April 11, 2011

To : Members of the Faculty of Health Sciences Graduate Policy and Curriculum Council

From : Medy Espiritu
Assistant Secretary and SynApps System Administrator

The next meeting of the Faculty of Health Sciences Graduate Policy and Curriculum Council will be held Friday, April 15, 2011 at 9:00 a.m. in MDCL 3016.

Listed below are the agenda items for discussion.

Please call email espiritu@mcmaster.ca or call extension 24204, if you are unable to attend the meeting.

AGENDA

I. Minutes of the meeting of December 17, 2010

II. Business Arising

III. New program: M.Sc. Health Science Education

IV. Medical Sciences: Closure of the Neuroscience and Behavioural Science Field

V. Graduate curriculum recommendations

Global Health

New courses:
* 707 – Global Burden of Disease
* 715 – Supervised Knowledge Opportunity
Health Management

Change in course number:
*770 – Leadership in Health Organizations – from *770 to *708

Health Research Methodology

New course:
*774 – Introduction to Biostatistics (Online)

Change in course title:
*742 – Ethical Issues in Research Involving Human Subjects

Change in course description:
*721 – Fundamentals of Health Research and Evaluation Methods
*751 – Observational and Analytical Research Methods
*759 – Survival Analysis in Health Research
*771 – Fundamentals of Health Research and Evaluation Methods (Online)

Change in method of evaluation:
*727 – Theory and Practice of Measurement
*743 – Systematic Review Methods

Clarification of prerequisites:
*773 – Systematic Review Methods (Online)

Course cancellation:
*725 – Knowledge Exchange and Translation

Nursing

Course cancellation:
*708 – Information and Communication Technology Applications in Health: Theory and Practice

Occupational Therapy

Change in course description:
637 – Disability, Development and Occupation: Inquiry and Integration
*737 – Transition to Practice: Inquiry and Integration VI
*738 – Transition to Practice: Professional Roles and Experiential Practicum VI
*749 – Transition to Practice: Evidence Based Practice VI
Update course information to reflect current status: *(for Council information)*
638 – Disability, Development and Occupation: Professional Roles and Experiential Practicum

**Physiotherapy**

*Change in course description:*
*634 – Physiotherapy Clinical Practice II*
*734 – Physiotherapy Clinical Practice V*

Update course information to reflect current status: *(for Council information)*
*631 – Fundamentals of Cardiorespiratory and Neurological Practice/Problem-based III*
*632 – Fundamentals of Cardiorespiratory and Neurological Practice/Clinical Laboratory III*
*713 – Research and Evidence-based Practice*
*731 – Integrated Physiotherapy Practice – Problem-based VI*
*732 – Integrated Physiotherapy Practice – Laboratory VI*
*735 – Professional Transition*

**Rehabilitation Science**

Changes to the calendar description of the admissions requirements for the M.Sc. Thesis and M.Sc. Online

Changes to the calendar description of the “Courses” section

Changes to the calendar description of the Ph.D. Degree

Changes to the Rehabilitation Science introduction section - page 207 of the current graduate calendar

Changes to the calendar description pertaining to other courses – page 210 of the current graduate calendar

*Change in course description:*
*758 – Qualitative Research Methods for Analyzing and Interpreting Data*
*(cross-listed as HRM *758 and Nursing *758)*
I. Minutes of meeting

The minutes of the meeting of September 22, 2010 were approved on a motion by Dr. Hanna, seconded by Dr. Schwartz with minor corrections: In the “Present” section, “Ms. L. Letts” and “Ms. L. Geddes” were replaced with “Dr. L. Letts” and “Dr. L. Geddes.”

II. Business arising

There was no business arising from the previous minutes of meeting.

III. Curriculum Revisions

Health Research Methodology

New course: *726 – The Science and Practice of Knowledge Translation: Foundations

Dr. Hanna presented the proposed new course, *726 – The Science and Practice of Knowledge Translation: Foundations, in the Health Research Methodology Program. Dr. Hanna explained that the course aims to attract the following graduate students: those who wish to pursue an academic career in the field of knowledge translation (KT); those whose primary research is in another domain but wish to strengthen their KT-related skills; and those who are interested in doing KT as part of their professional activities.

Dr. Hanna moved, and Dr. Mahony seconded,

“that the Faculty of Health Sciences Graduate Policy and Curriculum Council, approve the new course, *726 – The Science and Practice of Knowledge Translation: Foundations, proposed by the Health Research Methodology program.”

After a brief discussion, the council suggested that page 2 of the Recommendation form (#4 – Method of Evaluation) should specify that the course has an “online participation” component.

Dr. Hanna explained that Rehabilitation Science *725 – Knowledge Exchange and Translation (cross-listed with HRM) was previously offered. However, the program members feel that the
Learning needs of the Health Research Methodology students are distinct from the Rehabilitation Sciences students, and that a new course is needed in HRM to address this issue.

The motion was carried.

Nursing Program

Transfer from Course-based M.Sc. to the PHCNP program

Dr. Black discussed the proposal from the Nursing program concerning the transfer procedure from the course-based M.Sc. Nursing to the PHCNP Certificate program. She explained the process: the student submits a letter of request to transfer and completes the PHCNP Admission’s 3-question essay, which is submitted to the Transfer Committee. A letter of support from the advisor and proof of employment hours (two years of full time nursing practice within the past five years) are also required.

Dr. Mahony moved, and Dr. Letts seconded,

“that the Faculty of Health Sciences Graduate Policy and Curriculum Council approve the procedure to transfer from course-based M.Sc. to the PHCNP certificate in Nursing, as described in the document.”

The motion was carried.

Police Records Check Policy

Dr. Black presented the proposed Police Records Check Policy for the Nursing program. She explained that the policy is quite similar to the recently approved Occupational Therapy and Physiotherapy Police Records Check Policy, with the exception of the annual declaration of the student’s status.

Dr. Black moved, and Dr. Letts seconded,

“that the Faculty of Health Sciences Graduate Curriculum and Policy Council approve the proposed Policy Records Check Policy for the Nursing program, as described in the document.”

One member referred to the composition of the “Not Clear” Police Check Advisory Panel (Chair of the Nursing Graduate Program Admissions Committee, Registrar, Graduate Student Representative from the Nursing program); and expressed concern as to whether the student representative would be able to give professional advice. Dr. Hayward believes that having a student representative in the panel will not be a problem. Furthermore, she commented that it would be best to keep the proposed policy similar to the approved OT/PT policy. She reminded the Council as well that the Nursing program does not expect to receive plenty of cases deemed “not clear.” On page 10, item G.6 – Enrolled Students, item #39, the Council suggested adding “within two weeks” to indicate a timeframe for submitting a status change.
The motion was **carried** (subject to amendments suggested by the Council).

**Occupational Therapy Program**

Dr. Letts presented the change in title, description, and method of evaluation for course, *728 – Adulthood, Community & Participation: Professional Roles and Experiential Practicum V.*

Dr. Black moved, and Dr. Letts seconded,

“**that the Faculty of Health Sciences Graduate Policy and Curriculum Council approve the changes proposed for course, *728 - Adulthood, Community & Participation: Professional Roles and Experiential Practicum V, as described in the document.**”

The motion was **carried.**

**Health Policy**

**Changes to the timing of the comprehensive examination**

As there was no representative from the Ph.D. Health Policy Program, Dr. Coombes referred to the document circulated to the members and briefly discussed the proposed changes.

Dr. Coombes moved, and Dr. Mahony seconded,

“**that the Faculty of Health Sciences Graduate Policy and Curriculum Council approve the proposed changes to the timing of the comprehensive examination for the Ph.D. in Health Policy program, as described in the document.**”

After a brief discussion, the Council members raised the following issues:

- The timing of the breadth fields’ comprehensive examination from June of year 1 to December of year 2 is in line with the School of Graduate Studies policy; however, if a student fails twice, the terms of appeal can be problematic.

- The reading list should not be posted in 14 months with respect to dates and timing because doing so would be unfair. Preparation times outlined in the document should be double checked for consistency with the proposed changes to examination times.

The motion was **carried** (subject to addressing the issues raised by the Council members).

There was no other business, and the meeting adjourned at 9:35 a.m.
Program Proposal Brief of the

MASTER OF SCIENCE IN HEALTH SCIENCE EDUCATION

Submitted to the
Ontario Universities Council on Quality Assurance

Oct _____, 2011

MScHS Education program committee:
Denise Marshall, Mary Law and Kareen McCaughan
CONTENTS

INTRODUCTION .................................................................................................................. 3
Objectives of the program ..................................................................................................6
Admission Requirements ................................................................................................. 9
Structure ............................................................................................................................10
Program Content and Curriculum Design .......................................................................12
  Total Graduate courses ...............................................................................................13
Part-time blended delivery ..............................................................................................16
Assessment of teaching and learning ............................................................................17
Resources for the proposed program ..............................................................................17
  The Faculty ..................................................................................................................17
  Course production and delivery ..................................................................................21
  Physical and Financial Resources ............................................................................21
Quality and other indicators ...........................................................................................22
Online Course Development ..........................................................................................22
Administrative Structure ...............................................................................................23
Projected intake and enrollments ...................................................................................23
Method used for brief preparation ..................................................................................24
APPENDIX....................................................................................................................... 26
  Appendix A: Working Group .....................................................................................26
  Appendix C Faculty CVs ............................................................................................29
  Appendix D Library Resources ..................................................................................29
PROPOSAL BRIEF FOR A MASTERS OF SCIENCE IN HEALTH SCIENCE EDUCATION

INTRODUCTION

Within Ontario, and across Canada, there are no Masters of Science in Health Science Education, which focus on graduate level education to improve knowledge and skills for health practitioners who teach in clinical health science fields. This master’s program leads to the degree Master of Science in Health Sciences Education for health science clinical educators (physicians, nurses, occupational therapists, physiotherapists, midwives, physician assistants, etc.), and others who teach in health sciences education, research, academic clinical care, and lead in health care settings. The program builds on the Faculty of Health Science’s internationally renowned signature pedagogies in health science education. This is a course-based Masters that will consist of six required courses, an elective course, and a scholarly paper. The program will be highly accessible through a blended delivery format of online and classroom formats. There will be one program intake per year of 20-25 part-time students with courses offered every semester. The program will act as a strategy to improve collaborative, patient-centred care by engaging learners in inter- and intra-professional practice, shape the future of education in health science professional programs, and to foster health professions leadership and succession planning.

The pioneering work conducted in Problem-based Learning (PBL) in the Faculty of Health Sciences at McMaster is widely known. The PBL approach has had enormous influence in education at all levels. It spread from a signature pedagogy 40 years ago at McMaster FHS to influence curriculum design and teaching strategies world-wide in over 120 universities for medical education and health sciences education (e.g. nursing, physiotherapy, pharmacology, etc), in other disciplines (e.g. architecture, engineering), and eventually in all educational levels, primary, secondary and post-secondary education. The Faculty of Health Sciences at McMaster has had enormous educational influence on health science education. The PBL teaching and learning methodology that uses an inquiry approach focuses on student-driven small group learning to foster critical thinking, higher retention, and stronger cognitive competencies including coping with uncertainty and communication skills.
Learner demand and need for the program
Health science educators have had limited choices in graduate programs that specialize in health science education. Over the past twenty years there has been a growing interest by health science educators in graduate programs that pertain to clinical teaching and scholarship and prepare individuals for leadership roles in a faculty of health science academic environment. At McMaster approximately 100 new faculty members per year and numerous established faculty members, who have taught for a number of years, seek professional development as health science educators and express a strong interest in a for-credit graduate program in clinical health science education. Health science educators have had to rely on professional development workshops at McMaster to learn about health science education, enroll in generic higher education programs that were not specific to health science education or graduate programs in education that cater primarily to elementary and secondary teachers, or programs that were at a distance some of which are located in other countries (e.g. University of Illinois at Chicago; University of Dundee, Scotland, Maastricht University, Netherlands, and the University of Bern, Switzerland).

The process of developing a proposal for a graduate program began with a needs assessment that included wide consultation within FHS, an internal and external environmental scan, extensive data gathering, including a literature review, key stakeholder interviews, and a faculty wide survey. A core development group was formed that consulted with the broader academic community at McMaster University and similar health science masters’ programs offered worldwide (the University of Illinois at Chicago; Maastricht University in the Netherlands; University of Dundee in Scotland, and the University of Bern, Switzerland).

The results of a program analysis of these programs revealed core courses in cognition and learning (educational psychology), curriculum design, assessment and evaluation, and educational research methods. Leadership is a core course or an optional track within most programs. International programs varied in their delivery mode. The University of Illinois-Chicago and the University of Dundee offer their program in dual modes, classroom or blended (classroom and online), whereas similar programs at Maastricht University and the University of Bern have one blended mode of delivery in which the core courses and a minimum number of others are classroom-based accompanied by online electives.
To extend consultation and engage potential participants in a discussion regarding the proposed Masters program, a needs assessment survey of McMaster University Health Science faculty was developed, and built on the priority areas identified in the environmental scan. Quantitative and qualitative data from our faculty survey in 2010 (N-287) underscored interest in the program, confirmed reasons for interest in the degree, preference for course content, course delivery mode, comfort with various learning formats, and indicated they have specific learning needs that are not being met. They indicated they want a customized curriculum for health professionals, the context of which is grounded in the science of teaching and learning specific to current and future of health science education that includes the emerging field of Interprofessionalism health science education, pedagogy including knowledge of McMaster’s FHS signature pedagogies and related cognitive and educational psychology as it pertains to health science education, learning environments (small group learning), curriculum design in health science education, assessment and evaluation in clinical health science education, research methods germane to health science education, educational leadership, and online learning. They indicated they want to enhance scholarship, professional development, and prepare for advanced health science education. Participants stressed they preferred a format that is offered in a blended learning format consisting of online learning with face-to-face classroom intensives as the delivery format of choice. The greatest interest was for academic advancement in the form of a dedicated, part-time graduate program.

This program responds to the need for attention to inter and intra professional practice in health science education. It is anticipated that a number of the candidates in this Master program will be physician faculty. The Association of Faculties of Medicine in Canada’s report, The Future of Medical Education in Canada (FMEC) (2010) recommends that to improve collaborative, patient-centred care, the education of physicians should include the development of inter and intra-professional teamwork competencies. The FMEC report suggests that experience working in collaboration with other health care professionals be integrated across disciplines and throughout the spectrum of health education, from undergraduate to post-graduate education. Thus, the MSc Health Sciences Education program will be designed to meet the interprofessional needs of health professionals: physicians, nurses, occupational therapists, physiotherapists, midwives, physician assistants, clinical chemists and others.
The FMEC report also recommends that based on rapid and evolving technological changes that medical education programs should increase the use of technology. The MSc Health Science Education program’s use of technologies for learning in health science fields applies such recommendations.

**Brief listing of the Program**

The MSc Health Science Education will be a part-time, two-three year course-based program offered to health educators who are currently employed in a clinical and/or academic teaching capacity in any health care sector in Canada or internationally. The program is offered through a blended learning format (online and classroom intensives). The program consists of three components in which students complete six courses, an elective and scholarly paper as an exit requirement, which counts as two half courses.

The program features include blended delivery to serve health professionals living and working at a distance from McMaster University’s Hamilton campus. Many of the students will be clinical physicians who also teach in McMaster’s medical education program. They may reside outside Hamilton, as the medical undergraduate and postgraduate programs now occurs at the three main campuses: Hamilton, Kitchener/Waterloo and Niagara. Other students interested in the program will be associated with other health science education programs in Ontario and across Canada.

**Objectives of the program**

The program aligns with many of the priority objectives in McMaster’s strategic plan as outlined in Refining Directions 2009, such as expanding inquiry and problem based learning (PBL) approaches, support trans-disciplinary research and educational programs, increase graduate enrolment to at least 20% of total student enrolment, develop new non-thesis graduate programs, foster the scholarship of teaching and learning, reinforce the quality and status of teaching and learning, and expand technology-rich opportunities that will enable innovation.

The objectives of the program are to present a graduate level (Master’s of Science) curriculum at McMaster University specifically designed for health science educators that:
1. Integrates graduate level training in interprofessionalism, leadership, and McMaster’s Faculty of Health Science signature curriculum (e.g. PBL, concept based learning) in course content, learning strategies and activities. These themes will be written across the curriculum

2. Enables knowledge, academic skill and attitude building pertaining to health science education

3. Enhances preparedness for advanced professional and inter-professional academic roles including leadership in health science education

4. Is delivered in a format accessible to health professionals working in diverse settings

5. Engages learners with interactive learning strategies in classroom and online learning

6. Provide learners with more in-depth exposure to McMaster models of problem centred learning in health sciences education

7. Enables learners to utilize information technology for classroom and online learning, communication, and assessment

8. Incorporates program learning outcomes that align with the Ontario Council of Academic Vice Presidents (OCAV) Graduate Degree Learning Expectations required for all graduate courses: depth and breadth of knowledge; research and scholarship; level of application of knowledge, professional capacity/autonomy; level of communication skills; and awareness and limits of knowledge

The MSc Health Science Education includes a number of objectives that align with the goals of McMaster University Faculty of Health Sciences and educational directions of McMaster University as articulated in Refining Directions II.

Program Learning Outcomes

Upon completion of the program students will be able to demonstrate the following learning outcomes:

1. Depth and breadth of knowledge and skills in a systematic understanding of knowledge and skills, and current problems in
   a. Pedagogy, curriculum designs and teaching strategy fundamentals in health science education
   b. The science of teaching and learning
   c. Assessment and evaluation in health science education
   d. Academic scholarship in health science education
e. Educational research methods in health science education
f. Educational Leadership in health science education
g. Application of information technologies to health sciences programs

2. Research and scholarship, demonstrated by a conceptual understanding and methodological competence that:
   a. Enables a working comprehension of how established techniques of research and inquiry are used to create and interpret knowledge in health science education
   b. Enables critical evaluation of research and scholarship in health science education
   c. Treats complex issues based on established principles and techniques
   d. Develops a sustained argument applying the integration of science education concepts in a scholarly paper
   e. Presents originality in the application of knowledge and skills

3. Level of application of knowledge – competence in the research process by applying an existing body of knowledge in the critical analysis of a new question or specific problem or issue in a new setting through the presentation of scholarly work

4. Professional capacity/autonomy
   a. The qualities and transferable skills necessary for employment requiring the exercise of initiative and of personal responsibility and decision-making in complex situations
   b. Intellectual independence
   c. Ethical behaviour consistent with academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research
   d. The ability to appreciate the broader implications of applying knowledge to particular situations

5. Level of communications skills – communication of ideas, issues and conclusions clearly

6. Awareness of limits of knowledge – cognizant of the complexity of knowledge and of the potential contributions of other interpretations, methods, and disciplines.

It is also anticipated that graduates from the program will be able to:

- Contribute to the advancement of the critical analysis of health science education
- Prepare for employment as educational leaders in health science faculties, diverse health care settings, within post-secondary education, and health care industry.
Program Requirements

The passing grade for courses will be B- consistent with other Master’s level courses offered by the School of Graduate Studies. Scholarly integrity will be expected of all students taking the program in keeping with policies of the McMaster School of Graduate Studies.

The program will consist of a total of five half-courses, two quarter-courses, and one full course for a total of 24 units. Each quarter course is worth 1.5 units, each half course is worth 3 units, and each full course is work 6 units. There are a total of 6 courses (15 units), one elective (3 units), and a full course scholarly paper (6 units).

The proposed courses are as follows:

- Health Science Education I: Fundamentals of health science education (quarter course)
- Health Science Education II: Scholarly works (quarter course)
- Cognition and curriculum design in health science education (half course)
- Assessment and evaluation in health science education (half course)
- Educational research methods in health science education (half course)
- Health Science Educational leadership (half course)
- Elective in Online Learning in Health Science Education or another graduate level course from another health profession program (half course)
- Scholarly paper (full course)

Program Nomenclature

The program is named a Masters’ of Science in Health Science Education, as typically degree programs coming out of the Faculty of Health Science are Masters’ of Science programs. The science of teaching and learning in the health science education context permeates all courses in the program.

Admission Requirements

The admission requirements for the program are appropriate for the learning outcomes. Candidates for admission to this health science education program will have an honours-equivalent, four-year bachelor’s degree in a health science or related health professional degree (e.g. Bachelor of Health Sciences from the Nursing, Physician Assistant or Midwifery Programs), an MD, or a Master’s of Science in Physiotherapy or Occupational Therapy, etc. or others with special permission and health care
qualifications. They will be individuals that are interested in augmenting their existing knowledge and skills through a program of study that facilitates exploration and analysis of the full range of health science education as well as provides the historical, theoretical and critical armature required. To be considered for admission to the MSc Health Science Education program, an applicant must have:

- A four-year undergraduate degree with at least a B+ from an accredited university (equivalent to a McMaster 8.5 GPA out of 120 in the final year in all courses in the [a health science related] discipline.
- Health professional qualifications (as discussed above)
- An official transcript of academic work completed to date at all post-secondary institutions attended, sent directly from the issuing institution(s). If the final degree does not show that a completed degree has been conferred, an official copy of the diploma is also required.
- Two confidential letters of recommendation from instructors most familiar with the applicant’s academic work, sent directly from the instructors.
- Teaching experience in a health related discipline
- A personal Curriculum Vitae (resume)
- A written personal statement of Intent that explains why the application is seeking graduate education in this program. (500-800 words)
  - Explanation of what is desired from this degree
  - Area of interest in scholarly work
- If English is not the applicant’s native tongue, an official copy of the applicant’ TOEFL Test of English as a Foreign Language score or other evidence of competency in English must be submitted. A minimum TOEFL (iBT) score of 92 (550 on the paper – base TOEFL or 237 on the computer-based test) is required.
- A maximum of 25 students will be admitted each year

**Structure**

The program’s structure is designed to meet the specified learning outcomes and degree level expectations. Participants in the program will be full-time working professionals who require flexible learning. Blended and online learning formats allow physicians, nurses, occupational therapists, physiotherapists and other health practitioners to attend virtual classes in an asynchronous manner and
classroom sessions in an intensive format during weekends or in the summer semester. The program length (two-three years) ensures that the program requirements can be reasonably completed within a five-year time period.

The structure will enable high intellectual quality learning of health science education concepts, processes and attitudes. Students will work with experienced clinical and academic teachers/tutors to explore a range of approaches and concepts that have proven successful in health science education.

**Figure 1: Example Course Schedule for Master of Science in Health Science Education**
(6 courses, 1 elective and a 2 credit scholarly paper)

<table>
<thead>
<tr>
<th>Term</th>
<th>Course</th>
<th>Term</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term 1</td>
<td>Health Science Education I: Fundamentals of Health Science Education</td>
<td>Term 7</td>
<td>Elective: Online earning in Health Science Education or a graduate course from health profession masters program, such as nursing, health research methodology, or rehabilitation science</td>
</tr>
<tr>
<td>Term 2</td>
<td>Cognition &amp; Curriculum Design in Health Science Education</td>
<td>Term 8</td>
<td></td>
</tr>
<tr>
<td>Term 3</td>
<td>Assessment &amp; Evaluation in Health Science Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term 4</td>
<td>Health Science Education II: Scholarly Works</td>
<td>Term 9</td>
<td></td>
</tr>
<tr>
<td>Term 5</td>
<td>Research Methods in Health Science Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term 6</td>
<td>Health Science Educational Leadership</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term 7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Scholarly Paper
**Program Content and Curriculum Design**

Unlike Masters in Education programs currently offered in Ontario and across Canada, McMaster University’s Masters of Science in Health Science Education will focus specifically on health science education. Conventional Masters in Education programs are general by necessity, without focused study on learning in clinical contexts. The Faculty of Health Sciences at McMaster University has exceptional strength in faculty specializing in interprofessional clinical health science program curriculum design, development, educational research methods, and online learning applied to health science education. McMaster University FHS is well positioned to offer students an in-depth and extensive examination of health science education. McMaster’s FHS faculty work across schools and programs to incorporate interprofessional perspectives and directly participate in the full range of academic and clinical roles in health science professions.

Given the changing face and complexity of the health science education environment, it is necessary that health science educators supplement their theoretical and historical education practices. The curriculum addresses the current state of health science education through content and context. The program achieves the objectives and outcomes through a course of study encompassing the many domains of knowledge, skills and attitudes with which health care educators and leaders must be conversant.

The unique design of the program interweaves four key features desired by health educators which will be embedded throughout all courses, and act as overarching tenets: Interprofessionalism; educational leadership; health science education signature pedagogies (e.g. Problem Based Learning-PBL); mixed and flexible delivery format. To ensure authentic Interprofessional learning, the courses in the program will be grounded by interactive engagement of students from different health science professions in group/team based learning that embody the principles and practices for integrating Interprofessional education.

