libraries chrough a license with Linnet Geomatics represent another significant resource for the support of the natural resources and environmental management program. The data license provides access to a data warehouse of land related information collected by various provincial departments. The data sets include digital topographic base maps, lend use/land cover satellite imagery, administrative boundaries, and natural resources datasets. Natural resources regions, ecological regions, ecological reserves, environmental regions, water power reserves, and trap line data are examples of data sets which will be of interest to researchers in the proposed program.

## Web Resources

Access to Web resources in the field of natural resources and environmental management is facilitated by an excellent guide Environmental Management Tools on the Internet: Accessing the World of Environmental Information by M. Katz and D. Thornton (Delray Beach, Florids: St. Lucie Press, 1997). This guide is located in the reference collection of the Elizabeth Dafoe Library.

## Docyment Delivery

Materials which are not in the Librariss' collections can often be borrowed from other Libraries tnrough Document Delivery. In fact, the Libraries as a member of COPPUL (Council of Prairie and Pacific University Libraries) is committed to provide faster docurnent delivery through the development of GODOI (integrated holdings informarion for COPPUL catalogues) and RELAIS (an enhanced electronic document delivery management program). However, given the weakness of the collection, it yould be unwise to expect to rely heavily on document delivery to meet the needs of the prospective doctoral studenis. Document delivery cannot replace a good on-site collection.

## C. COLLECTION REQUIREMENTS

An evaluation of the complete results of the analysis indicates that the University of Manitoba Libraries cannot provide adequate support for the study and research at the PhD level in the fields of natural resources and environmental management. Both the monograph and serials collections are weak.

This assessment follows several other evaluations in the past 8 years which have indicated that collections are inadequase in the field of environmental studies.

In 1991, De. Charles Bigelow applied for $\$ 20,000$ from the Environmental Innovations Fund for the purchase of books to support the Environmental Science program. The

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application was based on a survey of the collection conducted by the Science librarians. The application uas unsuccessful. (Attachment l)

In a memo dated August 12, 1996, from Mrs. Caralynne Presser to Dr. Gordon Robinson, regarding the creation of a Centre for Environmental Studies, Ms. Presser stated that the Libraries had "concerns about the adequacy of the Libraries' collection to support the range of courses the Centre might propose ...". The proposal was for a BSc program. (Attachment 2)

Two years later (August 10,1996), in response to a proposal for a new program, a minor in Environmental Science, Ms. Judy Harper, Head of the Sciences and Technology Library, expressed her concern to Dr. Richard Lobdell that "the additional number of students will create a strain on book resources". She stated that she would submit a proposal for funding for at least $\$ 10,000$ to the Science Endowment Fund. This application was also not successful. (Atrachment 3)

Although efforts to strengthen the collection have been on-going, the collection level has clearly not been improved to a level adequate to support a PhD program. In order to strengthen the present level of support, a signiftcant increase in the acquisition of the current monographic and serials publications, including retrospective materials, will be necessary.

A total of 2026 individual monographs was checked overall, of which the Libraries holds 949 or $47 \%$. The suggested minimum holdings required to provide adequare support for a program at the PhD level is $80 \%-94 \%$. It is difficult to derermine an exas: figure for the amount needed to acquire retrospective monographs and other material, cut if the Libraries were to attempt to strengthen the collection to the $80 \%$ recommended minimum coverage for doctoral prograrn support, an additional 671 titles would be required. At an average cost of $\$ 50$ per citle, this would require an approximate expenditure of $\$ 33,550$ (in Canadian funds, not including PST and GST). Purchases could be spread over 3-5 years. To maintain the currency of the collection, an additional estimated 55000 per year would be required.

In terms of journals, the situation is as critical. To strengthen the jourral collection to the $80 \%$ recommended minimum, some 70 journals would be required. At an estimated average cost of $\$ 990^{\circ}$, this amounts to an annual expenditure of approximately $\$ 69,300$. Obviously this is unrealistic, so a selected list of the highest ranked titles are proposed for purchase:

Biodiversity and conservation - $\$ 365$ U.S.
Critica! Reviews in Environmental Science and Technology - 5375 U.S.
Ecological Modelling - 32287 U.S.
Energy and Environment - E 117
Energy Policy - 5797 U.S.
Environment - $\$ 70$ U.S.
Environmental Management - 5381 U.S.

