McMaster University **School of Graduate Studies**

1280 Main Street West
Hamilton, Ontario, Canada
L8S 4L8

Phone 905.525.9140
Ext. 23679
Fax 905.521.0689
http://www.mcmaster.ca/graduate

April 30, 2008

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

From : Medy Espiritu
Assistant Secretary and SynApps System Administrator

The next meeting of the Faculty of Health Sciences Graduate Policy and Curriculum Committee will be held on **Monday, May 5, 2008** at **2:00 p.m.** in **MDCL-3012**.

Listed below are the agenda items for discussion.

If you are unable to attend this meeting, please notify me at extension 24204 or email espiritu@mcmaster.ca.

A G E N D A

I. MINUTES OF THE MEETING OF DECEMBER 5, 2007

II. BUSINESS ARISING

III. CURRICULUM REVISIONS

Biochemistry and Biomedical Sciences
- New course: *731 – Stem Cells and Regenerative Medicine

Health Research Methodology
- Change in the comprehensive examination procedure
- New courses:*724 – eHealth: Fundamentals of eHealth and the Canadian Health Care System
  *741 – Introduction to Health Technology Assessment
- Cross-listing of course: *C711 – Health Economics and Evaluation *(to be cross-listed as HRM *711)*
- Minor change: *758 – Qualitative Research Methods for Collecting, Analysing and Interpreting Data

Medical Sciences
- New course: *747 – Pediatric Exercise Medicine

Nursing
- Minor change: *700 – Philosophical Basis of Nursing Research

Occupational Therapy
- Change in course description: *727 – Transition to Practice: Inquiry and Integration V
- Minor change: 627 – Person, Environment, and Occupation: Inquiry and Integration – Term 2
- Minor change: *738 – Transition to Practice: Professional Roles and Experiential Practicum VI

Physiotherapy
- Original course descriptions for 611, *612, *621, and *622

Calendar copy: Ph.D. in Health Policy – Dr. M. Giacomini
Note: *The Joint Faculties of Humanities and Social Sciences Graduate Curriculum and Policy Committee approved this agenda item on April 16, 2008. This will also be presented for approval at the meeting of the Faculty of Business Graduate Curriculum and Policy Committee on May 7, 2008.*

Calendar copy: eHealth – Dr. N. Archer
Note: *The Faculty of Engineering Graduate Curriculum and Policy Committee approved this agenda item on April 15, 2008. This will also be presented for approval at the meeting of the Faculty of Business Graduate Curriculum and Policy Committee on May 7, 2008.*

IV. Graduate Faculty Participation – *for information*

V. Change in Ph.D. course requirement for Neuroscience – *for information*
Note: *The Faculty of Science Graduate Curriculum, Policy, Admissions and Study Committee approved this agenda item on April 21, 2008.*

VI. OTHER BUSINESS

FACULTY OF HEALTH SCIENCES GRADUATE POLICY AND CURRICULUM COMMITTEE
DECEMBER 5, 2007, 1:00 P.M.
MDCL-3017

PRESENT: Dr. C. Richards (Chair), Mr. P. De Ciantis, Dr. B. Lichty, Ms. K. McCahill-Harrison, Mr. J. Hernandez, Dr. J. Nodwell, Dr. M. Stampfli, Dr. L. Schwartz, Dr. P. Solomon, Dr. L. Wishart, Mrs. M. Espiritu (Assistant Secretary)

REGRETS: Dr. P. Baxter, Dr. K. Bennett, Dr. M. Black, Dr. S. Wilkins, Mr. J. Scime

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I. MINUTES

Approval of the minutes for the meetings of April 19, 2007 and June 13, 2007 was deferred until the next meeting to give the members ample time to review them.

II. BUSINESS ARISING

Health Sciences Graduate Policy and Curriculum Committee

Dr. Richards referred to the revised membership list of the Faculty of Health Sciences Graduate Policy and Curriculum Committee, which was approved recently by the Faculty of Health Sciences Executive Committee. Dr. Richards explained that the previous curriculum committee's membership was heavily comprised of representatives from Medical Sciences; the list has been revised to reflect equivalent representation from each program.

III. ASSOCIATE DEAN'S REPORT

Review of the School of Graduate Studies

Dr. Richards explained that on November 5, 2007, the Provost conducted an external review of the School of Graduate Studies' role in McMaster's academic mission. The review team met with the Acting Dean and Associate Deans of the School of Graduate Studies, faculty deans, department chairs, program directors, graduate advisors, graduate students from the six faculties, and the staff members of the School of Graduate Studies. The Provost has already received the review team's report and he expects it to be available soon for public viewing. In addition, Dr. Richards said the terms of reference for the Dean of Graduate Studies are currently under review and he expects that there will also be a change in the terms of reference for the Associate Deans.

IV. CURRICULUM REVISIONS

1) Medical Sciences Ph.D.: Change in comprehensive examination procedure

Dr. Stampfli referred to the document and discussed the proposed changes to the Ph.D. Medical Sciences comprehensive examination procedure. He explained that: (a) the written part of the examination is in the form of a CIHR-style grant application focusing on the research area or any field in Medical Sciences that is of interest to the student; (b) there is an oral examination based on the proposal; and (3) the committee is comprised of the supervisor, one other member of the supervisory committee, and two faculty members from the Medical Sciences program. Dr. Richards commented that the current comprehensive examination procedure has encountered several problems in the past and the Ontario Council on Graduate Studies has recommended that the program revise its comprehensive examination procedure. Dr. Stampfli said the proposed change garners wide support from both faculty members and graduate students. Dr. Stampfli added that the proposal is similar to the comprehensive examination formats in Biochemistry, Biology, and Neuroscience.

Dr. Nodwell questioned the grading system for the written part of the comprehensive examination (i.e., the criteria for passing and failing). Dr. Stampfli explained that the assessment of the written portion would be in accordance with the CIHR guidelines. Ms. McCahill-Harrison commented with agreement from Dr. Stampfli that the document should clearly specify the assessment procedure. One member asked if there is a process in place to ensure that the topic proposal is the original work of the student, not the supervisor. Dr. Stampfli acknowledged that the supervisor has some input but the topic cannot be lifted in part or in whole from any of the supervisor's grant or grant applications. Dr. Richards explained that a member of the supervisory committee (not the supervisor) will act as the coordinator of the examination, and this person will serve as an advisor to the student. In response to a question, Dr. Stampfli said that if the proposal is approved, the change will affect incoming students and those who have not yet done their comprehensive exams. According to Dr. Stampfli, 18 students in the program are about to do their comprehensive exams. Ms. McCahill-Harrison commented with agreement from Dr. Stampfli that the document does not specify the timeline for a re-examination should the student fail the first time. Dr. Richards suggested that the time to revise a failed written component should be no more than three weeks. The student is required to withdraw from the program if he/she fails the second time.

2) Medical Sciences Ph.D.: Change in course requirements

Dr. Stampfli reviewed the proposed change to the course requirements for the Ph.D. program in Medical Sciences. Ph.D. students will be required to take at least one 700-level course. He added that the supervisory committee may require the student to take additional courses.

Ms. McCahill-Harrison asked if the one 700-level half-course required for the program will be in Medical Sciences. Dr. Richards responded that it should be a Medical Science course, however, any student can request for a change, and the committee will make a decision based on the merit of the request. In response to Ms. McCahill-Harrison, Dr. Richards explained that the student

has to obtain a B- for the course. He added that the overall course average for transferring from the Master's to the Ph.D. program is still a B+.

Dr. Richards commented that the proposed reduction of course requirements is an advantage to Medical Sciences because the program currently has large class enrolments. Dr. Stampfli said the changes to the comprehensive examination and the course requirements would give students more time to focus on their research.

Dr. Stampfli moved, and Dr. Wishart seconded,

"that the Faculty of Health Sciences Graduate Policy and Curriculum Committee approve, for recommendation to the Faculty of Health Sciences Executive Committee, the proposed changes in the comprehensive examination and course requirements for the Ph.D. program in Medical Sciences."

The motion was **carried**.

For information of the committee, Dr. Richards explained that the new coordinator for course *713 – Physiology and Pathophysiology of the Gastrointestinal Tract is Dr. Waliul Khan.

3) Rehabilitation Science

Dr. Solomon reviewed the proposed new courses for the Rehabilitation Science program:

RS *711 – Musculoskeletal Health Assessment and Diagnostics for Advanced Practice Therapists
RS *712 – Therapeutics for Advanced Practice Musculoskeletal Care
RS *770 – Leadership in Rehabilitation

Dr. Solomon moved, and Dr. Nodwell seconded,

"that the Faculty of Health Sciences Graduate Policy and Curriculum Committee approve, for recommendation to the Faculty of Health Sciences Executive Committee, the new courses, RS *711, RS *712, and RS *770, as described in the documents."

Ms. McCahill-Harrison noted that course RS *711 will be offered in May 2008 and course RS *770 will be offered in April 2008. She suggested contacting Graduate Studies to ensure that adding the courses to SOLAR will not be a problem.

The motion was **carried**.

Dr. Richards discussed the proposed change in the prerequisite for course HRM *770 – Mixed Methods Research Designs for Health Services and Policy Research. The current prerequisite for the course is permission of the instructor; the proposed prerequisite requires students to have HRM 721, 745 and permission of the instructor.

Dr. Solomon moved, and Mr. De Ciantis seconded,

“that the Faculty of Health Sciences Graduate Policy and Curriculum Committee approve, for recommendation to the Faculty of Health Sciences Executive Committee, the change in prerequisite for RS *770.

The motion was **carried**.

Graduate Faculty Participation

Dr. Richards briefly discussed the Graduate Faculty Participation List for information of the members.

There was no other business and the meeting adjourned at 2:05 p.m.

McMaster University

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	Biochemisty and Biomedical Sciences
COURSE TITLE	Stem Cells and Regenerative Medicine

COURSE NUMBER	731	**COURSE CREDIT**		
		FULL COURSE ( )	**HALF COURSE (X)**	**QUARTER (MODULE) ( )**
INSTRUCTOR(S)	Drs. Mick Bhatia and Laurie Doering			
PREREQUISITE(S)	None			

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

NEW COURSE	x	**DATE TO BE OFFERED:** January 2008	**WAS THE PROPOSED COURSE OFFERED ON DEAN'S APPROVAL?** NA **IF YES, PROVIDE THE DATE:**

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.**

CHANGE IN COURSE TITLE		**PROVIDE THE CURRENT COURSE TITLE:** N/A				
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:** N/A				
OTHER		**EXPLAIN:**				

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

Stem cells hold immense experimental potential as model systems for human disease and development that are difficult to ascertain in cell lines or in the mouse. Arguably, the most impactful role of human stem cells is for tissue repair that becomes damaged from disease or injury; examples include diabetes and spinal cord injury. This utility of stem cells is heavily seeded in new approaches to the clinic called "regenerative medicine". However, there are many stem cell types that may be specific to certain applications, and new technologies involved with stem cell delivery and differentiation that require elucidation before these stem cell-based replacement therapies can be robustly brought to the bedside. The underlying biology that defines stem cells, and their potential applications to human health, will be discussed broadly to better define the current successes and future limitations of regenerative medicine using human stem cells.

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

Defining the various stem cell types will be the initial goal of this session. This will include embyronic stem cells, somatic stem cells with examples from the hematopoietic and neural system, and reprogrammed cells derived from mature cell types. Experimentally to define the function of these cells, human-mouse xenotransplantation assays will be reviewed, including the relevance of these measures to clinical applications.

1. STATEMENT OF PURPOSE (How does the course fit into the department's program?)

Currently, Stem Cells and Cancer is a field of study for the Department, and this course represents the only course offered that focuses on human stem cell biology and applications.

2. EXPECTED ENROLMENT:

10-15

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

Depending on the specific subtopics, the course will generally be 20% lecture, and 80% open review and discussion of primary papers that assist the group in achieving the course goals of understanding basic stem cell biology and application to regenerative medicine.

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 will be based 50% on individual presentations of subtopic and primary publication/study, along with 50% class participation in discussions.

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: Mickie Bhatia Email: mbhatia@mcmaster.ca Extension: 28687 Date: January 18, 2008

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

McMaster University

Kevin W. Eva, Ph.D.
Associate Professor & Associate Chair
Clinical Epidemiology & Biostatistics
Program for Educational Research & Development
MDCL, Room 3522, McMaster University
HAMILTON, ON, Canada L8N 3Z5
E-Mail: evakw@mcmaster.ca
Phone: (905) 525-9140 x27241
FAX: (905) 572-7099

To Whom It May Concern,

We are writing this letter to alert you to changes that the Board of Comprehensives Examiners for the Health Research Methodology Program would like to make to our Comprehensive Examination Purpose and Procedure Manual. As you will recall, this past academic year was the first year of our revised comprehensives process and, as a result, was inevitably bound to be a trial year to some extent. The process has run very smoothly to date and we are getting set for round 2. To do so the Board met with the broader comprehensives planning committee who conceived of the process to discuss issues that had come to light during the past year and, as a result of that discussion, a few changes have been proposed for the procedure.

Along with this letter you should receive an annotated copy of the handbook that will illustrate the changes being proposed. Most are merely clarifying and esthetic changes, but a change has been made to the proposed evaluation scheme that resulted in our seeking your committee's approval. The change is that rather than requiring two "in-seminar presentations" that would be graded by faculty facilitators we intend to require only one such presentation. The reasons for this are four-fold:

1. The presentations require substantially more work than the commentary, so a weighting of 30% for one presentation and 10% per commentary seems more appropriate.
2. The principle of multiple sources of assessment is still maintained as candidates are still expected to complete 1 seminar, 6 commentaries, and participate in the PhD seminar in addition to the grading performed on their independent studies.
3. Logistically, as the HRM program's enrollment increases, 1 seminar per student is more feasible.
4. The first set of seminar sessions have now been dedicated to student presentations of their independent study proposals, still requiring students to present twice but

without a mark being assigned to the first presentation as no content experts will be present.

Thank you in advance for your consideration of these changes. Should you need any further information please do not hesitate to ask.

Sincerely,

Jean-Eric Tarride
Chair, Board of Comprehensive Examiners

Kevin Eva
PhD Seminar Co-Facilitator

HEALTH RESEARCH METHODOLOGY
Ph.D. PROGRAMME
FACULTY OF HEALTH SCIENCES
GRADUATE PROGRAMMES

COMPREHENSIVE EXAMINATION
PURPOSE AND PROCEDURE

McMaster University

Hamilton, Ontario

Revised April 9, 2008 by Kevin Eva

Deleted: December 2006 revised by FM Jan 9, 2007

COMPREHENSIVE BOOKLET
HEALTH RESEARCH METHODOLOGY

Ph.D. LEVEL

Table of Contents

DISCLAIMER iii

PREAMBLE 1

GENERAL OBJECTIVE 1

ACADEMIC INTEGRITY AND ACADEMIC DISHONESTY 1

GLOSSARY OF TERMS 1
- THE BOARD OF COMPREHENSIVE EXAMINATIONS (BCE) 1
- COMPREHENSIVE SEMINAR COORDINATOR(S) 1
- COMPREHENSIVE SEMINAR PRESENTER 2
- INDEPENDENT STUDY SUPERVISOR 2
- MEMBER-AT-LARGE 2
- DISSERTATION SUPERVISOR 2
- PROGRAM COORDINATOR 2
- ADMINISTRATIVE ASSISTANT 2

AIM AND CONTENT OF THE COMPREHENSIVE EXAMINATION 2
- PhD SEMINAR 3
- INDEPENDENT STUDY 3

TIMING OF THE EXAMINATION 4
- PhD SEMINAR 5
- INDEPENDENT STUDY 5

ROLES AND RESPONSIBILITES 6
- THE BOARD OF COMPREHENSIVE EXAMINATIONS (BCE) 6
- THE STUDENT 6
- PhD SEMINAR COORDINATOR(S) 7
- PhD SEMINAR PRESENTER 7
- INDEPENDENT STUDY SUPERVISOR 7
- MEMBER-AT-LARGE 8
- DISSERTATION SUPERVISOR 8
- HRM ADMINISTRATIVE ASSISTANT 8

THE EXAMINATION PROCESS 8
- PhD SEMINAR 8
- INDEPENDENT STUDY 9
  - Student Interim Progress Report 9
  - Interim Assessment from Independent Study Supervisor 9
  - Interim Assessment from the Comprehensive Seminar Coordinators 9
  - Interim Report 9
  - Final Report 10

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EVALUATION OF THE EXAMINATION **10**
PhD SEMINAR **10**
INDEPENDENT STUDY **10**
Key dates for evaluation: **10**
PASS AND PASS WITH DISTINCTION **11**
SECOND CHANCE AND FAILURE **11**
Ph.D. Seminar 11
Independent Study 12
IMPORTANT POINTS TO BEAR IN MIND **12**
TIMELINE 2008 - 2009 ..... **14**
INDEPENDENT STUDY PLAN OF STUDY **15**
Grading Form for Commentary **17**
Grading Form for In-seminar Presentations **18**
Grading Form for Independent Study (Written) **19**
Grading Form for Independent Study (Oral Defense) **20**

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DISCLAIMER

This booklet is intended to guide faculty and students through the procedures of the Comprehensive Examination. It is not a code of conduct or a precise legal document and, therefore, it must be understood by all that minor variations in the details, timing and manner in which the various steps are addressed or completed may occur and should be acceptable to all parties.

It is incumbent on the student to avail himself or herself of the described procedures. If any of the steps are not taken, the responsibility rests with the student and such omissions cannot be used as a basis for an Appeal against a decision of the Examining Committee. Any inquiries about these procedures are to be directed to the Board of Comprehensive Examinations (BCE) or the Administrative Assistant at extension 27718.

Any disagreement or misunderstanding over the interpretation of specific points should be referred to the Board of Comprehensive Examinations and, if resolution is not achieved, to the Associate Dean of Graduate Studies (Health Sciences) who will make a final decision.

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PREAMBLE

McMaster has a long tradition of innovation in health education, one that the Health Research Methodology Program has embraced. We seek to provide our students with a comprehensive, methodologically rigorous and respectful interdisciplinary environment for learning, and to create intellectual leaders capable of addressing age-old and emerging problems in diverse areas of health research (e.g, clinical epidemiology, biostatistics, health service research, population and public health, health technology assessment and other health related fields).

GENERAL OBJECTIVE

The Health Research Methodology (HRM) Ph.D. Program seeks to provide an educational experience that produces researchers with appropriate skills to contribute to understanding the production, protection and restoration of health in individuals, patient groups or populations, by the applications of appropriate research methodology.

The comprehensive examination process within the HRM Ph.D. Program aims to assess the ability of students to integrate ideas that reflect the current state of knowledge in the five HRM fields (clinical epidemiology, biostatistics, health services research, population and public health and health technology assessment), and other areas of Health Research Methodology, as appropriate.

Candidates are expected to provide reasoned arguments to support their interpretation of the areas under study and to demonstrate their ability to use the information they have acquired. Students must pass the examination before being permitted to progress to the preparation of a research thesis.

ACADEMIC INTEGRITY AND ACADEMIC DISHONESTY

Any degree of academic dishonesty or plagiarism in the written part in the Comprehensive Examination is unacceptable (see Graduate Calendar, section 6.1). Any material taken word for word from the published work of others must be presented in quotation marks and referenced appropriately. It is not permissible to take the essential structure and ideas of a review article and merely to paraphrase them. The source of diagrams and figures taken from the published literature must be acknowledged. The content of the written reports should represent the student's own analysis of the research literature in the student's own words.

If academic dishonesty is suspected on the written portion of the examination the Examination Chair will be notified and the matter will be pursued through the Academic Integrity Policy of the University. The student will not be permitted to proceed to oral examination until the allegation of dishonesty is satisfactorily resolved.

GLOSSARY OF TERMS

THE BOARD OF COMPREHENSIVE EXAMINATIONS (BCE)

The Board of Comprehensive Examinations consists of at least three experienced HRM graduate faculty. Board members are appointed for staggered three-year terms by the Faculty of Health Sciences, Graduate Policy & Curriculum Committee. The Chair is appointed by the HRM Program Coordinator. The Seminar Coordinator(s), HRM Program Coordinator and the Associate Dean of Graduate Studies (Health Sciences) are ex-officio members.

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COMPREHENSIVE SEMINAR COORDINATOR(S)

Member(s) of HRM graduate faculty will serve as Seminar Coordinator(s) responsible for coordinating the

PhD Seminar.

COMPREHENSIVE SEMINAR PRESENTER
An HRM graduate faculty member who serves as a resource person and content expert in each core seminar session. On occasion, a post-comprehensives Ph.D. student will serve as a presenter in non-core sessions (i.e., non-examinable sessions)

INDEPENDENT STUDY SUPERVISOR
A member of graduate faculty at McMaster University, not the student's thesis supervisor, but may be a member of the supervisory committee (NB. Only one of the Independent Study Supervisor or the Member-at-large may sit on the student's supervisory committee). This person supervises the Independent Study component of the comprehensives.