The program is set within a rich health science education environment with experts in health science education, which provides the ideal learning context for health science education. McMaster University faculty includes internationally recognized leaders in health science education (most notably in PBL). The large number of health professional training programs offered at McMaster provides an unusually full,
and versatile environment in which to practice health science education. This includes specialized educational support resources, centres and programs, such as The Anatomy Lab, The Centre for Simulation-based learning, and the Program for Educational Research and Development. Clinical health science education occurs in the hospitals in Hamilton and surrounding areas, including Health Sciences Corporation, St. Joseph’s Healthcare and affiliated community hospitals and clinics.

The instructional design of the courses will reflect a constructivist approach to teaching and learning, which is germane to discovery learning, PBL, and other progressive teaching and learning strategies utilized in health science education. Learners will experience learning approaches consisting of small group learning led by an instructor (tutor) who facilitates discovery learning, case/situation analysis, problem-solving from multiple perspectives, and self-directed learning, to name a few. Learning strategies and activities within courses provide opportunities for experimentation, interprofessionalism and leadership. Courses will be subdivided into modules or units.

Learners enroll in the foundation course Health Science Education I first, after which they take the remaining courses then the elective. One or more courses will be offered each semester. After completing the courses learners may enroll in the final scholarly paper. This scholarly work will reflect the student’s area of interest, such as curriculum design, program evaluation, or assessment test construction. The work will be completed in the format of a paper suitable for publication. Health Science Education II will be held in the summer semester for students who have completed at least two courses. It offers students an opportunity to interact with their peers and faculty face-to-face and to present scholarly works.

**Total Graduate courses**

**Health Science Education I**

This fundamentals course provides students with an overview of the program and courses where the over arching goals, learning outcomes, instructional methods, resources, assessment methods, and faculty of the program are introduced. Students reflect upon their goals and learning outcomes for the program, experience small group work, such as PBL tutorials in a face-to-face setting in preparation for online learning groups, and library resources and online learning tools such as (Desire to Learn) and video conferencing.
Health Science Education II
This course provides students with an opportunity to engage in intellectual dialogue face-to-face with an interdisciplinary group of fellow students about their scholarly work in progress, present and give feedback on works-in-progress, and participate in presentations on the process of writing and preparing a manuscript to a health professions journal.

Cognition and Curriculum in Health Science Education
In this course students explore fundamentals of the science of teaching and learning in health science education programs through cognitive and educational psychology theories in conjunction with teaching strategies and curriculum design models that range from traditional lecture/seminar format to PBL, concept-based learning, simulation-based learning, and other current teaching approaches. In small tutorial groups students will analyze curriculum designs, and apply theories to curriculum designs that incorporate teaching strategies to a health science education, clinical, or community setting.

Assessment and Evaluation in Health Science Education
In this course student explore theories and concepts underlying assessment, assessment strategies, and evaluation planning for health science education at the course and program level. Assessment topics include assessment and evaluation instruments appropriate for health science academic and clinical settings, characteristics of high fidelity simulations for clinical performance assessment and OSCEs. Students will develop a basic knowledge of program evaluation including conceptual frameworks for program evaluation, instrumentation, data collection and data sources, and reporting results.

Educational Research Methods in Health Science Education
In this course students are introduced to a range research methods used to assess learning in health science programs. Major topics include psychometrics, epidemiology, experiments, quantitative, and qualitative methods.

Educational Leadership in Health Science Education
In this course students are introduced to the theoretical and conceptual fundamentals of educational administration in post-secondary academic health sciences and community health care contexts such as organizational behavior theory, leadership, change process, and human-resource planning.
Elective: Online Learning in Health Science Education

In this course students explore the pedagogies, knowledge and teaching skills applicable to learning technologies from theory to practice. Topics include benefits and challenges of online learning, managing faculty and student transformation from classroom to online teaching and learning teaching, facilitation of online discussions, and the design of learning activities and selection of technological resources for online learning (e.g. PBL online).

Elective: Other programs

Elective courses outside the program will allow learners to custom tailor the elective to suit individual learning needs and interests. Recommended elective courses will include McMaster graduate courses available or adaptable to online delivery, approved courses from other universities, and Independent Study. McMaster University offers numerous graduate courses that may be of interest to students in the MSc Health Science Education program as electives. Some of the more likely courses will be housed in programs, such as Nursing, Health Research Methodology and Rehabilitation Science. Student eligibility to take graduate courses from other programs as an elective will vary from graduate program to program. McMaster standard policy indicates that all graduate courses are open to suitably prepared students.

Scholarly Paper

The scholarly paper (equivalent to two half courses) is an opportunity for graduate course-based MSc HS Education students to demonstrate, in writing, their ability to integrate ideas that reflect their analysis and use of knowledge in areas of health science teaching and learning, research and leadership. The scholarly paper will demonstrate integrative thinking and focus on a topic selected by the student in consultation with their Scholarly Paper Supervisor. Students will develop a proposal individualized to the student’s area of interest that addresses the MSc Health Science Education’s Guidelines for Scholarly Papers. The scholarly paper does not require the collection or analysis of primary data or the conduct of research with subjects (although this may be an option in some circumstances). The scholarly paper will be graded by a the scholarly paper Supervisor and a Second Reader.

The paper will be developed by the student during their program and will be submitted online. Students will be encouraged to present part of their papers (e.g. literature review) during the Health Science Education II Scholarly paper presentations course. Depending on the specific project topic, some
students may need to conduct fieldwork to collect necessary data and in such cases appropriate ethics approval may be required. Online supervision feedback will be provided on an on-going basis online, by telephone, by videoconference, or in person should the student prefer a face-to-face meeting at McMaster University.

**Part-time blended delivery**

The program is designed for part-time student enrollment to meet the learning needs of the diverse clinical health science professionals. One or more courses will be offered every semester and the elective course will be offered each year. While students may also choose their elective course from other programs in classroom or online mode courses, it is anticipated most will opt for an online course, predominantly the elective offered by the program.

The program will be delivered in a blended delivery mode (a combination of face-to-face sessions and online sessions). This mode is appropriate to meet the intended learning outcomes including the Degree Level Expectations and the access to learning needs of the working health care professional. Daytime course offerings and campus-located courses are inaccessible to the majority of the intended learners in the program. As practicing health professionals, physicians, nurses, physiotherapists, administrators, etc. often work rotating shifts leaving little time for structured daytime courses schedules. In addition, some of the learners live and work at a distance from McMaster’s Hamilton campus (main campus) working at McMaster FHS’s other campuses (Niagara and Kitchener) or at other universities within Ontario or across Canada. A few late week/weekend condensed blocks paired with asynchronous online learning will afford the flexibility of learning at a time and location convenient to individual lifestyles compatible with professional responsibilities.

The program begins with a face-to-face intensive fundamentals course that will include an orientation and overview of the program. The remaining courses will be held online with the exception of the Scholarly Work presentations course (Health Science Education II). Online sessions will be delivered by McMaster’s learning management system (LMS), which is currently Desire to Learn. Both synchronous and asynchronous discussion will be held in each course. Synchronous online communication will utilize
web conferencing programs, such as Elluminate, which has been used successfully in FHS programs at McMaster University for several years.

Student/faculty contact will take place regularly through synchronous and asynchronous discussions, and videoconferences. Evaluation of the scholarly paper will be conducted via telephoned or videoconference to ensure direct evaluation of the student’s knowledge of the paper.

**Assessment of teaching and learning**

Course level learning outcomes align with program level learning outcomes ensuring that as students master course level learning outcomes, program level outcomes are in turn are completed. A range of assessment strategies will be employed that allow students to demonstrate competency of course learning outcomes. The scholarly paper will allow students to demonstrate competency of program learning outcomes.

The tracking of student success in achieving course level learning outcomes is monitored as is customary by faculty on a course-by-course basis. The program’s administration and evaluation committee will monitor student achievement across courses.

**Resources for the proposed program**

**The Faculty**

The FHS possesses faculty of exceptional depth of experience with health science education. Faculty members who will be teaching in the program have expertise in health science education, assessment and evaluation in health science clinical education, and in PBL. The development of a critical analysis of education research in health care settings will be met by building on the FHS’s many years of research expertise in health science education research.

Faculty for courses will be drawn from the FHS schools (medicine, nursing, rehabilitation science) and programs (Midwifery, Physician Assistant Education Program, etc) that offer advanced health sciences
professional education while faculty for electives courses from other programs will be affiliated with FHS graduate health science programs and other departments many of which offer interdisciplinary programs. Health Sciences affiliated graduate programs include research oriented graduate programs, such as Medical Sciences, Health Research Methodology, Nursing and Rehabilitation Science and interdisciplinary programs such as Global Health (MSc), eHealth, Health and Aging, and Health Policy. The program offers one elective course, which is expected to be of interest to the majority of the students. It is anticipated that some students (two to three) may take an elective from one of these other programs and that few students will take the same elective.

The demands of teaching in the MSc Health Science Education program are not expected to substantially impact the demands for faculty for existing programs. There are over 1000 full-time and 2000 part-time faculty in FHS. We believe that the workload of the faculty members in the program will be manageable.

Students will require faculty supervision for their scholarly paper projects, which will be graded by this faculty member and a second reader. The program faculty include individuals who are experienced in supervising graduate students in addition to teaching graduate courses, serving as committee members, and external examiners for theses and evaluations at McMaster and other institutions.

Table 2 lists core faculty, who will teach in the program and serve as supervisors. The chart identifies faculty by their home unit affiliation, area of expertise, and gender. Appendix lists additional faculty who will be involved in the program as second readers for scholarly papers and periodic teaching. It should be noted that numerous health science faculty will have only intermittent participation in the program, such as serving as a second reader for a scholarly paper.
Table 1- Core Faculty Member by field and expertise

<table>
<thead>
<tr>
<th>Faculty Name &amp; Rank</th>
<th>M/F</th>
<th>Home Unit</th>
<th>Degree &amp; University</th>
<th>Area or Expertise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baptiste, S.</td>
<td>F</td>
<td>Rehabilitation Science</td>
<td>MHSc McMaster</td>
<td>Leadership</td>
</tr>
<tr>
<td>Chen, R.</td>
<td>F</td>
<td>Nursing</td>
<td>PhD</td>
<td>Research methods</td>
</tr>
<tr>
<td>Dore, K.</td>
<td>F</td>
<td>CE&amp;B</td>
<td>PhD McMaster</td>
<td>Research methods</td>
</tr>
<tr>
<td>Grierson, L.</td>
<td>M</td>
<td>CE&amp;B</td>
<td>PhD</td>
<td>Research methods</td>
</tr>
<tr>
<td>Jung, B.</td>
<td>F</td>
<td>Rehabilitation Science</td>
<td>PhD Western</td>
<td>Interprofessionalism</td>
</tr>
<tr>
<td>Marshall, D.</td>
<td>F</td>
<td>Family Medicine</td>
<td>MD</td>
<td>Leadership</td>
</tr>
<tr>
<td>Martin, L.</td>
<td>F</td>
<td>Nursing</td>
<td>PhD</td>
<td>Teaching methods</td>
</tr>
<tr>
<td>McKey, C.</td>
<td>F</td>
<td>Nursing</td>
<td>PhD</td>
<td>Evaluation</td>
</tr>
<tr>
<td>Musson, D.</td>
<td>M</td>
<td>CSBL</td>
<td>PhD</td>
<td>Simulation-based learning</td>
</tr>
<tr>
<td>Neville, A.</td>
<td>M</td>
<td>Oncology</td>
<td>PhD</td>
<td>Leadership</td>
</tr>
<tr>
<td>Norman, G.</td>
<td>M</td>
<td>CE&amp;B</td>
<td>PhD McMaster</td>
<td>Research methods</td>
</tr>
<tr>
<td>Rieter, H.</td>
<td>M</td>
<td>Medicine</td>
<td>MD</td>
<td>Evaluation</td>
</tr>
<tr>
<td>Risdon, C.</td>
<td>F</td>
<td>Family Medicine</td>
<td>MD</td>
<td>Leadership</td>
</tr>
<tr>
<td>Salfi, J.</td>
<td>F</td>
<td>Nursing</td>
<td>PhD McMaster</td>
<td>Interprofessionalism</td>
</tr>
<tr>
<td>Solomon, P.</td>
<td>F</td>
<td>Rehabilitation Science</td>
<td>PhD Waterloo</td>
<td>Online Learning</td>
</tr>
<tr>
<td>Stratford, P.</td>
<td>M</td>
<td>Rehabilitation Science</td>
<td>MSc McMaster</td>
<td>Quantitative methods</td>
</tr>
<tr>
<td>Walsh, A.</td>
<td>F</td>
<td>Family Medicine</td>
<td>MD</td>
<td>Leadership</td>
</tr>
<tr>
<td>Whyte, R.</td>
<td>M</td>
<td>Anesthesia</td>
<td>MD</td>
<td>Research Methods</td>
</tr>
<tr>
<td>McCaughan, K.</td>
<td>F</td>
<td>PAEP</td>
<td>PhD, Simon Fraser</td>
<td>Educational Psychology</td>
</tr>
</tbody>
</table>

CE&B – Clinical Epidemiology and Biostatistics  
CSBL – Centre for Simulation-based learning  
PAEP – Physician Assistant Education Program
Teaching Assignments
Each course will be co-developed by an interdisciplinary team of faculty who are content experts in various areas of course content. Each content expert will be responsible for the development of a section of the course in his or her area of content expertise. Several members of the development team will also teach/facilitate sections of the course.

Table 3 - Anticipated teaching assignments for the proposed program

<table>
<thead>
<tr>
<th>Course</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Science Education I</td>
<td>Jung, B. Marshall, D. McCaughan, K. Neville, A.</td>
</tr>
<tr>
<td>Health Science Education II</td>
<td>Jung, B. Marshall, D. McCaughan, K. Murray-Davis, E. Norman, G.</td>
</tr>
<tr>
<td>Cognition and Curriculum Design in Health Science Education</td>
<td>Baptiste, S. Martin, L. McCaughan, K. Musson, D. Norman, G. Neville, A. Norman, G Whyte, R.</td>
</tr>
<tr>
<td>Assessment and Evaluation in Health Science Education</td>
<td>Dore, K. Grierson, L. Martin, L. Reiter, H. Salfi, J. Stratford, P. Sherbino, J.</td>
</tr>
<tr>
<td>Research Methods in Health Science Education</td>
<td>Chen, R. Dore, K. Grierson, L. Norman, G. Whyte, R.</td>
</tr>
<tr>
<td>Leadership in Health Science Education</td>
<td>Baptiste, S. Marshall, D. Walsh, A. McKey, C. Risdon, C. Solomon, P.</td>
</tr>
<tr>
<td>Online learning in Health Science Education</td>
<td>Levinson, A. Malott, A. McCaughan, K. Wainman, B.</td>
</tr>
</tbody>
</table>
Course production and delivery

Course production will occur over a two year period with three courses developed the first year and four courses the second year. Table 2 displays the step-wise production and delivery schedule.

Table 2 Course production development and delivery schedule

<table>
<thead>
<tr>
<th>Course</th>
<th>2011/12</th>
<th>2012/13</th>
<th>2013/14</th>
<th>2014/15</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall</td>
<td>Winter</td>
<td>Summer</td>
<td>Fall</td>
</tr>
<tr>
<td>Health Science Education I</td>
<td>Develop</td>
<td>New</td>
<td>Deliver</td>
<td>Deliver</td>
</tr>
<tr>
<td>Cognition &amp; Curriculum</td>
<td>Develop</td>
<td>New</td>
<td>Deliver</td>
<td>Deliver</td>
</tr>
<tr>
<td>Assessment &amp; Evaluation</td>
<td>Develop</td>
<td>New</td>
<td>Deliver</td>
<td></td>
</tr>
<tr>
<td>Health Science Education II</td>
<td>Develop</td>
<td>New</td>
<td>Deliver</td>
<td></td>
</tr>
<tr>
<td>Research Methods</td>
<td>Develop</td>
<td>Adapt</td>
<td>Deliver</td>
<td></td>
</tr>
<tr>
<td>Leadership</td>
<td>Develop</td>
<td>Adapt</td>
<td>Deliver</td>
<td></td>
</tr>
<tr>
<td>Online Learning</td>
<td>Develop</td>
<td>New</td>
<td>Deliver</td>
<td></td>
</tr>
<tr>
<td>Develop Total</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>New</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adapt</td>
<td>0</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deliver</td>
<td>1</td>
<td>4</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>

Physical and Financial Resources

As this is a part-time program graduate financial assistance for students through scholarships are not provided. However, students may apply for external scholarships or other funding.

Most classroom space for FHS programs is currently in the Michael DeGroote Centre for Leadership and Learning (MDCL) or nearby campus building (e.g. Health Sciences Center). All core and internal adjunct faculty in this proposal currently have access to private or semi-private offices with telephone and high-speed data lines. Office/carrel space is not normally provided to graduate students pursuing a course-
project program. The program will require ready access to seminar rooms and program administrative office space. Since the students are part-time and most courses are online there is no need for graduate study rooms. The on-site sessions will be held in the summer or on weekends when there are less demands on classroom space.

All faculty and graduate students are provided with an account on the university mainframe computer. This account gives them access to electronic mail facilities, Internet, learning management systems, library catalogue. In addition, students in the MSc Health Science Education will have access to a portal where program specific information and resources will be available along with access to video conferencing software, such as Elluminate. Once students register for an online course they gain access to the course’s virtual classroom website in the learning management system (Desire to Learn).

The program has the support of department chairs for faculty participation. Funding for the administration of the program will be provided by the FHS.

**Quality and other indicators**

Intellectual development of the student

McMaster University Faculty of Health Sciences is uniquely positioned to promote the intellectual development of students in this program due to the clinical and academic culture that McMaster FHS pioneers and others created to foster excellence in interprofessionalism, leadership, and innovative teaching and learning strategies in health science education. This culture of modeling and enabling intellectual excellence, creativity, and integration is pervasive. FHS Health science faculty not only emulate these characteristics in their practice as clinicians but connect and carry them forward into their academic roles resulting in collaborative teamwork mirrored in inclusive health science educational practice. Core faculty are well qualified to teach in this program as illustrated in their C.V.s (see Appendix C).

**Online Course Development**

Online courses are developed by multidisciplinary teams. Content will be developed by faculty as content experts with the assistance of online instructional design, multimedia design, and technical
assistance under the project management of the MSc Health Science Education program director. As courses will be interactive by design, interactive learning resources will be developed in conjunction with content and instructional design. The budget includes costs to develop multimedia components through the services of audio/video producers and editor.

**Administrative Structure**

**Program Administration**

The administrative structure of the program will consist of a program director working in conjunction with executive, advisory, curriculum, admissions, evaluation, and student affairs committees. MSc Health Science Education committees will be developed as permanent committees, designed to deal with specific issues of the program. Each committee will have a clearly defined Terms of Reference, including role and composition. The administrative structure of the program will be highly consultative in order to respond to the interdisciplinary goals. Committee membership will have representation from the Faculty of Health Science academic units (professional schools and programs: medical education, nursing, rehabilitation science, midwifery, and physician assistant). The program will establish a governance document that will define the mission of the program. Any curriculum changes will be approved through the program’s Curriculum Committee, the FHS Graduate Curriculum Committees, the McMaster Graduate Council, McMaster University Senate, and the Quality Council.

**Projected intake and enrollments**

Table 4 illustrates the Projected intake and Enrolments. In this initial year of program start up 15 students will be admitted. Each subsequent year 25 students will be admitted. Within seven years of program start up it is expected that 90 students will have graduated from the program.

**Table 4: Projected intake and Enrolments**

<table>
<thead>
<tr>
<th>Year</th>
<th>Intake</th>
<th>Graduation</th>
<th>Enrollments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>15</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>2013</td>
<td>25</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td>2014</td>
<td>25</td>
<td>0</td>
<td>65</td>
</tr>
<tr>
<td>2015</td>
<td>25</td>
<td>15</td>
<td>75</td>
</tr>
<tr>
<td>2016</td>
<td>25</td>
<td>25</td>
<td>75</td>
</tr>
<tr>
<td>2017</td>
<td>25</td>
<td>25</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>25</td>
<td>75</td>
</tr>
<tr>
<td>-------</td>
<td>----</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Total</td>
<td>165</td>
<td></td>
<td>90</td>
</tr>
</tbody>
</table>

**Method used for brief preparation**

This proposal brief was prepared by the Masters of Science Health Science Education Program Committee, constituted by multidisciplinary representation of Faculty of Health Science faculty members who will administer and contribute to teaching in the program. In addition to the Committee, potential faculty members from the McMaster MD program, the Program for Educational Research and Development (PERD), the Centre for Simulation based learning, the McMaster School of Nursing, Rehabilitation Science, Physician Assistant Education Program, and others have been consulted for program suggestions, and concur with the Committee. The following is a summary schedule for development and implementation of the program.
### Table 5: Tentative Program Development and Approval Schedule

<table>
<thead>
<tr>
<th>Month</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 2010</td>
<td>FHS Graduate Program Committee discussion and approval</td>
</tr>
<tr>
<td>January – February 2011</td>
<td>Preparation of Proposal Brief</td>
</tr>
<tr>
<td>March</td>
<td>Dean’s Meeting</td>
</tr>
<tr>
<td>April–May</td>
<td>1. Program review/approval by FHS graduate studies curriculum and policy committee (GPCC)</td>
</tr>
<tr>
<td></td>
<td>2. FHS Faculty Executive</td>
</tr>
<tr>
<td></td>
<td>3. Grad Council</td>
</tr>
<tr>
<td>June</td>
<td>Senate Approval</td>
</tr>
<tr>
<td>June – July</td>
<td>External Review</td>
</tr>
<tr>
<td>August</td>
<td>Internal Response to Reviewers’ Reports and revisions if required</td>
</tr>
<tr>
<td>September</td>
<td>Institutional Approval (second time if required)</td>
</tr>
<tr>
<td></td>
<td>1. FHS Faculty Executive Approval</td>
</tr>
<tr>
<td></td>
<td>2. Graduate council</td>
</tr>
<tr>
<td></td>
<td>University Planning Committee</td>
</tr>
<tr>
<td>September</td>
<td>Approval by Senate (second time if required)</td>
</tr>
<tr>
<td>October 2011</td>
<td>Quality Council review</td>
</tr>
<tr>
<td>January – September 2012</td>
<td>Development, marketing, and admissions process</td>
</tr>
<tr>
<td>August/September 2012</td>
<td>First entering class</td>
</tr>
<tr>
<td>Spring 2015</td>
<td>First graduating class</td>
</tr>
</tbody>
</table>
APPENDIX

Appendix A: Working Group
- Denise Marshall, Assistant Dean, Program for Faculty Development
- Colleen McKey, Assistant Professor, Nursing
- Kareen McCaughan, Curriculum Director, Program for Faculty Development and Physician Assistant Education Program
- Mary Law, Professor, Rehabilitation Science
## Appendix B Faculty Members involved in the program

<table>
<thead>
<tr>
<th>Name</th>
<th>Home Unit</th>
<th>Degree and University</th>
<th>Area of Expertise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wong, A.</td>
<td>Anesthesia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baxter, F.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shaw, L.</td>
<td>Family</td>
<td>Medicine</td>
<td></td>
</tr>
<tr>
<td>Dolovich, L.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cairney, J.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haider, S.</td>
<td>Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O'Byrne, P.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Panju, A.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soth, M.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameron, B.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You, J.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main, C.</td>
<td>Pathology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bourgeois, J.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anchala, K.</td>
<td>Pediatrics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brill, H.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Callen, D.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carter, T.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cupido, C.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Findlay, S.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gilleland, J.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grant, C.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harman, K.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ladhani, M.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lau, K.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marrin, M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McAssey, K.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meaney, B.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mesterman, R.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Murphy, P.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Niec, A.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portwine, C.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scheinemann,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reid, S.</td>
<td>Surgery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baxter, P.</td>
<td>Nursing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boblin, S.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landeen, J.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noesgaard, C.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cunnington, J.</td>
<td>PAEP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Field</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kulatunga-Moruzi, C.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thompson, P.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hutton, E.</td>
<td>Midwifery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Murray-Davis, B.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comen, L.</td>
<td>Rehabilitation Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Law, M.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix C Faculty CVs

Appendix D Library Resources
April 7, 2011-04-07

Proposal to Discontinue the Neuroscience and Behavioral Science Field of Medical Sciences
Effective September 1, 2011

The Medical Sciences Program and the Health Sciences Graduate Program Office has evaluated the enrolment in the Neuroscience and Behavioral Science Field, three years after the Neuroscience Graduate Program was launched. When the Neuroscience Graduate Program proposal was presented to FHS GPCC for information prior to the program approval, it was acknowledged that there could be competition, leading to eventual closure of this field in Medical Sciences as new students might prefer to enrol in the new program. Enrolment in the Neuroscience Program has grown, while the enrolment in the Neuroscience and Behavioral Science Field of Medical Sciences has declined.