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Environmental Protection - $\$ 68$ U.S.
Environmentalist - 5242 U.S.
Global Change Biology - $£ 319$
Journal of Environmental Planning and Management - $\$ 498$ U.S. Journal of Environmental Systems - $\$ 136$ U.S. Resources, Conservation and Recycling "\$1110 U.S.

These tities would represent an annual expenditure of $\$ 10,890$ CDN (not including PST and GSI) and does not include the purchase of back runs which could represent a cost of approximately $\$ 50,000$ if the latest 5 years of the above journals were acquired.

In summary, the Libraries cannot currently provide adequate suppor for the proposed PhD program and cannot absorb the high cost of strengthening and maintaining the collection. The following additional funds will be required to ensure adequate and continuing support:

One-Time Funding (spread over 3-5 years)
$\$ 35,500$ for retrospective monographs 50,000 for 5 years of back runs of new titles \$85,500 TOTAL

On-Going Annual Funding
S 5,000 per year for monographs
10,890 per year for new serial subscriptions
7,600 for Geobase annual subscription
\$23,490 IOTAL
GRAND TOTAL $\quad \$ 108,990 \mathrm{CDN}$ (not including PST and GST)
c.c. J. Harper
J. Horner

201

208 Administration Building Winnipeg, Manitoba Cinada RJT 2N2

To: Dr. Slobodan Simonovic, Director, Natural Resources Institute
From: R. Kinley, Director, Space Planning and Special Assignments


## Re: Draft Proposal for the Development of a Ph.D. Program in Natural Resources and Environmental Management

Thank you for forwarding the above material to me for comments. I support the development of this program and note that no additional space is required for its successful implementation.

123 Fletcher Argue Bldg. Winnipeg. Manitcba Canada R1T 2N2

Tel: (204) +74-8163
Fax: $(204)+74-7598$

## INTER-DEPARTMIENTAL CORRESPONDENCE

TO: $\quad$ Dr. Slobodan Simonovic; Director, Natural Resources Insifitute
FROM: Irene Thain, Supervisor, Classroom Services, Educational Support Services, Communication Systems

## DATE: February 9, 1999

RE: $\quad$ Draft Proposal for the Development of a Ph. D. Program in Natural Resources and Environmental Management

I have reviewed your proposal for the development of a Ph.D. program in Natural Resources and. Environmental Management. Based on the information provided in the proposal, we would engage our: regular classroom support services and resources in the delivery of courses as detailed in your document.

All classrooms currently hold overhead projectors. Most classrooms contain slide projectors, however, all other audio visual devices required for teaching purposes must be reserved according to the procedures. shown in our service information sheet (enclosure).

All services are provided on a first come first served basis. Items such as data projectors are in high demand and these items would require advance notice in order to ensure availability. Audio visual equipment is not normally available for long term research purposes due to the nature of our service. Support of credit class teaching in the classroom is our primary function and the audio visual inventory must be available to as many instructors as possible.

Your proposal indicates the need for a unique and original doctorel program in this discipline at the University of Munitoba. We wish you every success in your efforss wecture the required resources to implement the program.

IT/ajh
Encl.

## 203

## EDUCATIONAL SUPPORT SERVICES DIVISION

## CLASSROOM \& MEDIA SERVICES

Office Hours:
Scheduling via mail:
Scheduling via Fax:
Scheduling via phone:
Media Referance:
Supervisor:
Assist. Supv. and
Media Coordinator:
s:30-1:30 p.m. (Wlonday - Friday)
123 Fletcher Argue Bldg.
474-7598
$+7+\operatorname{sic} 163$
47+6+39
47+6+4+(Irene Thain)
$+7+6+39$ (Gina Neufeld)

Technical assistance is available for trouble calls at: (47ヶ) 9900
Hours: f:30-10:00 p.m. (Monday - Thursday when classes are in session) 8:30-12:00 noon (Saturday when clarses are in session)

Classroom \& Wedia Services will:

- schedule your request for audio-visual equipment (overhead projector, slide projector, video playback, large screen video projection, portable data projectiors etc.) for single date or repeat use for a term
- provide you with a trained projectionist who will set up the equipment at the time and place requested, and/or operate 16 mm fllm equipment during the class period
- instruct you in the operation of audio-visual equipment
- schedule your request for film and videotape programs
- arrange the loan and/or rental offilms and videotape programs from off-campus sources (shipping and rental costs are the responsibility of your department)
- provide you with subject lists offilm and videotape programs
- assist you in searches from on-line data bases for suitable film and videotape programs for the courses you reach
- bring in film and videotape programs for previewing and receive your purchase recommendations
- provide copyright information
- schedule . पour request for videoconferencing events (satellite or dial up)

These senvices are available at no charge for credit courses as shown in the general academic calendar..
Reservations can be made for a single event, or for several events for term needs. Reservations are preferred in writing, by fax or on the Classroom Services website (ready in September, 1999). Reservations should be made at least two working day's in advance. Example: reserve on Monday for service on Wednesday; reserve on Friday for service on Tueschn: The information required is:

- nante, department, course number and telephone number
- date; including starting and ending time
- location: building and room number
- equipment required
- film or videotape required (ifapplicable)
- operator required (for 16 mm films only) or set up only

Reservations for special events inchuting guest lecturers, workshops, non-credit seminars, videoconferencing, etc., are referred to the Classroom Services Supervisor as equipment and/or labour charges may apply.
(h:less'clswijorm'serwice)

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

March 2, 1999

Dr. Emöke Szathmáry
President \& Vice Chancellor
The University of Manitoba
Room 200, Administration Building
Winnipeg MB R3T 2N2

Dear Dr. Szathmáry:
I am pleased to inform you that the University of Manitoba's Statement of Intent for a Ph.D. program in Natural Resources and Environmental Management has been approved by the Program Advisory Committee (PAC) of the Council on Post-Secondary Education. The University may now proceed to the formal program proposal stage. Please note that approval of the Statement of Intent does not necessarily guarantee approval of the formal program proposal.

PAC was pleased to note that research relevant to Manitoba and western Canada will be emphasized in the proposed program; for example, the delivery of indigenously-controlled and culturally relevant services to Aboriginal peoples. PAC requests that Aboriginal groups in the province be consulted in the design and implementation of the program, and that the University of Manitoba pursue opportunities for partnership and cooperation with relevant government and nongovernment agencies, private industry and other institutions. PAC further requests that the program be flexible and accessible to Aboriginal learners.

We look forward to receiving your formal program proposal.

Sincerely,

L. LeTourneau

Executive Director
c. Dick Dawson

Louise Gordon
Kelly Saunders



May 9, 2000
Report of the Senate Planning and Priorities Committee on the Proposed Ph.D. Program in Natural Resources and Environment Management to be offered by the Natural Resources Institute

## Preamble

1. The Senate Planning and Priorities Committee (SPPC), under its terms of reference located on pp. 10.21-22 of the Senate Handbook (Rev. 1993), is charged with making recommendations to Senate regarding proposed academic programs.
2. The Faculty of Graduate Studies proposes to introduce a Ph.D. program in Natural Resources and Environmental Management to be offered by the Natural Resources Institute. The proposed program will build on the existing strengths of the Institute (i.e., sustainable management of water resources, community-based decision-making, and the management of wildlife and their habitat). The proposed program was discussed by SPPC at its meeting of May 9, 2000.

## Observations

1. Natural resource and environmental issues have a high priority with governments, industry and the public. A Ph.D. degree will be required to meet the requirements of a diverse range of natural resource and environmental management jobs, whether they be in the academic area, government, or the private sector.
2. Creation of "an interdisciplinary Ph.D. degree in the area of environmental and resource management" by the Natural Resource Institute was recommended in Building on Strengths: The Final Report of the University Task Force on Strategic Planning.
3. Manitoba students who want to pursue a Ph.D. in this field have to leave the province to do so. There are only three other Canadian interdisciplinary Ph.D. programs in resource and environmental management. As well, survey results indicate an interest in the proposed program by prospective students.
4. The program will be phased in so that a steady-state enrollment of ten students will be reached in three to five years. Conversely, the number of admissions in the Masters' program will be reduced so that the supervisory demands on faculty will remain at approximately current levels.
5. The program of study taken by students will draw from existing courses of the Natural Resource Institute and from the offerings of related academic departments. Deans of faculties housing all related departments have been consulted and have provided letters of support. The program of study will be individualized to reflect the interests of the students.
6. SPPC recognizes that this is an interdisciplinary degree program proposal which, in part, seeks to develop the candidates' ability to understand and communicate with a number of disciplines. SPPC wonders, however, if this fact will be achieved by designating University of Manitoba 700 level courses as being representative of "relevant courses" as these courses often have 200 to 400 level courses, or even degrees, as prerequisites. In the absence of satisfactory prerequisites, access to the courses may be restricted. In the spirit