MEMBER-AT-LARGE
A member of graduate faculty at McMaster University, not the student's thesis supervisor, but may be a member of the supervisory committee (NB. Only one of the Independent Study Supervisor or the Member-at-large may sit on the student's supervisory committee). This person aids in the evaluation of the Independent Study component of the comprehensives, but should not be expected to play a supervisory role.

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This person is a member of HRM graduate faculty. This person cannot serve as the student's Independent Study Supervisor or the Member-at-large.¶
¶

DISSERTATION SUPERVISOR
This person is a member of HRM graduate faculty. This person cannot serve as the student's Independent Study Supervisor or the Member-at-large.

PROGRAM COORDINATOR
The Health Research Methodology Graduate Program is under the leadership of an experienced Graduate Faculty member, who is the Program Coordinator.

ADMINISTRATIVE ASSISTANT
The administrative assistant is the person responsible for the administrative functioning of the HRM Program in the Health Sciences Graduate Program Office (HSC-3N10). The Independent Plan of Study and Interim Report are submitted to the HRM Administrative Assistant (HSC-3N10) for distribution to the Board of Comprehensive Examinations.

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AIM AND CONTENT OF THE COMPREHENSIVE EXAMINATION

The comprehensive examination process has two educational components: (1) a Ph.D. seminar of approximately 20 sessions, providing students with the opportunity to engage broadly in interdisciplinary learning, and (2) an Independent Study, involving part time work over 10 months, to allow students to demonstrate their competence in an area of specialization. The Ph.D. Seminar addresses the student's need to demonstrate breadth of learning, and the Independent Study empowers the student to demonstrate their depth of specialization.

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Full time students will complete both components of the exam in the second year of their Ph.D. studies. Part time students may elect to spread the comprehensive examination process over years 2 and 3, completing the Ph.D. Seminar and Independent Studies in alternate years, as appropriate. Students may complete the comprehensive examinations on a schedule different from the routine only in unique circumstances and following the limits described in the section of this document entitled "Timing of the examination."

The Comprehensive examination is graded like a course, with an overall mark that sums the grades

assigned for all portions of the comprehensive process. Successful completion of both major components of the exam (the Ph.D. Seminar and Independent Study) is required to pass (B- or above), with a final grade of pass (B- to A) or pass with distinction (A+) determined as a summary grade. The comprehensive examination process involves multiple faculty in grading each student for multiple discrete elements of the examination. These attributes improve the reliability of the evaluation process.

The comprehensive examination process as a whole will be coordinated by the Board of Comprehensive Examinations. The Ph.D. Seminar will be coordinated by one or two faculty members, with individual Seminar presentations developed by individual faculty presenters, in consultation with the Seminar coordinators and the Board of Comprehensive Examinations. Students are responsible for coordinating their Independent Study, in consultation with their dissertation supervisor (and supervisory committee, where appropriate). Students will help to identify a faculty member to supervise the Independent Study, and a Member-at-large to aid in its evaluation.

PhD SEMINAR

The seminar consists of approximately twenty sessions. Of the 20 session dates, approximately 12 will address core content (i.e., examinable content). Each of these core sessions will provide students with a historical, conceptual, theoretical or philosophical grounding in an area of research germane to HRM students. The first half of the core session presentation will be led by the Seminar presenter; the second half of most core sessions will consist of student-led presentations and discussions on topics of interest that relate to that session's focus. Four of the 20 total session dates will be allocated to student presentations and oral defenses of Independent Study projects. The remaining four sessions will offer non-core material (i.e., not examinable) that is useful to students at this stage in their career (e.g., writing skills, establishing a research career, etc.). The first 2-3 will consist of student presentations of their independent study proposals, the goal being to enable a collaborative learning environment in which one can engage with their peers and learn from their ideas. The approximate breakout of sessions will be as follows:

- Core Sessions (examinable content)
  - Ten sessions will be dedicated to a historical/philosophical/conceptual overview of each of the 5 HRM fields (generally, 2 sessions per field).
  - Two sessions will be dedicated to a similar overview of issues of scholarly or research importance to all HRM students. For example, one or more sessions might be devoted to research ethics issues, or issues in education such as student evaluation.

- Non Core Sessions (non-examinable content)
  - Four session dates will be dedicated to issues of more general interest, to present independent study proposals, or for skill development (e.g., pedagogical issues, career advancement, writing skills, or delivering oral presentations). The non-core sessions will typically bookend the core sessions, thus allowing students time to prepare their own presentations (either In-Seminar or Independent Study oral defenses).

- Oral Defense Sessions
  - Four sessions will be allocated to student presentations and oral defenses of their Independent Study projects. Up to 3 students will present during each session, thus allowing one hour for presentation and response to questions (i.e., an oral defense). Several oral defense sessions may be held concurrently as necessary to ensure that all students have sufficient time to present their work.

INDEPENDENT STUDY

The Independent Study is expected to take 20% of the student's time (that is, one day per week), from September through April. Full time students are expected to complete the Independent Study alongside the Ph.D. seminar in the second year of their Ph.D. program. Part time students may complete the total

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¶
Students are expected to prepare 2 in-seminar presentations in areas where they have an interest but limited expertise so that they may gain some breadth of exposure. Students will not prepare presentations within their fields of Independent Study or their dissertation fields. Students will use the initial list of papers identified by the faculty instructor for the relevant field session as the basis for a more advanced study in the area, addressing a question or topic of interest. To complete this advanced study, the student will be expected to identify additional, relevant readings, and prepare a 15-minute presentation (with electronic aids). Students may draw on the Seminar Presenter or their seminar colleagues to assist in the identification of additional sources, or search strategies, but they are expected to complete the in-seminar presentation independently.¶

comprehensive examination process over two years, in years two and three, and may elect to complete either portion in either year. The Independent Study is intended to provide an opportunity for the student to explore an area of interest and specialization in depth. It is expected that the student will explore a topic that builds on and deepens their expertise, but the specific topic is expected to be different from the dissertation topic so that the student has the opportunity to demonstrate breadth in their expertise. Generally, this will mean that the student explores a distinct topic or set of methods, though it is not necessary for the topic to be in a distinct field. Responsibility for ensuring the absence of extensive overlap falls to the dissertation supervisor, independent study supervisor and the supervisory committee (as appropriate), in consultation with the student.

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The Independent Study and dissertation should be distinct,

The student, in consultation with his/her thesis supervisor (and supervisory committee, where appropriate), must select one topic (and one appropriate topic supervisor) for intensive independent study. The Independent Study supervisor will be a member of graduate faculty at McMaster University, independent of the thesis supervisor. The guiding principle should be that the student learns something new/valuable/and relevant in their area of specialization and will be able to demonstrate mastery of the material. During the independent study consultations may be sought from other individuals, but a diary should be kept that tracks what portion of the work (intellectual or otherwise) belonged to the student and what portion was completed by the student him/herself. The model here is that of the dissertation – any given chapter within a thesis might be published with multiple authors, but the supervisory committee, independent study examiners, and the BCE must be re-assured that the end product is predominantly the work of the student. The write-up itself should be exclusively the work of the student.

Topics may be of multiple formats, including, but not limited to:

- Review state-of-the-art of an issue/area of study relevant to HRM
- Design a study to advance understanding
- Carry out a brief study including data analysis, etc.

In deciding on a topic and approach the student and his/her supervisory team is advised to think carefully about the amount of time required to complete the project and the readiness with which the necessary materials (including access to existing data sets, if necessary) can be accessed fall within the student's control given ethics/security approval timelines.

Students must prepare a written report ***(2000 to 3000 words in length, excluding appendices***), summarizing their study, to be submitted at the end of March. The student will also prepare an oral presentation of their Independent Study (20 minutes in length), and be prepared to explain and defend their work in an oral defense (40 minutes).

TIMING OF THE EXAMINATION

Under normal circumstances, students enter the program in September. Full-time students are expected to take the Comprehensive Examination before the end of the 24th month and part time students before the end of the 36th month following the start of their doctoral studies. Full time students are expected to complete the Seminar in the second year of their Ph.D. studies. Part time students may complete the total comprehensive examination process over two years, in years two and three, and may elect to complete either portion in either year. In instances in which students begin their PhD studies in January they are generally expected to complete the comprehensives exam in the same timing as those students who began the preceding September. In instances in which students begin their PhD studies in May they are generally granted a one-month extension to enable them to complete the comprehensives exam in the same timing as those students who began the following September.

Students may complete the comprehensives on a schedule distinct from the routine presented here only in unique circumstances, for compelling reasons, and given flexibility in the logistics of the comprehensives, as judged by the Board of Comprehensives Examiners. To complete the examination off-schedule an application must be made to the BCE by the first Thursday in June that outlines the

reason for the request and the proposed start time. This application must be accompanied by a letter from the student's dissertation supervisor and his/her potential independent study supervisor. Applications will only be considered if the parameters of the request fall within the parameters imposed by the School of Graduate Studies. Upon acceptance of an application the BCE will determine a timeline that is equivalent to that of other students completing the comprehensives during their regular schedule.

Failure to successfully complete the Comprehensive Examination within two years of commencing the Ph.D. program for full-time students or three years for part-time students, without approval for delay by the Board of Comprehensive Examinations and the School of Graduate Studies, will result in the student's withdrawal from the HRM Ph.D. Program.

PhD SEMINAR

The seminar consists of approximately twenty, 2-3 hour sessions that take place twice per month, on Thursday afternoons September through May. Full time students are expected to complete the Seminar in the second year of their Ph.D. studies. Part time students may complete the total comprehensive examination process over two years, in years two and three, and may elect to complete either portion in either year.

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INDEPENDENT STUDY

The Independent Study topic should be chosen, and arrangements for supervision with an appropriate faculty member and for review by an appropriate Member-at-Large should be finalized, in time to submit a plan of study to the Board of Comprehensive Examinations for final approval by **the first Thursday in June**. In support of this, the Seminar Coordinator(s) will convene an organizational meeting each spring for students who will begin their comprehensive examinations the following academic year, to apprise them of requirements.

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The Independent Study will commence in September and proceed in parallel with (but independently from) the Seminar throughout the academic year (though students may compress their Independent Study into a shorter period, if this is mutually agreed upon by the student and Independent Study supervisor). The Independent Study will be completed in time for students to prepare a final written report by the end of March and an oral defense in May. Key dates for students are as follows:

- March/April: Organizational meeting convened by Seminar Coordinators to inform pre-comp students about the process for their comprehensive examinations, beginning in September
- June: By the first Thursday students must submit plan of study for Independent Study to the HRM Administrative Assistant for distribution to the Board of Comprehensive Examinations for final approval. Plan of study must be signed by Dissertation supervisor, Independent Study supervisor, Member-at-Large and student
- September: Student begins Independent Study and Comprehensive Seminar. The member-at-large cannot be consulted beyond the end of September as that individual is expected to provide an "arm's length" evaluation upon completion of the independent study.
- Early December: Student submits interim progress report to Independent Study supervisor and to the HRM Administrative Assistant for distribution to the Board of Comprehensive Examinations by first Thursday in December.
- End March: Student submits final written report on Independent Study to Independent Study supervisor, Member-at-Large and HRM Administrative Assistant
- April-June: Student completes oral presentation and defense of Independent Study project

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ROLES AND RESPONSIBILITES

THE BOARD OF COMPREHENSIVE EXAMINATIONS (BCE)

It will be the responsibility of the Board to:

i. Establish and revise the course material for the Seminar, in consultation with the Seminar coordinators. In most cases this will be a matter of identifying appropriate topics and identifying Seminar presenters to develop/deliver the seminar on those topics.
ii. Review and give final approval to each student's Independent study plan
iii. Review and convey interim and final reports to students and the relevant authorities
iv. Serve as an advisory board for participating faculty, as issues arise
v. Serve as an advisory board for students, as issues arise

THE STUDENT

Ph.D. students pursuing their comprehensive examinations will take an active role in directing the examination, to ensure that their own educational goals are met. Specifically, the student will:

i. Select an Independent Study topic, in consultation with the Dissertation supervisor (and supervisory committee, where appropriate), that allows the student to further develop and demonstrate depth of specialization in the field, while ensuring that the topic is sufficiently distinct from the dissertation research to evidence some breadth in the area of specialization
ii. Identify an appropriate Independent Study supervisor, in consultation with the Dissertation supervisor (and supervisory committee, where appropriate)
iii. Develop a plan of study for the Independent Study, in consultation with the Independent Study supervisor, that specifies the project to be completed, a timeline and the nature and extent of a progress report to be submitted in December (sufficient to allow the supervisor to provide substantive interim feedback on the student's progress)
iv. Where necessary, revise this plan of study in consultation with the Independent Study supervisor, to account for any substantive modifications that are driven by external circumstances (e.g., the failure of an experiment, the lack of an expected data source, etc.)
v. Identify an appropriate individual to fulfill the Member-at-large role for evaluation of the Independent Study, in consultation with the Independent Study supervisor (and Dissertation supervisor, where appropriate)
vi. Attend and fully participate in Ph.D. Seminar activities, and complete all assignments, selecting topic areas that strengthen the student's interdisciplinary expertise and breadth of knowledge
vii. Submit a written commentary on 6 of the core sessions of greatest interest or as schedules permit. (Students responsible for an in-seminar presentation on the session topic may not submit a written critique for those sessions)
viii. Prepare 1 in-seminar presentation in an area where they have an interest but limited expertise so that they may gain some breadth of exposure (i.e., not within fields of Independent Study or their dissertation fields)
ix. Provide an interim progress report to the HRM Administrative Assistant for distribution to the Board of Comprehensive Examinations in December and to the Independent Study supervisor, to be evaluated by the Independent Study supervisor.
x. Produce a well-argued and written final report on the Independent Study, to be evaluated by the Independent Study supervisor and the Member-at-large
xi. Provide a well-argued and presented oral summary of the Independent Study and orally explain and defend its content, to be evaluated by the Independent Study supervisor and the Member-at-large.
xii. If problems arise with the Independent Study or with the Seminar (where the latter cannot be resolved through consultation with the Seminar coordinators), alert the Board to these issues, and work with the Board to seek a satisfactory resolution
xiii. Convey the plan of study for the Independent Study, any revisions of this study plan, the Interim progress report, and other relevant materials as appropriate, to the Independent Study Supervisor and the Board

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PhD SEMINAR COORDINATOR(S)

One to two faculty members will serve as coordinators for the Ph.D. Seminar. They will be responsible for attending (or providing alternating attendance at) each Seminar, coordinating presenters for each session, ensuring continuity for students as the Seminar progresses, and assisting in the grading of student activities, as necessary. Specifically, the coordinator(s) will:

i. Work with the Board of Comprehensive Examinations to establish and revise the course material for the Seminar
ii. Take attendance
iii. Collate marks for students on all critiques and in-seminar student presentations
iv. If problems arise with individual students, alert the student to these problems where possible. Where these problems persist or cannot be resolved, alert the Board to these issues, and work with the Board to seek a satisfactory resolution
v. Liaise with the Board of Comprehensive Examinations to provide interim and final assessments of student performance in the Seminar component of the Comprehensives.

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PhD SEMINAR PRESENTER

Members of graduate faculty at McMaster University will serve as presenters for each core seminar session in their areas of expertise and interest. Post-comprehensive Ph.D. students may sometimes serve as seminar presenters for non-core seminar sessions, where marks are not assigned. Faculty seminar presenters will be responsible for preparing a session outline including identifying key materials to be read in advance and critiqued. They will also mark student critiques addressing those materials, and any student presentations during their sessions. Specifically, seminar presenters will:

i. Identify appropriate articles to be pre-circulated to students in advance of the seminar session devoted to their discussion
ii. Mark all written critiques submitted for the seminar session
iii. Mark all in-seminar student presentations for the seminar session
iv. Liaise with the Seminar Coordinators to ensure that these marks have been documented

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INDEPENDENT STUDY SUPERVISOR

The Independent Study Supervisor is a member of graduate faculty at McMaster University with expertise and interest in the subject of the independent study. A key characteristic of Independent Study Supervisors is that they are ***not*** the student's thesis supervisor (though they may be on the supervisory committee).[1] It is expected that students will pursue an advanced topic of mutual interest in an independent but consultative fashion. Independent Study supervisors will be required to agree to a plan of study, as proposed and revised by the student; to submit an interim assessment of the student's progress (in December), and to evaluate the student's performance (written and oral). Specifically, Independent Study supervisors will:

i. Supervise a student's Independent Study in an area of expertise and mutual interest
ii. Assist the student to identify a Member-at-Large who can evaluate the final written paper and oral presentation on the Independent Study
iii. Confirm with the Member-at-Large their willingness to serve in this capacity
iv. Be available for consultation at mutually convenient times at least once per month between September and April.
v. Work with student as student develops a plan of study specifying the project to be completed, a timeline and the nature and extent of a progress report to be submitted in December (sufficient to allow the supervisor to provide substantive interim feedback on the student's progress)
vi. Where necessary, encourage or permit the student to revise this plan of study in a mutually agreeable manner, to account for any substantive modifications that may be necessary or

[1] Note that only one of the Independent Study Supervisor or Member-at-large may sit on the student's supervisory committee.

appropriate (due, for example, to circumstances such as the failure of an experiment, the lack of an expected data source, etc.)

vii. Provide an evaluation of the interim progress report to the Board of Comprehensive Exams in December, whose substance will be transmitted to the student
viii. Evaluate the student's final written paper on the Independent Study
ix. Evaluate the student's oral presentation and defense of their Independent Study
x. If problems arise, alert the Board to these issues, and work with the Board to seek a satisfactory resolution
xi. Convey all marks, and other relevant materials, to the Board in a timely manner

MEMBER-AT-LARGE

The member-at-large is a member of graduate faculty at McMaster University with interest and expertise in the Independent Study topic, who assists in its evaluation. The member-at-large should be at arm's length from the independent study project. He or she may consult with the student until the end of September, but should not be called upon during the remainder of the independent study. The member-at-large cannot be the student's Dissertation Supervisor (though they may be on the supervisory committee).[2] Specifically, the member-at-large will:

i. Evaluate the student's final written paper on the Independent Study
ii. Evaluate the student's oral presentation and defense of their Independent Study
i. Convey all marks, and other relevant materials, to the Board in a timely manner

DISSERTATION SUPERVISOR

The proposed comprehensive examination process relies on the Dissertation supervisor to play a key role in the Independent Study. The Dissertation supervisor will assist the student to identify a suitable Independent Study (one that is of substantive interest and value to the student, but which does not replicate dissertation research), a suitable Independent Study supervisor, and (where appropriate) a suitable Member-at-large to serve as a second evaluator. Specifically, the Dissertation supervisor will:

i. Assist the student to identify an appropriate Independent Study topic
ii. Assist the student to identify an appropriate Independent Study supervisor
iii. Where requested, assist the student to identify an appropriate Member-at-large to evaluate the Independent Study

HRM ADMINISTRATIVE ASSISTANT

The HRM Administrative Assistant distributes the Independent Study Plans and Interim Reports to the Board of Comprehensive Examinations.

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<#>Assist the student to identify an appropriate Independent Study topic¶
<#>Assist the student to identify an appropriate Independent Study supervisor¶
<#>Where requested, assist the student to identify an appropriate Member-at-large to evaluate the Independent Study¶
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THE EXAMINATION PROCESS

PhD SEMINAR

Students are expected to attend and participate in the Ph.D. seminar for 10 months including the oral defense sessions. They will be expected to submit a 2-3 page commentary based upon previously disseminated readings for 6 of the core sessions, and may select the sessions of greatest interest or of greatest flexibility given individuals' schedules. Students responsible for an in-seminar presentation on the session topic may not submit a critique for those sessions.

Students are expected to prepare 1 in-seminar presentation in an area where they have an interest but limited expertise so that they may gain some breadth of exposure. Students will not prepare presentations within their fields of Independent Study or their dissertation fields. Students will use the initial list of papers identified by the faculty instructor for the relevant field session as the basis for a more advanced study in the area, addressing a related question or topic of interest. To complete this advanced study, the student will be expected to identify additional, relevant readings, and prepare a 15-minute presentation

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[2] Note that only one of the Independent Study Supervisor or Member-at-large may sit on the student's supervisory committee.

(with electronic aids). Students may draw on the Seminar Presenter or their seminar colleagues to assist in the identification of additional sources, or search strategies, but they are expected to complete the in-seminar presentation and commentaries independently.