Figure 1. Changes in enrolment of BIU eligible graduate students (shown as total FTE) in the Neuroscience and Behavioral Science Field of Medical Sciences and the Neuroscience Graduate Program.

![Graph showing enrolment changes](image)

There is now extensive overlap in the Health Sciences Faculty Members that are approved to supervise students in the Neuroscience Graduate Program and the Neuroscience and Behavioral Science Field of Medical Sciences, with most Faculty opting to recruit students through the Neuroscience Graduate Program. Applicants are confused by the fact that McMaster University offers Neuroscience training in more than one program. The Neuroscience and Behavioral Science Field is no longer a broad focus of the Medical Sciences program and the enrolment in the Field has fallen below the critical mass required to continue. After review of the situation, we are seeking approval to close the Neuroscience and Behavioral Science Field of Medical Science, effective September 2011.
The Department Chairs, and the Faculty that are supervisors in the Neuroscience and Behavioral Science Field of Medical Science, have been consulted to ensure that all issues associated with a field closure are addressed. As the Medical Science faculty that have trained graduate students in the Neuroscience and Behavioral Science Field are now supervisors in the Neuroscience Program, the impact of the proposed field closure is estimated to be minimal. The Program Director of the Neuroscience Program, Kathy Murphy has been consulted and has not identified any concerns. The closure of the Neuroscience and Behavioral Science Field of Medical Science would allow for more focused Neuroscience training at McMaster University while allowing the Medical Sciences Program to focus on training in other Fields. The records for the students that are presently enrolled in the Neuroscience and Behavioral Science Field of Medical Science have been reviewed. The program estimates that many of the current students in this field will likely defend in the next six months, leaving a projected 5 students (1 MSc, 4 PhD) in the field as of November 1, 2011. The Medical Sciences Program proposes to roll the remaining students in the field into the Physiology and Pharmacology Field of Medical Sciences, effective September 1st, 2011, so that they can complete their degree in Medical Sciences (note: the degree will be the same as it does not specify the field). Additionally, Neuroscience courses offered by Medical Sciences are under review to determine if they should be discontinued, cross-listed or become Neuroscience program courses.

Respectfully submitted by James Mahony, Assistant Dean of Medical Sciences and

Catherine Hayward, Associate Dean of Graduate Studies (Health Sciences)
PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:

1. This form must be completed for ALL course changes. All sections of this form must be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

DEPARTMENT/PROGRAM: Master of Science in Global Health

COURSE TITLE: Global Burden of Disease

COURSE NUMBER: 707

INSTRUCTOR(S): Timothy O'Shea

PREREQUISITE(S):

NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)

NEW COURSE: x

DATE TO BE OFFERED: Winter 2012

WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL? If yes, provide the date:

WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT? If yes, attach to this form any relevant correspondence with the other department(s). Note: Cross-listing of courses requires approval from each department and faculty concerned.

CHANGE IN COURSE TITLE: Provide the current course title:

CHANGE IN COURSE DESCRIPTION: 600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form

CHANGE TO FULL COURSE

CHANGE TO HALF COURSE

CHANGE TO QUARTER COURSE

COURSE CANCELLATION: Provide the reason for course cancellation:

OTHER: Explain:

BRIEF DESCRIPTION FOR CALENDAR - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.
This course will introduce graduate students to the concepts of the global burden of disease. The course will start by examining how disease burden is measured and the value choices that are implicit in such measurement tools. An overview of diseases and conditions responsible for a significant portion of the global disease burden will then be presented, focusing on epidemiology, clinical aspects, management and prevention.

CONTENT/RATIONALE - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.
Please see attached course outline.
1. **STATEMENT OF PURPOSE** (How does the course fit into the department’s program?)

This course is designed to complement the current offerings in the global diseases stream of the Masters of Global Health program by providing students with knowledge and skills specific to this field.

2. **EXPECTED ENROLMENT:**

15-20

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL** (i.e., lectures, seminars):

Faculty led presentations and small group discussions/tutorials

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)

Weekly Quiz - 10%; Participation/Attendance - 20%; Student Presentation - 30%; Final Paper - 40%

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT?**

   IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).

n/a

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

n/a

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Timothy O'Shea, MD, FRCPC, MPH Email: osheat@mcmaster.ca Extension: 42471 Date:

---

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/medy
Global Burden of Disease

Overview

This course aims to answer two basic questions: how is disease burden measured and what are the major causes of morbidity and mortality on a global scale. The course will employ a combination of lecture and group presentations to critically examine how major governmental and non-governmental organizations conceptualize disease burden while also gaining an understanding of the disease states which contribute significantly to theses metrics.

Outline

The course will be broken into an introductory period where major concepts will be introduced. Students will learn the basics of epidemiologic measurement of disease burden on a global scale and will examine the benefits and drawbacks of various metrics as well as the values that are implicit in their conceptualization. The course will then shift to a survey of major causes of disease burden on a global scale, with a focus on basic biomedical, epidemiologic, social and political aspects of the various disease states.

Method of Instruction:

Students will be expected to come prepared each week by reviewing the suggested reading on each topic. Lectures will be presented by either the course instructors or guest lecturers with expertise in the area of discussion. The first two weeks will involve lectures followed by class discussion as key concepts are introduced. Thereafter class will be divided between a lecture (~1 hr) and student presentations. Presentations will be made on a topic related to that week’s lecture, and suggested topics will be provided.

Method of Evaluation:

Marks will be assigned based on the following breakdown:

- Weekly quiz – 10%
- Participation/Attendance – 20%
- Student Presentation – 30%
- Final Paper – 40%
Week 1 – Measuring Health and Disease

Drs. Christian Kraeker and Tim O’Shea

Objectives: To provide a broad overview of how health and disease is conceptualized and measured, with particular attention paid to the implicit value judgements which shape these metrics. Students will have an understanding of common measurement tools such as disability adjusted life years (DALYs), quality adjusted life years (QALYs), life expectancy, crude mortality, maternal mortality and infant mortality.

Background reading:


Week 2 – Social Determinants of Health/The Millennium Development Goals

Dr. Tim O’Shea

Objectives: This class will continue to lay the foundation for future class discussions of specific disease entities by providing a broad overview of the relationship between social factors and health, with a focus on poverty and inequality. These issues will be examined through various frames of reference, from local to global. The concept of the Millennium Development goals will also be briefly introduced and the politics behind their conception examined.

Background reading:


Week 3 – HIV, TB, Malaria

Dr. Christian Kraeker

Objectives: This session will introduce the students to the massive impact that these three diseases have had globally. Epidemiological trends over time will be discussed and whether or not progress has been made with respect to halting these diseases. The major funding sources and organizations charged with tackling these diseases will be discussed. Finally, the concepts of vertical and horizontal health care delivery will be compared and contrasted.

Background reading:


Suggested Presentation Topics:

HIV: Test and Treat
HIV: Circumcision
Malaria: Co-artem supply and production
Tb: The World Health Organization (WHO) STOP TB strategy
Week 4 – Global Burden of Infectious Diseases

Dr. Tim O’Shea

Objectives: This session will mainly focus on the wide range of infectious diseases labeled as “neglected tropical diseases”. Neglected diseases will be defined and theories as to why they are in fact neglected will be discussed. The main methods of controlling these diseases will be generally introduced which will lead to a discussion regarding the difficult task of globally eradicating these diseases which affect the world’s most poor.

Background reading:


Suggested Presentation Topics:
Schistosomiasis – Control measures
Eradication of infectious diseases – successes and controversies
The World Health Organization (WHO) STOP TB strategy
Onchocerciasis control – The Onchocerciasis Control Program (OCP) and The African Program for Onchocerciasis Control (APOC)
Worm infections and mass preventive chemotherapy
Week 5 – Global Burden of Psychiatric Disease

Dr. Sheila Harms

Objectives:

Psychiatric illnesses remain one of the most important causes of disability adjusted life years lost in both high and low income countries. This session will explore the epidemiology of psychiatric illness on a global scale and will focus on the unique challenges in their control and treatment.

Background reading:


Saraceno B, van Ommeren M, Batniji R. Barriers to improvement of mental health services in low-income and middle-income countries. The Lancet. (2007); 370: 1164-74.

Vinck P, Pham PN. Association of exposure to violence and potential traumatic events with self-reported physical and mental health status in the Central African Republic. JAMA. (2010); 304(5): 544-52.

Suggested Presentation Topics:

Conflict and mental health
Access to mental health services in rural areas
Measuring mental health
Week 6 – Maternal Health

Dr. Jean Chamberlain (via video link)

Objectives: The objective of this session is to be able to understand and describe the global burden of maternal mortality from an epidemiological perspective. Examples from high-income and low-income countries will be compared and contrasted. Students will be able to describe how maternal mortality is counted and disseminated and be able to discuss the direct and indirect causes of maternal death. Finally, solutions to the problem of maternal mortality will be introduced and discussed.

Background reading:


Suggested Presentation Topics:

Enterovaginal fistulas – Social and medical consequences
Social implications of high maternal mortality
Global controversy over use of misoprostol
Global blood supply
Week 7 – Global Burden of Pediatric Disease

Dr. Andrea Hunter

Objectives:

This class will review the major contributors to childhood morbidity and mortality with special attention paid to those diseases not covered in other classes. Diarrheal diseases, respiratory illness and malnutrition will be addressed in detail. Attention will also be paid to the social and economic conditions that are associated with higher childhood mortality rates.

Background Reading:


Suggested Presentation Topics:

WHO Expanded Program on Immunization (EPI)

Effects of micronutrient supplementation

The first week of life in a rural community: interventions for survival
Week 8 – Global Burden of Chronic Disease

Dr. Salim Yusuf

Objectives: During this session students will learn about the growing epidemiological transition of communicable disease to non-communicable diseases on a global scale. The global impact and spread of diseases such as heart disease, diabetes, respiratory illness and mental illness will be discussed, as will the idea that only certain diseases receive significant attention. Theories as to why this is occurring and to whom it is occurring to will stimulate discussion.

Background reading:


Suggested Presentation Topics

Global burden of cardiovascular disease

The epidemiologic shift

Global burden of diabetes mellitus
Week 9 – Water, Hygiene and Climate Change

Dr. Christian Kraeker

Objectives: This session will examine how deterioration of clean water services and hygiene contribute to the spread of ill health and infectious diseases such as diarrheal diseases. The underlying reasons for poor sanitation will be introduced and multiple examples will be utilized to exemplify this process. The impact that global climate change has on health and infectious diseases will be introduced.

Background reading:


Suggested Presentation topics:

Climate change and malaria

Natural disasters and risk of disease (impact of a tsunami on health)

Options for sanitation in rural environments

Benefits of soap and clean water in a rural community
Week 10 – Special Populations - Migration and Conflict

Dr. Christian Kraecker

Objectives: This session will introduce how conflict and migration contribute to ill health. Risk factors for the spread of infectious diseases in a conflict setting will be discussed, as will the direct and indirect effects of conflict with respect to health. Students will be able to describe the changing nature of conflict and how this relates to health. A discussion will also introduce the major players involved in attempting to alleviate the detrimental effects that conflict have on health.

Background reading:


Suggested Presentation Topics:

Health risks of overcrowding (i.e. refugee camps)

Internally displaced persons

Rural to urban migration epidemiological shift (why is everybody moving to a city?)
Week 11 – Special Populations – Marginalized Populations

Dr. Tim O’Shea

Objectives:

This class will act as a review of concepts covered thus far in class. In particular we will revisit the idea of the social determinants of health by conceptualizing disease risk as a manifestation of social power. Marginalization on a global scale and at the local level affects both the types of illness that one is at risk for and the expected outcome when one becomes ill. We will explore the epidemiology of disease according to social class and examine the various theories proposed to explain this phenomenon.

Background Reading:


Hwang SW. Homelessness and Health. CMAJ. 2001, 164(2)


Suggested Presentation topics:

The McKewon Hypothesis

The Experiment at Many Farms
Week 12 – Solutions – Innovative Approaches to Health Care Delivery

Dr. Tim O’Shea and Christian Kraecker

Objectives:

In this class we will examine innovative methods of health care delivery and disease management aimed at the control or treatment of the disease states discussed in previous lectures. A discussion will be had around the benefits and drawbacks of these programs and challenges in scaling up successful projects will be addressed.

Background reading:

Einterz EM. Health district development and the need to dig deeper. The Lancet. (2011); 377: 1122-23.


Suggested Presentation Topics:

Integrated health-care

Horizontal vs. vertical health care delivery

Delivery of HIV care in a rural Africa

Dignitas International and community based HIV care

The Hamilton Shelter Health Network
Week 13 – Wrap Up
Drs. Tim O'Shea and Christian Kraeker

This class will provide an opportunity for students to reflect on topics covered throughout the course and to ask questions of the course coordinators. Time will also be spent discussing progress on the final paper. Finally, students will be offered suggestions on what the next steps in their learning could be, and how they could translate the new knowledge they have gained into action.
# Recommendation for Change in Graduate Curriculum - For Change(S) Involving Courses

## Please read the following notes before completing this form:

1. This form must be completed for **ALL** course changes. All sections of this form **must** be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: spiritu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

## Department/Program

- **M.Sc. Global Health**

## Course Title

- **Supervised Knowledge Opportunity**

## Course Number

- **715**

## Course Credit

<table>
<thead>
<tr>
<th></th>
<th>Full Course ( )</th>
<th>Half Course (x)</th>
<th>Quarter (Module) ( )</th>
</tr>
</thead>
</table>

## Instructor(s)

- Staff, Approved Graduate Status Required

## Prerequisite(s)

- Registration in M.Sc. Global Health

## Nature of Recommendation (Please check appropriate box)

- **NEW COURSE**

## Date to be Offered:

- Fall 2011

## Was the Proposed Course Offered on Dean’s Approval?** Yes**

If Yes, Provide the Date:

## Will the Course be Cross-listed with another Department? **No**

If Yes, Attach to this Form Any Relevant Correspondence with the Other Department(s).

Note: Cross-listing of courses requires approval from each department and faculty concerned.

## Change in Course Title

- Provide the Current Course Title:

## Change in Course Description

- **600-level Course (Undergraduate course for graduate credit):** Please see #4 on page 2 of this form

## Change to Full Course

## Change to Half Course

## Change to Quarter Course

## Course Cancellation

- Provide the Reason for Course Cancellation:

## Other

- Explain:

## Brief Description for Calendar - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.

This half-course is designed to allow students to tailor their learning to address specific knowledge gaps identified by the program or supervisory committee. In consultation with a faculty member with expertise in the area, a course outline will be developed that is tailored to meet the student's knowledge gaps and learning requirements. Students will engage on a faculty member-supervised exploration of relevant concepts and scholarly literature. It is expected that the level of learning is consistent with expectations for 700 level courses. Please see detailed description on the M.Sc. Global Health Website.

Prerequisite; Registration in the M.Sc. (Global Health) Program. Proposals are welcome at any time and will normally be approved within 48 hours. The approval (and permission) of the student, instructor and program dean are required.

## Content/Rationale - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.

Content is variable and will meet specific student-centered learning gaps.

The topic(s) would not normally be extensively covered in existing graduate courses to which the student has access. The program of studies is, however, a one year experience and therefore there may be cases when a committee and the student identify knowledge issues that may only be addressed by this mechanism because the relevant graduate course is not offered at the time or contains the wrong overall focus. Topics complementary to the scholarly paper or thesis are permitted.

The instructor will not normally be the supervisor of the student. The instructor and the student must submit a plan of study that identifies the curriculum issues to be addressed and the mechanism of evaluation. Evaluation methodologies must be consistent with learning goals. A useful guide to evaluation is Fenwick and Parsons (2000), "The Art of Evaluation", Thompson Educational Publishing, Toronto 244pp. Copies are available in the global health program office. The instructor and student must agree to the evaluation mechanisms but by definition, there should be evidence of regular and prompt feedback, graded or not. It may be possible to complete the course by meeting learning outcomes and recording the mark as Pass/Fail.
1. STATEMENT OF PURPOSE (How does the course fit into the department’s program?)

The M.Sc. (Global Health) has two streams; thesis option or scholarly paper. Students registered in the scholarly paper option have one year to complete the degree requirements. There are three streams in the program (infectious disease, business and social sciences) that match the students direction and interest. The backgrounds of students are highly variable (desirable) and we know that all complete 700 level courses with no extended difficulty (fall term 2010) in all three areas of concentration. During the course of term one and early term two, students develop proposals for scholarly papers and identify supervisors. Supervisors (one at this point), in discussion with students note areas of knowledge deficiencies that must be addressed for success.

This course would provide a just-in time mechanism to address the learning needs in a short duration program. It is consistent with the faculty values of life-long learning and the mechmism by which that is most often achieved.

2. EXPECTED ENROLMENT:

Two-four per year

3. DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):

Variable. Potential students and Instructors will be provided with several faculty development resources when they identify the opportunity. However, most graduate faculty will probably uses a standard range of options familiar to the system and their prior experience when teaching graduate students. If oral evaluation methods are utilized, a summary record must be constructed and signed by the supervisor and student. (feedback and/or evaluation).

4. DESCRIBE IN DETAIL THE METHOD OF EVALUATION: (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)

Evaluation to be agreed upon by all parties, and documented at the start of the course. All forms of evaluation are encouraged if matched to learning outcomes. See for example: Fenwick and Parsons (2000), "The Art of Evaluation", Thompson Educational Publishing, Toronto, 244pp. Copies are available in the global health program office. The instructor and student must agree to the evaluation mechanisms but by definition, there should be evidence of regular and prompt feedback, graded or not. It may be possible to complete the course by meeting learning outcomes and recording the mark as Pass/Fail.

5. TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).

Other programs have similar course but have extended approval time lines that do not be our stated objective. The MBA program has a similar course with short approval time-lines. The nature of this course is specific to and addresses the needs of global health.

6. IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?

PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Del Harnish, Assistant Dean Email: harnishd Extension: 22815 Date: Jan13, 2011

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/medy
**SCHOOL OF GRADUATE STUDIES**

**RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING COURSES**

PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:

1. This form must be completed for **ALL** course changes. All sections of this form **must** be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

<table>
<thead>
<tr>
<th>DEPARTMENT/PROGRAM</th>
<th>Health Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE TITLE</td>
<td>Leadership in Health Organizations</td>
</tr>
<tr>
<td>COURSE NUMBER</td>
<td>HM 770*</td>
</tr>
<tr>
<td>COURSE CREDIT</td>
<td>FULL COURSE ( )</td>
</tr>
<tr>
<td></td>
<td>HALF COURSE ( x )</td>
</tr>
<tr>
<td></td>
<td>QUARTER (MODULE) ( )</td>
</tr>
<tr>
<td>INSTRUCTOR(S)</td>
<td>Connie Mitchell or Joyce Tryssenaar, Ph.D.</td>
</tr>
<tr>
<td>PREREQUISITE(S)</td>
<td>Prereq: HM 700*, HM 705*, HM 706*, HM 707*</td>
</tr>
<tr>
<td></td>
<td>Antireq: RS 770*</td>
</tr>
</tbody>
</table>

NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)

<table>
<thead>
<tr>
<th>NEW COURSE</th>
<th>DATE TO BE OFFERED:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL?</td>
</tr>
<tr>
<td></td>
<td>IF YES, PROVIDE THE DATE:</td>
</tr>
</tbody>
</table>

**WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT? NO**  **IF YES, ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).**  **NOTE: CROSS-LISTING OF COURSES REQUIRES APPROVAL FROM EACH DEPARTMENT AND FACULTY CONCERNED.**

<table>
<thead>
<tr>
<th>CHANGE IN COURSE TITLE</th>
<th>PROVIDE THE CURRENT COURSE TITLE:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHANGE IN COURSE DESCRIPTION</th>
<th>600-LEVEL COURSE (Undergraduate course for graduate credit)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Please see #4 on page 2 of this form</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHANGE TO FULL COURSE</th>
<th>CHANGE TO HALF COURSE</th>
<th>CHANGE TO QUARTER COURSE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COURSE CANCELLATION</th>
<th>PROVIDE THE REASON FOR COURSE CANCELLATION:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OTHER</th>
<th>EXPLAIN:</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td>Change course number from HM770 to HM 708</td>
</tr>
</tbody>
</table>

**BRIEF DESCRIPTION FOR CALENDAR** - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.

This course explores principles, practices, trends and issues of leadership in health organizations. Current theories of leadership with attention to styles, practices, tasks and models will be covered. Participants will be encouraged to reflect on and analyze their own leadership experiences in light of theories studied. Through the interplay of theory and practical application, participants will gain a deeper appreciation for the requirements, responsibilities, and consequences of effective leadership. The course encourages professional and personal development through action learning that is relevant and transferable to organizations.

**CONTENT/RATIONALE** - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.

This course is designed for health professionals who want to acquire the knowledge and skills to develop as leaders in their current and future practice. The course emphasizes the development of knowledge regarding theories of leadership and the application of learning at the level of self, profession, and organizations. The tasks and strategies related to effective leadership are also explored. The course will include 4 thematic modules:

- Module 1 (Week 1-3) What is leadership? Major theories, leadership styles
- Module 2 (Week 4-6) – Leadership in health organizations; principles, practices, trends and issues.
- Module 3 (Week 7-9) Leadership tasks and strategies

Upon completion of the course, learners will be able to:

1. Understand their own leadership style
2. Apply theoretical concepts to leadership issues related to self, profession, and organizations.
3. Synthesize conceptual differences and use problem-solving teams to further understand the dynamics of leadership
4. Create a leadership plan relevant to their current practice

Course materials will consist of journal articles, custom courseware and internet resources.
1. **STATEMENT OF PURPOSE** (How does the course fit into the department's program?)

   This course is one of the core courses in the Master in Health Management Program. The program is offered through a collaboration between the School of Rehabilitation Science and the DeGroote School of Business at McMaster University. This course is also available, as an elective course, to graduate students enrolled in the Masters or Doctoral programs at McMaster.

2. **EXPECTED ENROLMENT:**

   15 students

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):**

   This course is composed of 13 sessions which are spread out over a 13-week term. Each of the first 11 sessions includes objectives, reading assignments, and study questions and learning activities. The final two sessions will be devoted to student projects when the students will read and respond to each other’s projects. In place of traditional lectures and class discussions, we will use posted messages as a means of group communication. Sessions will be active for 7 days. Each week, students will be required to respond to the discussion questions. All students are required to participate in each discussion.

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)

   Evaluation will be based on:
   - Participation in weekly sessions - 20%
   - Assignment 1 - [Self] Self-Assessment of Leadership Paper - 10%
   - Assignment 2 - [Other] Interview a leader in the field of health management. Analyse the interview using a theoretical approach. -20%
   - Assignment 3 - [Organization] Develop a detailed, theoretically based leadership plan/approach to a current situation in an organization, profession, or health care. -40%
   - Assignment 4 - Facilitate discussion on your leadership plan. - 10%

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT?**

   If yes, please attach to this form any relevant correspondence with the other department(s).

   A similar course is offered in the RS program. The two courses are taken by students in different programs. This course focuses directly on leadership in health management.

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

   N/A

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Joy MacDermid  
Email: macderj@mcmaster.ca  
Extension: 22524  
Date: January 25, 2011

---

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
SCHOOL OF GRADUATE STUDIES
RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING COURSES

PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:
1. This form must be completed for ALL course changes. All sections of this form must be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

DEPARTMENT/PROGRAM
Clinical Epidemiology & Biostatistics / Health Research Methodology

COURSE TITLE
Introduction to Biostatistics (Online)

COURSE NUMBER
HRM 774

COURSE CREDIT
FULL COURSE ( ) HALF COURSE (X) QUARTER (MODULE) ( )

INSTRUCTOR(S)
Steve Hanna

PREREQUISITE(S)
Not required for HRM students; otherwise, permission of the instructor.

NATURE OF RECOMMENDATION
(PLEASE CHECK APPROPRIATE BOX)

NEW COURSE
X

DATE TO BE OFFERED:
September 2011

WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL?
If YES, PROVIDE THE DATE:

WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT? NO
IF YES, ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S). NOTE: CROSS-LISTING OF COURSES REQUIRES APPROVAL FROM EACH DEPARTMENT AND FACULTY CONCERNED.

CHANGE IN COURSE TITLE

PROVIDE THE CURRENT COURSE TITLE:

CHANGE IN COURSE DESCRIPTION
600-LEVEL COURSE (Undergraduate course for graduate credit)
Please see #4 on page 2 of this form

CHANGE TO FULL COURSE
CHANGE TO HALF COURSE
CHANGE TO QUARTER COURSE

COURSE CANCELLATION

PROVIDE THE REASON FOR COURSE CANCELLATION:

OTHER
X

EXPLAIN:
HRM 774 will be an online equivalent of HRM 702 (and thus, listed as an anti-requisite).