## SPPC Report, Cont'd.

of the proposal, it may be desirable to present either a broader range of courses or to alter the language of the program description to encompass the need for, and desirability of, flexibility in course selection.
7. Decisions regarding land use must reconcile the interests of a broad range of communities. In a Manitoban context this would include the Aboriginal community, as well as the mineral exploration and extraction industry. This program would be strengthened through the more obvious inclusion of courses that would prepare students to deal with issues arising from these areas.
8. The Natural Resources Institute is currently attempting to convert a 0.5 FTE to 1.0 FTE so that the program can be augmented. Delivery of the program is not dependent on this conversion.
9. Space and facilities exist within the Natural Resources Institute to accommodate the needs of the proposed program.
10. The current holdings of the library are not adequate to meet the requirements of the program. However, there is a plan in place to procure the needed library material.

## Recommendation

SPPC endorses the Faculty of Graduate Studies' proposal that a Ph.D. program in Natural Resources and Environmental Management to be offered by the Natural Resources Institute be established.

Respectfully submitted,

Norman Halden, Chair, Senate Planning and Priorities Committee Robert Tait, Chair, Subcommittee on Program and Curriculum Planning
/ls

# 207 <br> THE UNIVERSITY OF MANITOBA <br> PROPOSAL FOR UNDERGRADUATE OR CERTIFICATE COURSE CHANGE 

PART A.
Faculty: Architecture Department: Environmental Design

## Course Name: Bachelor of Environmental Design,

 Third Year: Interior Environment Option| 079:3AA | Design Studio 5 | 6 |
| :--- | :--- | :--- |
| $079: 3 \mathrm{AB}$ | Design Studio 6 | 6 |
| 079:3AC | Sensory Technology 1 | 3 |
| 079:3AD | Sensory Technology 2 | 3 |
| 079:3AE | Sensory Technology 3 | 3 |
| $079: 3 \mathrm{AF}$ | Design Inquiry | 3 |
| 079:3AG | The Interior Dimension 1 | 3 |
| $079: 3 \mathrm{AH}$ | The Interior Dimension 2 | 3 |
| 079.3 Al | Digital Design Media | 3 |
|  | Total credit hours | 33 |

The Course is to be:
Modified
To become effective in the Fall 2000 Session
To be included in the 2000/2001 General Calender

Is this course listed as a required course or a formal elective in any University program? YES

## Exlating Calendar/ Brochure Entry

None existing for BED
Reason For Change:
The Bachelor of Environmental Design is being modified to introduce the planned Interior Environment Option. This change complies with the Faculty of Architecture restructuring ratified in the Senate Spring Session 1999. The new curriculum will be taught to both Environmental Design and Interior Design students at the third year level, as the Bachelor of Interior Design is being phased out. To accommodate the discrepancy between the Option year requirements ( 33 credit hours) and the BID third year ( 34 credit hours) some modfications have been made to the BID curriculum. Refer Transition Arrangements Attachments 5 \& 6.

## Frequency of Offering

Annual offering

Signatures:
Departmental Approval:
LINN CHAlMERS KMAMENC FEES $28^{\text {th }} 2000$

Faculty/School Approval: MiCHATE


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

## Report of the Senate Committee on Curriculum and Course Changes on a Proposal from the Faculty of Architecture

## Preamble

The Senate Committee on Curriculum and Course Changes (SCCCC) met on the above date to consider a proposal from the Faculty of Architecture for an Interior Environment Option within the Bachelor of Environmental Design.