INDEPENDENT STUDY

The student is responsible for identifying an appropriate Independent Study topic and supervisor, in consultation with her/his dissertation supervisor (and supervisory committee, where appropriate). The student is also responsible for identifying an appropriate Member-at-Large, with the support of the Independent Study supervisor. The student should prepare a written plan of study that provides an overview of the Independent Study project, outlining any meeting schedule and the expectations for the Independent Study (including outlining the form and extent of a progress report that should be prepared to allow the supervisor to submit an Interim report on the student's progress to the Board of Comprehensive Exams in December). The plan of study should be agreed to by the Independent Study supervisor, and together with a copy of the student' curriculum vitae and a brief description of their present and any previous thesis topics, should be submitted to the HRM Administrative Assistant for distribution to the Board of Comprehensive Examinations by the first Thursday in June. The plan of study should be reviewed and amended by the student and supervisor as necessary during the academic year, especially if major changes are made in the expectations (the Board should be notified of any such revisions).

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Student Interim Progress Report

Students will submit in early December, an interim progress report on their Independent Study to their Independent Study Supervisor and to the HRM Administrative Assistant for distribution to the Board of Comprehensive Examinations. The nature and extent of the report will have been pre-specified in the student's plan of study, agreed to in the independent study proposal (and modified as required). The Independent Study Supervisor will use this report to provide an interim grade (worth 10% of the final Independent Study mark). In addition to the progress report, which is circulated to the Independent Study Supervisor, the student is invited to submit any further comments relating to their progress in the Seminar or the Independent Study to the Board, in confidence.

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Interim Assessment from Independent Study Supervisor

The Independent Study Supervisor will submit an interim assessment of the student to the Board of Comprehensive Examination Chairs in mid-December. This assessment will consist of an evaluation of the student's interim progress report, which will be transmitted to the student directly, and any other comments on the student's progress of which the Board should be made aware, in confidence.

Interim Assessment from the Comprehensive Seminar Coordinators

The Seminar Coordinators will submit a brief report to the Board of Comprehensive Examinations in mid-December regarding the progress of all students participating in the comprehensive examination seminar. The report will provide marks-to-date from written critiques and in-Seminar presentations, and an assessment of attendance. Where appropriate, the Seminar Coordinators will also append any comments about students' progress of which the Board should be made aware (e.g., attendance problems).

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Interim Report

It is hoped that the interim evaluations will be helpful to the student in monitoring their own progress, and that they may indicate to the Board and the student whether there are problems arising with the process such that students who are not performing satisfactorily will redouble their efforts to ensure success. Where appropriate, the Board will request a meeting with the student and/or Independent Study supervisor to discuss issues arising and to guide the parties to work toward a successful outcome.

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Final Report

The Board of Comprehensive Examinations will provide official notification to students of their final grade shortly after the completion of the student's oral defense. This final grade will summarize the marks the students have received throughout the process, as reported by the Seminar coordinators, the Independent Study supervisor, and the other evaluators.

EVALUATION OF THE EXAMINATION

The final mark on the comprehensive examination sums the individual components of the examination. The Ph.D. seminar is worth 50% of the total grade and the Independent Study is worth 50%. The student must, however, receive a mark of at least a B- (70%) in each component to be considered to have passed the exam.

PhD SEMINAR

The Ph.D. Seminar is worth 50% of the final mark for the Comprehensive Exam. The mark for the Ph.D. seminar will be arrived at from a summation of the following components:

- Attendance: Students will receive 0.5% of their seminar grade for each session attended to a maximum of 10%, but at least 80% of the sessions must be attended.
  - Assessed by Seminar Coordinators
- Commentaries: Students will receive a total of 60% of their final mark for preparing 6, 2-3 page commentaries: 10% each = 60%.
  - Marked by the Seminar presenter
- Presentations: Students will receive a total of 30% of their final mark for providing 1 in-seminar presentation = 30%.
  - Students will be assessed on the quality of their presentation (electronic aids are expected) and their ability to facilitate discussion in a subsequent question and answer period.
  - Students will be assessed by the Seminar Presenter for that session

INDEPENDENT STUDY

The Independent Study is worth 50% of the final mark for the Comprehensive Exam. The mark for the Independent Study will be arrived at from a summation of the following components:

- Interim progress report: Students will receive 10% of their Independent Study mark from the assessment provided by their Independent Study supervisor of their interim progress report. Without a progress report a mark cannot be assigned.
- Final paper: Students will receive 50% of their Independent Study mark from the final paper. The final paper should review the student's Independent Study in sufficient depth to allow an expert in the field to evaluate the student's competence. The paper should be between ***2000 and 3000 words***, excluding appendices such as graphs, figures, tables, references and glossaries of abbreviations.
  - Students will be assessed by their Independent Study supervisor and the designated Member-at-Large
  - The final mark for the Independent Study paper will average the marks of the two evaluators
- Oral Defense: Students will receive 40% of their Independent Study mark from the oral defense. Students are expected to prepare a 20 minute presentation, covering the material reviewed in the paper (the use of electronic aids is expected), and to be able to orally explain and defend the material for a further 40 minutes.
  - Students will be assessed by their Independent Study supervisor and the designated Member-at-Large
  - The final mark for the oral defense will average the marks of the two evaluators

Key dates for evaluation:

- Evaluation of written portion of Independent Study

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- Early December: Students submit interim progress report on Independent Study
- Early January: Students receive interim report on their progress from the Board, including the assessment of their interim progress report
- Late March (Time 0): Students submit final written report on their Independent Study
- Early April (Time 0 + 2 weeks): Students receive evaluation of their final written report; students who fail are given 2 weeks to re-write the final report on their Independent Study
- Mid April (Time 0 + 4 weeks): Students required to re-write their final reports submit revised version
- End April (Time 0 + 5 weeks): Students receive evaluation of their re-written final report.

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- Evaluation of oral portion of Independent Study
  - April/May: Students complete oral defense of their Independent Study
  - June: Students who failed their oral defense re-do their oral defense

- Evaluation of Seminar
  - End May (at end of oral defense sessions): Students receive final grade on their Seminar
  - June: Students who failed their Seminar undertake oral examination to demonstrate their knowledge

PASS AND PASS WITH DISTINCTION

The final mark on the comprehensive examination sums the individual components (Seminar and Independent Study) of the examination. The Ph.D. seminar is worth 50% of the total grade and the Independent Study is worth 50%. The student must, however, pass each component (i.e., B- or above) to be considered to have passed the Comprehensive Examination.

To pass the Comprehensive Seminar students must achieve a minimum of a B- in their final summary grade (i.e., the grade that sums the individual marks on the written critiques, in-Seminar presentation, and attendance). The final grade, whether fail (C+ or below), pass (B- to A) or pass with distinction (A+; 90%) will be determined by the summary grade. Students who do not achieve a passing summary grade on the Seminar portion of the Comprehensives will be given one second opportunity to address the deficiencies (see below).

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To pass the Independent Study, students must pass both the written and oral portions of this component. Students must first pass the written portion of the Independent Study – that is, students must receive at least a B- on the combined grade assigned to the interim progress report (10%) and written paper (50%). Students who do not pass the written portion of the Independent Study will be given one opportunity to re-write the paper (see below). Students who pass the written portion of the Independent Study will then proceed to the Oral Defense. Students who are unsuccessful with their first attempt at the Oral Defense will be given one second opportunity (see below). Students who pass both the written and oral portions of their Independent Study (on first try or second chance) will be deemed to have passed that component of their Comprehensive examination. The final grade on the Independent Study, whether pass (B- to A) or pass with distinction (A+) will be determined by the summary grade of the oral and written portions.

SECOND CHANCE AND FAILURE

Feedback mechanisms have been built into the examination process such that the student should have ample opportunity to address any potential weaknesses before the end of the comprehensive process. However, should a student fail either component of the comprehensive exam they will be provided with a second chance to demonstrate their knowledge of the material, as per the schedule outlined below. If this is required pass with distinction will no longer be a potential outcome for the student to achieve.

Ph.D. Seminar

A cumulative mark of less than 70% (B-) on the Ph.D. seminar will be considered a failure of that component of the comprehensive process. To address the deficiencies, the student will be required to sit

an oral examination in late June. The oral exam will focus upon a sub-set of the topics for which the student submitted critiques and prepared presentations. The Board of Comprehensive Examinations will select the topics, in consultation with the Seminar Coordinators, and will recruit 2 additional faculty members who were involved with the Comprehensive Seminar to serve as oral examiners. Specifically, the student will be provided with a second opportunity to demonstrate their knowledge in two fields outside their own area of field expertise. These areas are understood to be defined by the students' selection of areas for written critiques and presentations. Where this is unclear (i.e., where students failed to submit sufficient critiques), the Board of Comprehensive Examinations will identify the areas to be examined orally, and the student will be notified. The oral examination committee will consist of:

- 1 Seminar Coordinator, who acts as Chair
- 2 Faculty examiners who participated as Seminar presenters in the fields under examination.

The oral examination will take 1 hour. The date for oral examinations will be specified in the Seminar syllabus so that students and faculty can plan, in advance, for this possibility. Post-examination, each examiner will be asked to provide a mark using the percentage scale. The average of these two marks will determine the student's final grade on the Seminar component of the comprehensive examination. If the student fails the oral examination, they will be deemed to have failed the Comprehensive Examination and will be required to withdraw from the program.

Independent Study

An average mark of less than 70% on the written component of the Independent Study (comprising the interim progress report and the final written report) will be considered a failure of that portion of the Independent Study. To make up for this failure the student will be required to re-submit a revised version of their final written report within two weeks of the original submission date. If the student fails on re-evaluation of the written portion, they will be deemed to have failed the Comprehensive Examination and will be required to withdraw from the program.

The student must pass the written portion of the Independent Study in order to proceed to the oral defense. Should a student fail the oral defense (based upon the average mark assigned by his/her examiners), the student will be expected to re-defend the project orally in late June. If the student fails on re-evaluation of the oral portion, they will be deemed to have failed the Comprehensive Examination and will be required to withdraw from the program.

IMPORTANT POINTS TO BEAR IN MIND

1. Students must submit the Independent Plan of Study to the HRM Administrative Assistant (HSC-3N10) by the first Thursday in June.

2. Students must provide the HRM Administrative Assistant (HSC-3N10) with a copy of their curriculum vitae and a brief description of their present and any previous thesis topics when they submit their Independent Plan of Study. This information is kept on file to prevent duplication of previous work in the Comprehensive Examination papers.

3. Once the sequence of dates for the examination process (i.e., Independent Study Plan, PhD Seminar Presentation) has been set; it may only be delayed for reasons of ill health or other extreme circumstances. If a student fails to complete the written or oral examination components in time without such a reason, the student may, at the discretion of the Board, be considered to have failed the first attempt at the examination. The Board of Comprehensive Examinations will have the discretion in consultation with the Seminar Coordinators and the Independent Study Supervisor of determining the validity of a student's need for extension. After a second failure to complete all components of the examination, the student will be required to withdraw from the HRM Ph.D. Graduate Programme.

5. The original copies of all documents relating to a student's comprehensive examination must be forwarded to the Faculty of Health Sciences Graduate Programmes Office (3N10) as they are generated, for storage in the student's file. This is essential because the Associate Dean of Graduate Studies (Health Sciences) and the Health Sciences Graduate Programmes Office will be involved if a student fails or appeals the result of his/her comprehensive examination.

TIMELINE 2008 - 2009

**All PhD seminars scheduled for 1:30 – 4 on Thursday afternoons

	PhD Seminar	Independent Study
April 10, 2007	Organizational Meeting	
April - May		Student & Dissertation supervisor (and Supervisory Committee, where appropriate) seek Independent Study supervisor . Student and Independent Study supervisor develop plan of study and seek Member-at-Large (Plan due to Board June 5th)
June		Board approves plan of study
September 4	Faculty-led presentations (non-core material)	
September 18		
October 2	Faculty-led presentations of core material (first half of each session)	Student conducts Independent Study
October 16		
October 30		
November 13		
November 27		Student submits Progress Report (due December 4th)
December 11	Student-led presentations (second half of each session)	Supervisor submits Interim Assessment
January 8		Board distributes Interim Reports
January 22	Students submit 2-3 page critiques for 6 sessions after reviewing material circulated by Faculty facilitator	Student conducts Independent Study
February 5		
February 19		
March 5		
March 19		Student submits final report
April 2	Faculty-led presentations (non-core material)	Evaluators submit assessments
April 16		
April 30	Student presents Independent Study project (oral defense)	
May 14		
May 28		
June 11		
June 18	Evaluators submit assessments	
June 25	Second Chance Week	

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HRM COMPREHENSIVE EXAMINATION
INDEPENDENT STUDY PLAN OF STUDY

PLEASE NOTE:
1. All sections of this form ***must*** be completed. This form must be ***signed*** by the Independent Study Supervisor, the Dissertation Supervisor, the Member-at-Large and the Student.
2. The *HRM Comprehensive Examination – Independent Study Plan of Study* must be completed by all Health Research Methodology students pursuing their comprehensive examinations.
3. This form must be submitted to the Board of Comprehensive Chairs by first Thursday in *June along with a copy of your curriculum vitae and a brief description of your present and any previous thesis topic(s)*

Date:	
Student Name & Number:	
Dissertation Supervisor:	
Members of Supervisory Committee:	
Independent Study Supervisor:	
Member-at-Large:	

Independent Study Topic: *(Give a brief description, i.e. outline the topics or major sub-topics, and indicate anticipated outcomes)*

Relevance of proposed Independent Study Topic: *(Please discuss the ways in which the proposed Independent Study will enhance your area of specialization without duplicating your Dissertation research)*

Interim Progress Report: *(Provide a description of the form and extent of the student's interim progress report, to be submitted in early December [exact date to be specified]. Please note, this description should clearly indicate what is required of the student; the interim progress report will be evaluated by the Independent Study Supervisor, and will be assessed a grade worth 10% of the final grade for the Independent Study component of the Comprehensive Exam (i.e., 5% of the total grade for the Comprehensives))*
Other: *(Please outline any other issues relevant to this Independent Study, such as a particular meeting schedule, a timeline for completion of specified elements of the study, etc.)*

I _____, [Name of Student] recognize that by signing this form I accept all responsibility in ensuring the completion of the Independent Study project. I understand that the Independent Study Supervisor will play a consultative role in this project and that my work will be done independently. I also recognize that this agreement can be revised at any time, but that all parties must sign the new agreement.

By signing, each of the parties agrees that the above terms are appropriate for a Comprehensive Examination Independent Study Project.

Signatures of:

PhD Student: _____

Independent Study Supervisor: _____

Dissertation Supervisor: _____

Member-at-Large: _____

Grading Form for Commentary

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Each commentary is expected to be 2-3 pages in length. It should entail a scholarly synopsis, critique, and commentary on the readings distributed for the PhD seminar. Supplemental resources are allowable if they add meaningful content to the commentary, but they are not required. In assigning a percentage grade, please keep the following in mind:

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- 70% is the pass mark for graduate students
- 90% is the cut-point for passing with distinction
- Each commentary is worth 10% of the student's mark in the seminar portion of the comprehensives
- The writing style should be appropriate for the graduate student level
- The content should be scholarly in that it should provide a thoughtful overview of the readings, linking them together in an interesting way rather than simply being a summary of the content of the provided readings.

Student Name: _____

Faculty Name: _____

Topic: _____

Grade: _____ %

Comments:

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Grading Form for In-seminar Presentations

Each in-seminar presentation is expected to be approximately 30 minutes in length including time for discussion. It should entail a scholarly synopsis, critique, and commentary on readings that expand the focus of the seminar to that point (i.e., it is expected to build on the material presented by the faculty facilitator in some way rather than simply re-stating the material provided in the seminar readings). Supplemental resources should be used in a manner that adds meaningful content to the seminar. In assigning a percentage grade, please keep the following in mind:

- 70% is the pass mark for graduate students
- 90% is the cut-point for passing with distinction
- Students are expected to prepare presentations in areas where they have an interest but limited expertise so that they may gain some breadth of exposure.
- Each in-seminar presentation is worth 15% of the student's mark in the seminar portion of the comprehensives
- The presentation style should be appropriate for the graduate student level (i.e., appropriate length, professional visual supports, and strong verbal skills).
- The content should be scholarly in that it should provide a thoughtful overview of the focal topic and build upon the material presented in the pre-seminar readings.
- The student may not be able to answer all questions stemming from the discussion, but should be able to facilitate the discussion and speak knowledgeably of the issues

Student Name: _____

Faculty Name: _____

Topic: _____

Grade: _____ %

Comments:

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Grading Form for Independent Study (Written)

Each report is expected to be 20 double-spaced pages in length, excluding appendices such as graphs, tables, etc. It should entail a scholarly synopsis of the project undertaken for the student's independent study, presented in sufficient depth to allow an expert in the field to evaluate the student's competence. A mark will be assigned by both the independent study supervisor and the member-at-large with the average of the two scores constituting 50% of the student's grade for the independent study.

In assigning a percentage grade, please keep the following in mind:

- 70% is the pass mark for graduate students
- 90% is the cut-point for passing with distinction
- The writing style should be appropriate for the graduate student level
- The content should be scholarly in that it should provide a thoughtful overview of the issue focused upon (including a focused research question if appropriate), rigour in the methods adopted, appropriate analyses, and a integrative, intellectually-sound discussion.

Please return this form to Ann Greene (HSC 3N10) by Friday, xxx.

Student Name: _____

Faculty Name: _____

Topic: _____

Grade: _____ %

Comments:

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Grading Form for Independent Study (Oral Defense)

Each student will have 15 minutes (maximum) to deliver an oral summary of his/her independent study. It should entail a scholarly synopsis of the project undertaken. A mark will be assigned by both the independent study supervisor and the member-at-large with the average of the two scores constituting 40% of the student's grade for the independent study.

In assigning a percentage grade, please keep the following in mind:

- 70% is the pass mark for graduate students
- 90% is the cut-point for passing with distinction
- The presentation style should be appropriate for the graduate student level
- The content should be scholarly in that it should provide a clear and thoughtful overview of the issue of focus as well as a critical and well-organized summary of the work completed within the context of a professional and engaging presentation with use of appropriate audiovisual material and minimal use of notes.

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After the presentation examiners will have up to 30 minutes to question the student to generate an assessment of the student's understanding of the issues relevant to the project after which time 10 minutes will be available for discussion with the broader audience in attendance.

Student Name: _____

Faculty Name: _____

Topic: _____

Grade: _____ %

Comments:

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McMaster University

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 Graduate Program			
COURSE TITLE	EHealth: Fundamentals of eHealth and the Canadian Health Care System			
COURSE NUMBER	724	**COURSE CREDIT**		
		FULL COURSE ( )	**HALF COURSE (X)**	**QUARTER (MODULE) ( )**
INSTRUCTOR(S)	Ann McKibbon			
PREREQUISITE(S)	2-day orientation to the Canadian Health Care System for students (non-health background).			

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

NEW COURSE	X	**DATE TO BE OFFERED:** September 2008	**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 tutorial-based course will cover a broad range of eHealth topics from the perspective of health care delivery. Topics include a definition of eHealth; health care data; hospital and primary care information systems (i.e. electronic health records [EHR] systems); specialty components of an EHR system; how health professionals use data; human/cognitive factors in development and implementation of eHealth applications; standards, vocabulary and nomenclatures and how used; aggregation of health information; patient information systems and consumer eHealth; research and evaluation of eHealth applications and using eHealth applications; implementation issues and privacy, security, and confidentiality; and the future of eHealth.

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

The three core courses for the MSc in eHealth are built using recommendations for graduate education content from COACH—Canada's Health Informatics Association. The students taking this course will be registered in the eHealth program and will have chosen a home department (School of Business, Department of Computing and Software, or Department of Clinical Epidemiology and Biostatistics). The students may have a health background but most likely will not. The course emphasizes understanding the needs, information tools and use, and culture of healthcare delivery in Canada with respect to acquisition and handling of health data/information. Secondary emphasis is on the evaluation of eHealth interventions. Because some students will have a strong health background and some will not, the course will require a 2-day orientation session (optional for students with Canadian experience) to the Canadian health care system and care as delivered across hospitals, communities, and homes. The course presents a variety of relevant issues in an integrated manner that will help to prepare students for more focused study in research and evaluation in eHealth and more advanced courses in the MSc in eHealth program. The course will be illustrated by real life examples, current and historical journal publications, invited speakers, and visits to healthcare settings.

1. STATEMENT OF PURPOSE (How does the course fit into the department's program?)

1. start to understand the Canadian Health Care system and its delivery in the Hamilton area
2. understand what eHealth is and how it is inter-related with health care delivery
3. understand the culture of health care and how this affects planning, implementation, and use of information technologies. Also to understand how the culture of health is different than that of business and computing and software.
4. to start to appreciate the flow of information in the use of existing information technologies and plans for future information flows
5. know the main applications of eHealth for primary health care and hospital based care
6. understand privacy, security, and confidentiality issues from the health care providers' and patients perspective generally and specifically, in relation to eHealth applications and research situations
7. understand the problems encountered when developing, implementing, or evaluating an eHealth project
8. know the role that eHealth can play in health research including patient-specific or large database research projects. Rese

2. EXPECTED ENROLMENT:

10 to 15 students in Fall 2008 and then steady-state of approximately 20 to 30 in susequent years.