BRIEF DESCRIPTION FOR CALENDAR - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.
This fully-online course utilizes problems, published presentations, discussion boards, quizzes and tutorials to explore basic statistical concepts and techniques as they apply to analysis and presentation of data encountered in biostatistical and epidemiology practice. The course covers: graphical presentation of data, elementary probability, descriptive statistics, probability distributions, and introduces hypothesis testing using parametric and non-parametric methods.

CONTENT/RATIONALE - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.
Students will acquire knowledge of basic statistical concepts and techniques as they apply to analysis and presentation of data encountered in biostatistical and epidemiology practice. The course covers: graphical presentation of data, elementary probability, descriptive statistics, probability distributions, and introduces hypothesis testing using parametric and non-parametric methods.

Upon completing the course successful students will be able to:
1. Determine the most appropriate statistical approach for common problems in health research.
2. Explain the basic principles underlying each approach.
3. Interpret the results of statistical tests commonly used in health research.

Course texts: Biostatistics: The Bare Essentials by Norman and Streiner, or Fundamentals of Biostatistics by Rosner. Additional “online” resources will recommended throughout the course.
1. **STATEMENT OF PURPOSE** (How does the course fit into the department’s program?)

HRM students are required to take a basic biostatistics course.

2. **EXPECTED ENROLMENT:**

20 students

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL** (i.e., lectures, seminars):

This course will use a modified problem-based approach whereby students will be expected to attempt problems on topics prior to viewing the lecture material. The course will be separated into six (6) 2-week modules. Each module will have a number of short presentations, with slides, audio and opportunities for students to interact with the content material (i.e. quiz questions with immediate feedback). For each module, the students will be able to attempt the given problem and then view the lecture material (at their leisure). Each module will close with an internet-based test of the material covered. Students will have the opportunity to interact with colleagues and tutors via an internet-based tutorial prior to each test.

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)

   - The tutors’ assessment of the student’s performance and participation in course activities (i.e. discussion boards) (10%)
   - Three tests (20% for each, 60% total)
   - A problem-based exercise at the end of term. This will be submitted as a written protocol. We encourage students to analyze their own data sets, rather than use one provided. If a student decides to use his/her own data, this must be approved by the tutor before proceeding. If the student has no suitable data sets available, a final problem exercise will be provided by the course coordinator (30%)

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).**

No

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

N/A

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Steve Hanna    Email: hannas@mcmaster.ca    Extension: 27851

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
HRM Course Outline

Course Number & Title: HRM 774: Introduction to Biostatistics (ONLINE)
Course Co-ordinator: Steve Hanna
Additional Faculty/Support:

Course Description
This online course utilizes interactive online presentations, readings, discussion boards, tutorials, quizzes and assignments to introduce students to the basic statistical concepts and techniques as they apply to analysis and presentation of data encountered in biostatistical and epidemiology practice. The course covers: graphical presentation of data, elementary probability, descriptive statistics, probability distributions, and introduces hypothesis testing using parametric and non-parametric methods.

Course Objectives
Students will acquire knowledge of basic statistical concepts and techniques as they apply to analysis and presentation of data encountered in biostatistical and epidemiology practice.

Upon completing the course successful students will be able to:
1. Determine the most appropriate statistical approach for common problems in health research.
2. Explain the basic principles underlying each approach.
3. Interpret the results of statistical tests commonly used in health research.

Educational Methods/Course Format
This course will use a modified problem-based approach whereby students will be expected to attempt problems on topics prior to viewing the lecture material. The course will be separated into six (6) 2 week modules. Each module will have a number of short presentations, with slides, audio and opportunities for students to interact with the content material (i.e. quiz questions with immediate feedback). For each module, the students will be able to attempt the given problem and then view the lecture material (at their leisure). Each module will close with an internet-based test of the material covered. Students will have the opportunity to interact with colleagues and tutors via an internet-based tutorial prior to each test.

Course Text/Materials
Course texts: Biostatistics: The Bare Essentials by Norman and Streiner, or Fundamentals of Biostatistics by Rosner. Additional “online” resources will recommended throughout the course.

Prerequisites: Not required for HRM students; otherwise, permission of the instructor.

Module | Topic
--- | ---
Module 1 | Introduction to Statistics, Terminology, Describing Data
Module 2 | Working with Distributions and Probability
Module 3 | Comparing 2 or More Groups
Module 4 | Working with Categorical Variables (non-Parametric Statistics)
Module 5 | Relationship between Variables (Linear Regression)
Module 6 | Relationship between Variables (Multiple and Logistic Regression)

Evaluation of Student Performance
- The tutors’ assessment of the student's performance and participation in course activities (i.e. discussion boards) (10%)
- Three tests (20% for each, 60% total)
- A problem-based exercise at the end of term. This will be submitted as a written protocol. We encourage students to analyze their own data sets, rather than use one provided. If a student decides to use his/her own data, this must be approved by the tutor before proceeding. If the student has no suitable data sets available, a final problem exercise will be provided by the course coordinator (30%)
Course Syllabus
HRM *774
Introduction to Biostatistics (ONLINE)

1. Course Overview

1.1 Brief Description

This is an online introductory course in Biostatistics. Interactive learning modules, required readings, discussion boards, tutorials, and assignments will be used to highlight basic statistical concepts and techniques as they apply to analysis and presentation of data encountered in biostatistical and epidemiology practice. The course covers: graphical presentation of data, elementary probability, descriptive statistics, probability distributions, and introduces hypothesis testing using parametric and non-parametric methods.

1.2 Prerequisites

- Students must meet McMaster’s School of Graduate Studies admission criteria (see: http://www.mcmaster.ca/graduate/grad_calendar.pdf section 2.1.5, page 5)
- Non-HRM students require permission from the course instructor

2.0 General Course Objectives

A successful student will be able to:

1) Outline the basic principles of statistical analyses typically used in health research.

2) Identify when and how to use each test appropriately and be able to interpret the results.

3) Critically appraise research studies/protocol with respect to analysis plans and statistical results.

This course will be delivered in an online format. The course will comprise of six (6) 2-week modules. Each module will be structured in the following way:

1) An introductory problem to be attempted before viewing online presentations.

2) A series of 5-10 min recorded lectures each covering one of the major concepts in the module – these will be powerpoint-style presentations accompanied by an audio commentary by the instructor.

3) A tutorial session whereby students can discuss concepts with colleagues and an assigned tutor.

4) A test that will be completed at the end of the module cycle.
3.0 Student Evaluation

3.1 Final Grade Breakdown

1) Tests (1 for each module): $3 \times 20\% = 60\%$
   - Multiple choice, short answers
   - Will evaluate student’s knowledge of when to use the appropriate test,
     perform basic calculations, and interpret statistical test output. Tests will also
     evaluate student’s knowledge of statistical concepts and theory

2) Final Assignment: 30%
   - Students will demonstrate ability to conduct a statistical analysis on an existing
     dataset. This will include developing a research question, translating this
     question into a statistical hypothesis, conducting appropriate analyses, and
     interpreting result. Students are encouraged to analyze their own dataset (we
     will provide you with one if an appropriate dataset cannot be identified). Further
     details regarding the assignment are outlined below.

3) Participation: 10%
   - Based on student’s performance and participation in course activities (i.e. discussion
     boards, tutorials, etc.) Tutorials will take place midway through the second week of each
     module (6 in total).

3.2 Letter Grade Conversion

Grades in graduate courses at McMaster are reported as letter grades using the following breakdown:

- A+ = 90 to 100 consistently outstanding
- A  = 85 to 89 overall superior quality
- A- = 80 to 84 high achievement
- B+ = 77 to 79 competent, but not consistently high quality
- B  = 73 to 76 satisfactory quality
- B- = 70 to 72 only marginally acceptable
- F  = failure inadequate work

4.0 RESOURCES

4.1 One of these two is required

1) Norman GR, Streiner DL. Biostatistics: The Bare Essentials, (3rd edition)

A text covering most topics in the course, with a good sprinkling of humour (though, be warned, not
everyone appreciates the jokes). It also comes with a trial version of SPSS for a little extra cost.

More traditional, but comprehensive and detailed

**Note that almost any introductory textbook covers most of the material in the course. However, readings for each module will be suggested from one of these two books (above).**

### 4.2 Reference/Resource Books

There are so many texts out there. Here we just mention a few we know about. Also, as you will see later, there are some web-based on-line texts, which are free!

Some of the books with recent editions have diskettes with more than just datasets.


2. *Gonick, Larry and Smith W. The Cartoon Guide to Statistics. Harper Collins, 1994.* Fun way to get at the basic concepts, but will not take you all the way through the course.


   A basic text, which covers: chi-square, regression, nonparametric tests, sequential designs for paired observations with rapid outcomes, and life tables. An oldie, but a goody.

   A comprehensive basic stats text, covering additional topics & experimental design, epidemiology, as well as biostatistics.

### 4.3 Additional On-Line Resources

Again, there are many resources out there. A good place to start is:

[http://statpages.org/index.html](http://statpages.org/index.html)
which has links to free software for doing statistics calculations, to free ‘textbooks’, and more.

I have had good feedback from students on “The Little Handbook of Statistical Practice”, an on-line text that I recommend:

http://www.tufts.edu/~gdallal/LHSP.HTM

Other sites you might check out are:

http://members.aol.com/johnp71/javastat.html

http://www.ruf.rice.edu/~lane/stat_sim/index.html

5.0 The Curriculum

Below you will find the topics to be covered in each module.

Module 1 – Introduction to Statistics, Terminology, Describing Data

Objectives: Upon successful completion of this module, the student will be able to identify the qualities of different kinds of variables, and recognize which class of methods is appropriate for each kind of variable/data. The student will acquire techniques to graphically display data and be able to use these techniques to identify anomalies in a dataset.

Topics to be covered:
1) Different types of variables (nominal, ordinal, ratio, interval, continuous vs. discrete)
2) Various data displaying techniques including scatterplots, boxplots, histograms
3) Measures of central tendency and measures of dispersion

Resources: Norman GR, Streiner DL. Biostatistics: The Bare Essentials. Chapters 1, 2, 3 & 29

Module 2 – Working with Distributions and Probability

Objectives: Upon successful completion of this module, the student will be able to calculate measures of central tendency (mean, median, mode) and measures of dispersion (Interquartile range, standard deviation, variance) from a given dataset. The student will be able to calculate simple probabilities. The student will be able to translate questions into statistical hypotheses. The student will be able to interpret the meaning of the p-value and how to interpret its meaning. The student will be able to explain the relationship between sample statistics and population parameters and will be able to conduct a test for one-sample comparisons.

Topics to be covered:
1) Normal Distribution
2) Z-score – one sample comparisons
3) Distribution of means – Central Limit Theorem/Standard Error of Means
4) Hypothesis Testing – Null and alternative hypotheses
5) p-values and Confidence Intervals
6) Type I and Type II errors
7) Fundamentals of probability theory
8) Binomial Distribution

Resources: Bare Essentials: Chapters 4, 5 & 6 (and 27)
Rosner: Chapter 3 – sections 1 to 6; Chapter 4 – Sections 1 to 8; Chapter 5 – sections 1 to 5. Chapter 6; Chapter 7 – sections 1 to 5, 7.

Module 3 – Comparing 2 or More Groups (Parametric Statistics)

Objectives: Upon successful completion of this module, the student will be able to compare 2 or more group means. The student will understand when it is appropriate to use a paired vs. an unpaired t-test. The student will also be able to compare more than 2 group means, and will be able to perform and interpret the results of Analysis of Variance (ANOVA) tests.

Topics to be covered:
   1) Paired and unpaired t-test
   2) Analysis of Variance – 2 or more means
   3) Repeated measures – related means

Resources: Bare Essentials: Chapter 7, 8 & 10
Rosner: Chapter 8 – sections 8.1 to 8.7. Chapter 12 – sections 12.1 to 12.4.

Module 4 – Working with Categorical Variables (non-Parametric Statistics)

Objectives: Upon successful completion of this module, the student will be able to compare 2 groups with respect to categorical variables (e.g. frequency data). The student will be able to calculate and interpret an odds ratio. The student will be able to explain the following concepts: Association, Covariation, and Interaction.

Topics to be covered:
   1) Contingency tables – 2x2, (n)Row x (n)Column
   2) Odds Ratio
   3) Chi-square
   4) Goodness of fit
   5) Fisher’s exact method
   6) Co-variation and Interaction

Resources: Bare Essentials: Chapter 21
You could also go back to the section on the binomial distribution in Chapter 5, and then look at http://www.tufts.edu/%7Egdallal/p.htm
Rosner: Chapter 10 – sections 10.1, 10.2 from p.390 on, 10.3. For extra problem, section 10.7. Chapter 13 – sections 13.2, 13.3, 13.4 up to p.648; 13.5 up to p.661
Module 5 – Relationship between Variables (Linear Regression)

Objectives: Upon successful completion of this module, the student will be able to model linear relationships between 2 variables when the dependent variable is continuous (interval). The student will be able to identify what is required for a model to be considered "good" (i.e. understand regression analysis assumptions). The student will be able to explain what is meant by correlation and explained variance and will be able to interpret results of simple linear regression analyses.

Topics to be covered:
   1) Correlation
   2) Explained variance
   3) Linear Regression – Single independent variable
   4) Assumptions in Regression

Resources:   Bare Essentials: Chapter 13
             Rosner: Chapter 11 – sections 11.1 to 11.7, 11.8 up to p.503

Module 6 – Relationship between Variables (Multiple and Logistic Regression)

Objectives: Upon successful completion of this module, the student be able to model relationships between a binary or continuous (interval) dependent variable and 1 or more independent variables. The student will be able to build (conceptually) such models and interpret the results/computer output related to regression analyses.

Topics to be covered:
   1) Linear Regression – 2 or more independent variables
   2) Logistic Regression – binary dependent variable

Resources:   Bare Essentials: Chapter 14 & 15
             Rosner: Chapter 11, sections 9 to 10. Chapter 13 – section 13.7

             Also, for dealing with categorical independent variables ('dummy variables') see:
             http://www2.chass.ncsu.edu/garson/pa765/regress.htm

6.0 HRM Program/University Policies

   6.1 Policy on Late Assignments and Missed Tests
In extreme situations final papers will be accepted up to 7 days after the posted due date. However, ten percent will be deducted from all late papers.

Exceptions to this policy are at the discretion of the online instructor. It is however, important that you contact the instructor as soon as possible in the case of an emergency and well before a deadline in the case of previous commitments or restrictions.
6.2 Academic Integrity Policy

Please click on the link http://www.mcmaster.ca/academicintegrity/ for information regarding:

- The McMaster University Academic Integrity Policy
- Information for Students (i.e. videos, quizzes, plagiarism, inappropriate collaboration, etc.)
- Information for Faculty (i.e. plagiarism, inappropriate collaboration, forms and procedures, etc.)

Any violations (as defined by the Academic Integrity Policy) will not be tolerated.

6.3 Students with Disabilities:

If you have a disability that may affect your ability to participate or complete the requirements of this course you may wish to contact the instructor to discuss appropriate accommodations. Or, you can contact, McMaster University’s Centre for Student Development (http://csd.mcmaster.ca/sswd/). Among other things, CSD provides counseling and support services.

7.0 Communication Expectations & Netiquette

Netiquette: social conventions to facilitate communication in a polite and respectful manner in electronic networks (from ‘net etiquette’). For more information see: http://en.wikipedia.org/wiki/Netiquette

What you can expect from us:

- We will respect you and take your questions and concerns seriously
- We will respond to your requests for assistance in a timely fashion
  - For important personal matters please email individuals directly (using the contact information above) and we will respond within 24 hours during the week or 48 hours over the weekend.
- Student-student interaction and the building of a learning community are important to the success of the course. Consequently, we will not respond to every post in a discussion board. We will be monitoring the discussion forums at least every 72 hours and will intervene when problems arise. If an issue that arises in the discussion forum needs immediate attention by the instructor please follow-up with a personal email.
- You will receive feedback on your final paper within 2 weeks of submission. If this is not possible, we will let you know within this time when you can expect your final evaluation and feedback.

What we expect from everyone:

In summary, we expect everyone to communicate in a pleasant and efficient manner that respects all involved.
General Netiquette Guidelines:

- Do not personally attack someone. Ensure that your messages, when appropriate, disagree with the idea and not the person.
- Remember that written communication, especially between relative ‘strangers’, can easily be misconstrued. If you are worried that your post might come across as impolite or inappropriate – rewrite it!
- Some people find that emoticons (such as smiley faces or winks) or acronyms (such as, LOL or IMHO) help to express the emotional context of your text and help avoid misunderstandings. Feel free to use them! Although we suggest you elaborate on any less commonly used acronyms for the less web-savvy (and to avoid further misunderstandings).

Course Communication Style:

- Online course discussions should be timely, concise, and relevant to the discussion topic. To facilitate discussion board navigation please try to use descriptive subject lines and start new topics under a new discussion thread.
- Be an active listener. That is, read and digest what has already been posted and ask for clarification when you are unsure of another’s point of view.
- Think critically. Attempt to see things from other perspectives. Relate information to your previous experiences and training. For the benefit of others, please try to refer to appropriate supporting information/references whenever possible.
- Be creative. Use this course as an opportunity to brainstorm ideas. Consider and support others in the development of their ideas.

**FINAL ASSIGNMENT**

Purpose

To demonstrate that you can take a dataset, translate the practical questions into statistical hypotheses, conduct the appropriate analyses and interpret the results.

Preparation

We encourage you to analyze your own (or a colleague’s) dataset. (If you cannot identify one, we will provide one).

Several weeks before the end of term, give your tutor a brief (1/2 to 1 page) outline of your proposal. A copy should also go to the course instructor. It should describe the health problem, and list the questions you intend to answer and the statistical techniques you intend to use. Include a sheet listing the variables in the dataset, and the number of subjects for analysis. Your tutor will confirm if the proposal meets the requirements of the course.
Final Report

You will be required to produce a report of your analysis and findings. The report should be no more than 10 pages in length. Pages should be double-spaced with 2 cm margins and 12-point font. The maximum length does not include references or tables/figures. The reports will be graded on both the appropriateness and execution of the statistical test(s) used and the difficulty of the problem at hand. That is, as in diving competitions, the grading will take account of the ‘degree of difficulty’.

NOTE: This is a statistical assignment; the background should be kept very short. Concentrate on showing you understand the material covered in the course (statistical concepts and techniques).

If you are really having trouble finding a suitable dataset, here are some Internet sites to check out:

http://www.lib.uwaterloo.ca/discipline/health_kin/healthstats.html

http://www.statcan.gc.ca/start-debut-eng.html

http://www.intute.ac.uk/statistics/

http://www.census.gov/

http://www.data.gov/
SCHOOL OF GRADUATE STUDIES

RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING COURSES

PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:
1. This form must be completed for ALL course changes. All sections of this form must be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

<table>
<thead>
<tr>
<th>DEPARTMENT/PROGRAM</th>
<th>Clinical Epidemiology &amp; Biostatistics / Health Research Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE TITLE</td>
<td>Ethical Issues in Research Involving Human Subjects</td>
</tr>
<tr>
<td>COURSE NUMBER</td>
<td>742</td>
</tr>
<tr>
<td>COURSE CREDIT</td>
<td>FULL COURSE ( ) HALF COURSE ( X ) QUARTER (MODULE) ( )</td>
</tr>
<tr>
<td>INSTRUCTOR(S)</td>
<td>Lisa Schwartz</td>
</tr>
<tr>
<td>PREREQUISITE(S)</td>
<td>HRM 721</td>
</tr>
</tbody>
</table>

NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)

NEW COURSE
<table>
<thead>
<tr>
<th>DATE TO BE OFFERED:</th>
<th>WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IF YES, PROVIDE THE DATE:</td>
</tr>
</tbody>
</table>

WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT?  
IF YES, ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S). NOTE: CROSS-LISTING OF COURSES REQUIRES APPROVAL FROM EACH DEPARTMENT AND FACULTY CONCERNED.

CHANGE IN COURSE TITLE  
| PROVIDE THE CURRENT COURSE TITLE: | Research Ethics |

CHANGE IN COURSE DESCRIPTION  
600-LEVEL COURSE (Undergraduate course for graduate credit) 
Please see #4 on page 2 of this form

CHANGE TO FULL COURSE

CHANGE TO HALF COURSE

CHANGE TO QUARTER COURSE

COURSE CANCELLATION
| PROVIDE THE REASON FOR COURSE CANCELLATION: |

OTHER
| EXPLAIN: |

BRIEF DESCRIPTION FOR CALENDAR - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.
This course is designed to prepare students to think creatively and proactively about ethical and legal issues in the design, conduct, analysis, and dissemination of research. Topics are divided into two categories: 1. ethical treatment of research participants and 2. research integrity. Sessions will involve case discussion and critical analysis of ethical issues and the relevant principles, guidelines and laws. Exercises will coach students through mock-submission to a Research Ethics Board and provide insight of how REBs function.

CONTENT/RATIONALE - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.
An understanding of ethics is essential to the design and conduct of research. Attention to ethics in research has grown over the past 60 years as a result of a number of prominent cases of misadventure. International and national standards have been developed to provide guidance to investigators in the design, conduct, and dissemination of research of high integrity and the safe and dignified treatment of research participants. This course is designed to prepare students to think critically and proactively about ethical and legal issues in their future research endeavours. Sessions will involve case discussion and critical analysis of ethical issues and the relevant principles, guidelines, and laws. Topics are divided into two categories, 1-ethical treatment of research participants and 2- research integrity. Practical elements of the course include exercises that will coach students through a mock-submission to a Research Ethics Board and provide insight of how REBs function. The focal text is: Ethical and Regulatory Aspects of Clinical Research. E.J. Emanuel, R.A. Crouch, J.D. Arras, J.D. Moreno, C. Grady (editors) john Hopkins University Press 2003 (ISBN 0-8018-7813-6). The Tri-Council Policy Statement on Ethics in Human Research will be used as a secondary text.
1. **STATEMENT OF PURPOSE** (How does the course fit into the department’s program?)

To date, ethical issues in the conduct of research have not been addressed in a systematic fashion in the HRM program. This course will provide students with ethical principles and a conceptual framework that will allow students to apply these concepts across any of the Health Research Methods courses they take.

2. **EXPECTED ENROLMENT:**

12-14 students.

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL** (i.e., lectures, seminars):

Small group sessions will be led by course designers or invited speakers with a special expertise in a relevant field. Each session will involve case discussion and critical analysis of relevant theory, law or policy.

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)

Students will be evaluated on the basis of:
- preparation and participation 10%
- essay 55%
- presentation 20%
- mock REB application 15%

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT?**

IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).

N/A

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

N/A

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Lisa Schwartz  Email: schwar@mcmaster.ca  Extension: 22987

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
<table>
<thead>
<tr>
<th>DEPARTMENT/PROGRAM</th>
<th>Clinical Epidemiology &amp; Biostatistics / Health Research Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE TITLE</td>
<td>Fundamentals of Health Research and Evaluation Methods</td>
</tr>
<tr>
<td>COURSE NUMBER</td>
<td>HRM 721</td>
</tr>
<tr>
<td>COURSE CREDIT</td>
<td>HALF COURSE</td>
</tr>
<tr>
<td>INSTRUCTOR(S)</td>
<td>Mitchell Levine and Alice Lytwyn</td>
</tr>
<tr>
<td>PREREQUISITE(S)</td>
<td>Enrolment in HRM, eHealth or PhD in Health Policy programs or Permission of Instructor</td>
</tr>
</tbody>
</table>

**NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)**

<table>
<thead>
<tr>
<th>NEW COURSE</th>
<th>DATE TO BE OFFERED:</th>
<th>WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>IF YES, PROVIDE THE DATE:</td>
</tr>
</tbody>
</table>

**WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT?**

No

If Yes, attach to this form any relevant correspondence with the other department(s). Note: Cross-listing of courses requires approval from each department and faculty concerned.

**CHANGE IN COURSE TITLE**

<table>
<thead>
<tr>
<th>PROVIDE THE CURRENT COURSE TITLE:</th>
</tr>
</thead>
</table>

**CHANGE IN COURSE DESCRIPTION**

X 600-LEVEL COURSE (Undergraduate course for graduate credit)

Please see #4 on page 2 of this form

**CHANGE TO FULL COURSE**

<table>
<thead>
<tr>
<th>CHANGE TO HALF COURSE</th>
<th>CHANGE TO QUARTER COURSE</th>
</tr>
</thead>
</table>

**COURSE CANCELLATION**

<table>
<thead>
<tr>
<th>PROVIDE THE REASON FOR COURSE CANCELLATION:</th>
</tr>
</thead>
</table>

**OTHER**

<table>
<thead>
<tr>
<th>EXPLAIN:</th>
</tr>
</thead>
</table>

**BRIEF DESCRIPTION FOR CALENDAR**

Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.

The course will cover the basic concepts in formulating a research question, literature review, study design, selection of study sample, outcome measurement, research ethics and knowledge translation. The course will provide students the opportunity to develop a research question and determine the appropriate research method for a research proposal. Research designs that will be discussed include randomized clinical trials, cohort and case-control designs and the evaluation of diagnostic test properties.