## Observations

1. On 2 December 1998, Senate approved a proposal for restructuring in the Faculty of Architecture. At that time, the Environmental Design Program replaced the Department of Environmental Design. The program consists of two foundation years for which all students in the program must register, and a third-year option selected by students. Professional options included Interior Design, Architecture, City Planning and Landscape Architecture. The Department of Interior Design continued to deliver a Bachelor of Interior Design program along with a research Master of Interior Design.
2. The Department of Interior Design is currently phasing out its undergraduate degree. The Bachelor of Environmental Design is being modified to introduce the planned Interior Environment Option.
3. The new curriculum will be taught to both Environmental Design and Interior Design students at the third year level, as the Bachelor of Interior Design is being phased out. To accommodate the discrepancy between the Option year requirements ( 33 credit hours) and the BID third year ( 34 credit hours) some modifications are being made to the BID curriculum.
4. The library has indicated that there are no library resource implications attached to the proposed reorganization of the Interior Design program and option year.

## Recommendation

The Senate Committee on Curriculum and Course Changes recommends that the course and program changes from the Faculty of Architecture listed below be approved by Senate.

Respectfully submitted,

Dean B. L. Dronzek, Chair<br>Senate Committee on Curriculum and Course Changes

Courses to be introduced:
079.3AA Design Studio 5(2-9:0-0)

Studio projects, which explore and elaborate systems of meaning in interior placemaking in the private realm: developing strategies and processes in the design of the interior environment. Pre-requisite:079.259.
079.3AB

Design Studio 6 (0-0;2-9)
Studio projects, which explore and elaborate systems of meaning in interior placemaking in the public realm: developing strategies and processes in the design of transitional interior environments. Pre-requisite: 079.3AA.
079.3AC Sensory Technology 1 (3-0:0-0) +3

The study of the interaction of light, colour, materials, construction, building systems and detaling in the design of the interior environment; responding to human and ecological considerations. Co-requisite: 079.3AE.
079.3AD Sensory Technology 2 (0-0:3-0)
$+3$
Further study of the interaction of light, colour, materials, construction, building systems and detailing in the design of the interior environment; responding to human and ecological considerations. Co-requisite: 079.3AE.
079.3AE Sensory Technology 3 (0.5-3:0.5-3) +3

Workshop, studio and site investigations which explore and extend curriculum content in Sensory Technology 1 and 2. Co-requisites: 079.3AC and 079.3AD.
079.3AF Design Inquiry (3-0:0-0) $+3$
Contemporary methods of inquiry relating to the design of interior environments.
079.3AG The Interior Dimension 1(3-0:0-0)

An historical and theoretical approach to the evolution of interior environments, artifacts, and the visual spatial statements of twentieth century design culture.
079.3AH The Interior Dimension 2 (0-0:3-0)

An extended historical and theoretical investigation of interior environments, artifacts and visual/spatial statements of contemporary design culture.
079.3AI Digital Design Media (0-0:2-3) +3

An intermediate level computer applications elective focused on design, representation and communications. Specific course content to be determined by the areas of specialization available to the faculty and department on a yearly basis. Pre-requisite: 079.265.


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## Report of the Senate Planning and Priorities Committee on the Third Year of the Faculty of Architecture Environmental Design Programme

## Preamble

1. The terms of reference for the Senate Planning and Priorities Committee (SPPC) are found in the Senate Handbook (Rev. 1993), pp. 10.21-22, wherein the SPPC is charged with making recommendations to Senate regarding proposed academic programs.
2. The Faculty of Architecture is in the process of reorganizing its three-year Environmental Design Programme leading to a BED degree. The proposal to reorganise was approved by Senate in the Spring of 1999, along with the first two years of the program. SPPC has since received the course change proposals for the third year of the program for which approval is now being sought.

## Observations

1. There are only minor resource implications. Regular acquisition funds will be used to purchase required journals. Funding for basic tools for Design Studio and Sensory Technologies will be sought through grant applications or within the Faculty of Architecture.

## Recommendation

SPPC endorses the revisions to the third year of the Faculty of Architecture Environmental Design Program.

Respectfully submitted,

Norman Halden, Chair, Senate Planning and Priorities Committee
Robert Tait, Chair, Subcommittee on Program and Curriculum Planning
As

## Report of the Senate Committee on Rules and Procedures with Respect to Senate Elections

## Preamble

1. The terms of reference for the Senate Committee on Rules and Procedures (SCRP) are found on page 10.22 of the Senate Handbook (1993).
2. The University Secretary was approached with a request that the Senate Executive Committee nominate members to the Senate Committee on Nominations such that the slate could be approved at the May meeting of the Senate. Thus the Senate Committee on Nominations could have the new members in place for June. This has been accomplished but one difficulty lay in the fact that the outcome of the Senate elections was unknown at the time.