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

This course will be run using tutorial based small group learning. Weekly sessions are 3 hours long. About half of the sessions will start with a visit or visitor for the first hour and the other 2 hours of the class will be discussions led by the tutor or student facilitator on that week's content. Students are expected to prepare the weekly material before coming to class. This preparation involves completing the readings and assignments for that session. Weekly assignments may be group or individual work with most done individually. Attendance is compulsory. Preparation work is designed to take approximately 6 hours per week (double the class time). Evaluation of class members is based on individual participation and preparation and a final group project.

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

Evaluation will include a mid-term examination, and a term paper on a specific topic of interest to the student group, to be presented and submitted in written form at the end of the term. The paper will be in the form of an evaluation protocol or research project related to an eHealth intervention or system, probably done as an interdisciplinary project. Students will be matched in groups of 2 or 3 with a mix of backgrounds in each group.

Class participation	15%
Midterm exam (short answer)	40%
Case studies (2 at 5 points each)	10%
Final project	35% (presentation 10%, 20% final report, and 5% from peer assessment)

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 complements one in busines and computer science buth they are not overlapping. All 3 are required courses for the MSc in eHealth.

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

Yes, business and computer science.

PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Ann McKibbon Email: mckib@mcmaster.ca Extension: 22803

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

HRM Course Outline

Course Number & Title:	HRM 724 eHealth: Fundamentals of eHealth and the Canadian Health Care System
Course Co-ordinator:	Ann McKibbon
Additional Faculty/Support:	Various within and outside the department

Course Description

Summary

This tutorial-based course will cover a broad range of eHealth topics from the perspective of health and health care. It is one of three required courses in the MSc in eHealth. Topics include what is eHealth; health care data; hospital and primary care information systems (ie, electronic health records [EHR] systems); specialty components of an EHR system; how health professionals use data; human/cognitive factors in development and implementation of eHealth applications; standards, vocabulary and nomenclatures and how used; aggregation of health information; patient information systems and consumer eHealth; research and evaluation of eHealth applications and research using eHealth applications; implementation issues and privacy, security, and confidentiality; and future of eHealth. Students will be graded on class participation, a midterm examination, case studies, and a final group project (proposal for an evaluation of an eHealth application or research project involving an application). The course will be run using Web-CT.

Prerequisite: 2-day orientation to the Canadian Health Care System for students with a non-health academic background. This orientation will be held before the course starts each fall.

Students

- Required course for MSc in eHealth
- Elective course for HRM students (first priority after eHealth students)
- Other students may take the course if they meet the requirements and obtain approval from the instructor

Course description

The three core courses for the MSc in eHealth are built using recommendations for graduate education content (core competencies) from COACH—Canada's Health Informatics Association. http://www.coachorg.com/default.asp?ID=822

The students taking this course may have a health background but most likely will not. The course emphasizes understanding the needs, information tools and use, and culture of healthcare delivery in Canada with respect to acquisition and handling of health data/information. Secondary emphasis is on the evaluation of eHealth interventions/applications and research uses of them.

Because some students will have a strong health background and some will not, the course will require a 2-day orientation session to the Canadian health care system and care as delivered across hospitals, communities, and homes. This orientation will be optional for the students with a health background in Canada or the United States although they will be encouraged to take part as mentors to those students without a health background. The orientation sessions will be mandatory for the non-health students in eHealth although the learning that will take place will not be formally evaluated in the course. To take this course, students not registered in the MSc in eHealth must take the orientation days if they do not have a health background or if health professionals have not received their education in north America.

The course presents a variety of relevant issues in an integrated manner that will help to prepare students for more focused study in research and evaluation in eHealth and more advanced courses in the MSc in eHealth program. The course will be illustrated by real life examples, current and historical journal publications, invited speakers, and visits to healthcare settings. The visits and speakers will provide input on real-world opportunities and challenges in eHealth. A short summary of the 12 class sessions follow.

The course will be given in the fall of each academic year.

In the eHealth program we seek to produce graduates who are comfortable with interdisciplinary situations and understand the unique cultures and domain knowledge that each of the 3 faculties bring. The amount of content across the 3 domains is huge necessitating coverage of most topics only at a high level. The students will gain more content information and skills as needed in further courses or thesis work. More learning will likely happen for the eHealth students during their 8 month internship, further course work, the eHealth seminar series, and thesis and paper preparation.

Course Objectives

1. to understand the Canadian Health Care system and its delivery in the Hamilton area
2. understand what eHealth is and how it is inter-related with health care delivery
3. understand the culture of health care and how this affects planning, implementation, and use of information technologies. Also to understand how the culture of health is different than that of business and computing and software.
4. to begin to appreciate the flow of information in the use of existing information technologies and plans for future information flows
5. know the main applications of eHealth for primary health care and hospital based care
6. understand privacy, security, and confidentiality issues from the health care providers' and patients perspective in relation to eHealth applications and research situations
7. understand the problems encountered when developing, implementing, or evaluating an eHealth project/application
8. learn the role that eHealth plays in health research and administration

Educational Methods/Course Format

This course will be run using tutorial based small group learning. Weekly sessions are 3 hours long. About half of the sessions will start with a visit or visitor for the first hour and the other 2 hours of the class will be discussions led by the tutor or student facilitator on that week's content. Students are expected to prepare the weekly material before coming to class. This preparation involves completing the readings and assignments for that session. Weekly assignments may be group or individual work. Attendance is compulsory. Preparation work is designed to take approximately 6 hours per week (double the class time). Evaluation of class members is based on individual participation and assignments, a midterm examination, and preparation and presentation of a final group project.

Course Text/Materials

Shortliffe EH, Cimino JJ editors. Biomedical Informatics: Computer Applications in Health Care and Biomedicine. 3rd ed. Springer Verlag. 2006. 1037 pp.

Other assigned readings from open source journals—no CourseWare will be produced or required.

Prerequisites:	Prerequisite: 2-day orientation to the Canadian Health Care System for students with a non-health academic background. This orientation will be held before the course starts each fall.
Session	**Topic**
Orientation Sessions	Introduction to the Canadian Health Care system for non-Health Students
Week 1	Introduction to eHealth
Week 2	Health Care Data
Week 3	Hospital and Primary Care Information Systems
Week 4	Specialty Databases in Health Record Systems
Week 5	How Health Professionals Use Health Data and Issues of Errors
Week 6	Human/Cognitive Factors when Working with Health Professionals (personnel issues)

Week 7	Standards, Vocabularies and Nomenclatures
Week 8	Aggregation and Reporting of Health Information—Requirements and Opportunities
Week 9	Patient Information Systems and Consumer eHealth
Week 10	Introduction to Research and Evaluation in eHealth Projects
Week 11	Implementation Issues and Security, Privacy, and Confidentiality
Week 12	Future of eHealth and final examination
Week 13	Final Presentations of Group or Individual Projects

Evaluation of Student Performance

Evaluation will include a mid-term examination, and a term paper on a specific topic of interest to the student group, to be presented and submitted in written form at the end of the term. The paper will be in the form of an evaluation protocol or research project related to an eHealth intervention or system, probably done as an interdisciplinary project. Students will be matched in groups of 2 or 3 with a mix of backgrounds in each group.

Class participation	15% (1 mark/unit—0, 0.5 or 1.0 depending on contributions) plus up to 2 for special contribution at some point(s) in the class. 1 point for completing the majority of the online evaluations—tutor, speaker, content)
Midterm exam (short answer)	40%--this will be later half of the course
Case studies (2 at 5 points each)	10%--likely an evaluation of a published article or technical report
Final project	35% (presentation 10%, 20% final report, and 5% from peer assessment)

Student expectations

Students will be expected to know and adhere to the University standards in relation to academic integrity (http://www.mcmaster.ca/academicintegrity/students/index.htm).

Orientation Session. Introduction to the Canadian Health Care system for non-health students **(1-2 days in early September to occur before classes starts)**

Objectives:

- To begin to understand the Canadian Health Care system
- To become familiar with the various components of and players in the health care system as carried out in the Hamilton area.

Day 1—General Introduction

- The Canadian Health Care System—general overview including the Canada Health Act, funding, provincial similarities and differences—presenter: TBD
- Discussion among class members on how countries differs on provision of care and funding.
- Who are the players in the health care system
    - Physicians and nurses
    - Specialists and primary care providers
    - Allied health professionals
    - Mental health, dentistry, public health
- Health professional education including the postgraduate educational system (Anthony Levinson?)
- Tour of Hamilton Health Sciences by a hospitalist or nurse specifically pointing out patient and information flow (arranged by Akbar Panju and his internal medicine colleagues)
- Tour of medical records, the laboratories, imaging, and pharmacy to observe people and information flow

Day 2—**Components of the care system**—multiple speakers for 45 minutes for each component and then 15 minutes of questions and discussion of information flow in that area. The speakers will be given a list of questions to address that deal with people flow, process, information flow, and others with whom they are involved during care of patients.

- Report back on tours, what learned, and what not learned from previous day
- Speakers
    - Hospital based care
    - Primary care including family physicians and nurse practitioners
    - Specialist care(Hertzel Gerstein)
    - Community care access centers (CCAC head has already been approached)
    - Long-term care
    - Palliative care centres
    - Public Health

Readings: No required readings for this session.

Optional reading: Health Canada. Canada's Health Care System. Ottawa. 2005. http://www.hc-sc.gc.ca/hcs-sss/alt_formats/hpb-dgps/pdf/pubs/2005-hcs-sss/2005-hcs-sss_e.pdf

Tasks: None

Session 1. Introduction to eHealth

Objectives

- To come to a working definition of eHealth that we can use throughout the course
- To understand the broad aspects of eHealth and some of its components

Content

- What is informatics
- What is eHealth—definitions
    - "information" or "health data" and its flow during care definition
    - Technology definition (computers + competent health professional > either alone) (Feidman)
- What are health informatics and eHealth domains
    - Bioinformatics (molecular level)
    - Imaging (parts of people)
    - Clinical informatics (people with diseases and conditions)
    - Consumer informatics (health and wellness—all individuals)
    - Public health informatics (populations)

Readings

- Fourman, M. Informatics. Division of Informatics, University of Edinburgh. http://www.inf.ed.ac.uk/publications/online/0139.pdf 9 pages
- Introductory chapters of text (chapter 1, 5) *"The Computer Meets Medicine and Biology: Emergence of a Discipline" and "Essential Concepts in Biomedical Computing"* pages 3-45 and 186-232

Activities

- Introduction to students and the tutorial process
- Discussion of course expectations, methods, final projects, and evaluations
- Review of orientation and discussion of health care system with peers who have a health background
- Discussions around different definitions of informatics and eHealth
- Discussion of domains of eHealth/informatics
- Textbook question 2:

    "what do you think it means to say that a computer program is "effective"? Make a list of a dozen computer applications related to health with which you are familiar. List the applications in decreasing order of effectiveness, as you have explained this concept. Then for each application, indicate your estimate of how well human beings perform the same task (this will require you to determine what it means for a human being to effective). Do you discern a pattern? If so, how do you interpret it?"

Session 2. Health Care Data

Objectives

- To understand the variety of health care data important to eHealth
- To begin to appreciate some of the "culture" in which health care is provided

Content

- Health care terminology (and sources to learn more)
- HL7 Health Level 7 interoperability and communication standards
- Data/information elements, types, and formats, and how obtained, stored, manipulated, and accessed
- Culture and values in healthcare settings—discussion with emphasis on how students in a variety of disciplines see and appreciate the cultural issues brought out in the movie/video

Readings

- Textbook chapters (chapters 2, 6) *"Biomedical Data: Their Acquisition, Storage and Use", "System Design and Engineering in Health Care"* pages 46-79 and 233-264
- Shaver S. HL7 101: A beginner's guide. For the Record. 2007;19(1):22-6. http://www.fortherecordmag.com/archives/ftr_01082007p22.shtml
- Watching an assigned movie done in a health care setting that shows health care cultures and their challenges (not yet chosen). Some we have considered and probably will not go with are Sicko, Patch Adams, Barbarian Invasion, ER segments.

Activities

- Discussing the assigned health-related movie or television video that illustrate healthcare culture—issues learned and how different or the same across the backgrounds of the students
- Textbook Question 1, Chapter 6.

  1. Reread the hypothetical case in Section 6.2.1

  a) What are the 3 primary benefits of the clinical system? What are the 3 primary disadvantages?

  b) Do you think that the benefits of the system outweigh the disadvantages? Are there adequate noncomputer based solutions to the problems with which the system was designed to help? If so, what are they?

  c) How could you change the system in our institution or in one you have read about? Among the topics you might address are the effects of the system on hospital routine, computer reliability, and terminal availability and the adequacy of user training programs.
- Look at HL7 and the Canada Infoway standards and be ready to discuss the need for such a standard.

Session 3. Hospital and Primary Care Information Systems

Objective

- To start to understand what constitutes a full hospital information system and now the various components work together

Content

- Primary care, acute hospital care, long-term care, hospices
- Physician information needs and resources
- Nursing information needs and resources
- Electronic medical records systems, electronic health records systems, hospital information systems, etc.
- Integration of all into one working system

Readings

- Textbook chapters (chapters 12, 13) *"Electronic Health Records Systems",* and *"Management of Information in Health Care Organizations"* page 447-510.
- Practice on an existing EMR prototype (probably GE Centricity)

Activities

- Large group presentation from someone like David Chan on his OSCAR system
- Textbook questions: 12.1,12.5, 12.6

  12.1 What is your definition of an electronic health record (EHR)? What are 5 advantages of an HER over a paper-based record? What are 3 limitations of an EHR?

  12.5 Would a paper-based scan of a paper-based record be an HER? What are 2 limitations and advantages of such a system based on scans only?

  12.6 Among the key issues for designing an HER system are what information should be captured and how it should be entered into the system.

  a) Physicians may enter data directly or may record data on a paper worksheet (encounter form) for later transcription by a data-entry worker. What are 2 disadvantages and 2 disadvantages of each system?

  b. Discuss the relative advantages and disadvantages of entry of free text instead of entry of fully coded information. Deserve an intermediate or compromise method.
- Explore the GE Centricity site (http://www.gehealthcare.com/usen/products.html) with the goal of buying an off-the-shelf system. How easy would this be using just the Internet?

Evaluation

- Submission of first case study (10%)

Session 4. Specialty Databases in Health Record Systems

Objective

- To continue to learn about EHRs and their components
- recognize the need for separate yet interconnected specialty databases
- To learn the components, data structures, and requirements of these specialty databases

Content

- imaging systems and other visual data
- pharmacy systems

Readings

- McCoy MJ. Speaking of EHRs: Parsing EHR systems and the start of IT projects. Journal of AHIMA. 77(4):24-28. http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1_030968.hcsp?dDocName=bok1_030968
- Textbook chapters (chapters 9, 18) *"Imaging and Structural Informatics" "Imaging Systems in Radiology"* pages 344-378 and 626-659.
- E-health and Pharmanet—Building Electronic Health Records for BC. March 2007. http://www.health.gov.bc.ca/pharme/newsletter/edrugupdate2.pdf
- Continue your perusal of the GE site or another commercial vendor and determine what you would need to know about investigating a PACS (Picture Archive and Commincation System) or a pharmacy system for a health care institution of your choice.

Activities

- Guest lecturer such as Dr. David Koff or Dr. John You re imaging systems and other diagnostic tests in an eHealth environment.
- Discussion of assignment around components of EHRs.

Session 5. How Health Professionals Use Health Data and Errors

Objectives

- To begin to understand how health professionals use information
- To be introduced to clinical decision support systems and experience how one is used
- To understand how data is reused and reprocessed and how these aspects will only increase in the future
- To start to understand how errors can be made in health institutions both inside and outside EHRs.

Content

- Information needs of health professionals
- Decision support systems
- Evidence based medicine and clinical practice guidelines
- Errors—commission and omission inside and outside EHRs
- Manipulation of data used by clinicians
    - Information retrieval
    - Natural language processing
    - Machine learning systems

Readings

- Textbook (chapters 17, 20) *"Patient-Monitoring System", "Clinical Decision Support Systems"* pages 585-625 and 698-736.
- Meadows M. Strategies to Reduce Medication Errors: How the (US) Working to Improve Medication Safety. http://www.fda.gov/fdac/special/testtubetopatient/safety.html
- Friedman AL, Georghegan SR, Sowers NM, Kulkarni S, Formica RN. Medication errors in the outpatient setting. Archives of Surgery 2007;142:278-83. http://archsurg.ama-assn.org/cgi/reprint/142/3/278
- Journal article on issues around data manipulation (eg information retrieval, data mining, natural language processing, and machine learning)

Activities

- Try out the free demonstration of Isabel on some real and not-so-real signs and symptoms. http://www.isabelhealthcare.com/home/free_trial?idtop=free. How easy would it be to integrate this sort of system into an EHR system?
- Read the Fridman article. How could EHRs "fix" any of these error situations? How could the EHRs make things worse with respect to errors?
- Read the Meadow's article and discuss how these steps could/should be integrated into routine health care.
- Where would one implement processes in an EHR that used
    - Information retrieval
    - Data mining
    - Natural language processing
    - Machine learning

Session 6. Human/Cognitive Factors when Working with Health Professionals (personnel issues)

Objective

- To understand the need for human computer interaction assessments and the importance of a useful and usable system
- To think about workflow and how important it is and how difficult it is to change.

Content

- Cognitive factors and eHealth
- Implementation issues including usability issues
- Human-computer interaction and interface issues
- Healthcare culture part 2 (visits to sites and discussion of various experiences)
- Visit or expert presentation

Readings

- Textbook (chapter 4) “Cognitive Science and Bioinformatics” pages 133-185
- .Massaro TA.Introducing physician order entry at a major academic medical center: I. Impact on organizational culture and behavior. Acad Med. 1993 Jan;68(1):20-5.
- Neilsen J. Usability Engineering. Chapter 1. Executive Summary. Pages 1-22. Academic Press 1993.

Activities

- Large group presentation from a clinician working with patients and computers
- Role playing based on University of Virginia article. This article frankly discusses a disastrous implementation of a compulsory physician order entry system. The physicians revolted and refused to continue to work until the system was modified.
- Demonstrations of usability testing in class—this is to show the students how usability is done AND how difficult it is for a person who is brought in to show the deficiencies of a system. The person doing the work often ends up in an uncomfortable situation by “failing” to use a system well.

Session 7. Standards, Vocabularies and Nomenclatures

Objectives

- To become aware of existing standards for data and representation of data
- To understand the need for standard vocabularies and standards
- To work with several of the more popular vocabularies and UMLS which brings vocabularies together in one large system and to experience how easy/difficult coding is

Content

- the need for standard vocabulary and where they are used—and the magnitude of the issue
- examples of currently used vocabularies: SNOMED, Read Codes, MeSH
- what is UMLS and why it is important

Readings

- Textbook Chapter 7*. "Standards in Biomedical Informatics".* Pages 265-312
- Campbell JR, Carpenter P, Sneiderman C, Cohn S. Chute CG, Warren J for the CPRI Work Group on Codes and Structure. Journal of the American Medical Informatics Association. 1997;4:238-51. http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=61239&blobtype=pdf

Activities

- Take a term and determine how many synonyms exist for the term (use the Internet, print sources, and your classmates)
- Code a piece of health care text and data in multiple coding systems
- Discussion of whether standards are more important for health, business, or computer science

Evaluation

- Midterm examination: This will be open book and may be either a take home exam over 2 days or an in-class exam.

Session 8. Aggregation and Reporting of Health Information—Requirements and Opportunities

Objectives

- To understand some of the formal reporting mechanisms to which health care institutions must adhere
- To understand how the health information from individuals is aggregated and used in community decision making such as planning or disease/disaster surveillance
- To begin to understand the aggregation of health data in the community and its place in advertising and marketing
- To begin to appreciate national and international health statistics, their place in eHealth, and data collection issues.

Content

- Health technologies and pharmaceutical development, testing, and evaluation
    - Health Technology Assessments and their requirements
- National and international reporting requirements
- Data warehousing and its place in health care—US and Canada

Readings

- Vital Statistics Council of Canada. Strategic Plan. http://www.vscouncil.ca/e_strategic_plan_2005.html
- Statistics Canada website for health
- European Observatory on Health Systems and Policies. Policy Brief. Health Technology Assessment: An introduction to Objectives, role of evidence, and Structure in Europe. http://www.euro.who.int/Document/E87866.pdf
- Data warehousing in the health care industry—three perspectives. [online source]. http://www.dmreview.com/issues/19980301/696-1.html

Activities

- Find a health technology assessment that deals with an eHealth application and bring it to class to discuss the evaluation's strengths and the strengths of the application. Hints on where to go: InHATA vortal (http://216.194.91.140/vortal/)
- Go to the Stats Canada website for health: http://www.statcan.ca/english/ads/82-003-XPE/index.htm. Find some statistics related to a) hospital patients and b) community activities and determine how easy/hard it would be to capture and report electronically and manually.
- How are national statistics different from marketing datawarehousing data. Is the Canadian situation with respect to marketing data warehousing different from that of the US?