**CONTENT/RATIONALE**

Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.

The major components of research activities are covered, including concept of health, formulation of research questions, literature reviews, study designs, selection of study populations, choice of measuring instruments, assessing disease frequency, study interpretation issues such as determination of causality and the effectiveness of clinical and community interventions, and ethics, economics, health technology asessment, and knowledge translation.
1. **STATEMENT OF PURPOSE** (How does the course fit into the department’s program?)

   Course introduces students to a wide range of perspectives and research methodologies that are relevant to the study of health phenomena.

2. **EXPECTED ENROLMENT:**

   40 to 45 students each Summer and Fall

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL** (i.e., lectures, seminars):

   There are 12-13 sessions. Each session is comprised of a 1 hour large group session and 1.5 hour tutorial.

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** (For 600-level course, indicate the *Extra Work* to be required of graduate students, i.e., exams, essays, etc.)

   - Midterm Exams 4 x 15 marks each (multiple choice/short answer) 60%
   - Final paper & presentation 25%
   - Participation (tutorial & evaluation completion) 14%
   - Submission of question for final paper 1%

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT?**

   IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).

   N/A

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

   N/A

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

- **Name:** Mitchell Levine & Alice Lytwyn
- **Email:** levinem@mcmaster.ca
- **Extension:** SJH

---

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
# Recommendation for Change in Graduate Curriculum - For Change(s) Involving Courses

**PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:**

1. This form must be completed for **ALL** course changes. All sections of this form **must** be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

<table>
<thead>
<tr>
<th>DEPARTMENT/PROGRAM</th>
<th>Clinical Epidemiology &amp; Biostatistics/ Health Research Methodology graduate program</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE TITLE</td>
<td>Observational and Analytical Research Methods</td>
</tr>
<tr>
<td>COURSE NUMBER</td>
<td>751</td>
</tr>
<tr>
<td>INSTRUCTOR(S)</td>
<td>Andrew Mente, PhD</td>
</tr>
<tr>
<td>PREREQUISITE(S)</td>
<td>HRM 721 or permission of instructor required</td>
</tr>
</tbody>
</table>

**NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)**

<table>
<thead>
<tr>
<th>NEW COURSE</th>
<th>DATE TO BE OFFERED</th>
<th>WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>IF YES, PROVIDE THE DATE:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IF YES, ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S). NOTE: CROSS-LISTING OF COURSES REQUIRES APPROVAL FROM EACH DEPARTMENT AND FACULTY CONCERNED.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHANGE IN COURSE TITLE</th>
<th>PROVIDE THE CURRENT COURSE TITLE:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>CHANGE IN COURSE DESCRIPTION</th>
<th>PROVIDE THE REASON FOR COURSE CANCELLATION:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>BRIEF DESCRIPTION FOR CALENDAR</th>
<th>Provide a brief description (<strong>maximum 6 lines</strong>) to be included in the Graduate Calendar.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The course is designed to introduce students to the basic concepts and methods used in observational (non-experimental) studies to conduct needs assessments (e.g., prevalence of disease or order), to understand the determinants of health (e.g., association between independent/exposure variables and dependent/outcome variables in analytic research) and to emphasize concepts that are essential to the conduct of epidemiologic studies including internal and external validity, random variability, bias, effect modification, causality, and generalisability. The topics will focus on three broad areas: i) the formulation of research questions and use of theory to explicate the relationships among key variables; ii) study design options, sampling, measurement and analysis, and iii) the control of error.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CONTENT/RATIONALE</th>
<th>Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The course is designed to introduce students to the basic concepts and methods used in observational (non-experimental) studies to conduct needs assessments (e.g., prevalence of disease or order), to understand the determinants of health (e.g., association between independent/exposure variables and dependent/outcome variables in analytic research) and to emphasize concepts that are essential to the conduct of epidemiologic studies including internal and external validity, random variability, bias, effect modification, causality, and generalisibility. The topics will focus on three broad areas: i) the formulation of research questions and use of theory to explicate the relationships among the core variables of interest; ii) the basic elements and options for research studies: sampling, measurement and analysis, and iii) the identification and control of error.</td>
</tr>
</tbody>
</table>
1. STATEMENT OF PURPOSE (How does the course fit into the department’s program?)

This is a key methods course in the HRM program. It is useful for students who wish to tackle causal questions that cannot be addressed by RCTs and other types of questions that do not involve an assessment of causality.

2. EXPECTED ENROLMENT:

~ 30-40

3. DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):

There will be 10 lectures which present core concepts and issues to all students. The lectures will be about one hour each, at fixed times throughout the course in a central location. Some time will be set aside for large-group questions/discussions. There will be small group tutorials to explore/expand the material presented during the lectures. Each tutorial will include a list of required readings and 1-4 assignments. Occasionally students in each tutorial group will be asked to form into subgroups of 2-3 students each and take responsibility for completing an assignment and presenting the results to the entire class.

4. DESCRIBE IN DETAIL THE METHOD OF EVALUATION: (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)

The evaluation of students (grades) will be divided into 4 components: 1) A written research protocol in form of a written grant application, the protocol will address a research question of interest to the student and include: a problem statement/formulation; brief review of relevant literature including a theoretical framework and/or presumed mechanisms of effect; a description of the design, including sampling, measurement, data collection and analysis; discussion of threats to validity, strategies to control error, risks to subjects and ethics. This protocol will be from 15-20 pages, double spaced, excluding references, figures, tables, appendices and will constitute 60% of the grade. 2) Average tutor impression of in-class comprehension and contribution will constitute 20% of the grade. 3) A one page single spaced critical review of another student's protocol presentation will constitute 10% of the grade. 4) A one hour in-class multiple choice and short response test will constitute 10% of the grade.

5. TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).

No

6. IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?

No

PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Andrew Mente   Email: andrew.mente@phri.ca   Extension: 40443

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:

1. This form must be completed for ALL course changes. All sections of this form must be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

DEPARTMENT/PROGRAM
Department of Clinical Epidemiology and Biostatistics

COURSE TITLE
Survival Analysis in Health Research

COURSE NUMBER
759

INSTRUCTOR(S)
Noori Akhtar-Danesh

PREREQUISITE(S)
HRM-723 or HRM-731 or by permission of instructor. N.B. HRM 721 is recommended

NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)

NEW COURSE
DATE TO BE OFFERED:

WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL?
IF YES, PROVIDE THE DATE:

WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT? NO
IF YES, ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S). NOTE: CROSS-LISTING OF COURSES REQUIRES APPROVAL FROM EACH DEPARTMENT AND FACULTY CONCERNED.

CHANGE IN COURSE TITLE
PROVIDE THE CURRENT COURSE TITLE:

CHANGE IN COURSE DESCRIPTION
X
600-LEVEL COURSE (Undergraduate course for graduate credit)
Please see #4 on page 2 of this form

CHANGE TO FULL COURSE
CHANGE TO HALF COURSE
CHANGE TO QUARTER COURSE

COURSE CANCELLATION
PROVIDE THE REASON FOR COURSE CANCELLATION:

OTHER
EXPLAIN:

BRIEF DESCRIPTION FOR CALENDAR - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.

This course will cover the main statistical issues in survival analysis. Specific topics of the course are Kaplan-Meier curves, log-rank test, Cox Proportional Hazard Model, Stratified and Extended Cox Model, Parametric Survival Models, Recurrent Events, Competing Risks, Relative Survival Analysis, and Model Evaluation. Depending on time and the students’ progress and interests, new advancements in survival analysis will be discussed.

CONTENT/RATIONALE - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.

Survival analysis involves the modelling of time to event data, in this context, death or failure is considered an "event" in the survival analysis literature. This course is mainly aiming current and future graduate students of the HRM program.

This course will cover the main statistical issues in survival analysis. Specific topics of the course are Kaplan-Meier curves, log-rank test, Cox Proportional Hazard Model, Stratified and Extended Cox Model, Parametric Survival Models, Recurrent Events, Competing Risks, relative survival analysis, and Model Evaluation. Depending on time and the students’ progress and interests, new advancements in survival analysis will be discussed.

The main textbook for the course will be:

For further reading the following books are also suggested:
1. **STATEMENT OF PURPOSE** (How does the course fit into the department’s program?)

   The graduate students and faculty in the Department of CE&B are frequently encountered with datasets that need to be analyzed using survival techniques. This course covers most of the survival analysis techniques and seems to be a necessary course for the special disciplines such as biostatistics and epidemiology within the department.

2. **EXPECTED ENROLMENT:**

   12 Students

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL** (i.e., lectures, seminars):

   The course is designed to be taught in a lecture based format with a problem-based discussion component. Each week there will be a data analysis assignment for discussion to help students better understand and apply the concepts.

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)

   The course will be evaluated based on student's attendance and participation (15%), three hand-in assignments (15% each), a final project (20%), and the presentation of the final project (20%).

   For each week there will be an assignment; three of them will be handed-in by students and graded by the tutor. For each assignment a dataset will be given and students will be asked to use appropriate statistical techniques to analyze the dataset and interpret the results; the solution will be discussed in the tutorial group.

   The final assignment (the project) consists of two parts - a hand-in report, of at most 10 double-spaced pages, font size 12, (plus the final computer output), and a class presentation of 10-15 minutes.

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT?**

   **NO**

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

   The course is primarily intended for the graduate students of biostatistics and epidemiology in the Department of CE&B. However, we anticipate that graduate students from the other disciplines such as Statistics and Nursing will be interested.

   **PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

   Name: Noori Akhtar-Danesh   Email: daneshn@mcmaster.ca   Extension: 22297

---

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
### SCHOOL OF GRADUATE STUDIES

**RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING COURSES**

**PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:**

1. This form must be completed for **ALL** course changes. All sections of this form **must** be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espirtu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

<table>
<thead>
<tr>
<th>DEPARTMENT/PROGRAM</th>
<th>Health Research Methodology Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE TITLE</td>
<td>Fundamentals of Health Research and Evaluation Methods (Online)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COURSE NUMBER</th>
<th>771</th>
<th>COURSE CREDIT</th>
<th>FULL COURSE ( )</th>
<th>HALF COURSE ( )</th>
<th>QUARTER (MODULE) ( )</th>
</tr>
</thead>
</table>

| INSTRUCTOR(S) | Soo Chan Carusone |

| PREREQUISITE(S) | SGS minimum requirements and permission from instructor; antirequisite HRM 721 |

**NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)**

<table>
<thead>
<tr>
<th>NEW COURSE</th>
<th>DATE TO BE OFFERED:</th>
<th>WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>IF YES, PROVIDE THE DATE:</td>
</tr>
</tbody>
</table>

**WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT?** If Yes, Attach to this Form Any Relevant Correspondence with the Other Department(s). **NOTE:** Cross-listing of courses requires approval from each department and faculty concerned.

**CHANGE IN COURSE TITLE**

**PROVIDE THE CURRENT COURSE TITLE:**

**CHANGE IN COURSE DESCRIPTION**

<table>
<thead>
<tr>
<th>600-LEVEL COURSE (Undergraduate course for graduate credit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please see #4 on page 2 of this form</td>
</tr>
</tbody>
</table>

**CHANGE TO FULL COURSE**

<table>
<thead>
<tr>
<th>CHANGE TO HALF COURSE</th>
<th>CHANGE TO QUARTER COURSE</th>
</tr>
</thead>
</table>

**COURSE CANCELLATION**

<table>
<thead>
<tr>
<th>PROVIDE THE REASON FOR COURSE CANCELLATION:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>OTHER</th>
<th>EXPLAIN: Change in instructor and content/rationale</th>
</tr>
</thead>
</table>

**BRIEF DESCRIPTION FOR CALENDAR** - Provide a brief description *(maximum 6 lines)* to be included in the Graduate Calendar.

The online course will cover the basic concepts in formulating a research question, literature review, study design, selection of study sample, outcome measurement, research ethics and knowledge translation. The course will provide students the opportunity to develop a research question and determine the appropriate research method for a research proposal. Research designs that will be discussed include randomized clinical trials, cohort and case-control designs and the evaluation of diagnostic test properties.

**CONTENT/RATIONALE** - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.

The online course will cover the basic concepts in formulating a research question, literature review, study design, selection of study sample, outcome measurement, research ethics and knowledge translation. The course will provide students the opportunity to develop a research question and determine the appropriate research method for a research proposal. Research designs that will be discussed include randomized clinical trials, cohort and case-control designs and the evaluation of diagnostic test properties.
1. **STATEMENT OF PURPOSE**  (How does the course fit into the department’s program?)

The online format of this introductory course allows students to further their studies even while working full-time or living at a distance from the University. This course is also a prerequisite for most upper-level graduate courses in the HRM program, it introduces students to a wide range of perspectives and research methodologies that are relevant to the study of health phenomena. This course is designed to help students to identify further learning objectives related to in-depth study of specific research methods.

2. **EXPECTED ENROLMENT:**

15-25 Students

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL** (i.e., lectures, seminars):

This online course consists of 12 units (a new unit is posted every week). Each unit consists of a video-captured lecture, required readings, an assignment, discussion and a tutorial session. Participation in the discussion boards is monitored and evaluated. Tutorials will be held at the end of the week via a web conferencing tool (Elluminate LIVE). Live participation in the tutorial sessions is optional although individuals who cannot attend are expected to review the archived session materials.

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)

   - 60% = quizzes (4 x 15%)
   - 20% = Final paper/research proposal
   - 10% = Participation in discussion forums
   - 10% = Discussion facilitation and summary document

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT?**

   If yes, please attach to this form any relevant correspondence with the other department(s).

   N/A

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

   **PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

   Name: Mitchell Levine   Email: levinem@mcmaster.ca   Extension:

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
**PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:**

1. This form must be completed for **ALL** course changes. All sections of this form **must** be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

**DEPARTMENT/PROGRAM**
Clinical Epidemiology & Biostatistics / Health Research Methodology

**COURSE TITLE**
Theory and Practice of Measurement

**COURSE NUMBER**
HRM 727

**INSTRUCTOR(S)**
Kelly Dore and John Cairney

**PREREQUISITE(S)**
HRM 702, or equivalent intro stats course, or permission of the instructor

**NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)**

- NEW COURSE
- CHANGE IN COURSE TITLE
- CHANGE IN COURSE DESCRIPTION
- COURSE CANCELLATION

**NEW COURSE**

<table>
<thead>
<tr>
<th>DATE TO BE OFFERED</th>
<th>WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IF YES, PROVIDE THE DATE:</td>
</tr>
</tbody>
</table>

**WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT?**

- If Yes, Attach to this Form Any Relevant Correspondence with the Other Department(s). Note: Cross-listing of courses requires approval from each department and faculty concerned.

**CHANGE IN COURSE TITLE**

<table>
<thead>
<tr>
<th>PROVIDE THE CURRENT COURSE TITLE:</th>
</tr>
</thead>
</table>

**CHANGE IN COURSE DESCRIPTION**

- **600-LEVEL COURSE** *(Undergraduate course for graduate credit)*

Please see #4 on page 2 of this form

**CHANGE TO FULL COURSE**

- CHANGE TO HALF COURSE
- CHANGE TO QUARTER COURSE

**COURSE CANCELLATION**

<table>
<thead>
<tr>
<th>PROVIDE THE REASON FOR COURSE CANCELLATION:</th>
</tr>
</thead>
</table>

**OTHER**

<table>
<thead>
<tr>
<th>EXPLAIN:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in method of evaluation.</td>
</tr>
</tbody>
</table>

**BRIEF DESCRIPTION FOR CALENDAR** - Provide a brief description *(maximum 6 lines)* to be included in the Graduate Calendar.

Principles of subjective assessment in topic areas ranging from educational evaluation to patient-based measurement of health attitudes or health status. Discussion includes: principles and methods of constructing rating scales and approaches to assessing the measurement properties of such scales. Special emphasis on assessment of reliability and validity – various forms of reliability (test-re-test, interobserver, split-halves), distinction between reliability and agreement, and indirect methods to assess validity of an instrument in the absence of a "gold standard". Advanced topics in generalizability theory will be introduced. Format is that of lecture, plus small group discussion.

**CONTENT/RATIONALE** - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.

Principles of subjective assessment in topic areas ranging from educational evaluation to patient-based measurement of health attitudes or health status. Discussion includes: principles and methods of constructing rating scales and approaches to assessing the measurement properties of such scales. Special emphasis on assessment of reliability and validity – various forms of reliability (test-re-test, interobserver, split-halves), distinction between reliability and agreement, and indirect methods to assess validity of an instrument in the absence of a "gold standard". Advanced topics in generalizability theory will be introduced. Format is lecture, plus small group discussion. Text: Streiner DL, Norman GR. Health Measurement Scales, 4th ed., OUP 2007
1. **STATEMENT OF PURPOSE** (How does the course fit into the department’s program?)

Measurement is an essential element of health research methodology. This is the only general course in measurement.

2. **EXPECTED ENROLMENT:**

20-25

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL** (i.e., lectures, seminars):

Lecture plus small group discussion.

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)

- 20% for class participation
- **Analysis Assignment 20%**
- 30% for final written project and presentation
- 30% for Quizzes

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT?**

If yes, please attach to this form any relevant correspondence with the other department(s).

N/A

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

Of potential interest to graduate students in Psychology or other HS programs (Nursing, physio etc.).

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Kelly Dore  
Email: dore@mcmaster.ca  
Extension: 22956

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
### PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:

1. **This form must be completed for ALL course changes.** All sections of this form must be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

### DEPARTMENT/PROGRAM
Clinical Epidemiology & Biostatistics / Health Research Methodology

### COURSE TITLE
Systematic Review Methods

### COURSE NUMBER
743

### COURSE CREDIT
<table>
<thead>
<tr>
<th>COURSE CREDIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>FULL COURSE</td>
</tr>
<tr>
<td>( )</td>
</tr>
</tbody>
</table>

### INSTRUCTOR(S)
Gordon Guyatt, Deborah Cook

### PREREQUISITE(S)
Permission of instructor (HRM 721, HRM 702 and one-page outline of the topic).

### NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)

**NEW COURSE**

<table>
<thead>
<tr>
<th>DATE TO BE OFFERED:</th>
<th>WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IF YES, PROVIDE THE DATE:</td>
</tr>
</tbody>
</table>

**WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT?**

If Yes, attach to this form any relevant correspondence with the other department(s).

**Note:** Cross-listing of courses requires approval from each department and faculty concerned.

### CHANGE IN COURSE TITLE

**Provide the current course title:**

### CHANGE IN COURSE DESCRIPTION

**600-LEVEL COURSE** *(Undergraduate course for graduate credit)*

Please see #4 on page 2 of this form

### CHANGE TO FULL COURSE

<table>
<thead>
<tr>
<th>CHANGE TO FULL COURSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHANGE TO HALF COURSE</td>
</tr>
<tr>
<td>CHANGE TO QUARTER COURSE</td>
</tr>
</tbody>
</table>

### COURSE CANCELLATION

**Provide the reason for course cancellation:**

### OTHER

x

**Explain:** Change in 'Method of Evaluation'

### BRIEF DESCRIPTION FOR CALENDAR

- **Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.**

This course about research synthesis focuses on comparisons between alternative interventions. Rigorous review methods will be highlighted, such as searching for potentially relevant articles, selecting primary articles using explicit, reproducible criteria, appraisal of study architecture, quantitative data synthesis and interpretation. Old and new concepts and controversies in review methods will be highlighted. The work of the Cochrane Collaboration and in particular the Cochrane Handbook, forms the underpinning of much of the material.

### CONTENT/RATIONALE

- **Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.**

This course about research synthesis focuses on comparisons between alternative interventions. Rigorous review methods will be highlighted, such as searching for potentially relevant articles, selecting primary articles using explicit, reproducible criteria, appraisal of study architecture, quantitative data synthesis and interpretation. Old and new concepts and controversies in review methods will be highlighted. The work of the Cochrane Collaboration and in particular the Cochrane handbook, forms the underpinning of much of the material.
1. **STATEMENT OF PURPOSE** (How does the course fit into the department’s program?)

Systematic reviews synthesize the results of multiple primary investigations using strategies that limit bias and random error; these strategies include a comprehensive search of all potentially relevant articles, and their selection using explicit, reproducible criteria. Primary research designs and study characteristics are appraised, data are synthesized, and the results are interpreted. Systematic reviews of previous research from the backbone of grant proposals and help to highlight what is known and yet to be discovered or clarified. Systematic reviews can help practitioners keep abreast of the medical literature by summarizing large bodies of evidence, and by helping to explain differences among several studies. Used increasingly to set clinical policy, systematic reviews may facilitate the link between best research evidence and optimal health care at the population level. Thus, this course will be of potential use and interest to many HRM students in several ways.

2. **EXPECTED ENRROLMENT:**

20-25 Students

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL** (i.e., lectures, seminars):

Weekly lectures, followed by small group tutorials

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)

Two assignments, each worth 15%, and one final paper worth 70%. The assignments will involve the development and presentation of student research questions, and the methods they will apply to answer the question. Assignments will allow the students to obtain instructor feedback prior to submission of their final paper (a completed systematic review and, when applicable, a meta-analysis).

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).**

N/A

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

N/A

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Gordon Guyatt  
Email: guyatt@mcmaster.ca  
Extension: 22160

---

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
# Recommendation for Change in Graduate Curriculum - For Change(s) Involving Courses

**PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:**

1. This form must be completed for ALL course changes. All sections of this form must be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: esperitu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

<table>
<thead>
<tr>
<th>DEPARTMENT/PROGRAM</th>
<th>Health Research Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE TITLE</td>
<td>Systematic Review Methods (Online)</td>
</tr>
<tr>
<td>COURSE NUMBER</td>
<td>*773</td>
</tr>
<tr>
<td>COURSE CREDIT</td>
<td>FULL COURSE ( )</td>
</tr>
<tr>
<td>INSTRUCTOR(S)</td>
<td>Soo Chan Carusone</td>
</tr>
<tr>
<td>PREREQUISITE(S)</td>
<td>Permission of instructor (HRM 721, HRM 702 and one-page outline of the topic).</td>
</tr>
</tbody>
</table>

**NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)**

- NEW COURSE
- DATE TO BE OFFERED:
- WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL? If Yes, PROVIDE THE DATE:

**WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT?** No

**NOTE:** CROSS-LISTING OF COURSES REQUIRES APPROVAL FROM EACH DEPARTMENT AND FACULTY CONCERNED.

**CHANGE IN COURSE TITLE**

- PROVIDE THE CURRENT COURSE TITLE:

**CHANGE IN COURSE DESCRIPTION**

- 600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form

**CHANGE TO FULL COURSE**

- CHANGE TO HALF COURSE
- CHANGE TO QUARTER COURSE

**COURSE CANCELLATION**

- PROVIDE THE REASON FOR COURSE CANCELLATION:

**OTHER**

- X

**EXPLAIN:** Clarification of prerequisites.

**BRIEF DESCRIPTION FOR CALENDAR** - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.

This online course about research synthesis focuses on comparisons between alternative interventions. Interactive learning modules, required readings, discussion boards, tutorials, and assignments will be used to highlight rigorous review methods, such as searching for potentially relevant articles, selecting primary articles using explicit, reproducible criteria, appraisal of study architecture, quantitative data synthesis and interpretation. Students enrolling in the course must first identify a suitable research question and identify a partner for their review. The course is structured around the steps of executing a systematic review and students are expected to apply the knowledge they gain on an ongoing basis to complete their review by the end of the course.

**CONTENT/RATIONALE** - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.

This course about research synthesis focuses on comparisons between alternative interventions. Rigorous review methods will be highlighted, such as searching for potentially relevant articles, selecting primary articles using explicit, reproducible criteria, appraisal of study architecture, quantitative data synthesis and interpretation. The course is structured around the steps of executing a systematic review and students are expected to apply the knowledge they gain on an ongoing basis to complete their review by the end of the course.

This online course has the same readings and learning materials presented in the on-campus course HRM 743.

Session topics: Introduction; Review of Reviews; Protocol Formulation and Protocol Development; Identifying and Selecting Studies; Quality of Evidence Assessments; Data Collection Forms; Combining the Findings of Independent Studies; LAB – Measuring Disagreement/Quantitatively Combining Research Findings; Variation Between Study Findings; Summarizing and Interpreting Results

Required Materials: Custom courseware AND the following text:
1. **STATEMENT OF PURPOSE** (How does the course fit into the department’s program?)

Systematic reviews synthesize the results of multiple primary investigations using strategies that limit bias and random error; these strategies include a comprehensive search of all potentially relevant articles, and their selection using explicit, reproducible criteria. Primary research designs and study characteristics are appraised, data are synthesized, and the results are interpreted. Systematic reviews of previous research from the backbone of grant proposals and help to highlight what is known and yet to be discovered or clarified. Systematic reviews can help practitioners keep abreast of the medical literature by summarizing large bodies of evidence, and by helping to explain differences among several studies. Used increasingly to set clinical policy, systematic reviews may facilitate the link between best research evidence and optimal health care at the population level. Thus, this course will be of potential use and interest to many HRM students in several ways.