## Observations

1. The SCRP was requested to consider a change to the Senate rules in order to require reporting results of Senate elections no later than April $15^{\text {th }}$ in each year. This would facilitate the election of members of the Senate Committee on Nominations at the May Senate meeting (without the potential problem of having to replace a person so elected who is not subsequently elected as a Senator) (see Recommendation).
2. In the past, bringing forward a complete slate of nominees to Senate Committees has been problematic for the Senate Committee on Nominations since members do not receive a complete list of Senators for the future year until June $1^{\text {st }}$. This information is vital, inasmuch as many Senate Committees require a certain number of Senators. Having access to this information much earlier would be advantageous, particularly with the list of nominees being required in late June rather than early July.
3. Because the June meeting of Senate will take place toward the end of the month, it will be more appropriate to hold elections for the Senate Representative(s) to the Board in May rather than June. Elections for the Senate Representative(s) on the Senate Executive Committee could also be held at an earlier date if the results of the Senate elections were known earlier.
4. Requesting that elections to Senate be held earlier in the year should not impose a hardship on faculties. In fact, the contrary may be true and that holding such elections prior to the examination period will likely result in a larger turnout of the electorate.
5. The proposed change to the reporting date will not affect the terms on Senate; members' terms will commence June $1^{\text {sl }}$ and terminate May $31^{\text {st }}$ as is currently the case.

## Recommendation

The Senate Committee on Rules and Procedures recommends that Section 6, Clause 6.2.6 a) of the Standing Rules of Senate governing election procedures (Senate Handbook, Rev. 1993) be amended by repealing the existing wording and substituting the following:

## 215

"the election is completed and reported to the University Secretariat by April $15^{\text {th }}$ at the latest."

Respectfully submitted,
E.A. Braid, Chair

Senate Committee on Rules and Procedures
LS

Below is the pertinent excerpt from the Senate Handbook:

## 6. Procedures for Election

Each council constituency shall be responsible for the conduct of its own election and shall formulate its own rules, provided that:
(a) the election is completed by 15 May where possible, but in no case later than 31 May;
(b) all members eligible to vote are given at least 10 days' notice of vacancies to be filled together with a list of members eligible for election and a statement of procedures for filling nominations (by mail or meeting);
(c) all members eligible to vote are given at least 10 days' notice of nominations received.

## Comments of the Executive Committee:

The Executive Committee endorses the report to Senate.


[^0]:    ${ }^{1}$ A large number of 'disciplines' integrale knowledge from a variety of area. This fact was recognized in the University of Manitoba's Task Force Report, which states that "Psychology and Geography, as well as Anthropology, are disciplines that are by nature interdisciplinary" (UM 1998: 60). Other inherently interdisciplinary bodies of knowledge include recreation sludies, native studies, women's studies, architecture, and human ecology.
    ${ }^{2}$ Two NRI graduates have completed Ph.D. programs through the University of Manitoba's individual Interdisciplinary Program in the area of natural resources and environmental management. Four Ph.D. students currently pursuing studies in this area are enrolled in the Individual Interdisciplinary Program.

[^1]:    ${ }^{3}$ For instance. Winnipeg is home to the largest population of Aboriginal people in Canada, a community which is expected to grow to almost 74,000 by the year 2001. As the birth rate in the Aboriginal community is nearly twice that of non-Aboriginal peoples, a growing proportion of the people of Manitoba will be of Aboriginal descent (MRTEE n.d.:13-14). The political strength of this community may be seen in the fact that the current and former leaders of the Assembly of First Nations, Phil Fontaine and Ovide Mercredi, are from Manitoba.
    ${ }^{4}$ An increasing number of Aboriginal peoples have already sought out a university education; for instance, between 1981 and 1991, the number of aboriginal university graduales increased from 695 to 2,260 (MRTEE n.d.:16).

[^2]:    ${ }^{\text {j }}$ At present, 31 of our 54 Master's students are female.

[^3]:    ${ }^{6}$ The Manitoba Throne Speech (March 1997) noted that "In keeping with its continuing commitment to sustainable development, [the] government will initiate sustainable development strategies, for the province's fisheries and wildlife resources.

[^4]:    cc: Dr. A. Secco, Graduate Studies
    Nicole Michaud Oysrryk, Dafoe Library