Session 9. Patient Information Systems and Consumer eHealth

Objectives

- To realize that health information spreads far beyond physicians offices and hospitals
- Look at issues of the accuracy and usability of the content of eHealth installations

Content

- Wikis, blogs, Web, Internet
- Issues of quality of information
- Education for students, continuing education, and consumers
- Consumer informatics/eHealth
- Personal health records
- Smart houses

Readings

- Textbook readings Chapter 14 "*Consumer health informatics and telemedicine".* Pages 511-536.
- Choice of websites on a chosen health topic
- California Health Care Foundation. Perspectives on the Future of Personal Health Records. http://www.chcf.org/documents/chronicdisease/PHRPerspectives.pdf
- Article on social networks and their potential for harm. String of suicides leads to questions about the role of the Web. http://www.informationweek.com/news/internet/showArticle.jhtml;jsessionid=AG30PQPVSDRGAQSNDLRSKH0CJUNN2JVN?articleID=205918769&_requestid=124026
-

Activity

- To identify as many "community based" health information resources as possible during their daily activities (e.g., kiosks for blood pressure checks in drug stores, advertising in university public washrooms…)
- Expert presentation by a consumer (Jan Burke-Gaffni (?))
- Read the O'Connor Cochrane review of decision aids (O'Connor AM, Stacey D, Entwistle V, Llewellyn-Thomas H, Rovner D, Holmes-Rovner M. Tait V, Tetroe J, Barry M, Jones J. Decision Aids for People Facing Health Treatment or Screening Decisions [Review]. Only pages 1-17. Make sure that you understand the methodology used in this summary of the literature. What is the role of decision aids in eHealth delivery?
- What is the role of eHealth people in relation to blogs and other similar social networking projects?

Evaluation

- Second case study handed in. Either an evaluation of an article or a website.

Optional after Class

- Searching session on eHealth topics given by a representative of the Health Sciences Library (probably Neera Bhatnagar). This is extremely useful for the next assignment and the final report.

Session 10. Introduction to Research and Evaluation in eHealth Projects

Objectives

- To understand why we need research and some of its components
- To start to understand how research and evaluation are done in health and health information systems—how are they different and the same

Content

- What is research, what is evaluation and how different
- Where and when each is important
- Defining stakeholders and projects
- Qualitative and quantitative methods
- Asking important, answerable, and appropriate questions
- Sampling issues—who or what to gather data on
- Measurement issues
- Questionnaire development
- Large databases and issues related to research
    - Study databases (e.g, Framingham, Nurses' Health Study)
    - Governmental databases (e.g., Ontario Institute for Clinical Evaluative Sciences)

Readings

- Textbook: (Chapter 11) *"Evaluation and Technology Assessment"* pages 403-446
- Watch the podcast of A National Web Conference on the Importance of Evaluation in Health IT Implementation: Practical Advice for Providers and Healthcare Organizations

- *Presenters:*
    - *Julie McGowan, Ph.D., Indiana University*
    - *Caitlin M. Cusack, M.D., M.P.H., NORC*
    - *Fred Lord, M.D., Rural Health IT Corporation*

The evaluation of health information technology (IT) projects has frequently taken a backseat to the work of implementing IT systems, equipment, and applications. However, evaluation has increasingly been recognized as a component to the overall success of health IT adoption and use. AHRQ's National Resource Center for Health IT (NRC) has developed tools to assist with the evaluation of health IT. These tools were initially targeted towards assisting AHRQ-funded projects, but they are now available to the entire health IT community via AHRQ's health IT Web site, http://healthit.ahrq.gov.This teleconference will discuss the importance of evaluating health IT projects, including outcomes related to quality and patient safety, and describe the evaluation tools available on AHRQ's health IT Web site. The event will also feature an AHRQ-funded grantee who will discuss how these tools can be used to cost-effectively evaluate health IT in a real-world setting. This event is intended for clinicians, clinical managers, health care executives, and others involved in the implementation of health IT systems, equipment, and applications.

Activities

- Find a well-done evaluation of an eHealth project/service
- Find a well-done research project that **assessed** an eHealth project/service/application
- Find a well-done research project that **uses** eHealth applications
- Be prepared to compare and contrast them in relation to evaluation and research.

Evaluation

- Date for submission of final project topics and establishment of final project groups (must be interdisciplinary).

Session 11. Implementation Issues and Security, Privacy, and Confidentiality

Objective

- To gain an understanding and respect for the importance and complexities of privacy, confidentiality, security, etc. across groups.

Content

- Implementation issues
- Privacy, confidentiality, security, copyright, ethics, certification, and legal issues in relation to patient care and research efficiencies

Readings

- Textbook (chapter 10) *"Ethics and Health Informatics: Users, Standards, and Outcomes"* pages 379-403.
- Complete the Tri-Council Statement on Ethical Conduct of Research Using Humans. http://pre.ethics.gc.ca/english/index.cfm. Although this statement deals with ethics in research many of the principles are important to eHealth professionals. Download 2 copies of your certificate—one to hand in and one for your personal files as it is useful for other purposes including HRM721.

Activities

- Large group speaker such as Don Willison
- Role playing in relation to these issues—concerning the growing abilities of eHealth and health research to be able to come up with strong evidence of prognosis for patients. Should these new insights be used to withhold care?
- Discussion of these issues in relation to final project papers

Note that the reading in this section is light so that students may spend more time on their final projects.

Session 12. Future of eHealth

Objectives

- To round out missing components of the course
- To become more aware of the need to understand the health care culture

Content

- Policy and governmental issues in eHealth
- Culture part 3—culture of health care in relation to computer science and business
- changing roles, new partnerships, and future directions of healthcare in relation to eHealth/informatics

Readings

- (Chapter 24.) *"The future of Computer Applications in Biomedicine"* pages 829-848
- Others outside of textbook

Activities

- Bring the most "outrageous" eHealth dream of the future to present to the class. Prizes given.
- Final wrap-up discussion for the course in relation to culture of health in relation to the culture of business and computer science. Please be ready to demonstrate that you have mastered the content and how you have integrated your background and learning over the course.

Evaluation

- Discussion of final projects. No final examination.

Session 13. Final Presentations of Group or Individual Projects

The final session will consist of presentations by each member of the class of their project. Projects can be individual or group although group projects are preferred. Class members are encouraged to ask questions and will be assessed on the quality of their questions and answers.

The paper will be in the form of a protocol for an evaluation of an eHealth installation or application or a research project related to an eHealth intervention or system, done as an interdisciplinary, group project.

Evaluation methods will include a mid-term examination, and a term paper on a specific topic of interest to the student, to be presented and submitted in written form at the end of the term.

Class participation	15% (1% /unit plus possible plus up to 2% for special contributions over the entire semester and 1% for completing web-CT evaluations)
Midterm exam (short answer questions)	40%
Case studies (2 at 5 points each)	10% (evaluation of a published paper or report or websites)
Final project	35% (10% presentation, 20% report, and 5% peer assessment)

McMaster University

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	Health Research Methodology			
COURSE TITLE	Introduction to Health Technology Assessment			
COURSE NUMBER	741	**COURSE CREDIT**		
		FULL COURSE ( )	**HALF COURSE (X)**	**QUARTER (MODULE) ( )**
INSTRUCTOR(S)	Daria O'Reilly			
PREREQUISITE(S)	None			

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

NEW COURSE	X	**DATE TO BE OFFERED:** September 2008	**WAS THE PROPOSED COURSE OFFERED ON DEAN'S APPROVAL?** No **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.

Health Technology Assessment (HTA) has the tremendous potential to transform the delivery of health care services, and improve health outcomes and quality of life. Decisions about whether to purchase and use new health technologies should be based on high-quality evidence of its impact on health outcomes, the health care system, and cost-effectiveness. Payers of health care face the challenge of aligning decision making with the best available evidence. Upon completion of this course, students will be equipped with the skills to evaluate the quality of an HTA, to critically appraise it to make a judgment about a study's methods, results and conclusions. Additionally, students will be become adept in conducting HTAs and be mindful of the barriers to, and facilitators of, evidence-based decision making in the real world.

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

Introduction to HTA, is a course developed for graduate students registered in the Masters and PhD Health Research Methodology (HRM) Program. Specifically, this course was designed for PhD students specializing in HTA and is intended to be a required course for PhD students in the HTA field of the HRM program and an elective course for Masters students. The objectives of the course are to: 1. introduce students to the basic framework for conducting an HTA; 2. learn how to apply the basic techniques required for an HTA (systematic literature review, economic evaluation, analysis of uncertainty); 3. learn the basics of different types of economic models (decision trees, Markov models, discrete event simulation models), and identify the type of modeling approach that is best suited for a particular disease and intervention; 4. understand the current practice and evaluation of public involvement in HTA in different jurisdictions; 5. appreciate the nature of social values and how they differ from, and relate to, evidence in the context of HTA; 6. understand the underlying ethical considerations that can enhance HTA by encouraging just process and socially responsible outcomes; 7. learn why some HTA problems progress through the HTA process while other do not with the aid of some case studies.

1. STATEMENT OF PURPOSE (How does the course fit into the department's program?)

As of July 2007, the HRM program provides students the opportunity to specialize in one of five 'fields of specialization'. The five fields are: clinical epidemiology, biostatistics, health services research, public and population health and health technology assessment (HTA). Currently there is only one course offered dealing with HTA and this is an advanced course. The Introduction to HTA course proposed here will provide students with the basic skills required to understand the role of HTAs in health care decision making as well as be able to critique and conduct HTAs.

2. EXPECTED ENROLMENT:

8 students

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

The course consists of 13 sessions (3-hour session, once a week). The first 5 sessions consist of presentations by the instructors of topics related to conducting an HTA followed by class discussion of specific methodological points and examples. Sessions 6-10 introduce students to the dissemination of HTA results and the ethical issues surrounding HTA. Session 11 presents 2 HTAs that have been completed which illustrate how various factors impact the assessment and dissemination of results. In session 12, a health care decision-maker in Ontario will be invited to speak to the students to share their experiences with HTA. Individual projects will be briefly presented to the class in Session 13..

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.)

Breakdown of Student Evaluation Components:
Grades for the course will be determined as follows:

In-class participation*:	14%
Submission of final project question:	5%
Assignments:	25%
Project presentation:	15%
Written HTA project:	40%
Completion of course evaluation:	1%

* Students get marks for participation for each class (1.0 or 0.5).

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: Daria O'Reilly Email: oreilld@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

HRM Course Outline

Course Number & Title:	HRM 741 Introduction to Health Technology Assessment
Course Co-ordinator:	Daria O'Reilly
Additional Faculty/Support:	Ron Goeree, Jean-Eric Tarride, Mita Giacomini, Julia Abelson, John Lavis, Lisa Schwartz

Course Description

Health Technology Assessment (HTA) has the tremendous potential to transform the delivery of health care services, and improve health outcomes and quality of life. Decisions about whether to purchase and use new health technologies should be based on high-quality evidence of its impact on health outcomes, the health care system, and cost-effectiveness. Payers of health care face the challenge of aligning decision making with the best available evidence.

Upon completion of this course, students will be equipped with the skills to evaluate the quality of an HTA, to critically appraise it to make a judgment about a study's methods, results and conclusions. Additionally, students will be become adept in conducting HTAs and be mindful of the barriers to, and facilitators of, evidence-based decision making in the real world

Introduction to HTA, is a course developed for graduate students registered in the Masters and PhD Health Research Methodology (HRM) Program. Specifically, this course was designed for PhD students specializing in HTA and is intended to be a required course for PhD students in the HTA field of the HRM program and an elective course for Masters students.

Course Objectives

The objectives of the course are to:

1. introduce students to the basic framework for conducting an HTA;
2. learn how to apply the basic techniques required for an HTA (systematic literature review, economic evaluation, analysis of uncertainty);
3. learn the basics of different types of economic models (decision trees, Markov models, discrete event simulation models), and identify the type of modeling approach that is best suited for a particular disease and intervention;
4. understand the current practice and evaluation of public involvement in HTA in different jurisdictions;
5. appreciate the nature of social values and how they differ from, and relate to, evidence in the context of HTA;
6. understand the underlying ethical considerations that can enhance HTA by encouraging just process and socially responsible outcomes;
7. learn why some HTA problems progress through the HTA process while other do not with the aid of some case studies.

Educational Methods/Course Format

The course consists of 13 sessions (3-hour session, once a week). The first 5 sessions consist of presentations by the instructors of topics related to conducting an HTA followed by class discussion of specific methodological points and examples. Sessions 6-10 introduce students to the dissemination of HTA results and the ethical issues surrounding HTA. Session 11 presents 2 HTAs that have been completed which

illustrate how various factors impact the assessment and dissemination of results. In session 12, a health care decision-maker in Ontario will be invited to speak to the students to share their experiences with HTA. Individual projects will be briefly presented to the class in Session 13.

Course Text/Materials

The course synopsis, session outlines (including objectives, pre-readings and links to articles, pre-class work and in-class assignments) and slides of presentations will be posted on WebCT. The slides of presentations will be posted after each class.

Policies concerning academic dishonesty, ethical considerations and students with disabilities can be found in the School of Graduate Studies calendar.

Prerequisites:	none
Session	**Topic**
Week 1	Introduction to HTA
Week 2	Identifying the evidence for HTA
Week 3	Taking the quality of evidence into account when interpreting the evidence and synthesizing the results
Week 4	Economic evaluation and decision analysis
Week 5	Good practices and critical appraisal in economic evaluation
Week 6	Packaging, dissemination and supporting the use of HTAs
Week 7	The public and the HTA process
Week 8	Social dimensions of health technology assessment
Week 9	Ethics, aesthetics and values in health technologies assessment
Week 10	The case of genetic test technologies
Week 11	Case studies
Week 12	Invited speaker/decision-maker
Week 13	Project presentations & instructor/peer feedback

Evaluation of Student Performance

The intent is to provide many opportunities for students to demonstrate their mastery of HRM 741 material:

In-class participation
Assignments
Submission of final project question
Project presentation
Written HTA project
Completion of course evaluation

<u>In-class Participation</u>

The course covers a wide range of topics related to the overall HTA process. Some topics are well established while others are new and emerging research areas. Emphasis will be placed on class participation. The success of the course depends, to a considerable degree, on the effort students put into understanding the materials.

Assignments:

A number of sessions will include some pre-session work. Students will be expected to prepare responses to all assignments included in the course and to discuss them each week in class.

Project presentation:

Students will be expected to present their final course paper in a presentation in front of the class and instructors for feedback and advice. Students will be rated on their presentations.

Written HTA Project

The final assignment will require students to design an HTA on a topic of interest. The objective of the final course paper is for the student to show that they have obtained a clear understanding of the key steps involved in conducting an HTA by designing an HTA evaluate a health technology of interest to the student. The paper must contain the basic framework for conducting an HTA:

1) Identify the topic for assessment
2) Clear specification of the assessment problem
3) Sources of research evidence for HTA
    a. Types of literature
    b. Design a search strategy
4) Collection of primary data (if appropriate)
5) Interpretation of the evidence
6) Synthesize and consolidate evidence
7) Economic analysis in HTA
    a. Cost-effectiveness analysis
    b. Cost-benefit analysis
    c. Cost-utility analysis
8) Dissemination of findings and recommendation

Breakdown of Student Evaluation Components:

Grades for the course will be determined as follows:

In-class participation*:	14%
Submission of final project question:	5%
Assignments:	25%
Project presentation:	15%
Written HTA project:	40%
Completion of course evaluation:	1%

* Students get marks for participation for each class (1.0 or 0.5).

How HRM 741 will be evaluated

An online course evaluation will be completed by each student for each unit (WebCT) for the unit and the large group presenter. Course coordinators, presenters, and the

department administration value these evaluations which are used in planning revisions to the content and recruitment of faculty tutors. Because we value constructive feedback, students will receive 1% towards their final mark for completion of the evaluations.

Session #1 – Introduction to HTA

Description:
This session will start with a course overview that will outline the class structure, deliverables and student evaluations. Following this, the lecture will provide an overview of HTA and describe the HTA process. This class includes definitions of HTA, the origins of HTA, various international, national, provincial and local examples of HTA, HTA agencies, a framework for conducting HTA and a summary of some of the limitations and challenges one faces when employing HTA.

Objectives:
At the end of this session, students will be able to:

1) Define HTA using related descriptions and terminology;
2) Understand the origins and context of HTA;
3) Be aware of various agencies and resources for HTA:
4) Know the steps involved in conducting an HTA;
5) Evaluate the strengths, weaknesses and limitations of HTA.
6) Understand the relative value and limitations of clinical practice guidelines and standards and HTAs as well as the fundamental philosophical, conceptual and methodological characteristics that differentiate them.

Pre-session readings:

Banta D. The development of health technology assessment. *Health Policy* 2003;63(2):121-32.

Franklin C. Basic concepts and fundamental issues in technology assessment. *Intensive Care Med* 1993;19(2):117-21.

McDaid D. Co-ordinating health technology assessment in Canada: a European perspective. *Health Policy* 2003;63(2):205-13.

Health Technology Assessment Task Group. Health Technology Strategy 1.0: Final Report. Health Canada; 2004.

Additional Resources:

Banta HD, Thacker SB. The case for reassessment of health care technology. Once is not enough. *JAMA* 1990;264(2):235-40.

Battista RN, Lance JM, Lehoux P, Regnier G. Health technology assessment and the regulation of medical devices and procedures in Quebec. Synergy, collusion, or collision? *Int J Technol Assess Health Care* 1999;15(3):593-601.

Goodman CS. *HTA 101: introduction to health technology assessment*. Falls Church (VA): Lewin Group; 2004. Available: http://www.nlm.nih.gov/nichsr/hta101/hta101.pdf.

Goodman CS, Snider G, Flynn K. *Health care technology assessment in VA*. Boston; Washington: Management Decision and Research Center; Health Services Research and Development Service; 1996. Available: http://www.hsrd.research.va.gov/publications/internal/taprimer.pdf.

Hailey D, Menon D. A short history of INAHTA. International Network of Agencies for Health Technology Assessment. *Int J Technol Assess Health Care* 1999;15(1):236-42.

Jonsson E. Development of health technology assessment in Europe. A personal perspective. *Int J Technol Assess Health Care* 2002;18(2):171-83.

Maynard A, McDaid D. Evaluating health interventions: exploiting the potential. *Health Policy* 2003;63(2):215-26.

Roehrig C, Kargus K. *Health technology assessment in Canada and the G-7 countries: a comparative analysis of the role of HTA agencies in the decision-making process*. Ottawa: Health Canada; 2003.

Stevens A, Milne R, Burls A. Health technology assessment: history and demand. *J Public Health Med* 2003;25(2):98-101.

Session #2 – Identifying the Evidence for HTA

Description:

Identifying potentially relevant items for inclusion is one of the fundamental processes in health technology assessment. This session will provide students with an introduction to the skills and resources necessary to perform an HTA search, along with hands-on use of some of the key resources.

Objectives:
At the end of this session, students will have gained an understanding of:

1) the key issues surrounding the identification of evidence for HTA

2) the key sources of published and grey literature

3) bibliographic database searching basics

Pre-session readings:
Alton V, Eckerlund I, Norlund A. Health economic evaluations: how to find them. *Int J Technol Assess Health Care*. 2006;22(4):512-7.

Chan L, Dennett L, Collins S, Topfer L-A. Introduction. *In*: Health technology assessment on the Net: a guide to Internet sources of information. 8th ed. Edmonton: Alberta Heritage Foundation for Medical Research (AHFMR); 2006. Available: http://www.ahfmr.ab.ca/download.php/0a4970e0b01d488d8b66b2d41c9c0460.
*Downloadable bookmarks: http://www.ahfmr.ab.ca/publications/?search=Internet+sources+of+information&type=1

Savoie I, Helmer D, Green CJ, Kazanjian A. Beyond Medline: reducing bias through extended systematic review search. *Int J Technol Assess Health Care*. 2003;19(1):168-78.

Additional Resources:
Dundar Y, Dodd S, Williamson P, Walley T, Dickson R. Searching for and use of conference abstracts in health technology assessments: policy and practice. *Int J Technol Assess Health Care*. 2006;22(3):283-7.

Goodman CS. Retrieving evidence for HTA. *In*: HTA 101: introduction to health technology assessment. Lewin Group: Falls Church (VA); 2004. Available: http://www.nlm.nih.gov/nichsr/hta101/hta101.pdf.

Higgins JPT, Green S, editors. Locating and selecting studies. *In*: Cochrane handbook for systematic reviews of interventions 4.2.6 [updated September 2006]; Section 5. Available: http://www.cochrane.org/resources/handbook/hbook.htm.