2. **EXPECTED ENROLMENT:**

15 Students

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL** (i.e., lectures, seminars):

This online course consists of 10 units (a new unit is posted every week). Each unit consists of an interactive learning module (with audio-narrated slides), required readings, an assignment, discussion and a tutorial session. Participation in the discussion boards is monitored and evaluated. Tutorials will be held at the end of the week via a web conferencing tool (Elluminate LIVE). Live participation in the tutorial sessions is optional although individuals who cannot attend are expected to review the archived session materials.

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)

50% = final paper  
30% = weekly assignments  
10% = Written review of a fellow student’s final paper  
5% = Participation/contribution to discussion forums  
5% = Facilitation and summary of discussion

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT?**  
   **IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).**  

N/A

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

N/A

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Soo Chan Carusone  
Email: chansy@mcmaster.ca  
Extension:

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
# Recommendation for Change in Graduate Curriculum - For Change(s) Involving Courses

**PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:**
1. This form must be completed for **ALL** course changes. All sections of this form must be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

## Department/Program
Health Research Methodology

## Course Title
Knowledge Exchange and Translation

## Course Number
725

## Course Credit
<table>
<thead>
<tr>
<th>Full Course</th>
<th>Half Course</th>
<th>Quarter (Module)</th>
</tr>
</thead>
<tbody>
<tr>
<td>( )</td>
<td>( X )</td>
<td>( )</td>
</tr>
</tbody>
</table>

## Instructor(s)
J. MacDermid

## Prerequisite(s)

## Nature of Recommendation (Please Check Appropriate Box)

### New Course
- Date to be Offered:
- Was the Proposed Course Offered on Dean’s Approval? If Yes, Provide the Date:

### Will the Course Be Cross-listed with Another Department?
If Yes, Attach to this Form Any Relevant Correspondence with the Other Department(s). **Note:** Cross-listing of courses requires approval from each department and faculty concerned.

### Change in Course Title
Provide the Current Course Title:

### Change in Course Description
600-Level Course *(Undergraduate course for graduate credit)* Please see #4 on page 2 of this form

### Change to Full Course
Change to Half Course
Change to Quarter Course

### Course Cancellation
- Provide the Reason for Course Cancellation:
  - See attached memo from Dr. J. MacDermid and Dr. S. Hanna

### Other
- Explain:
  - This course is cross-listed as Nursing *725 and Rehabilitation Science *725

### Brief Description for Calendar
- Provide a brief description *(maximum 6 lines)* to be included in the Graduate Calendar.

### Content/Rationale
- Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.
1. **STATEMENT OF PURPOSE** (How does the course fit into the department’s program?)

2. **EXPECTED ENROLMENT:**

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL** (i.e., lectures, seminars):

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** (For 600-level course, indicate the *Extra Work* to be required of graduate students, i.e., exams, essays, etc.)

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT?** IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: S. Hanna  Email: hannas  Extension: 27851  Date: February 16, 2011

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
February 16, 2011

Dear Dr. Catherine Hayward;

Rehabilitation Science 725 was approved last year as a cross-listed course in Nursing and HRM. The course has been over-subscribed each year. HRM has sufficient independent enrolment to mount an independent course, and has expert faculty members willing to teach an HRM version of KT. We request that the course HRM 725 be cancelled with approval of both Rehabilitation Science and Health Research Methodology. The HRM students will be asked to register for the newly created HRM 726 once it is set up on SOLAR.

Please contact me if you have any questions,

Sincerely,

Joy MacDermid, PhD
Professor and Assistant Dean
Rehabilitation Science Graduate Program

Steven E. Hanna, PhD
Assistant Dean, Health Research Methodology
Associate Professor, Dept. of Clinical Epidemiology & Biostatistics
Investigator, CanChild Centre for Childhood Disability Research

cc Ann Greene
Programs Coordinator
Health Sciences Graduate Studies
### SCHOOL OF GRADUATE STUDIES

**RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING COURSES**

**PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:**

1. This form must be completed for ALL course changes. All sections of this form must be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

<table>
<thead>
<tr>
<th>DEPARTMENT/PROGRAM</th>
<th>Nursing</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE TITLE</td>
<td>Information and Communication Technology Applications in Health: Theory and Practice</td>
</tr>
<tr>
<td>COURSE NUMBER</td>
<td>708</td>
</tr>
<tr>
<td>COURSE CREDIT</td>
<td>FULL COURSE ( )</td>
</tr>
<tr>
<td>INSTRUCTOR(S)</td>
<td>Ruta Valaitis</td>
</tr>
</tbody>
</table>

**NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)**

<table>
<thead>
<tr>
<th>NEW COURSE</th>
<th>DATE TO BE OFFERED</th>
<th>WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL? IF YES, PROVIDE THE DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT?** IF YES, ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S). **NOTE:** CROSS-LISTING OF COURSES REQUIRES APPROVAL FROM EACH DEPARTMENT AND FACULTY CONCERNED.

<table>
<thead>
<tr>
<th>CHANGE IN COURSE TITLE</th>
<th>PROVIDE THE CURRENT COURSE TITLE:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHANGE IN COURSE DESCRIPTION</th>
<th>600-LEVEL COURSE (Undergraduate course for graduate credit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change to Full Course</td>
<td>Change to Half Course</td>
</tr>
<tr>
<td>Change to Quarter Course</td>
<td>Change to Quarter Course</td>
</tr>
</tbody>
</table>

**COURSE CANCELLATION**

<table>
<thead>
<tr>
<th>COURSE CANCELLATION</th>
<th>PROVIDE THE REASON FOR COURSE CANCELLATION:</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Due to low numbers of students registering for the course, it was cross-listed to increase numbers. No nursing students have taken it in the last offering and only 2 to 3 nurses registered in the past.</td>
</tr>
</tbody>
</table>

**OTHER**

<table>
<thead>
<tr>
<th>EXPLAIN:</th>
</tr>
</thead>
<tbody>
<tr>
<td>My demands have changed as I have taken on a Chair in Primary Health Care Nursing. I plan to use this time to develop a new graduate course in primary health care. It will have a technology unit included in the course.</td>
</tr>
</tbody>
</table>

**BRIEF DESCRIPTION FOR CALENDAR** - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.

**CONTENT/RATIONALE** - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.
<table>
<thead>
<tr>
<th>Number</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>STATEMENT OF PURPOSE</strong> (How does the course fit into the department’s program?)</td>
</tr>
<tr>
<td>2.</td>
<td><strong>EXPECTED ENROLMENT:</strong></td>
</tr>
<tr>
<td>3.</td>
<td><strong>DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL</strong> (i.e., lectures, seminars):</td>
</tr>
<tr>
<td>4.</td>
<td><strong>DESCRIBE IN DETAIL THE METHOD OF EVALUATION:</strong> (For 600-level course, indicate the <strong>Extra Work</strong> to be required of graduate students, i.e., exams, essays, etc.)</td>
</tr>
<tr>
<td>5.</td>
<td><strong>TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).</strong></td>
</tr>
<tr>
<td>6.</td>
<td><strong>IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?</strong></td>
</tr>
</tbody>
</table>

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
<th>Extension</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ruta Valaitis</td>
<td><a href="mailto:valaitis@mcmaster.ca">valaitis@mcmaster.ca</a></td>
<td>22298</td>
<td>March 14 2011</td>
</tr>
</tbody>
</table>

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/medy
Memorandum

To: Members of the Graduate Program Curriculum Committee

From: Dr. Lori Letts, Assistant Dean – Occupational Therapy Program

Date: March 17, 2011

Re: Course Change Forms

Further to the request from committee members at the last meeting in regards to alerting the members of the GPCC to any changes being brought forward for courses, please find below a summary of the course change forms from the Occupational Therapy Program that will be reviewed at the April 15, 2011 meeting.

With the exception of course OT 638, all course change forms have been revised only slightly to reflect current content and focus of the courses. This includes updating the course instructors, description of the course for the calendar, and description of the method of presentation of course material.

For course OT 638, the items as above have been updated. In addition, a new evaluation component has been added to the course: the Professional Portfolio. The program has used a professional portfolio for a number of years. However we have recently revised it so that it becomes formally reviewed as part of course content twice in the program (at the end of year 1 in OT 638 and in the second last term of year 2 OT 728 which was previously approved by GPCC). The portfolio is based on the professional competencies of occupational therapists, and provides the students an opportunity to conduct a self-assessment of their preparation to meet the competencies, and to identify gaps and learning issues that will need to be addressed prior to graduation. The portfolios will be evaluated by faculty advisors, and are reviewed based on a complete/incomplete standard, since we are modeling our evaluation on that used by the College of Occupational Therapists of Ontario. Students must have a “complete” in the portfolio to successfully complete the course.

These forms have been approved by the OT Curriculum and Educational Committees.

Thank you

Lori Letts, Professor and Assistant Dean
Occupational Therapy Program
School of Rehabilitation Science
SCHOOL OF GRADUATE STUDIES

RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING COURSES

PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:
1. This form must be completed for ALL course changes. All sections of this form must be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

DEPARTMENT/PROGRAM | School of Rehabilitation Science, Occupational Therapy Program
---|---
COURSE TITLE | Disability, Development and Occupation: Inquiry and Integration
COURSE NUMBER | 637
COURSE CREDIT | FULL COURSE (X) | HALF COURSE ( ) | QUARTER (MODULE) ( )
INSTRUCTOR(S) | Rebecca Gewurtz and Joyce Tryssenaar
PREREQUISITE(S) | OT 616, 617, 618, 626, 627, 628

NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)

<table>
<thead>
<tr>
<th>NEW COURSE</th>
<th>DATE TO BE OFFERED</th>
<th>WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>IF YES, PROVIDE THE DATE:</td>
</tr>
<tr>
<td>WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT?</td>
<td>IF YES, ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S). NOTE: CROSS-LISTING OF COURSES REQUIRES APPROVAL FROM EACH DEPARTMENT AND FACULTY CONCERNED.</td>
<td></td>
</tr>
</tbody>
</table>

CHANGE IN COURSE TITLE | PROVIDE THE CURRENT COURSE TITLE:

CHANGE IN COURSE DESCRIPTION | X 600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form

CHANGE TO FULL COURSE | CHANGE TO HALF COURSE | CHANGE TO QUARTER COURSE

COURSE CANCELLATION | PROVIDE THE REASON FOR COURSE CANCELLATION:

OTHER | X EXPLAIN: Update course information to reflect current status

BRIEF DESCRIPTION FOR CALENDAR - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.
This course is designed to provide students with opportunities to develop an understanding of models of disability, development and occupation through large group discussion and exploration of learning issues developed from problem scenarios. The course will focus on disability theory, models of occupation, and developmental theories, and the application of these theories and models to occupational therapy practice.

CONTENT/RATIONALE - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.
The theme of Term 3 is Disability, Development & Occupation. This theme will be explored and expanded across both courses and within each component of the courses. Within the Inquiry and Integration course, the emphasis will be on understanding the impact of disability and development on human occupation. The inquiry seminars will focus attention on theories of disability and human development that are drawn upon in occupational therapy practice, as well as the systems that influence them. The problem based tutorials cover the lifespan and will provide opportunity to apply theoretical concepts to occupational therapy practice.
1. **STATEMENT OF PURPOSE** (How does the course fit into the department's program?)

This is a required course for all students in the MSc(OT) program.

2. **EXPECTED ENROLMENT:**

65 students per year

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL** (i.e., lectures, seminars):

This course provides students with opportunities to develop an understanding of the constructs of disability, the scope of human development and their relevance to occupation both through large group discussion and exploration of learning issues derived from problem scenarios during problem-based small groups. Each group with the assistance of a tutor, will find its own means and way of exploring any given problem. The large group component will provide students with an introduction to experts and resource people with particular knowledge and skill in areas to disability, human development and occupation.

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** (For 600-level course, indicate the *Extra Work* to be required of graduate students, i.e., exams, essays, etc.)

<table>
<thead>
<tr>
<th>Assessment Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book Review paper</td>
<td>20%</td>
</tr>
<tr>
<td>Relational/Response paper</td>
<td>30%</td>
</tr>
<tr>
<td>Scholarly paper Understanding Disability</td>
<td>50%</td>
</tr>
<tr>
<td>In-Tutorial Performance Evaluation</td>
<td>Satisfactory/Unsatisfactory</td>
</tr>
</tbody>
</table>

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).**

No - this course is intended exclusively for students in the MSc(OT) program.

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

N/A

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Lori Letts  Email: lettsl@mcmaster.ca  Extension: 27816  Date: January 14, 2011

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
SCHOOL OF GRADUATE STUDIES
RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING COURSES

PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:
1. This form must be completed for **ALL** course changes. All sections of this form must be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

DEPARTMENT/PROGRAM: School of Rehabilitation Science, Occupational Therapy Program

COURSE TITLE: Transition to Practice: Inquiry and Integration VI

COURSE NUMBER: 737

COURSE CREDIT: FULL COURSE ( )  HALF COURSE (X)  QUARTER (MODULE) ( )

INSTRUCTOR(S): Sandra Moll / Penny Salvatori

PREREQUISITE(S): Year 1 OT courses, OT 727, 728, 747, 748

NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX):

<table>
<thead>
<tr>
<th>NEW COURSE</th>
<th>DATE TO BE OFFERED:</th>
<th>WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL? IF YES, PROVIDE THE DATE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEW COURSE</td>
<td>600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form</td>
<td></td>
</tr>
</tbody>
</table>

WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT?  IF YES, ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S). NOTE: CROSS-LISTING OF COURSES REQUIRES APPROVAL FROM EACH DEPARTMENT AND FACULTY CONCERNED.

CHANGE IN COURSE TITLE: Provide the current course title:

CHANGE IN COURSE DESCRIPTION: X 600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form

CHANGE TO FULL COURSE | CHANGE TO HALF COURSE | CHANGE TO QUARTER COURSE

COURSE CANCELLATION: Provide the reason for course cancellation:

OTHER: X EXPLAIN: Update course information to reflect current status

BRIEF DESCRIPTION FOR CALENDAR - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.

The purpose of this half course is to provide the students with opportunities to pursue advanced knowledge and understanding of complex concepts underlying occupational therapy practice in the evolving healthcare environment. Students will participate in interprofessional large group seminar sessions and in-depth exploration within small group problem-based tutorials, to explore issues that pertain their transition into practice, and prepare them for entry to practice, considering issues related to systems within which they will work. Large group seminar and small group tutorial formats are utilized.

CONTENT/RATIONALE - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.

Given the rapid rate of change within the health care environment, an understanding of the key issues impacting professional practice is imperative. This course allows students to explore professional issues related to the structure and function of health care systems and organizations as well as the evolving roles of rehabilitation professionals in both the private and public sector. Students will explore dimensions of inter-professional care and develop basic practice management skills which will assist them to enter the field as new health professionals. Students will be expected to access a wide range of resources including literature from business and health administration fields. Students will develop a proposal for a new business/private practice, new role, or new clinical program.
1. **STATEMENT OF PURPOSE** (How does the course fit into the department’s program?)

   This is a required course for all students in the MSc(OT) program.

2. **EXPECTED ENROLMENT:**

   65 students per year

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):**

   Several large group inquiry sessions are combined with physiotherapy students. An interprofessional educational experience with medicine and nursing is also planned to allow for further collaboration and information exchange. Topics covered during the course include: business/program development, legal and legislative issues in practice, and supervision of students and support personnel. The PBT small group sessions involve only OT students. They will provide an opportunity for students to identify gaps in knowledge, to create their own problem scenarios based on individual and/or group learning needs and to facilitate group discussion around that scenario.

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)

   - Proposal Assignment - 45%
   - Reflection Exercise - 20%
   - Problem Scenario Development & Facilitation - 35%
   - In-Tutorial Performance - satisfactory/unsatisfactory

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).**

   No - this course is intended exclusively for students in the MSc(OT) program.

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

   N/A

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Lori Letts  Email: lettsl@mcmaster.ca  Extension: 27816  Date: January 14, 2011

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
**SCHOOL OF GRADUATE STUDIES**

**RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING COURSES**

**PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:**

1. This form must be completed for **ALL** course changes. All sections of this form must be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

<table>
<thead>
<tr>
<th>DEPARTMENT/PROGRAM</th>
<th>School of Rehabilitation Science, Occupational Therapy Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE TITLE</td>
<td>Transition to Practice: Professional Roles and Experiential Practicum VI</td>
</tr>
<tr>
<td>COURSE NUMBER</td>
<td>738</td>
</tr>
<tr>
<td>COURSE CREDIT</td>
<td>FULL COURSE ( ), HALF COURSE (X), QUARTER (MODULE) ( )</td>
</tr>
<tr>
<td>INSTRUCTOR(S)</td>
<td>Debra Steward/Sandra Moll</td>
</tr>
<tr>
<td>PREREQUISITE(S)</td>
<td>Year 1 OT courses, OT 717, 718, 747, 727, 728, 748</td>
</tr>
</tbody>
</table>

**NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)**

<table>
<thead>
<tr>
<th>NEW COURSE</th>
<th>DATE TO BE OFFERED</th>
<th>WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>If Yes, provide the date:</td>
</tr>
</tbody>
</table>

**WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT?**

If Yes, attach to this form any relevant correspondence with the other department(s). Note: Cross-listing of courses requires approval from each department and faculty concerned.

**CHANGE IN COURSE TITLE**

Provide the current course title:

**CHANGE IN COURSE DESCRIPTION**

X 600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form

**CHANGE TO FULL COURSE**

**CHANGE TO HALF COURSE**

**CHANGE TO QUARTER COURSE**

**COURSE CANCELLATION**

Provide the reason for course cancellation:

**OTHER**

X Explain:

Update course information to reflect current status

**BRIEF DESCRIPTION FOR CALENDAR**

Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.

This practically-based half course will provide students with the opportunity to develop advanced practice skills within laboratory and real world situations. The focus of the skills labs will provide access to a broad spectrum of applied practical knowledge, whereas the placements in practice settings will focus more specifically upon areas relative to each student’s learning needs. The course coordinator will advise and approve all students’ learning plans, which will allow students to address individualized learning needs.

**CONTENT/RATIONALE**

Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.

The course is designed to provide opportunities for students to examine their knowledge, skills and professional behaviours as they prepare to enter clinical practice. A central focus of the course will be the development of advanced practice skills that integrate knowledge of human occupation and health across the lifespan. The course will focus on professional competence and self-assessment and provide students with an opportunity to enhance professional competence through self appraisal and the ongoing development and implementation of professional development learning plans to continue to upgrade personal practice. There are 9 weeks of classes followed by 8 weeks of clinical practicum experience.
1. **STATEMENT OF PURPOSE**  (How does the course fit into the department's program?)

   This is a required course for all students in the MSc(OT) program.

2. **EXPECTED ENROLMENT:**

   65 students per year

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL** (i.e., lectures, seminars):

   Students will explore and integrate both personal and professional perspectives of occupational therapy during this period of transition to practice. Students will develop and implement individualized self-assessment learning plans to refine specific professional practice skills related to assessment, intervention, discharge planning, and follow-up needed to enter clinical practice.

   The format for the Professional Roles & Experiential Practicum (PREP) course consists of a blend of faculty and student-led skills workshops that address knowledge, skills and attitudes needed by all therapists to enter practice.

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)

   - Clinical Practice Self Assessment and Learning Plan - 55%
   - Student Led Practice Workshops - 45%
   - Practicum - satisfactory/unsatisfactory

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT?**

   No - this course is intended exclusively for students in the MSc(OT) program.

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

   N/A

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Lori Letts  Email: lettsl@mcmaster.ca  Extension: 27816  Date: January 14, 2011

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
### SCHOOL OF GRADUATE STUDIES

**RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING COURSES**

**PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:**

1. This form must be completed for **ALL** course changes. All sections of this form **must** be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espitu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

**DEPARTMENT/PROGRAM**  
School of Rehabilitation Science, Occupational Therapy Program

**COURSE TITLE**  
Transition to Practice: Evidence Based Practice VI

**COURSE NUMBER**  
749

**COURSE CREDIT**  
| FULL COURSE ( ) | HALF COURSE (X) | QUARTER (MODULE) ( ) |

**INSTRUCTOR(S)**  
Bonny Jung

**PREREQUISITE(S)**  
none

**NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)**

**NEW COURSE**

**DATE TO BE OFFERED:**

**WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL?**

**IF YES, PROVIDE THE DATE:**

**WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT?**

**IF YES, ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).**

**NOTE:** Cross-listing of courses requires approval from each department and faculty concerned.

**CHANGE IN COURSE TITLE**

**Provide the current course title:**

**CHANGE IN COURSE DESCRIPTION**

**X**

**600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form**

**CHANGE TO FULL COURSE**

**CHANGE TO HALF COURSE**

**CHANGE TO QUARTER COURSE**

**COURSE CANCELLATION**

**Provide the reason for course cancellation:**

**OTHER**

**X**

**EXPLAIN:**

Update course information to reflect current status

**BRIEF DESCRIPTION FOR CALENDAR** - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.

This half course runs in Term 6 of the second year of the M.Sc. (OT) program. It builds on 748 - Transition to Practice: Evidence Based Practice V, in Term 5. It focuses on: 1. understanding how evidence is generated, integrated and applied, and 2. synthesizing and disseminating research evidence-based knowledge in a scholarly forum. It consists of individual work on research projects that were initiated earlier in the year in Term 5 and completed in Term 6.

**CONTENT/RATIONALE** - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.

This half course builds on EBP IV (747) and EBP V (748) and focuses on synthesizing and disseminating research evidence in occupational therapy.
<table>
<thead>
<tr>
<th>1. STATEMENT OF PURPOSE  (How does the course fit into the department’s program?)</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is a required course for all students in the MSc(OT) program.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. EXPECTED ENROLMENT:</th>
</tr>
</thead>
<tbody>
<tr>
<td>65 students per year</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students work in small groups to implement individualized learning plans related to specific evidence-based practice projects. In this course, emphasis is on analysis, synthesis and dissemination of research findings. Some large group seminars will focus the students’ work; in addition, they will meet regularly with their project supervisor and the course coordinator as they work through their projects. The course ends with a symposium, which offers students an opportunity to present their project findings through podium or poster presentation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. DESCRIBE IN DETAIL THE METHOD OF EVALUATION: (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBP Project Symposium Presentation - 50%</td>
</tr>
<tr>
<td>EBP Final Product - 50%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT?</th>
</tr>
</thead>
<tbody>
<tr>
<td>No - this course is intended exclusively for students in the MSc(OT) program.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
</tr>
</tbody>
</table>

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Lori Letts  Email: lettsl@mcmaster.ca  Extension: 27816  Date: January 14, 2011

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
# Recommendation for Change in Graduate Curriculum - For Change(s) Involving Courses

## Please Read the Following Notes Before Completing This Form:

1. This form must be completed for **ALL** course changes. All sections of this form must be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritumcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

## Department/Program
School of Rehabilitation Science, Occupational Therapy Program

## Course Title
Disability, Development and Occupation: Professional Roles and Experiential Practicum

## Course Number
638

## Course Credit
<table>
<thead>
<tr>
<th></th>
<th>FULL COURSE</th>
<th>HALF COURSE</th>
<th>QUARTER (MODULE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>638</td>
<td>(X)</td>
<td>( )</td>
<td>( )</td>
</tr>
</tbody>
</table>

## Instructor(s)
Jackie Bosch/Jocelyn Harris/Joyce Tryssenaar

## Prerequisite(s)
OT 616, 617, 618, 626, 627, 628

## Nature of Recommendation (Please Check Appropriate Box)

### NEW COURSE

<table>
<thead>
<tr>
<th></th>
<th>Date to be Offered</th>
<th>Was the Proposed Course Offered on Dean's Approval? If Yes, Provide the Date:</th>
</tr>
</thead>
</table>

### Will the Course be Cross-listed with Another Department? If Yes, Attach to This Form Any Relevant Correspondence with the Other Department(s). Note: Cross-listing of courses requires approval from each department and faculty concerned.

### Change in Course Title

Provide the Current Course Title:

### Change in Course Description

600-Level Course (Undergraduate course for graduate credit) Please see #4 on page 2 of this form

### Change to Full Course

<table>
<thead>
<tr>
<th>Change to Full Course</th>
<th>Change to Half Course</th>
<th>Change to Quarter Course</th>
</tr>
</thead>
</table>

### Course Cancellation

Provide the Reason for Course Cancellation:

### Other

| X | Explain: Update course information to reflect current status |

## Brief Description for Calendar

Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.

This Term 3 course builds on applying the occupational performance process model in a number of clinical scenarios. Course content will move into consideration and understanding of multi-system problems, and clinical problems which illustrate complexity and chronicity. Students will be expected to apply principles of evidence-based practice, critical thinking and clinical reasoning. Areas of focus include: working with children through play and in school settings, home and community practice, group interventions, psychosocial interventions, neurology, and using technology. The course also includes a practicum within a practice setting.