Jadad AR, Moher D, Klassen TP. Guides for reading and interpreting systematic reviews: II. How did the authors find the studies and assess their quality? *Arch Pediatr Adolesc Med*. 1998;152(8):812-7.

Moher D, Cook DJ, Eastwood S, Olkin I, Rennie D, Stroup DF. Improving the quality of reports of meta-analyses of randomised controlled trials: the QUOROM statement. Quality of Reporting of Meta-analyses. *Lancet* 1999;354(9193):1896-900.

Raftery J, Roderick P, Stevens A. Potential use of routine databases in health technology assessment. *Health Technol Assess*. 2005;9(20):1-106. Available: http://www.hta.ac.uk/execsumm/summ920.htm.

Royle P, Waugh N. Literature searching for clinical and cost-effectiveness studies used in health technology assessment reports carried out for the National Institute for Clinical Excellence appraisal system. *Health Technol Assess*. 2003;7(34):iii, ix-x, 1-51. Available: http://www.hta.ac.uk/execsumm/summ734.htm.

Sampson M, Barrowman NJ, Moher D, Clifford TJ, Platt RW, Morrison A, Klassen TP, Zhang L. Can electronic search engines optimize screening of search results in systematic reviews: an empirical study. *BMC Med Res Methodol*. 2006;24;6:7. Available: http://www.biomedcentral.com/1471-2288/6/7.

Song FJ, Fry-Smith A, Davenport C, Bayliss S, Adi Y, Wilson JS, Hyde C. Identification and assessment of ongoing trials in health technology assessment reviews. *Health Technol Assess*. 2004;8(44):iii, 1-87. Available: http://www.hta.ac.uk/execsumm/summ844.htm.

Topfer L-A, Auston I, editors. *Etext on Health Technology Assessment (HTA) information resources*. Bethesda (MD): United States National Library of Medicine; 2005. Available: http://www.nlm.nih.gov/archive/20060905/nichsr/ehta/ehta.html.

Session #3 – Taking the Quality of Evidence into Account When Interpreting the Evidence and Synthesizing the Results

Description:
It is essential to establish the safety and efficacy of new health technologies. However, measuring effectiveness is the key to improving decision-making, whether related to a particular patient, a hospital or other institution, or a funding agency. The most rigorous evidence about effectiveness comes from well-designed randomized clinical trials with a sufficiently large sample; other kinds of studies can provide valuable information, but are vulnerable to bias. This session explains the essentials of study rigour and validity, in order to help students critically appraise published work. Students are also introduced to some methods for combining data from multiple studies.

Objectives:
At the end of this session, students will be able to:

1) Understand the issues related to study rigour, validity, and bias;
2) Discuss the advantages of randomization (reliable, unbiased results);
3) Assess the quality of the evidence from randomized clinical trials when interpreting the evidence
4) Appreciate how study quality impacts the estimate of treatment benefit
5) Use various techniques to combine and synthesize data from multiple studies

Pre-session readings:

Abraham NS, Moayyedi P, Daniels B, Veldhuyzen Van Zanten SJO. The methodological quality of trials affects estimates of treatment efficacy in functional (non-ulcer) dyspepsia. Alimentary Pharmacology & Therapeutics 2004, 19(6): 631–641.

Jadad AR, Moore RA, Carroll D, Jenkinson C, Reynolds DJ, Gavaghan DJ, et al. Assessing the quality of reports of randomized clinical trials: is blinding necessary? Control Clin Trials 1996 Feb;17(1):1-12.

Moher D, Pham B, Jones A, Cook DJ, Jadad AR, Moher M, et al. Does quality of reports of randomised trials affect estimates of intervention efficacy reported in meta-analyses? Lancet 1998 Aug 22;352(9128):609-13.

Schulz KF, Chalmers I, Hayes RJ, Altman DG. Empirical evidence of bias. Dimensions of methodological quality associated with estimates of treatment effects in controlled trials. Journal of the American Medical Association 1995 Feb 1;273(5):408-12.

Schulz KF, Grimes DA. Allocation concealment in randomised trials: defending against deciphering. Lancet 2002 Feb 16;359(9306):614-8.

Additional Resources:

Begg C, Cho M, Eastwood S, Horton R, Moher D, Olkin I, et al. Improving the quality of reporting of randomized controlled trials. The CONSORT statement. Journal of the American Medical Association 1996 Aug 28;276(8):637-9.

Chalmers TC, Celano P, Sacks HS, Smith H, Jr. Bias in treatment assignment in controlled clinical trials. N Engl J Med 1983 Dec 1;309(22):1358-61.

Colditz GA, Miller JN, Mosteller F. How study design affects outcomes in comparisons of therapy. I: Medical. Stat Med 1989 Apr;8(4):441-54.

Cook DJ, Mulrow CD, Haynes RB. Systematic reviews: synthesis of best evidence for clinical decisions. Ann Intern Med 1997 Mar 1;126(5):376-80.

Detsky AS, Naylor CD, O'Rourke K, McGeer AJ, L'Abbe KA. Incorporating variations in the quality of individual randomized trials into meta-analysis. J Clin Epidemiol 1992 Mar;45(3):255-65.

Higgins JPT, Green S, editors. Assessment of Study Quality. Cochrane Handbook for Systematic Reviews of Interventions 4.2.6 [updated September 2006]; Section 6. http://www.cochrane.org/resources/handbook/Handbook4.2.6Sep2006.pdf (accessed 20th April 2007).

Higgins JPT, Green S, editors. Assessment of Study Quality. Cochrane Handbook for Systematic Reviews of Interventions 4.2.6 [updated September 2006]; Section 7. http://www.cochrane.org/resources/handbook/Handbook4.2.6Sep2006.pdf (accessed 20th April 2007).

Higgins JPT, Green S, editors. Assessment of Study Quality. Cochrane Handbook for Systematic Reviews of Interventions 4.2.6 [updated September 2006]; Section 8. http://www.cochrane.org/resources/handbook/Handbook4.2.6Sep2006.pdf (accessed 20th April 2007).

Juni P, Witschi A, Bloch R, Egger M. The hazards of scoring the quality of clinical trials for meta-analysis. Journal of the American Medical Association 1999 Sep 15;282(11):1054-60.

Kjaergard LL, Villumsen J, Gluud C. Reported methodologic quality and discrepancies between large and small randomized trials in meta-analyses. Ann Intern Med 2001 Dec 4;135(11):982-9.

Meade MO, Richardson WS. Selecting and appraising studies for a systematic review. Ann Intern Med 1997 Oct 1;127(7):531-7.

Sacks HS, Berrier J, Reitman D, Ancona-Berk VA, Chalmers TC. Meta-analyses of randomized controlled trials. N Engl J Med 1987 Feb 19;316(8):450-5.

Thompson SG. Why sources of heterogeneity in meta-analysis should be investigated. BM

Session #4 – Economic Evaluation and Decision Analysis

Description:

Economic evaluation methods in HTA

- Costing, discounting, perspectives
- Cost-effectiveness, cost-utility, cost-benefit analyses
- Decision analysis and models
- Variability and uncertainty
- Budget impact analysis

Objectives:

At the end of this session, students will have gained an understanding of:

1) The different types of economic evaluations and the basic components of evaluation

2) Decision analysis and different types of economic models

3) Distinction between uncertainty and variability, different types of uncertainty/variability and how they are treated differently depending on the type of analysis

4) The use of Budget Impact Analysis for health care decision making

Pre-session readings:

1. Drummond MF, Sculpher MJ, Torrance GW, O'Brien BJ, Stoddart GL. Chapter 2: Basic types of economic evaluation. In: *Methods for the economic evaluation of health care programmes*. 3rd ed. Oxford: Oxford University Press; 2005.

2. Torrance G., Walker V., Grossman R. et al., Economic evaluation of Ciprofloxacin compared with usual antibacterial care for the treatment of acute exacerbations of chronic bronchitis in patients followed for 1 year. Pharmacoeconomics, 1999;16(5):499-520.

3. Brennan A., Akehurst R. Modelling in health economic evaluation: What is its place? What is its value? PharmacoEconomics, 2000;17(5):445-459.

Session #5 – Good Practices and Critical Appraisal in Economic Evaluation

Description:
This session will expose students to accepted methods for conducting economic evaluations as well as providing them with a check list to critically appraise economic evaluations. Students will be introduced to various methods for costing within randomized controlled trials.

Objectives:
To provide students with:

1) An overview of selected guidelines used to conduct economic evaluation around the world;
2) An overview of good research practices for cost-effectiveness analysis alongside clinical trials;
3) An overview of good practice guidelines for decision-analytic modelling in HTA.

Pre-session readings:
Ramsey S, Willke R, Briggs A, Brown R, Buxton M, Chawla A, et al. Good research practices for cost-effectiveness analysis alongside clinical trials: the ISPOR RCT-CEA Task Force report. Value Health 2005 Sep;8(5):521-33.

Philips Z, Bojke L, Sculpher M, Claxton K, Golder S. Good practice guidelines for decision-analytic modelling in health technology assessment: a review and consolidation of quality assessment. Pharmacoeconomics 2006;24(4):355-71.

Drummond MF, Sculpher MJ, Torrance GW, O'Brien BJ, Stoddart GL. Chapter 3: Critical assessment of economic evaluation. In: *Methods for the economic evaluation of health care programmes*. 3rd ed. Oxford: Oxford University Press; 2005.

Additional Resources

Barber JA, Thompson SG. Analysis and interpretation of cost data in randomised controlled trials: review of published studies. BMJ 1998 Oct 31;317(7167):1195-200.

Hjelmgren J, Berggren F, Andersson F. Health economic guidelines--similarities, differences and some implications. Value Health 2001 May;4(3):225-50.

Gerard K, Seymour J, Smoker I. A tool to improve quality of reporting published economic analyses. Int J Technol Assess Health Care 2000;16(1):100-10.

Pre-session assignment:
Students are required to critically appraise a study by Torrance et al (see article from session #4) using the 10-point checklist by Drummond et al. (Chapter 3 Box 3.1 page. 28-29)

Torrance G, Walker V, Grossman R, Mukherjee J, Vaughan D, La FJ, et al. Economic evaluation of ciprofloxacin compared with usual antibacterial care for the treatment of acute exacerbations of chronic bronchitis in patients followed for 1 year. Pharmacoeconomics 1999 Nov;16(5 Pt 1):499-520.

Session #6 – Packaging, Disseminating and Supporting the Use of HTAs

Description:
HTAs are typically produced with the hope or intent that they will be used by professional leaders, health system managers, and public policymakers. However, proactive efforts need to be taken to package, disseminate and support the use of HTAs. This session will introduce a broad framework for knowledge translation (a jargon term for a broad field that encompasses packaging, disseminating and supporting the use of research evidence) and provide an opportunity for focused skill development in packaging and (planning for) disseminating an HTA.

Objectives:
At the end of this session, students will be able to:

1) Situate any particular effort to package, disseminate or support the use of HTAs within the context of a broad framework for knowledge translation;
2) Identify the take-home message from an HTA, the target audience for the message, and a potential strategy for either disseminating it or supporting its use.

Pre-session readings:

Lavis JN, Lomas J, Hamid M, Sewankambo N. Assessing country-level efforts to link research to action. Bulletin of the World Health Organization 2006; 84(8):620-628.

McGregor M. What decision-makers want and what they have been getting. *Value Health* 2006;9(3):181-5.

Additional Resources:

Grimshaw J, Shirran L, Thomas R et al. Changing provider behaviour: An overview of systematic reviews of interventions. Medical Care 2001; 39(Supplement 2):II2-II45.

Cameron M, Cranfield S, Iles V, Stone J. Managing Change in the NHS: Making Informed Decisions on Change – Key Points for Health Care Managers and Professionals. London: NHS Service Delivery and Organization R&D Programme, 2001. [http://www.sdo.lshtm.ac.uk/pdf/changemanagement_booklet.pdf]

Greenhalgh T, Robert G, Macfarlane F, Bate P, Kyriakidou O. Diffusion of innovations in service organizations: Systematic review and recommendations. The Milbank Quarterly 2004; 82(4):581-629.

Reay T. Managing managerial health care decisions in complex, high velocity environments. Alberta Heritage Foundation for Medical Research 2000-08-09:#02.

Pre-session assignment:

Select an HTA from a Canadian HTA agency. Identify one main take-home message from the HTA, the target audience for the message, and a potential strategy for either disseminating it or supporting its use.

Session #7 The Public and the HTA process: Can HTA be democratic?

Description:
This session will orient students to current debates and practices for incorporating public perspectives into the health technology assessment process. The roots of this debate will be explored through reading and discussion of the democratization of science literature. Core terminology and concepts from the public participation and engagement literature will be reviewed and considered in the HTA context. Current worldwide efforts to involve the public in HTA will be reviewed and analyzed.

Objectives:
At the end of this session, students will have gained an understanding of:

1) Ethical and political arguments for including 'the public' in HTA
2) The multiple meanings, goals and contested nature of 'public' and 'public involvement'
3) Current practice and evaluation of public involvement in HTA in different jurisdictions

Pre-session readings:

Abelson J, Giacomini M, Lehoux P, Gauvin FP. Bringing 'the public' into health technology assessment and coverage policy decisions: from principles to practice. *Health Policy* 82 2007:37-50.

Bal R, Bijker WE, Hendriks R. Democratisation of scientific advice. BMJ 2004 Dec 4;329(7478):1339-41.

Coulter A. Perspectives on health technology assessment: response from the patient's perspective. *International Journal of Technology Assessment in Health Care*. 2004; 20(1):92-96.

Royle J and Oliver S. Consumer involvement in the health technology assessment program. *International Journal of Technology Assessment in Health Care*. 2004; 20(4):493-497.

Additional Resources:

Nature Publishing Group. Going public. Nature 2004;431(7011):883.

Pivik, J, Rode, E, Ward C. A consumer involvement model for health technology assessment in Canada. *Health Policy* 2004; 69:253-268.

Hailey D. Consumer Involvement in Health Technology Assessment. Alberta Heritage Foundation for Medical Research. HTA Unit, December 2005.

Session #8 Social Dimensions of Health Technology Assessment

Description:

Social values and technology evaluation

- What are social values?
- Values in evaluation criteria
- Values in methodology

Values and evidence in policy decisions about health technologies

- The relationship between evidence and criteria
- The role of public participation

Social context and dynamics of health technologies

- Technological imperatives – basic concepts
- Influences between health technologies and social systems

Objectives:

At the end of this session, students will have gained an understanding of:

1) The nature of social values and how they differ from, and relate to, evidence in the context of health technology assessment
2) The role of social value judgments in HTA-based policy decisions
3) Models for identifying and assessing dynamics between health technologies and social systems

Pre-session readings:

Lehoux P, Blume S. Technology assessment and the sociopolitics of health technologies. *Journal of Health Politics Policy and Law*. 2000 Dec;25(6):1083-120.

Giacomini, M. (2005). One of these things is not like the others: the idea of precedence in health technology assessment and coverage decisions. *Milbank Quarterly*, 83(2), 193-223.

May C. A rational model for assessing and evaluating complex interventions in health care. *BMC Health Serv Res*. 2006 Jul 7;6:86.

Webster A. Health technology assessment: a sociological commentary on reflexive innovation. *International Journal of Technology Assessment in Health Care*. 2004 Winter;20(1):61-6.

Additional Resources:

Van der Wilt GJ, Reuzel R, Banta HD. The ethics of assessing health technologies. *Theoretical Medicine and Bioethics*. 2000 Jan;21(1):103-15.

Lehoux, P. (2006). *The Problem of Health Technology*. New York: Routledge.

Abelson J, Giacomini M, Lehoux P, Gauvin FP. Bringing 'the public' into health technology assessment and coverage policy decisions: From principles to practice. *Health Policy*. 2006 Sep 20; [Epub ahead of print]

May C. Mobilising modern facts: health technology assessment and the politics of evidence. *Sociology of Health and Illness*. 2006 Jul;28(5):513-32.

Leys M. Health care policy: qualitative evidence and health technology assessment. *Health Policy*. 2003 Sep;65(3):217-26.

Reuzel RP, van der Wilt GJ, ten Have HA, de Vries Robbe PF. Interactive technology assessment and wide reflective equilibrium. *Journal of Medicine and Philosophy*. 2001 Jun;26(3):245-61

Schot, J., & Rip, A. (1996). The past and future of constructive technology assessment. *Technological Forecasting and Social Change*. 54, 251-268.

Hummel MJM, van Rossum W, Verkerke GJ, et al. Assessing medical technologies in development - A new paradigm of medical technology assessment. 2000. *International Journal of Technology Assessment in Health Care*. 16 (4): 1214-1219

Giacomini, M. (1999). The 'which' hunt: assembling health technologies for assessment and rationing. *Journal of Health Politics, Policy, and Law*. 24(4), 715-758.

Session #9 – Ethics, Aesthetics and Values in Health Technologies Assessment: "I don't know much about HTA, but I know what I like."

Description:
This session will involve discussion of the role of ethics and values in assessment of new technologies. We will examine the role values play in determining how new technologies are evaluated and address the impact this has on social justice, health policy and resource allocation. Students will be asked to actively apply principle-based questions to a case study.

Objectives:
At the end of this session, students will have gained an understanding of:

1) The role that values, value judgments and value pluralism play in the assessment of new technologies, and whether evidence can be value neutral.

2) The underlying ethical considerations that can enhance HTA by encouraging just process and socially responsible outcomes.

3) How to apply a proposed set of ethical queries to a case study (see Hofmann)

Pre-session readings:
Braunack-Mayer AJ. Ethics and health technology assessment: handmaiden and/or critic? *Int J Technol Assess Health Care* 2006;22(3):307-12.

Hofmann B. Toward a procedure for integrating moral issues in health technology assessment. *Int J Technol Assess Health Care* 2005;21(3):312-8.

Further readings:
Zangwill, N. "Aesthetic Judgment"; *Stanford Encyclopedia of Philosophy*; First published Feb 28, 2003; substantive revision Jul 12, 2006 http://plato.stanford.edu/entries/aesthetic-judgment/

Banta HD, Thacker SB. The case for reassessment of health care technology. Once is not enough. *JAMA* 1990;264(2):235-40.

Roehrig C, Kargus K. *Health technology assessment in Canada and the G-7 countries: a comparative analysis of the role of HTA agencies in the decision-making process*. Ottawa: Health Canada; 2003.

National Institute for Clinical Excellence (NICE). *Social value judgement - principles for the development of NICE guidance*. London: The Institute; 2005. Available: http://www.nice.org.uk/page.aspx?o=svjguidance.

Session 10 – HTA: The case of genetic test technologies

Description:

Genetic test technologies

- What are genetic tests?
- What do genetic tests do?
- Why examine the case of genetic tests for HTA?

HTA where information is the outcome

- How is information valued?
- Who plays a role in the valuation of information?

Intended, extended and unintended effects

- What is an 'intended,' 'extended,' or 'unintended' effect?
- Weighing and balancing the effects of health technologies

Objectives:

At the end of this session, students will have gained an understanding of:

1) Genetic test technologies: what they are, how they pose some distinctive – but not unique – challenges for HTA

2) How information as a health technology outcome complicates judgments of safety, efficacy and effectiveness

3) The significance of the intended, extended and unintended effects of health technologies (illustrated by genetic test technologies, but not unique to them), and the challenges posed for HTA in weighing and balancing these diverse effects

Pre-session readings:

Bubela TM, Caulfield TA. Do the print media "hype" genetic research? A comparison of newspaper stories and peer-reviewed research papers. CMAJ. 2004 Apr 27;170(9):1399-407.

Hallowell N, Foster C, Eeles R, Arden-Jones A, Murday V, Watson MS. Balancing autonomy and responsibility: the ethics of generating and disclosing genetic information. Journal of Medical Ethics 2003;29:74-83.

Giacomini M, Miller FA, O'Brien, B. 2003. Economic Considerations for Health Insurance Coverage of Emerging Genetic Tests. Community Genetics Vol. 6: 61-73.

Giacomini M, Miller FA, Browman G. 2003. Confronting the "Grey Zones" of Technology Assessment: Evaluating Genetic Testing Services for Public Insurance Coverage in Canada. International Journal of Technology Assessment in Health Care Volume 19, Issue 2: 301-315.

Student Assignments:

Bassett K, Lee P, Green CJ, Mitchell L, Sroka H, Lal R, Hanvelt R, Kazanjian A. 2000. HTA and Our Genetic Future: Triple Marker Screening in British Columbia. BC Office of Health Technology Assessment, Centre for Health Services and Policy Research. BCOHTA 00:23C

Davies SC, Cronin E, Gill M, Greengross P,Hickman M, Normand C. 2000. Screening for sickle cell disease and thalassaemia: a systematic review with supplementary research. Health Technology Assessment 2000; Vol. 4: No. 3

Groups of 3-4 students will be assigned one of the above HTAs of a genetic test technology. Students are to review this HTA report and be prepared to provide a summative overview for their colleagues. Students are also to address the following questions:

- What technology is being assessed?
- What factors are identified as relevant to the assessment of this HT?
    - How are these factors measured?
- What are the intended effects of these HTs?
    - What other effects are apparent?
    - How are these other effects considered?