## Content/Rationale

Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.

This course is designed to look at assessment and intervention beyond the broad categories: activities of daily living (ADL), productivity and leisure that were covered in Term 2 and start to focus on occupational therapy in specific environments, with specific populations and various diagnostic groups. The focus is on enabling occupational performance across all stages of development and with many types of disabilities encountered in occupational therapy practice. The course provides students with opportunities to experience direct clinical practice within various practice settings in which occupational therapists provide service.
1. **STATEMENT OF PURPOSE** (How does the course fit into the department’s program?)

   This is a required course for all students in the MSc(OT) program.

2. **EXPECTED ENROLMENT:**

   65 students per year

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL** (i.e., lectures, seminars):

   There are nine weeks of classes; usually two classes per week, followed by six weeks of full time practicum. In this course, we are also introducing four sessions entitled: Clinical Application of Reasoning & Evidence (CARE) Groups. Clinical reasoning across all stages of the occupational performance process model is emphasized. Critical analysis of assessment and intervention will be integrated into the course. Regular classroom sessions will provide information about the skills required to use different assessments and interventions in practice. CARE Groups will offer opportunities for students to work through an occupational therapy process from referral to discharge with clinical scenarios, incorporating reasoning and the application of evidence.

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)

   - Evidence Based Appraisal - 35%
   - Planning and Running Own Group - 30%
   - Practical Examination - 35%
   - Practicum Evaluation - Pass/Fail
   - Professional Portfolio - Pass/Fail

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT?**
   IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).

   No - this course is intended exclusively for students in the MSc(OT) program.

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

   N/A

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

- **Name:** Lori Letts
- **Email:** lettsl@mcmaster.ca
- **Extension:** 27816
- **Date:** January 14, 2011

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
Memorandum

To: Members of the Graduate Program Curriculum Committee

From: Lynne Geddes, Assistant Dean – Physiotherapy Program

Date: March 17, 2011

Re: Course Change Forms

Further to the request from committee members at the last meeting in regards to alerting the members of the GPCC to any changes being brought forward for courses, the PT Program is continuing with updating all of its course change forms. This is the final ‘installment’ for the spring term (units 3 and 6). The Committee has already reviewed and passed the forms for Units 1, 2, 4, and 5.

With respect to the forms under consideration for the next meeting to be held on April 15, 2011:

1. With the exception of PT713, all course change forms reflect current content and focus of the courses. This includes the course instructors, content/rationale and descriptions of the method of presentation of course material and of evaluation.

   The PT Program is requesting approval of these forms by the committee.

2. For PT713, there has been a minor shift in the timing of some of the evaluation components in order to balance them over the full year of study in relation to student workload and timing of research requirements (e.g. REB application).

   I have been advised that since this is a minor change, this is being submitted for information to the committee.

Thank you

Lynne Geddes, Professor and Assistant Dean
Physiotherapy Program
School of Rehabilitation Science
## Recommending Change in Graduate Curriculum - For Change(s) Involving Courses

### Please Read the Following Notes Before Completing This Form:

1. This form must be completed for **ALL** course changes. All sections of this form **must** be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

### Department/Program

| DEPARTMENT/PROGRAM          | School of Rehabilitation Science, Physiotherapy Program |

### Course Title

| COURSE TITLE               | Physiotherapy Clinical Practice II |

### Course Number

| COURSE NUMBER | 634 |

### Course Credit

| COURSE CREDIT          | FULL COURSE ( ) | HALF COURSE (X) | QUARTER (MODULE) ( ) |

### Instructor(s)

| INSTRUCTOR(S) | Bronwen Thomas |

### Prerequisite(s)

| PREREQUISITE(S) |

### Nature of Recommendation (Please Check Appropriate Box)

<table>
<thead>
<tr>
<th>NEW COURSE</th>
<th>DATE TO BE OFFERED:</th>
<th>WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>IF YES, PROVIDE THE DATE:</strong></td>
</tr>
</tbody>
</table>

**Will the Course Be Cross-listed with Another Department?** **If Yes, Attach to This Form Any Relevant Correspondence with the Other Department(s). Note:** Cross-listing of courses requires approval from each department and faculty concerned.

### Change in Course Title

| PROVIDE THE CURRENT COURSE TITLE: |

### Change in Course Description

| CHANGE IN COURSE DESCRIPTION | X | 600-LEVEL COURSE (*Undergraduate course for graduate credit*) Please see #4 on page 2 of this form |

### Change to Full Course

| CHANGE TO FULL COURSE | CHANGE TO HALF COURSE | CHANGE TO QUARTER COURSE |

### Course Cancellation

| PROVIDE THE REASON FOR COURSE CANCELLATION: |

### Other

| OTHER | X | EXPLAIN: Update course information to reflect current status |

### Brief Description for Calendar

**Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.**

This Unit III clinical practice course will provide the opportunity for students to apply physiotherapy assessment and management skills with clients who may present with musculoskeletal, neurological and/or cardiorespiratory conditions related to complex health problems in a variety of health care environments. Prior to completing the full time two-year program, students will gain experience in musculoskeletal, neurological and cardiorespiratory practice settings.

### Content/Rationale

**Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.**

The objective of this course is to provide students with the opportunity to apply the knowledge and skills they have gained in the academic setting to a clinical setting. Students are supervised by regulated health care professionals (preceptors), who share their professional and clinical expertise with students, in order to prepare students for physiotherapy practice. There are no specific texts associated with the course. In place of texts, students may be provided with and/or may access readings from various resources including, but not limited to research literature, various texts, information from professional associations or the facility.
1. **STATEMENT OF PURPOSE** (How does the course fit into the department’s program?)
   
   This is a required course for all students in the MSc(PT) program.

2. **EXPECTED ENROLMENT:**
   
   65 students per year

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL** (i.e., lectures, seminars):
   
   Students will begin their 2nd 6-week clinical placement following the end of the academic unit. A variety of clinical facilities, settings and placement types will be offered.

   Clinical education sessions will be scheduled during the academic portion of the unit to discuss information relevant to clinical education.

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** (For 600-level course, indicate the **Extra Work** to be required of graduate students, i.e., exams, essays, etc.)
   
   Overall grade assigned: pass/fail

   **Individual Components:**
   - Clinical Performance Instrument (CPI)
   - Learning Contract

   The CPI is conducted at mid-term and the end of the placement. Using this tool, preceptors rate student performance using a Visual Analogue Scale (VAS) for 24 performance criteria. Preceptors can also provide specific comments for each criterion and are given the opportunity to recommend a pass/fail grade for the placement.

   The Learning Contract is comprised of 5 objectives for the placement agreed upon by the student and his/her preceptor(s) during the first week of the placement. Objectives are reviewed at mid-term and final, and the preceptor(s) assigns a mark (from 0-2) for each objective.

   The Course Coordinator takes into consideration the recommendation of the preceptor on the CPI and completion of the Learning Contract and its associated objectives and assigns a final grade.

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT?**
   
   If yes, please attach to this form any relevant correspondence with the other department(s).

   No - this course is intended exclusively for students in the MSc(PT) program.

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

   N/A

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Lynne Geddes      Email: geddesl@mcmaster.ca      Extension: 27818      Date: February 16, 2011

---

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
**SCHOOL OF GRADUATE STUDIES**

**RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING COURSES**

---

**PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:**

1. This form must be completed for **ALL** course changes. All sections of this form **must** be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritum@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

---

**DEPARTMENT/PROGRAM**

School of Rehabilitation Science, Physiotherapy Program

**COURSE TITLE**

Physiotherapy Clinical Practice V

<table>
<thead>
<tr>
<th>COURSE NUMBER</th>
<th>734</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE CREDIT</td>
<td></td>
</tr>
<tr>
<td>FULL COURSE</td>
<td>(   )</td>
</tr>
<tr>
<td>HALF COURSE</td>
<td>(X)</td>
</tr>
<tr>
<td>QUARTER (MODULE)</td>
<td>( )</td>
</tr>
</tbody>
</table>

**INSTRUCTOR(S)**

Bronwen Thomas

**PREREQUISITE(S)**

None

---

**NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)**

<table>
<thead>
<tr>
<th>NEW COURSE</th>
<th>Date to be Offered:</th>
<th>Was the Proposed Course Offered on Dean’s Approval?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>If Yes, Provide the Date:</strong></td>
</tr>
</tbody>
</table>

**WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT?** **If Yes, Attach to this Form Any Relevant Correspondence with Other Department(s).** **Note:** Cross-listing of courses requires approval from each department and faculty concerned.

**CHANGE IN COURSE TITLE**

Provide the Current Course Title:

**CHANGE IN COURSE DESCRIPTION**

X 600-LEVEL COURSE *(Undergraduate course for graduate credit)* Please see #4 on page 2 of this form

**CHANGE TO FULL COURSE**

**CHANGE TO HALF COURSE**

**CHANGE TO QUARTER COURSE**

**COURSE CANCELLATION**

Provide the Reason for Course Cancellation:

**OTHER**

X Explain:

Update course information to reflect current status.

---

**BRIEF DESCRIPTION FOR CALENDAR** - Provide a brief description *(maximum 6 lines)* to be included in the Graduate Calendar.

This Unit VI clinical practice course will provide the opportunity for students to apply physiotherapy assessment and management skills with clients who may present with musculoskeletal, neurological and/or cardiorespiratory conditions related to complex health problems in a variety of health care environments. Prior to completing the full time two-year program, students will gain experience in musculoskeletal, neurological and cardiorespiratory practice settings.

**CONTENT/RATIONALE** - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.

The objective of this course is to provide students with the opportunity to apply the knowledge and skills they have gained in the academic setting to a clinical setting. Students are supervised by regulated health care professionals (preceptors), who share their professional and clinical expertise with students, in order to prepare students for physiotherapy practice. There are no specific texts associated with the course. In place of texts, students may be provided with and/or may access readings from various resources including but not limited to research literature, various texts, information from professional associations or the facility.
**1. STATEMENT OF PURPOSE**  (How does the course fit into the department’s program?)

This is a required course for all students in the MSc(PT) program.

**2. EXPECTED ENROLMENT:**

65 students per year.

**3. DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL** (i.e., lectures, seminars):

Students will begin their 5th and final 6-week clinical placement following the end of the academic unit. A variety of clinical facilities, settings and placement types will be offered.

Clinical education sessions will be scheduled during the academic portion of the unit to discuss information relevant to clinical education.

**4. DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)

Overall grade assigned: pass/fail

Individual Components:
Clinical Performance Instrument (CPI)
Learning Contract

The CPI is conducted at mid-term and the end of the placement. Using this tool, preceptors rate student performance using a Visual Analogue Scale (VAS) for 24 performance criteria. Preceptors can also provide specific comments for each criterion and are given the opportunity to recommend a pass/fail grade for the placement.

The Learning Contract is comprised of 5 objectives for the placement agreed upon by the student and his/her preceptor(s) during the first week of the placement. Objectives are reviewed at mid-term and final, and the preceptor(s) assigns a mark (from 0-2) for each objective.

The Course Coordinator takes into consideration the recommendation of the preceptor on the CPI and completion of the Learning Contract and its associated objectives and assigns a final grade.

**5. TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).**

No - this course is intended exclusively for students in the MSc(PT) program.

**6. IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

N/A

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Lynne Geddes  Email: geddesl@mcmaster.ca  Extension: 27818  Date: March 16, 2011

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
SCHOOL OF GRADUATE STUDIES
RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING COURSES

PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:
1. This form must be completed for ALL course changes. All sections of this form must be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

<table>
<thead>
<tr>
<th>DEPARTMENT/PROGRAM</th>
<th>School of Rehabilitation Science, Physiotherapy Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE TITLE</td>
<td>Fundamentals of Cardiorespiratory and Neurological Practice/Problem-based III</td>
</tr>
<tr>
<td>COURSE NUMBER</td>
<td>631</td>
</tr>
<tr>
<td>COURSE CREDIT</td>
<td>FULL COURSE ( )  HALF COURSE (X)  QUARTER (MODULE) ( )</td>
</tr>
<tr>
<td>INSTRUCTOR(S)</td>
<td>Liliana Coman</td>
</tr>
<tr>
<td>PREREQUISITE(S)</td>
<td>none</td>
</tr>
</tbody>
</table>

NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)

NEW COURSE | DATE TO BE OFFERED: | WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL?
If Yes, PROVIDE THE DATE: |

WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT? | IF YES, ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S). NOTE: CROSS-LISTING OF COURSES REQUIRES APPROVAL FROM EACH DEPARTMENT AND FACULTY CONCERNED.

CHANGE IN COURSE TITLE | PROVIDE THE CURRENT COURSE TITLE:

CHANGE IN COURSE DESCRIPTION | 600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form

CHANGE TO FULL COURSE | CHANGE TO HALF COURSE | CHANGE TO QUARTER COURSE

COURSE CANCELLATION | PROVIDE THE REASON FOR COURSE CANCELLATION:

OTHER | X | EXPLAIN: Update course information to reflect current status

BRIEF DESCRIPTION FOR CALENDAR - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.
This Unit III tutorial course will introduce students to physiotherapy assessment and management of common cardiac and pulmonary conditions. There will also be an introduction to physiotherapy assessment and management of neurological clients focusing on stroke and spinal cord injury.

CONTENT/RATIONALE - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.
Building on the knowledge of the cardio-vascular and respiratory systems acquired in previous units, students will advance their knowledge of these systems, including normal physiology, changes with aging or obesity, selected medical and surgical conditions, assessment and management. Students will also be introduced to aspects of neurological assessment, the use of standardized measures and management strategies for clients with acute spinal cord injury and acute stroke. Students will explore the concepts of disablement using the ICF model which will provide structure for clinical reasoning. Students will continue to develop critical appraisal skills in evidence-based practice.

Custom Courseware of current selected articles;
Frownfelter D, Dean E. Cardiovascular and pulmonary physical therapy. 4th ed. Mosby Elsevier; 2006 or similar textbook;
O'Sullivan SB, Schmitz TJ. Physical rehabilitation; assessment and treatment. 5th ed. Philadelphia; Davis; 2007
1. **STATEMENT OF PURPOSE**  (How does the course fit into the department's program?)
   
   This is a required course for all students in the MSc(PT) program

2. **EXPECTED ENROLMENT:**
   
   65 students per year

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL** (i.e., lectures, seminars):
   
   Small tutorial groups will use health care problems to focus learning questions during the achievement of the course and Unit's learning objectives. These problems replicate the real life situations and serve as a focus for discussion to enhance learning. Students read the given problem and raise a number of issues. From the issues generated, a series of learning objectives are derived and critical assessment occurs. The learning objectives provide the framework for seeking information. The information gathered is discussed in the group, critically assessed and applied to the health care problem. At the end of the tutorial, time is set aside for evaluating the process, themselves, the group and the tutor.

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** (For 600-level course, indicate the **Extra Work** to be required of graduate students, i.e., exams, essays, etc.)
   
   Tutorial Evaluation - satisfactory/unsatisfactory. There will be a formal mid-term and final evaluation. Students and tutor to prepare a brief written evaluation of self, peer, and group performance.

   Midterm Written Examination, including multiple choice and/or short answer questions, worth 35% of course mark.

   Individual Written Assignment, worth 25% of the course mark

   Final Written Examination, including multiple choice and short answer questions, worth 40% of course mark

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT?**
   
   **IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).**

   No - this course is intended exclusively for students in the MSc(PT) program

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**
   
   N/A

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

| Name: Lynne Geddes | Email: geddesl@mcmaster.ca | Extension: 27818 | Date: February 16, 2011 |

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
SCHOOL OF GRADUATE STUDIES
RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING COURSES

PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:

1. This form must be completed for ALL course changes. All sections of this form must be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

DEPARTMENT/PROGRAM | School of Rehabilitation Science, Physiotherapy Program
---|---
COURSE TITLE | Fundamentals of Cardiorespiratory and Neurological Practice/Clinical Laboratory III
COURSE NUMBER | 632
INSTRUCTOR(S) | Barb Pollock
PREREQUISITE(S) | none

NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)

<table>
<thead>
<tr>
<th>NEW COURSE</th>
<th>Date to be Offered:</th>
<th>WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL? IF YES, PROVIDE THE DATE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT? IF YES, ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S). NOTE: CROSS-LISTING OF COURSES REQUIRES APPROVAL FROM EACH DEPARTMENT AND FACULTY CONCERNED.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CHANGE IN COURSE TITLE

CHANGE IN COURSE DESCRIPTION

600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form

<table>
<thead>
<tr>
<th>CHANGE TO FULL COURSE</th>
<th>CHANGE TO HALF COURSE</th>
<th>CHANGE TO QUARTER COURSE</th>
</tr>
</thead>
</table>

COURSE CANCELLATION

| Provide the Reason for Course Cancellation: |

OTHER

| Explain: |
| Update course information to reflect current status |

BRIEF DESCRIPTION FOR CALENDAR - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.

This Unit III clinical skills course will provide students with the clinical problem-solving skills to assess and treat clients with cardiorespiratory and neurological disorders (stroke, spinal cord injury). Students will use measures and models of practice to design physiotherapy management goals. Students will study relevant anatomical and physiological concepts.

CONTENT/RATIONALE - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.

This Unit III course will focus on the clinical assessment, diagnosis and treatment of clients with respiratory, cardiac, and/or vascular diseases, and the assessment and early management of clients with spinal cord injury and stroke. In the field of cardio-respiratory physiotherapy, some of the clinical skills require hands-on expertise (e.g. chest wall movement, auscultation, percussion, breathing techniques), while other clinical skills require sound knowledge and clinical reasoning (e.g. interpretation of chest X-Rays, arterial blood gases). During the clinical labs addressing clients with neurological conditions, standardized measures [American Spinal Injury Association (ASIA) scale, Functional Independent Measure (FIM), Berg Balance Scale] and their properties will be explored. The International Classification of Functioning, Disability and Health will be used to structure interventions. Specific techniques related to functional movement analysis, gait as well as early management of clients with spinal cord injury and stroke will be included.

Custom Courseware:
Frownfelter D, Dean E. Cardiovascular and pulmonary physical therapy. 4th ed. Mosby Elsevier; 2006; or similar textbook;
O’Sullivan SB, Schmitz TJ. Physical rehabilitation; assessment and treatment. 5th ed. Philadelphia; Davis; 2007
1. **STATEMENT OF PURPOSE** (How does the course fit into the department's program?)
   
   This is a required course for all students in the MSc(PT) program.

2. **EXPECTED ENROLMENT:**
   
   65 students per year.

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL** *(i.e., lectures, seminars):*

   This course is designed to integrate theoretical knowledge with clinical practice. It will incorporate self-directed learning, 'hands-on' practical skill development and clinical reasoning. Sessions will relate to the health care problem covered the same week in 621. Students will attend the human anatomy lab to reinforce relevant concepts. Students will have the opportunity to work with actual or standardized clients and with clinicians with expertise in the relevant area of practice will be resources for the sessions.

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** *(For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)*

   Group Seminar and one page handout on an assigned topic related to an intervention or outcome measure applicable to the population(s) included in this Unit - satisfactory/unsatisfactory

   Midterm Written Exam including multiple choice and/or short answer questions is worth 30% of the final mark

   Objective Structured Clinical Examination (OSCE) (1 hour practical examination focusing on the technical proficiency of assessment and treatment techniques) worth 35% of course grade

   Final Written Exam including multiple choice and/or short answer questions is worth 35% of the final mark

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT?**

   No - this course is intended exclusively for students in the MSc(PT) program

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

   N/A

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Lynne Geddes    Email: geddesl@mcmaster.ca    Extension: 27818    Date: February 16, 2011

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
**SCHOOL OF GRADUATE STUDIES**

**RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING COURSES**

**PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:**
1. This form must be completed for **ALL** course changes. All sections of this form must be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

<table>
<thead>
<tr>
<th>DEPARTMENT/PROGRAM</th>
<th>School of Rehabilitation Science/Physiotherapy Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE TITLE</td>
<td>Research and Evidence-based Practice</td>
</tr>
<tr>
<td>COURSE NUMBER</td>
<td>713</td>
</tr>
<tr>
<td>COURSE CREDIT</td>
<td>FULL COURSE (X)</td>
</tr>
<tr>
<td>INSTRUCTOR(S)</td>
<td>Paul Stratford, Julie Richardson, Pat Miller</td>
</tr>
<tr>
<td>PREREQUISITE(S)</td>
<td>None</td>
</tr>
</tbody>
</table>

**NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)**

<table>
<thead>
<tr>
<th>NEW COURSE</th>
<th>DATE TO BE OFFERED:</th>
<th>WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>IF YES, PROVIDE THE DATE:</td>
</tr>
<tr>
<td>WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT?</td>
<td>IF YES, ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S). <strong>NOTE:</strong> CROSS-LISTING OF COURSES REQUIRES APPROVAL FROM EACH DEPARTMENT AND FACULTY CONCERNED.</td>
<td></td>
</tr>
</tbody>
</table>

**CHANGE IN COURSE TITLE**

**CHANGE IN COURSE DESCRIPTION**

**CHANGE TO FULL COURSE**

**CHANGE TO HALF COURSE**

**CHANGE TO QUARTER COURSE**

**COURSE CANCELLATION**

**OTHER**

**BRIEF DESCRIPTION FOR CALENDAR** - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.

This 2nd year course will enable students to critically analyse the literature and engage in a research project to evaluate measures and interventions relevant to physical therapy. Students will be provided with information on study design, data acquisition and data analysis. They will acquire skills in searching the literature, analysing and interpreting data, presenting results and making clinical decisions that incorporate best evidence, patient values and clinical expertise. This course is offered over three terms of study.

**CONTENT/RATIONALE** - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.

The objective of this full year course is to develop students' ability to critically analyse the literature and to participate in a current research project. In Unit IV, the focus will be on measurement properties of clinical measurement studies including reliability, validity, and sensitivity to change. In Unit V, the focus will be on critical appraisal, design of outcomes, effectiveness, causation and qualitative research. In Unit VI, students will integrate and further develop research knowledge, skills and methodology. Students, working in teams of 2-5, will either participate/collaborate in an ongoing research project or carry out a research project of their own design. Both faculty and clinicians may act as supervisors for the research projects. If the supervisor is a clinician without a faculty appointment, the Course Coordinator then assigns a faculty member to provide support as needed. Formulating a research question, describing the research objectives and methods, scholarly writing papers and presenting a summary of the research through a presentation are examples of the skills students will develop. In place of a textbook, students will be provided with selected readings from the current literature and/or custom courseware (Units IV and V) and be required to conduct a literature review related to their research project (Unit VI).
1. STATEMENT OF PURPOSE (How does the course fit into the department’s program?)

This is a required course for all students in the MSc(PT) program.

2. EXPECTED ENROLMENT:

65 students per year.

3. DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):

This course is a full course over one year of study within Units IV, V, and VI. Both large-group, focused discussion seminars and involvement in an ongoing research project will be required. The large group sessions will focus on the measurement properties of clinical measurement studies and design of a clinical intervention trial. The research project will be mentored by at least one individual with a School of Rehabilitation Science faculty appointment and/or a community/clinical partner who will help generate appropriate questions and project goals. The results of the project will be shared with the student, faculty and clinical communities.

4. DESCRIBE IN DETAIL THE METHOD OF EVALUATION: (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)

Unit IV: a group seminar presentation worth 10% of the overall grade, a short answer and/or multiple choice quiz worth 20% of the overall grade, and the completion of an online quiz regarding research ethics (pass/fail).
Unit V: a group seminar presentation worth 7.5%, and a final exam worth 15%, and 2 in class quizzes worth a total of 7.5%. Research project agreement form and learning contract (pass/fail).
Unit VI: Research Mid-term Progress Report (pass/fail), Research Paper worth 24%, Supervisor’s evaluation of the student worth 10% and Oral Presentation of Research Project worth 6%.

5. TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT?

If yes, please attach to this form any relevant correspondence with the other department(s).

No - this course is intended exclusively for students in the MSc(PT) program.

6. IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?

N/A

PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Lynne Geddes    Email: geddesl@mcmaster.ca    Extension: 27818    Date: Dec 6, 2010

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
SCHOOL OF GRADUATE STUDIES

RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING COURSES

PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:
1. This form must be completed for ALL course changes. All sections of this form must be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

<table>
<thead>
<tr>
<th>DEPARTMENT/PROGRAM</th>
<th>School of Rehabilitation Science, Physiotherapy Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE TITLE</td>
<td>Integrated Physiotherapy Practice - Problem-based VI</td>
</tr>
<tr>
<td>COURSE NUMBER</td>
<td>731</td>
</tr>
<tr>
<td>COURSE CREDIT</td>
<td>FULL COURSE ( )</td>
</tr>
<tr>
<td>INSTRUCTOR(S)</td>
<td>Monique Muller, Norma MacIntyre</td>
</tr>
<tr>
<td>PREREQUISITE(S)</td>
<td>none</td>
</tr>
</tbody>
</table>

NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)

<table>
<thead>
<tr>
<th>NEW COURSE</th>
<th>DATE TO BE OFFERED</th>
<th>WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>If Yes, Provide the Date:</td>
</tr>
<tr>
<td>WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT?</td>
<td>If Yes, Attach to this Form Any Relevant Correspondence with the Other Department(s). Note: Cross-listing of courses requires approval from each department and faculty concerned.</td>
<td></td>
</tr>
</tbody>
</table>

CHANGE IN COURSE TITLE

Provide the current course title:

CHANGE IN COURSE DESCRIPTION

600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form

CHANGE TO FULL COURSE

CHANGE TO HALF COURSE

CHANGE TO QUARTER COURSE

COURSE CANCELLATION

Provide the reason for course cancellation:

OTHER

X Explain:

Update course information to reflect current status

BRIEF DESCRIPTION FOR CALENDAR - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.

This Unit VI tutorial course is designed to enable students to assess and manage clients with complex health problems involving multiple systems and a range of health care issues. In addition, knowledge and skills related to musculoskeletal assessment and treatment are advanced. Students are expected to utilize both previous and new knowledge and skills to design, implement and evaluate effective physical therapy treatment.

CONTENT/RATIONALE - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.

This Unit VI tutorial course has been designed to enable students to build on previous learning and acquire new knowledge to assess and manage clients with complex health problems involving multiple systems and physical, psychological and environmental issues. The key themes of pain, occupational performance, and collaborative approaches to care will be apparent throughout.

There are no required texts.
1. **STATEMENT OF PURPOSE**  (How does the course fit into the department's program?)

   This is a required course for all students in the MSc(PT) program

2. **EXPECTED ENROLMENT:**

   65 students per year

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL**  (i.e., lectures, seminars):

   Small tutorial groups will use health care problems to focus learning questions during the achievement of the course and Unit's learning objectives. These problems replicate the 'real life' situations and serve as a focus for discussion to enhance learning. Students read the given problem and raise a number of issues. From the issues generated, a series of learning objectives are derived and critical assessment occurs. The learning objectives provide the framework for seeking information. The information gathered is discussed in the group, critically assessed and applied to the health care problem. At the end of the tutorial, time is set aside for evaluating the process, themselves, the group and the tutor.

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:**  (For 600-level course, indicate the **Extra Work** to be required of graduate students, i.e., exams, essays, etc.)

   Tutorial Evaluation - satisfactory/unsatisfactory. There will be a formal mid-term and final evaluation. Students and tutor to prepare a brief written evaluation of self and peer performance.

   Midterm Written Examination, including multiple choice and/or short answer questions, worth 35% of course mark.

   Written Assignment worth 15% of the course mark

   Clinical Case Presentation (group oral presentation), worth 15% of the course mark

   Final Written Examination, including multiple choice and short answer questions, worth 35% of course mark

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT?**  
   IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).

   No - this course is intended exclusively for students in the MSc(PT) program

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

   N/A

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Lynne Geddes   Email: geddesl@mcmaster.ca   Extension: 27818   Date: March 16, 2011

---

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:

1. This form must be completed for **ALL** course changes. All sections of this form **must** be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

<table>
<thead>
<tr>
<th>DEPARTMENT/PROGRAM</th>
<th>School of Rehabilitation Science, Physiotherapy Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE TITLE</td>
<td>Integrated Physiotherapy Practice - Laboratory VI</td>
</tr>
<tr>
<td>COURSE NUMBER</td>
<td>732</td>
</tr>
<tr>
<td>COURSE CREDIT</td>
<td>FULL COURSE ( )</td>
</tr>
<tr>
<td></td>
<td>HALF COURSE (X)</td>
</tr>
<tr>
<td></td>
<td>QUARTER (MODULE) ( )</td>
</tr>
<tr>
<td>INSTRUCTOR(S)</td>
<td>John McCluskie</td>
</tr>
<tr>
<td>PREREQUISITE(S)</td>
<td>none</td>
</tr>
</tbody>
</table>

**NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)**

<table>
<thead>
<tr>
<th>NEW COURSE</th>
<th>DATE TO BE OFFERED:</th>
<th>WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>If Yes, Provide the Date:</td>
</tr>
</tbody>
</table>

**WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT?**  
*If Yes, Attach to this Form Any Relevant Correspondence with the Other Department(s). Note: Cross-listing of courses requires approval from each department and faculty concerned.*

**CHANGE IN COURSE TITLE**

<table>
<thead>
<tr>
<th>PROVIDE THE CURRENT COURSE TITLE:</th>
</tr>
</thead>
</table>

**CHANGE IN COURSE DESCRIPTION**

600-LEVEL COURSE *(Undergraduate course for graduate credit)* Please see #4 on page 2 of this form

**CHANGE TO FULL COURSE**

**CHANGE TO HALF COURSE**

**CHANGE TO QUARTER COURSE**

**COURSE CANCELLATION**

<table>
<thead>
<tr>
<th>PROVIDE THE REASON FOR COURSE CANCELLATION:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>OTHER</th>
<th>EXPLAIN:</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td>Update course information to reflect current status</td>
</tr>
</tbody>
</table>

**BRIEF DESCRIPTION FOR CALENDAR** - Provide a brief description *(maximum 6 lines)* to be included in the Graduate Calendar.

This Unit VI laboratory course is designed to enable students to assess and manage clients with complex health problems involving multiple systems and a range of health care issues. Incorporating principles of client-centred practice and evidence-based practice, students will learn to use physiotherapy management strategies designed to mesh with those of other health care practitioners to result in an outcome that best meets the clients’ needs and personal values.

**CONTENT/RATIONALE** - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.

The Unit VI clinical laboratory course is designed to enable students to assess and manage clients with complex health problems involving multiple systems and a range of health care issues. It is closely integrated with 731. At the end of the course, students will be able to plan, evaluate, and modify/progress assessment and treatment strategies that consider the evidence, the specific situation of the client, the student's set of competencies and the management goals of other health professionals. In addition to further development of hands-on skills, the course is designed to facilitate skills in critical thinking, problem solving and clinical decision making.

There are no required texts. Students will have access to seminar handouts and reference lists.
1. **STATEMENT OF PURPOSE** (How does the course fit into the department's program?)

   This is a required course for all students in the MSc(PT) program

2. **EXPECTED ENROLMENT:**

   65 students per year

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL** (i.e., lectures, seminars):

   During the class sessions, students will usually be divided into groups and rotate through a set of stations addressing various aspects of the content being covered concurrently in course 731. The laboratory outline for each session will be posted on the McMaster learning management system and students are expected to review the outline and other relevant material prior to class. Where possible, students will have the opportunity to work with actual volunteers with the health condition being studied and with clinicians with expertise in the relevant area of practice. Students will attend the human anatomy lab to reinforce concepts.

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** (For 600-level course, indicate the **Extra Work** to be required of graduate students, i.e., exams, essays, etc.)

   **Midterm Written Exam** including multiple choice and short answer questions is worth 20% of the final mark

   **Clinical Reasoning Assignment** (individual written assignment) is worth 15% of the final mark

   **Objective Structured Clinical Examination (OSCE)** (1 hour practical examination focusing on the technical proficiency of assessment and treatment techniques) worth 35% of course grade

   **Final Written Exam** including multiple choice and short answer questions is worth 30% of the final mark

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT?**

   If yes, please attach to this form any relevant correspondence with the other department(s).

   No - this course is intended exclusively for students in the MSc(PT) program

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

   N/A

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Lynne Geddes   Email: geddesl@mcmaster.ca   Extension: 27818   Date: March 16, 2011

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
## Recommendation for Change in Graduate Curriculum - For Change(s) Involving Courses

### Please Read the Following Notes Before Completing This Form:

1. This form must be completed for **ALL** course changes. All sections of this form **must** be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritumcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

### Department/Program

School of Rehabilitation Science, Physiotherapy Program

### Course Title

Professional Transition

### Course Number

735

### Course Credit

<table>
<thead>
<tr>
<th>Full Course</th>
<th>Half Course</th>
<th>Quarter (Module)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(X)</td>
<td>( )</td>
</tr>
</tbody>
</table>

### Instructor(s)

Sara Gallagher

### Prerequisite(s)

None

### Nature of Recommendation (Please Check Appropriate Box)

- **New Course**
- **Date to be Offered:**
- **Was the Proposed Course Offered on Dean’s Approval?** If Yes, Provide the Date:
- **Will the Course be Cross-listed with Another Department?** If Yes, Attach to this Form Any Relevant Correspondence with the Other Department(s). **Note:** Cross-listing of courses requires approval from each department and faculty concerned.

### Change in Course Title

Provide the Current Course Title:

### Change in Course Description

**600-Level Course** *(Undergraduate course for graduate credit)* Please see #4 on page 2 of this form

### Change to Full Course

<table>
<thead>
<tr>
<th>Change to Full Course</th>
<th>Change to Half Course</th>
<th>Change to Quarter Course</th>
</tr>
</thead>
</table>

### Course Cancellation

Provide the Reason for Course Cancellation:

### Other

**X**

**Explain:**

Update course information to reflect current status.

### Brief Description for Calendar

Provide a brief description *(maximum 6 lines)* to be included in the Graduate Calendar.

This Unit VI course is designed to provide students with the opportunity to examine current issues within the physiotherapy profession related to the health care system and the physiotherapy role within the system. Students will also learn management and business skills to enable them to create an effective practice environment upon graduation.

### Content/Rationale

Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.

Given the rapid rate of change within the health care environment, an understanding of the key issues impacting on professional practice is essential. This course will allow students to explore professional issues related to the structure and function of health care systems and organizations and the evolving roles of rehabilitation professionals. Students will gain knowledge and develop basic management and organization analysis skills that will assist them in their entry into practice as health professionals.

There are no required texts. Students are expected to access a wide range of resources including literature from the general business and health administration areas. Seminar handouts and reference lists will be provided.
1. **STATEMENT OF PURPOSE** (How does the course fit into the department’s program?)

   This is a required course for all students in the MSc(PT) program.

2. **EXPECTED ENROLMENT:**

   65 students per year.

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL** (i.e., lectures, seminars):

   The format of this course is a series of seminars and workshops lead by invited guests and faculty that allow for information exchange and debate. Term 6 occupational therapy students and Unit 6 physiotherapy students will participate together in the majority of the seminars. The speakers will be from a wide variety of backgrounds.

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** (For 600-level course, indicate the **Extra Work** to be required of graduate students, i.e., exams, essays, etc.)

   Program, business or role proposal. This is a written assignment that involves developing a proposal for a new clinical program, a new professional role or setting up a small business or private practice.
   - Proposal outline, worth 20% of the final mark
   - Proposal paper, worth 45% of the final mark

   Portfolio Assignment. This is a written assignment, using forms from the College of Physiotherapists of Ontario to expand students' understanding of the role of legislation and college directives related to clinical decision making and professional responsibilities
   - Worth 35% of the final mark

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT?**

   No - this course is intended exclusively for students in the MSc(PT) program.

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

   N/A

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Lynne Geddes Email: geddesl@mcmaster.ca Extension: 27818 Date: March 16, 2011

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/December 2006
Rationale for changes to the Rehabilitation Science section in the graduate calendar

1. Some changes are editing to be clearer in consistency (ordering of programs, clarity of language)

2. The availability of courses has changed and so specific courses listed in the calendar may no longer be available. Changes were made to be consistent with our current offerings.

3. There is clarification to the content of the letters that applicants should provide e.g. in terms of listing relevant research experience.

4. The requirement of providing two academic references is graduate policy; but has been difficult for some of our online Masters who are primarily clinical and distance education. For this reason these students were often required to provide two clinical references as well. This seems an additional burden- providing 4 letters of reference at the Masters level -- but only two at the PhD level. Therefore, we change this requirement to offer an option of one clinical reference-to allow those individuals whose academic references are people who do not know them to provide a reference from someone who has greater personal knowledge of their work habits.

5. Made a specific note that the supervisory committee may require students to take additional courses; and must approve electives. At times it is necessary to indicate to students that they have knowledge or methodology gaps in a specific area must be addressed by additional courses; and the curriculum committee feels it is important to have this specifically stated.

6. We provided more specific direction on the English requirements for applicants.
Rehabilitation Science - Admissions Requirements for MSc Thesis & MSc Online

These are the revisions to the section of the graduate calendar describing the M.Sc. degree for Rehabilitation Science on page 208 ending at the PhD Degree. There are no changes to our program although we have been more specific in describing our standards for test of English.

M.Sc. Course-based Option
The admission requirements for the course-based option are:

1. Graduation from a Physical or Occupational Therapy Entry Level Degree Program; or a four-year health relevant degree program with a minimum of a B+ average in the final year of the program.

2. Two academic references; Applicants have the option of providing one work-related reference.

3. Written application outlining clinical interests and experience, learning expectations and goals.

4. For foreign applicants whose native language is not English, evidence of proficiency in the use of the English language. The most common evidence is the Test of English as a Foreign Language (TOEFL) score of:
   - Paper Based TOEFL: Minimum score of 600 with a minimum speaking score of 45 and minimum of 50 in the other areas.
   - Computer Based TOEFL: Minimum score of 250 with minimum oral score of 45.
   - Internet Based (iBT) TOEFL: Minimum total score of 92 with a minimum writing score of 22.

For the course-based option, candidates must:
1. Complete, with at least a B- standing, a minimum of seven (7) graduate half courses.
   - Students may take courses RS *700, *701, *702, *703, *707 as electives if they are able to be onsite at McMaster University and *704 dependent on the availability of faculty.
   - Two elective courses may be chosen from among on-campus and other distance education courses, including those offered by other universities. A list of pre-approved courses for electives has been created (see the website) and approved by the Associate Dean of Rehabilitation Science and the Associate Dean of Graduate Studies (Health Sciences).

2. Complete RS 730 scholarly paper to demonstrate integrative thinking while addressing an issue in rehabilitation.

M.Sc. Degree -M.Sc. Thesis Option
The admission requirements for the thesis option are:
1. Graduation from a Physical or Occupational Therapy Entry Level Degree Program; or a four-year health relevant degree program with a minimum of a B+ average in the final year of the program.

2. Two academic references; Applicants have the option of providing one work-related reference.

3. A letter (maximum two pages) outlining the proposed training plan (supervisor and research area), research interests and experience; and long term career goals.

The general regulations for the M.Sc. degree appear under the Regulations for Master’s degrees near the beginning of this Calendar.

For the thesis option, candidates must:

1. Complete, with at least a B- standing, a minimum of four graduate half courses:
   - An approved Research Methods Course (e.g. RS *707);
   - An approved Data Analysis course (e.g. RS *714)
   - RS *700; and
   - An additional approved course (e.g. RS*701, *702, *703, *704, *711, *712)
   - SGS 101 - Academic Research Integrity and Ethics (an online module taken by all graduate students)
   - The School of Rehabilitation Science has a series of seminars given by rehabilitation scientists. Regular attendance at these seminars is required.
   - The student's supervisory committee may require students to take additional courses
   - Students may choose additional courses, which may be taken once approved by the student's supervisory committee

2. Complete a research thesis on an approved rehabilitation science issue and defend the thesis at a final oral examination.

Transfer Process (from a Masters to PhD program)

Exceptional students enrolled in the McMaster M.Sc. thesis option in the Rehabilitation Science Program can apply to transfer to the Ph.D. after meeting all the course requirements of the M.Sc. and establishing a thesis plan consistent with a PhD. The application must first be approved by the student’s committee. Then, a written application is submitted to the SRS Admissions Committee, followed by an oral presentation; at which time a decision on transfer is made.
Rehabilitation Science

These are the revisions to the preamble section of the calendar describing courses on page 209.

Courses

Courses marked with an asterisk (*) are half courses.

Students are responsible for ensuring their course selections meet their program and learning requirements, in consultation with their committee and program faculty/administration. Thesis-based students require permission of their supervisor before registering for courses. Some courses require permission of the course instructor and have enrollment restrictions. Not all courses are offered every year. Students may take more than one special topics (*703/*704) course, but only one may be counted towards the minimum degree requirements. Students taking a special topics course cannot also receive credit for a subsequent regular course offered on the same topic.
Rehabilitation Science – Ph. D. Degree

These are the revisions to the section of the calendar describing the PhD degree for rehabilitation science starting on page 208 and ending at the top of page 209 where it goes on to say research in rehabilitation science. We cannot change our fields so I have not edited that section. There are no changes to our program although we have been more specific in describing our standards for test of English.

Ph.D. Degree

The admission requirements for the Ph.D. are:

1. Completion of a thesis-based M.Sc. degree in rehabilitation or a related field with a minimum of a B+ average. Students in non-thesis-based degrees such as entry-level professional Masters (OT or PT or health related professionals degree) or a course-based Masters in a rehabilitation related field may be considered based on a minimum B+ average, combined with evidence of research experience and scholarly writing.

2. Two letters of recommendation from referees attesting to your academic/research abilities.

3. An up-to-date curriculum vitae.

4. A letter (maximum two pages) outlining the proposed training plan (research interests, proposed research project/line of investigation, identified potential supervisors) and previous research experience/training. The letter should also provide an explanation of expectations for financial support including any applications for external funding. Finally, a brief description of tentative future career plans should also be included.

5. For foreign applicants whose native language is not English, evidence of proficiency in the use of the English language is required. The most common evidence is the Test of English. The minimum university requirements are outlined in the General Regulations of the Graduate School; preferred standards for admission into the SRS degrees are:

   - Paper Based TOEFL: Minimum score of 600 with a minimum speaking score of 45 and minimum of 50 in the other areas.
   - Computer Based TOEFL: Minimum score of 250 with minimum oral score of 45.
   - Internet Based (iBT) TOEFL: Minimum total score of 92 with a minimum writing score of 22.

The degree requirements for the Ph.D. are:

- The general regulations for the Degree Doctor of Philosophy appear earlier in the Calendar.
- RS *725 Effective Knowledge Transfer for Rehabilitation Scientists (3 credits)
- An approved Data Analysis or Methods course (3 credits)
- An approved Content Course Relevant to Thesis (3 credits)
• SGS 101 - Academic Research Integrity and Ethics (an online module taken by all graduate students)
• The School of Rehabilitation Science has a series of seminars given by rehabilitation scientists. Regular attendance at these seminars is required.
• The student's supervisory committee may require students to take additional courses. PhD students are expected to have previously completed Masters level training in research methods, data analysis and theory. If these have not been completed during Masters level training, then additional courses in research methods/analysis will be required. If a course on the theory of science relevant to Rehabilitation has not been completed at the Master's level, students will be required to complete RS 700.
• Students may choose additional courses, which may be taken once, approved by the student's supervisory committee.
• Candidates are required to complete and pass the Ph.D. Comprehensive Examination. The comprehensive examination will include submission and oral defense of a portfolio designed to demonstrate breadth of knowledge and skills within their field, extending beyond the thesis topic. The candidate will use critical thinking and analysis to complete three tasks: a scholarly paper, a completed funding proposal, and an evaluated knowledge translation tool/intervention. The comprehensive examination will normally be completed within 20 months following registration for full time students, and 28 months for part-time students.
• The student will submit and defend a thesis demonstrating an original contribution to rehabilitation science. The supervisory committee determines when a candidate is ready to write the thesis and proceed to defense. The candidate submits a written thesis and defends it at a Final Oral Examination.
The School of Rehabilitation Science offers a M.Sc. and Ph.D. in Rehabilitation Sciences for individuals who have a prerequisite degree in Occupational Therapy, Physiotherapy or another field relevant to Rehabilitation Science; and wish to pursue graduate training in Rehabilitation Science.

There are two options within the Rehabilitation Science Master’s programs:
1. The thesis option which may be undertaken on a full or part-time basis on campus, and
2. The course-based option which is offered on a full or part-time basis; and can be completed entirely through online education, or include on-campus course options.

The **M.Sc. course-based option** provides training to physiotherapists, occupational therapists and other health professionals who want to obtain a master's degree relevant to their clinical practice. Components of the program are offered as collaboration between the School of Rehabilitation Science and the University of British Columbia. The program provides flexibility for working clinicians at a distance to complete the program entirely online and on a part-time basis. However, students also have the option to take on-campus courses. Courses emphasize evidence-based practice, clinical measurement/evaluation, critical thinking and application of knowledge to practice.

The **M.Sc. thesis option** provides training that will develop knowledge, appraisal and evaluation skills in Rehabilitation Science. Students will study and apply theory, research design, analysis methods, and rehabilitation science to contribute to the conduct and application of rehabilitation research; and assume leadership in health-related roles.

The **Ph.D. in Rehabilitation Science** provides training to develop rehabilitation scientists who will become experts in rehabilitation science, advance rehabilitation research and transfer new knowledge into practice and policy. This competency based program educates students in rehabilitation theory, research design and methods, grantsmanship, scientific writing, knowledge exchange and translation, and teaching/learning strategies. This option includes coursework, a comprehensive portfolio and a thesis. Graduates will be prepared to take on academic, leadership or research roles.
Rehabilitation Science – changes to page 210 of the graduate calendar

Please remove the entire section on page 210 entitled "Other Courses that may be of interest to students in the thesis option are the following" – this section lists courses in other departments. It is redundant information that is contained in the calendar elsewhere; and there are a number of courses listed that students cannot get into very easily, and others that are appropriate that are not listed here. I think it is fine for supervisors and students to find appropriate courses by looking throughout the calendar.

That would mean that after the description of course 758, the next section of the calendar would be entitled “Courses in the Online Course-based Option”.
SCHOOL OF GRADUATE STUDIES

RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING COURSES

Please read the following notes before completing this form:

1. This form must be completed for all course changes. All sections of this form must be completed.
2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: spiritu@mcmaster.ca).
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

<table>
<thead>
<tr>
<th>DEPARTMENT/PROGRAM</th>
<th>School of Rehabilitation Science/Rehabilitation Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE TITLE</td>
<td>Qualitative Research Methods for Analyzing and Interpreting Data</td>
</tr>
<tr>
<td>COURSE NUMBER</td>
<td>758</td>
</tr>
<tr>
<td>COURSE CREDIT</td>
<td></td>
</tr>
<tr>
<td>INSTRUCTOR(S)</td>
<td>Lynne Lofield</td>
</tr>
<tr>
<td>PREREQUISITE(S)</td>
<td>HRM 745</td>
</tr>
</tbody>
</table>

NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)

<table>
<thead>
<tr>
<th>NEW COURSE</th>
<th>DATE TO BE OFFERED</th>
<th>WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>IF YES, PROVIDE THE DATE:</td>
</tr>
</tbody>
</table>

Will the course be cross-listed with another department? Yes / If yes, attach to this form any relevant correspondence with the other department(s). Note: Cross-listing of courses requires approval from each department and faculty concerned.

<table>
<thead>
<tr>
<th>CHANGE IN COURSE TITLE</th>
<th>PROVIDE THE CURRENT COURSE TITLE: Qualitative Research Methods for Analyzing and Interpreting Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHANGE IN COURSE DESCRIPTION</td>
<td>X 600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form</td>
</tr>
<tr>
<td>CHANGE TO FULL COURSE</td>
<td>CHANGE TO HALF COURSE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COURSE CANCELLATION</th>
<th>PROVIDE THE REASON FOR COURSE CANCELLATION:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>OTHER</th>
<th>EXPLAIN:</th>
</tr>
</thead>
</table>

BRIEF DESCRIPTION FOR CALENDAR - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.

This intermediate-level course builds on learners’ prior knowledge about qualitative research from an introductory graduate course on qualitative research (HRM/NUR/RS 745) or its equivalent. During the course, learners will: gain first-hand experience with generic and sub-approach specific data analysis frameworks and methods; select one specific sub-approach (e.g., constructivist grounded theory) and follow its tenets while conducting a secondary analysis of data from a study on osteoporosis and aging among women; create and follow a data analysis plan congruent with the philosophy, goals and methods of the selected sub-approach; use appropriate methods to ensure rigour in data analysis and interpretation; maintain a reflective research journal throughout the course; and demonstrate a thorough understanding of course material and concepts in two written papers and an in-class presentation on their work. Learners are also expected to work towards create a positive and collegial learning environment for themselves and their classmates.

CONTENT/RATIONALE - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.

This change in course description is to provide a more accurate description of the current course content.
1. **STATEMENT OF PURPOSE** (How does the course fit into the department’s program?)

2. **EXPECTED ENROLMENT:**

3. **DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL** (i.e., lectures, seminars):

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION:** (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)

5. **TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).**

6. **IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?**

**PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
<th>Extension</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>J. MacDermid</td>
<td>macderj</td>
<td>22524</td>
<td>31 March 2011</td>
</tr>
</tbody>
</table>

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/medy