Session #11 – Case Studies

Description:
This session will present the results of 2 HTA problems. The first case study evaluates drug-eluting stents for use in percutaneous coronary angioplasty and the second case study will provide an overview of the feasibility of evaluating various interventions for the treatment of non-union fractures of long bones in Ontario. The various stages of the HTA projects will be described with a focus on the factors that influenced the success of the evaluations.

Objectives:
At the end of this session, students will:

1) Gain an understanding of the process/stages involved in conducting an HTA in the 'real world'
2) Be able to identify factors that influence the success of an HTA.
3) Understand the timelines associated conducting an evaluation.
4) Recognize various methods of dissemination of the results of the HTA and their potential influence on policy decisions.

Pre-session readings:

Morice MC, Serruys PW, Sousa JE, Fajadet J, Ban HE, Perin M, et al. A randomized comparison of a sirolimus-eluting stent with a standard stent for coronary revascularization. N Engl J Med 2002 Jun 6;346(23):1773-80.

Ontario Health Technology Advisory Committee. OHTAC Recommendation: Drug Eluting Stents (DES). Toronto: Medical Advisory Secretariat Ministry of Health and Long-term Care; 2005.

Ontario Health Technology Advisory Committee. DES Report: Cost effectiveness analysis of drug eluting stents compared to bare metal stents for percutaneous coronary interventions in Ontario (Interim Report, Program for Assessment of Technology in Health, December 2005). OHTAC E-Bulletin 2006;(8):1-5.

Medical Advisory Secretariat. Osteogenic Protein-1 for Long Bone Nonunion: Health Technology Literature Review.6 Ministry of Health and Long-Term Care; 2005.

Ontario Health Technology Advisory Committee. OHTAC Recommendation: Osteogenic Protein-1 for Long Bone Nonunion. Toronto: Medical Advisory Secretariat Ministry of Health and Long-term Care; 2005.

Additional Resources:

Bowen J, Hopkins R, He Y, Blackhouse G, Lassam C, Tu J, et al. Systematic review and cost-effectiveness analysis of drug eluting stents compared to bare metal stents for percutaneous coronary interventions in Ontario: interim report. Hamilton (ON): Program for Assessment of Technology in Health, McMaster University; 2005.

Cardiac Care Network of Ontario. Working Group on Drug Eluting Stents Report on Initial Utilization Strategy: Final Report and Recommendations. Toronto: 2002. http://www.ccn.on.ca/pdfs%5CFinalDrugElutingMaster2_Dec2002.pdf

Session #12 – Invited Speaker

The invited speaker will be asked to suggest some pre-session readings pertaining to the topic being presented.

Session #13 – Student Presentations

McMaster University

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	DeGroote School of Business/ Health Services Management			
COURSE TITLE	Health Economics and Evaluation			
COURSE NUMBER	C711/ HRM 711	**COURSE CREDIT**		
		FULL COURSE ( )	**HALF COURSE (x)**	**QUARTER (MODULE) ( )**
INSTRUCTOR(S)	Christopher J. Longo			
PREREQUISITE(S)	HSM stream of MBA, or permisson of instructor. Antirequisite: HRM 789			

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? Y **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:** Intention to cross list with Faculty of Health Sciences for students in the Health Research Methodology program				

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

This course examines the application of economic principles to policy-relevant questions in the area of health and health-care. Topics will include applied health economics, economic correlates to health, demand and supply of healthcare and insurance, healthcare system financing, economic evaluation in the pharmaceutical/medical devices industries, costing methodologies, cost-effectiveness and cost-benefit analyses, QALYs, decision analysis, modeling and means by which to improve value-for-money in the the health sector.

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

Basic principles in health care related to rationing and opportunity costs, health care markets, demand for health, costing methodologies, cost analyses, decision analysis and modeling. TEXT: Drummond et al. Methods for the economic evaluation of health care programs 3rd Edition, 2005

1. STATEMENT OF PURPOSE (How does the course fit into the department's program?)

C711 is one of the required courses for those chosing the "Health Services Management" stream of the MBA program.

2. EXPECTED ENROLMENT:

Maximum of 5 students from the faculty of health sciences (but not more than 20% of enrollment total).

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

Lectures, critical appraisal, and a major group project

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.)

One critical appraisal, class participation, class presentation of project work, and group project

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 through the faculty of health sciences for students in the health research methodology program, but may not always fit student timetables

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

It is not intended primarily for students outside our department, but rather as an option for students who may not be available for the HRM offering.

PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Christopher J. Longo Email: cjlongo@mcmaster.ca Extension: 23896 Date: Jan 7, 2008

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

Business C711
Health Economics and Evaluation
Winter 2008 Course Outline

Strategic Market Leadership and Health Services Management Area
DeGroote School of Business
McMaster University

COURSE OBJECTIVE

DeGroote's MBA specialization in Health Services Management (HSM) is the only one of its kind in Canada. Industry leaders and alumni agree that one of the most valuable courses offered has been the health economics/evaluation course that has appeared in the calendar under various names over the years. This course will examine the application of economic principles to policy-relevant questions in the area of health and healthcare.

INSTRUCTOR AND CONTACT INFORMATION

Tues 7pm – 10pm
Instructor
Dr. Christopher J. Longo
cjlongo@mcmaster.ca
Office: MGD #210
Office Hours: Tues 5:30 – 6:50pm
Tel: (905) 525-9140 x23896
Class Location: DSB-B105

Guest Lecturer (Week 8 & 9)
Ron Goeree
goereer@mcmaster.ca
Director, PATH
Associate Professor, Clinical Epidemiology & Biostatistics

Patti Wiebe
Secretary
wiebe@mcmaster.ca
Office: MGD #203
Office Hours: 08:30 – 4:30
Tel: (905) 525-9140 x24436

Course Website: http://www.degroote.mcmaster.ca

COURSE ELEMENTS

Credit Value:	3	Leadership:	Yes	IT skills:	No	Global view:	Yes
WebCT:	Yes	Ethics:	No	Numeracy:	Yes	Written skills:	Yes
Participation:	Yes	Innovation:	Yes	Group work:	Yes	Oral skills:	Yes

COURSE DESCRIPTION

This course will be taught using lectures, guest speakers, discussions, research projects and presentations. Lectures will not attempt to cover all the possible materials, but will provide a starting place for class discussion. Some of the class time will be used to engage in activities designed to illustrate certain topics and issues and to provide a basis for their discussion.

LEARNING OUTCOMES

This course will examine the application of economic principles to policy-relevant questions in the areas of health and healthcare. Topics may include but not be limited to applied health economics, demand and supply of healthcare and insurance, healthcare system financing, economic evaluation of pharmaceuticals, cost-effectiveness, cost-utility and cost-benefit analyses, and means by which to improve value-for-money in the health sector.

REQUIRED COURSE MATERIALS AND READINGS

WebCT registration for course content, readings and case materials • http://webct.mcmaster.ca	$ FREE
M. Drummond, et al, Methods for the Economic Evaluation of Health Care Programmes, 3rd edition", Oxford Medical Publications • purchase a copy at the bookstore	$ 78.50
Custom Courseware • purchase a copy at the bookstore	$ 40.50

OPTIONAL COURSE MATERIALS AND READINGS

None

EVALUATION

Learning in this course results to a large degree from in-class discussion and participation of comprehensive economic evaluation lectures and cases as well as out-of-class analysis. The balance of the learning results from related readings, and from researching your presentations, and projects. Work will be evaluated on both an individual and group basis. In group work members will share the same grade adjusted by peer evaluation. Your final grade will be calculated as follows:

Components and Weights

Brief critique	Based on recent health economics literature	10%
Class participation	Lecture time	15%
Term Project	Presentation	15%
Term Project	Report	60%
Total		100%

NOTE: The use of a McMaster standard calculator (Casio FX-991) is allowed during examinations in this course. See McMaster calculator policy at the following URL:

http://www.mcmaster.ca/senate/academic/calculat.htm

Conversion

At the end of the course your overall percentage grade will be converted to your letter grade in accordance with the following conversion scheme.

LETTER GRADE	PERCENT	LETTER GRADE	PERCENT
A+	90 - 100	C+	60 - 64
A	85 - 89	C	55 - 59
A-	80 - 84	C-	50 - 54
B+	75 - 79	F	00 - 49
B	70 - 74		
B-	65 – 69		

Health Research Methodology Graduate Students

At the end of the course HRM students' overall percentage grade will be converted to a letter grade in accordance with the following conversion scheme.

LETTER GRADE	PERCENT
A+	90 - 100
A	85 - 89
A-	80 - 84
B+	77 - 79
B	73 - 76
B-	70 – 72
F	Failure; inadequate work

Communication and Feedback

Students that are uncomfortable in directly approaching an instructor regarding a course concern may choose to send a confidential and anonymous email to the respective Area Chair at:

http://www.degroote.mcmaster.ca/curr/emailchairs.aspx

Students who wish to correspond with instructors directly via email must send messages that originate from their official McMaster University email account. This protects the confidentiality and sensitivity of information as well as confirms the identity of the student.

Instructors should conduct an informal course review with students by Week #4 to allow time for modifications in curriculum delivery. Instructors should provide evaluation feedback for at least 10% of the final grade to students prior to Week #8 in the term.

Mid term critique

This critique, is worth **10%** of your final grade and will be marked individually. The critique will be due on **February 5th**. A full description of expected format will be provided on or before the second week of classes.

Team Project – Presentation

There is a team presentation in this course that accounts for **15%** of your final grade. The presentation should cover the material included in your report, but be limited to 30-45 minutes with an additional 15 minutes for questions (some variation in length of presentation based on class size may occur).

Team Project – Written report

There is a major team report in this course that accounts for **60%** of your grade. This report should be based on an incremental analysis of a new technology or program with respect to existing treatments or practices. The scope of this report should be discussed with the instructor before proceeding, and must have a well defined and measurable outcome measure. You will be responsible for:

- Identifying a health economics issue with alternative interventions
- Conducting **an economic evaluation** of competing interventions using one of the comparative techniques identified in the *Drummond* text but limited to one of:
    - -Cost effectiveness analysis
    - -Cost-utility analysis
    - -Cost-benefit analysis
- Making appropriate recommendations based on this analysis.

Students should attempt to form groups early in the term and are required to provide an outline of their project by **February 12th**. The instructor will review the project for content and feasibility for the course, and provide appropriate feedback and guidance.

Your written research project is due the last day of classes for C711.

Participation

Name cards and class pictures may be used to help give credit for your participation (**15%** of grade). You must have a name card with your **full first and last name** clearly written and displayed in front of you for every class. A photograph of the class may be taken during class. This photograph may be used by the instructor to evaluate your participation. Therefore, once the photograph is taken, you **MUST** always attend that section of this course.

Instructors will feel free to **cold-call** on anyone at any time. Hence, it is imperative that you prepare for each and every class and reading. In general, contributions are evaluated in an ascending order from physically but not mentally present, to good chip shots, to quite substantial comments, to case cracking contributions. Debate and challenge are important activities that help in the learning process and the willingness of individuals to engage in such activities with their classmates is appreciated. However, using **air-time** involves an obligation to actually contribute. None of us has time for recitation of case facts, bland summaries of prior discussion, and so on, that are devoid of implications. Before you speak, always answer the question **so-what**? Participation will **NOT** be graded by counting each contribution a student makes. Participation will be graded by examining the quality of contributions in each class.

ACADEMIC DISHONESTY

Please note that students involved in academic dishonesty will receive a **ZERO** grade on the particular component in which the infraction occurred and a notation of academic dishonesty in the Dean's office. Students may also receive a **ZERO** grade on the course, a notation of academic dishonesty on their transcripts (i.e., Notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university. The University Senate Resolutions on Academic Dishonesty states:

> Academic dishonesty consists of misrepresentation by deception or by other fraudulent means. In an academic setting this may take any number of forms such as copying or use of unauthorized aids in tests, assignments, examinations, lab reports, term papers, or cases; plagiarism; talking during in-class examinations; submission of work that is not your own without citation; submission of work generated for another course without prior clearance by the instructor of both courses; submission of work generated by another person; aiding and abetting another student's dishonesty; and giving false information for the purpose of gaining admission or credits; and forging or falsifying McMaster University documents. No excuses for violation of this policy, including ignorance of the policy, are accepted.

For more detailed information see the following link:

http://www.mcmaster.ca/policy/ac_ethics.htm

It is the student's responsibility to understand what constitutes academic dishonesty. Please be careful when handing in assignments, reports, essays and/or cases that are based on individual

work. TAs have been instructed to **NOT** grade any paper that is deemed to have similar content with another person's work. In instances when work is suspected to be copied and/or plagiarized, all students involved will be notified and the case will be reviewed first by the instructor and then by the Office of Academic Integrity.

ONLY IF APPLICABLE
In this course we will be using a web-based service (Turnitin.com) to reveal plagiarism. Students will be expected to submit their work electronically to Turnitin.com and in hard copy so that it can be checked for academic dishonesty. Students who do not wish to submit their work to Turnitin.com must still submit a copy to the instructor. No penalty will be assigned to a student who does not submit work to Turnitin.com. All submitted work is subject to normal verification that standards of academic integrity have been upheld (e.g., Google search, etc.). To see Guidelines for the Use of Turnitin.com, please go to:

http://www.mcmaster.ca/academicintegrity/turnitin/students/index.htm

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http://library.mcmaster.ca/about/copying.pdf

POLICY ON MISSED MID-TERM EXAMINATIONS / TESTS

Where students miss a regularly scheduled midterm for legitimate reasons as adjudicated by the Academic Programs Office (APO), the weight for that test will be distributed across other evaluative components of the course at the discretion of the instructor.

Documentation explaining such an absence must be provided to the APO within five (5) working days upon returning to school. The approved McMaster Medical Form must be used to document absence for health related reasons. If an examination is missed without a valid reason, students will receive a grade of Zero (0) for that component. University policy states that a student may submit a maximum of three (3) medical certificates per year after which the student must meet with the Director of the program.

Please see the following URL for APO forms:

http://www.degroote.mcmaster.ca/curr/academ/undergr/forms.aspx

Students unable to write at the posted examination time due to the following reasons: religious; work-related (for part-time students only); representing university at an academic or varsity athletic event; and conflicts between two overlapping scheduled midterm examinations, have the option of applying for special examination arrangements. Such requests must be made to the APO at least ten (10) working days before the scheduled examination along with acceptable documentation. There will be only one common sitting for the special examination.

Instructors cannot themselves allow students to unofficially write make-up exams/tests. Adjudication of the request must be handled by the APO.

STUDENTS WITH DISABILITIES

Students with disabilities are required to inform the Centre for Student Development (CSD) of accommodation needs for examinations on or before the last date for withdrawal from a course without failure (please refer to official university sessional dates). Students must forward a copy of such CSD accommodation to the instructor immediately upon receipt. If a disabled student chooses NOT to take advantage of a CSD accommodation and chooses to sit for a regular exam, a petition for relief may not be filed after the examination is complete. The CSD website is:

http://csd.mcmaster.ca

RESEARCH USING HUMAN SUBJECTS

ONLY IF APPLICABLE
Research involving human participants is premised on a fundamental moral commitment to advancing human welfare, knowledge and understanding. As a research intensive institution, McMaster University shares this commitment in its promotion of responsible research. The fundamental imperative of research involving human participation is respect for human dignity and well-being. To this end, the University endorses the ethical principles cited in the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans:

http://www.pre.ethics.gc.ca/english/policystatement/policystatement.cfm

McMaster University has mandated its Research Ethics Boards to ensure that all research investigations involving human participants are in compliance with the Tri-Council Policy Statement. The University is committed, through its Research Ethics Boards, to assisting the research community in identifying and addressing ethical issues inherent in research, recognizing that all members of the University share a commitment to maintaining the highest possible standards in research involving humans.

If you are conducting original research, it is vital that you behave in an ethical manner. For example, everyone you speak to must be made aware of your reasons for eliciting their responses and consent to providing information. Furthermore, you must ensure everyone understands that participation is entirely voluntary. Please refer to the following website for more information about McMaster University's research ethics guidelines:

http://www.mcmaster.ca/ors/ethics

Organizations that you are working with are likely to prefer that some information be treated as confidential. Ensure that you clarify the status of all information that you receive from your client. You **MUST** respect this request and cannot present this information in class or communicate it in any form, nor can you discuss it outside your group. Furthermore, you must continue to respect this confidentiality even after the course is over.

WEBSITES OF INTEREST

Canadian Institute for Health Information – National and provincial data on hospital, physician and other healthcare professions and services. Information on this website is mostly based on administrative data, including some data on expenditures and costing.

CIHI website: http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=home_e

Canadian Agency for Drugs and Technologies in Health (CADTH)- Funded by the provincial ministers of health (and formerly known as CCOHTA) this organization undertakes clinical and economic evaluations of new technologies. They are also responsible for the Common Drug Review that advises the provinces on adoption (or not) of new technologies.

CADTH website: http://www.cadth.ca/index.php/en/home

National Institute for Clinical Excellence (NICE) – NICE is the independent organisation responsible for providing national guidance on the promotion of good health and the prevention and treatment of ill health. On 1 April 2005 NICE joined with the Health Development Agency to become the new National Institute for Health and Clinical Excellence (acroymn still NICE).

NICE website: http://www.nice.org.uk/page.aspx?o=home

Ontario Case Costing Project/ Initiative (OCCP/OCCI) – A consortium of hospitals that have developed standard costing methodologies to determine the full cost of health services from an institutional perspective.

OCCI website: http://www.occp.com/

Institute for Clinical Evaluative Sciences (ICES) – ICES is an Ontario Ministry of Health funded research group that "providing unique scientific insights to help policymakers, managers, planners, practitioners and other researchers shape the future direction of the Ontario health care system"

ICES website: http://www.ices.on.ca/webpage.cfm

COURSE SCHEDULE

C711
Health Economics and Evaluation
Winter 2008 Course Schedule

WEEK	DATE	ASSIGNMENT/LECTURE
1	Tues. Jan 8	Lecture: Introduction, course outline, overview of the Canadian health care system, and economic principles Readings: Courseware Web reading: http://www.hc-sc.gc.ca/hcs-sss/pubs/care-soins/2005-hcs-sss/index_e.html
2	Tues. Jan 15	Lecture: Markets and health care markets. Health Insurance and health insurance markets, and government intervention in health care insurance Readings: Courseware
3	Tues. Jan 22	Lecture: Demand for health and utility maximization. Technology assessment and basics of economic evaluation Readings: Drummond 3rd ed. Ch. 2
4	Tues. Jan 29	Lecture: Costing methodologies and challenges Reading: Drummond 3rd ed. Ch. 4 *Due: Critique article identified*
5	Tues Feb 5	*Critique due today* Lecture: Cost minimization, cost consequence, cost effectiveness, and cost benefit analyses, with case studies Reading: Drummond 3rd Ed. Ch 5 & 7
6	Tues. Feb 12	*Project groups formed and project outline due today* Lecture: Quality of life and cost utility analysis, with case studies Reading: Drummond 3rd ed. Ch. 6
7	Tues. Feb 19	READING WEEK

8	Tues. Feb 26	Lecture: Decision analysis and modeling (Ron Goeree; PATH) Reading: Drummond 3rd Ed. Ch. 9 & Courseware
9	Tues. Mar 4	Lecture: Methods for dealing with uncertainty (Ron Goeree; PATH) Reading: Courseware
10	Thurs Mar 11	Lecture: Pulling it all together, an application of economic evaluation in the pharmaceutical industry as a case study Reading: Courseware
11	Thurs Mar 18	Project work time (Schedule meeting with Professor)
12	Thurs Mar 25	Project work time (Schedule meeting with Professor)
13	Tues Apr 1	*Course Evaluation* Presentations
14	Wed Apr 8	Presentations *Hand in written report*

McMaster University

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	HRM, School of Nursing, School of Rehabilitation Sciences
COURSE TITLE	Qualitative Research Methods for Collecting, Analysing and Interpreting Data

COURSE NUMBER	758	**COURSE CREDIT**		
		FULL COURSE ( )	**HALF COURSE (X)**	**QUARTER (MODULE) ( )**
INSTRUCTOR(S)	Lynne Lohfeld, Seanne Wilkins			
PREREQUISITE(S)	HRM/NUR 745 or its equivalent			

NATURE OF RECOMMENDATION *(PLEASE CHECK APPROPRIATE BOX)*

NEW COURSE		**DATE TO BE OFFERED:** May 6 - July 29	**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:** Based on two years' experieince offering this course, the instructors have reformatted the weekly sessions to focus more directly on learnings captured in the final assignment. The number of graded assignments has also changed.			

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

This intermediate-level course builds on prior knowledge about qualitative research approaches, methods and their philosophical basis. The emphasis in this course is on using a Decision Matrix that is congruent with a student-selected research approach (Case Study, Grounded Theory or Phenomenology) in order to identify and address approach-specific issues related to sampling, data collection, management, analysis, interpretation, and write-up, rigour and ethics. The course is based on active involvement of learners through student-directed discussions and hands-on experiences culminating in a major paper and oral presentation, with the support and facilitation by graduate faculty who have expertise in qualitative research, and interdisciplinary collaboration with faculty and classmates.

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

See Attached

1. STATEMENT OF PURPOSE (How does the course fit into the department's program?)

There is a growing need to ensure that graduate students in the Health Sciences gain the necessary skills to independently or collaboratively conduct qualitative research. This course builds on a successful model of interdisciplinary education in an introductory graduate course on qualitative research (HRM/NUR 745), and provides further opportunities to understand theory and practice in the analysis, interpretation and write up of qualitative data. This course was designed to meet the expressed need recognized by both graduate students and qualitatively trained Faculty in the Faculty of Health Sciences for such a knowledge- and skill-building opportunity.

2. EXPECTED ENROLMENT:

Based on the expressed interest in HRM 758, we can enrol up to 12 students (-6 per tutorial or small group) from the Health Research Methods program, the School of Nursing and/or the School of Rehabilitation Science. In the past, we have had post-degree students employed in health care agencies or other graduate schools also seek enrolment.

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

- Computer based presentations on the use of a specifically deisgned software program, N.Vivo
- Lectures and large-group presentations
- Small-group (PBL) sessions led by students assisted by faculty facilitators
- In-class exercises and individual presentations
- Guest lecturers and presenters

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 write two papers on: the rationale for and methods of a specific qualitative approach for carrying out a secondary analysis of data from a study on aging and osteoporosis among women (25%) and data analysis and interpretation using the previously selected qualitative research approach and given data set (40%), in addition to a class-based presentation summarizing the two papers with a focus on data analysis and interpretation (25%), and class participation (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).

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: Lynne Lohfeld Email: lohfeld@mcmaster.ca Extension: 22969

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

McMaster University

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	Department of Pediatrics/Medical Sciences Graduate Program
COURSE TITLE	Pediatric Exercise Medicine

		COURSE CREDIT		
COURSE NUMBER	MS 747*	**FULL COURSE ( )**	**HALF COURSE (X)**	**QUARTER (MODULE) ( )**
INSTRUCTOR(S)	Dr. Brian Timmons, PhD			
PREREQUISITE(S)	Undergraduate Exercise Science or equivalent			

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

NEW COURSE	X	**DATE TO BE OFFERED:** Fall, 2008	**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		**EXPLAIN:**				

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

This course will provide an opportunity to study physiological and medical aspects of exercise and physical activity in healthy children and in children with a disease. The purpose and relevance of exercise testing and exercise rehabilitation in pediatric diseases will be highlighted, and student-directed seminars will further explore the role of exercise in specific pediatric populations with a disease or disability.

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

Week 1: Exercise responses of the healthy child
Week 2: Principles of exercise testing in the pediatric population
Week 3: Pediatric exercise in a clinical context - introductory concepts
Week 4,5: Pulmonary diseases
Week 6,7: Cardiovascular diseases
Week 8,9: Endocrine diseases
Week 10: Childhood obesity
Week 11,12,13: Neuromuscular and musculoskeletal diseases
Week 14: Hematologic and oncologic diseases

Text:
Bar-Or, O. and T.W. Rowland (2004) Pediatric Exercise Medicine: From Physiologic Principles to Health Care Application. Human Kinetics, Champaign, IL
Additional readings (2-3) for each disease/disability seminar will be provided by the instructor.

1. STATEMENT OF PURPOSE (How does the course fit into the department's program?)

Objectives:
1. To examine the acute and chronic effects of exercise and physical activity on physiological function in healthy children
2. To examine the clinical role of exercise and physical activity for children with a disease or disability
3. To expose students to technical considerations in exercise testing and rehabilitation with children

The Department of Pediatrics is home to the Children's Exercise & Nutrition Centre (CENC). This combined research and clinical facility examines and utilizes the role of exercise and physical activity in normal growth and development and in pediatric disease and disability. Dr. Timmons is an Assitant Professor leading the research program of the CENC. This proposed course represents an educational service by expertise at the CENC.

2. EXPECTED ENROLMENT:

Minimum of 5 students - no limit

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

Combined lectures delivered by instructor, and seminars presented by students (please see attached syllabus for further details)

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.)

Seminar Evaluation : Material delivery, answering questions, report for students
Grant Proposal: Topic of interest (approved by instructor)
(please see attached syllabus for further details)

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?

This course is not intended primarily for students outside the department.

PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Brian Timmons Email: timmonbw@mcmaster.ca Extension: 77218 Date: December 20, 2007

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

McMASTER UNIVERSITY

Graduate Programme – Medical Sciences

Pediatric Exercise Medicine

Course Instructor:
Brian W. Timmons, PhD,
Assistant Professor, Department of Pediatrics
905-521-2100, ext. 77218
timmonbw@mcmaster.ca

COURSE DESCRIPTION

This course will provide an opportunity to study physiological and medical aspects of exercise and physical activity in healthy children and in children with a chronic disease. The purpose and relevance of exercise testing and exercise rehabilitation in pediatric diseases will be highlighted and student-directed seminars will further explore the role of exercise in specific pediatric populations with a disease or disability.

PREREQUISITE

The students should have some background in exercise science and physiology or approved equivalent.

COURSE OBJECTIVES

1) To examine the acute and chronic effects of exercise and physical activity on physiological function in healthy children;

2) To examine the clinical role of exercise and physical activity for children with a disease or disability;

3) To expose students to technical considerations in exercise testing and rehabilitation with children.

REQUIRED READINGS

Bar-Or, O. and T.W. Rowland. (2004) Pediatric Exercise Medicine: From Physiologic Principles to Health Care Application. Human Kinetics, Champaign, IL.

Additional readings (2-3) for each disease/disability seminar will be provided by the instructor.

COURSE CONTENT

Week 1: Exercise responses of the healthy child

Week 2: Principles of exercise testing in the pediatric population
- Laboratory-based protocols
- Field-based protocols
- Physical activity measurement
- Energy expenditure measurement

Week 3: Pediatric exercise in a clinical context – introductory concepts

Week 4, 5: Pulmonary diseases
- Asthma
- Cystic fibrosis

Week 6, 7: Cardiovascular diseases
- Congenital heart disease
- Noncongenital heart disease

Week 8, 9: Endocrine diseases
- Type 1 diabetes
- Type 2 diabetes

Week 10: Childhood obesity

Week 11, 12, 13: Neuromuscular and musculoskeletal diseases
- Cerebral palsy
- Neuromuscular diseases
- Juvenile arthritis

Week 14: Hematologic and oncologic diseases

COURSE EVALUATION

Seminars

The purpose of the seminars is to give each student the opportunity to gain in depth knowledge about specific areas in pediatric exercise medicine. The seminar will require the student to provide relevant information pertaining to: disease background, a brief review of normal exercise responses relevant to the body system, exercise responses in the clinical population of interest, role of exercise in the disease (e.g., diagnostic, rehabilitation, etc.), contraindications of exercise in the population. A 2-page summary of the seminar will be distributed to the other students.

Depending on student enrollment, each student will be responsible for two disease/disability seminars – Total number of seminars (and therefore diseases/disabilities covered) will be flexible based on enrollment.

Evaluation of Seminar:

• Effective oral/visual delivery of pertinent information	**36%**
• Answering questions from classmates/instructor	**12%**
• Two-page (double-sided) information sheet	**12%**
Total	**60% of final grade**

Grant Proposal (Instructions – based on CIHR guidelines)

The research proposal should stand alone. In other words, it should contain all the information required to support your research plan and should contain a complete description of your project.

In the research proposal (7 pages maximum, excluding references and appendices) applicants must explain:

- What they want to do (central hypothesis, research question, specific objectives)
- Why this is a reasonable thing to do (review of previous work done on the subject matter, rationale)
- Why this is important (new knowledge to be obtained, improvements to health which will result)
- How they are going to do it (work plan, timelines, detailed descriptions of methods, analysis and discussion / interpretation of results, pitfalls, ways around the pitfalls, alternatives)

Each student will be responsible for a grant proposal to address a specific question of interest in pediatric exercise medicine. The topic can be developed and defined through readings required for the course in general, their seminar in particular, or personal interest, but must be approved by the instructor who will provide assistance with focusing the question. Each proposal will follow modified CIHR guidelines for research

proposals – budgets will not be necessary. Students will be required to commit to a topic by week 5, thus allowing at least 2 months for preparation of the proposal.

Evaluation of Grant Proposal:

• Effective consolidation of previous research and identification of gaps in knowledge	**12%**
• Clear description of objectives and hypotheses and relevance to health	**8%**
• Methodology	**20%**
Total	**40% of final grade**

MISSED CLASSES

Given the nature of this course, one missed class will result in a loss of significant information. To maximize the student's learning experience, if a class is to be missed for any reason, the student will be expected to complete a one-page quiz (10 multiple choice questions prepared by the instructor and answered under his supervision) based on either the material covered by the instructor or the 2-page double-sided information sheet prepared as part of each seminar. Should the student receive less than 75% on this quiz, a 1 percentage point deduction for each percentage point below 75 will be applied to their final grade. For example, if the student receives 72% on a make-up quiz and their final grade in the course is 85%, the final grade will be adjusted to 82%.

McMaster University

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	FHS - Nursing			
COURSE TITLE	Philosophical basis of nursing research			
COURSE NUMBER	NUR 700	**COURSE CREDIT**		
		FULL COURSE ( )	**HALF COURSE (X)**	**QUARTER (MODULE) ( )**
INSTRUCTOR(S)	Catherine Tompkins, Jenny Ploeg			
PREREQUISITE(S)	enrolled in PhD program			

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**	X	**CHANGE TO QUARTER COURSE**		
COURSE CANCELLATION		**PROVIDE THE REASON FOR COURSE CANCELLATION:**				
OTHER	X	**EXPLAIN:** Change to % allocation for course requirements: OLD Annotated bib - 30%; Major paper - 40%; Seminar presentation 30%. NEW Annotated bib - 35%; Major paper - 45%; Seminar presentation - 20%				

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

No Change

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

Ths change in percentage allocation will reflect the amount of effort put into the various assignments. The annotated bibliography and major paper are individually written assignments whereas, in many cases, the seminars are presented by pairs of students. In addition, the lower percentage allocated to the seminar, for which grades are generally higher than for the written assignments, will not unduly benefit students who are weak in their written work.

1. STATEMENT OF PURPOSE (How does the course fit into the department's program?)

NUR 700 is a required course for the PhD program

2. EXPECTED ENROLMENT:

6 - 12 annually

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

The course material is presented in a seminar/discussion format. During 2 weeks of the class, students present in a topic through a seminar

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.)

Annotated bibliography, major paper (20 pages), seminar presentation, group participation (pass/fail)

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

NUR 700 is an antirequisite to HRM 700 - Philosophy of Science for Health Research however the proposed course changes do not have any impact which would require communication.

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 for PhD students in nursing only.

PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Catherine Tompkins Email: tompkins@mcmaster.ca Extension: 22400 Date: March 3, 2008

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

McMaster University

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 hard copy of this form **must be signed** by the department chair or graduate advisor and sent to the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, GH-212.
4. 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	Occupational Therapy			
COURSE TITLE	Transition to Practice: Inquiry and Integration V			
COURSE NUMBER	727	**COURSE CREDIT**		
		FULL COURSE ( )	**HALF COURSE (X)**	**QUARTER (MODULE) ( )**
INSTRUCTOR(S)	Mary Tremblay			
PREREQUISITE(S)	Completion of year 1 & Term IV OT Courses			

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		**EXPLAIN:**			

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

This half course is the second part of a series of three half courses which are designed to work together across a full academic year, therefore their content and design are similar. The emphasis in this term upon adulthood and disability. 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 with adults and older adults within specialized areas of professional practice. Students will consider, through large group seminar sessions and in depth exploration within small group problem-based tutorials, issues that pertain particularly to adults and older adults within the scope of occupational therpay practice. 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.

This half course is the second part of a series of three half courses which are designed to work together across a full academic year; therefore, their content and design are similar. The emphasis in this term upon adulthood and disability.

The purpose of this half course is to provide the students with opportunities to pursue advanced knowledge and understanding of complex concepts underlying ocupational therapy pratice within specialized areas of professional practice. Studens wil consider, through large group seminar sessions and in depth exploration within small group problem-based tutorials, issues that pertain particularly to adults and older adults within the scope of occupationalt therapy practice. The courses extend across periods of nine weeks with one three hour large group seminar and two and a half hour small group tutorial each week.

1. STATEMENT OF PURPOSE (How does the course fit into the department's program?)

This is a required course for students enrolled in the MCHS(OT) Programme.

2. EXPECTED ENROLMENT:

Approximately 60

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

The large group, seminar/plenary component of each course wil involve guest experts/resource people who will, each week, focus discussion following a short keynote, providing students with the opportunity to engage in an interactice format for the latter half of the session.

The course will run for periods of nine weeks with each one three hour large group session per week. The small group, tutorial component will meet weekly for one two and a half hour sessions each week.

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 the completion of a scholarly take home paper 75% participation 25% paper and a 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 overlap

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

This course will not be cross-listed

PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Deb Stewart Email: stewartd@mcmaster .ca Extension: 27803

Department Chair or Graduate Advisor: _____ Date: _____
(Signature)

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

SGS/November 2005

McMaster University

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	SRS - MScOTProgram			
COURSE TITLE	Person, Environment, and Occupation: Inquiry & Integration -Term 2			
COURSE NUMBER	OT627	**COURSE CREDIT**		
		FULL COURSE (x)	**HALF COURSE ( )**	**QUARTER (MODULE) ( )**
INSTRUCTOR(S)	Bonny Jung and Penny Salvatori			
PREREQUISITE(S)	successful completion of all courses in Tem 1 of MScOT Program			

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:** A new problem write-up (clinical reasoning) take-home written assignment will replace the former clinical reasoning exam - both are worth 35% of the final course grade				

BRIEF DESCRIPTION FOR CALENDAR - Provide a brief description *(maximum 6 lines)* to be included in the Graduate Calendar.
No changes necessary

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.)

the problem write-up assignment will provide for a more in-depth study of a case scenario, a more indepth assessment of the student's critical thinking and clinical reasoning skills, and a more appropriate assessment of the student's written communication and organization skills.

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: Penny Salvatori Email: salvator@mcmaster.ca Extension: 27818 Date: Feb 6/08

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

McMaster University

SCHOOL OF GRADUATE STUDIES

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

PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:

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2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: *espiritu@mcmaster.ca*).
3. A hard copy of this form **must be signed** by the department chair or graduate advisor and sent to the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, GH-212.
4. 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			
COURSE TITLE	Transition to Practice: Professional Roles and Experiential Practicum VI			
COURSE NUMBER	738	**COURSE CREDIT**		
		FULL COURSE ( )	**HALF COURSE (x)**	**QUARTER (MODULE) ( )**
INSTRUCTOR(S)	Sue Baptiste & Shami Dhillon			
PREREQUISITE(S)	OT Program (MSc OT) Terms 1-5)			

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:** n/a

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:** Elimination of an Evaluation component and reorganization of Grade Allocation.			

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

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

1. STATEMENT OF PURPOSE (How does the course fit into the department's program?)

No change.

2. EXPECTED ENROLMENT:

60-65

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

Seminars and Large Group 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.)

(p1) Self-Assessment Learning Plan and Accomplishment of Plan (45%) (2) Student led Advanced Practice Workshop (55%)
Note: IPE Exam (20%) was dropped.

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: Shami Dhillon Email: sdhill@mcmaster.ca Extension: 26840

Department Chair or Graduate Advisor: _____ Date: _____
(Signature)

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

SGS/November 2005

McMaster University

School of Rehabilitation Science
1400 Main Street West, IAHS - 403
Hamilton, Ontario L8S 1C7
Telephone: (905) 525-9140, Ext. 27801
Fax: (905) 524-0069
Web: http://www.fhs.mcmaster.ca/rehab

April 29, 2008

Medy Espiritu
School of Graduate Studies
GH - 212

Dear Medy:

Please note that I am writing officially to formally request that the original course descriptions for PHYSIOTH 611, 612, 621 and 622 be re-approved officially by GPCC effective immediately, and that the revised course descriptions for these courses that were submitted for approval last spring 2007 be terminated.

Thank you.

Yours sincerely,

Laurie Wishart

Laurie Wishart, PhD
Assistant Dean (PT)

From: Laurie Wishart <wishartl@mcmaster.ca>
Subject: Re: Approval of Original PT Course Descriptions
Date: Tue, 29 Apr 2008 21:54:36 -0400
To: Helena Collins <collinsh@mcmaster.ca>
Cc: Medy Espiritu <espiritu@mcmaster.ca>, Kary McCahill-Harrison <kmccahil@mcmaster.ca>, richards@mcmaster.ca, papalial@zafron7.uts.mcmaster.ca

Hi Medy,
I am writing to make sure we end up with no change in the calendar- the description are correct in the calendar. The faculty through our committee process has approved no change in the Unit 1 and 2 course content.
Thank you for your help with this.
Laurie Wishart

-- Laurie Wishart
Associate Professor and Assistant Dean (PT)
TEL: (905) 525-9140 x 22685 – FAX: (905) 524-0069
EMAIL: wishartl@mcmaster.ca
School of Rehabilitation Science
IAHS, Room 403, McMaster University
1400 Main St. West Hamilton, ON L8S 1C7

Subject: RE: Course Descriptions for PT
Date: Fri, 4 Apr 2008 15:26:56 -0400
From: Helena Collins <collinsh@mcmaster.ca>
To: Helena Collins <collinsh@mcmaster.ca>, <kmccahil@mcmaster.ca>
CC: <collinsh@univmail.cis.mcmaster.ca>

Hi Kary – One more query and then I think this is it for the PT course descriptions.

A year ago when the new descriptions were formally approved by GPCC for Physioth 611, 612, 621 and 622 but then were never used by the program and then recently Laurie decided that we stay with the original descriptions so the originals are going in the grad calendar this year.

However, do we have to get GPCC to formally rescind or cancel the approval of the new descriptions and make a motion to formally reinstate the original descriptions?

Many thanks – looking forward to hearing from you soon.

Helena Collins

o .o. o o Program Administrator o o_ o. o

|> `|' (|) `| School of Rehabilitation`| <| |' |'
( ) [ ] [ ] /< Science, McMaster Univ. {< / } >\ >}
Institute for Applied Health Sciences

From: Helena Collins [mailto:collinsh@mcmaster.ca]
Sent: March-20-08 3:00 PM
To: kmccahil@mcmaster.ca
Cc: wishartl@mcmaster.ca; richards@mcmaster.ca; collinsh@univmail.cis.mcmaster.ca
Subject: 2008 - 2009 Graduate Calendar

Hi Kary: May I take you back to about a year ago.. Back in the winter of 2007, there were minor wording changes made to PHYSIOTH 611 (problem-based tutorial), 612 (clinical lab), 621(problem-based tutorial) and 622 (clinical lab) - respectively (Units 1 and 2) course descriptions. These changes were approved by GPCC in spring 2007? However, in July 07 (as per our email below), Laurie had requested to have the new changes put on hold and to leave the original descriptions in the 2007-2008 Grad Calendar.

For the 2008-2009 Grad Calendar, Laurie would like to leave the original course descriptions in. However, please let us know whether the PT program will now have to put forward a new recommendation to GPCC to allow the original course descriptions to remain as is.

Should you need further clarification, please feel free to call me at Ext. 27801.

Many thanks – looking forward to hearing from you soon.

Helena

Helena Collins
o .o. o o Program Administrator

Health Policy

The interdepartmental, interfaculty program in Health Policy at McMaster University offers a Ph.D. in Health Policy.

To contact us:
Health Policy Ph.D. Program
Phone: 905-525-9140 Ext. 22952
Email: hpphd@mcmaster.ca
Website: http://fhs.mcmaster.ca/hpphd/

Staff

Distinguished University Professor

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Professor

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Mita Giacomini, B.S., M.P.H., M.A., Ph.D. (California)
Jeremiah E. Hurley, B.A. (John Carroll), M.A., Ph.D. (Wisconsin-Madison)
M. Susan Watt, B.A., M.S.W., Adv. Dip. S.W. (Toronto), D.S.W. (UCLA)

Associate Professor

Julia Abelson, B.A. (Hons) (McMaster), M.Sc. (Harvard), Ph.D. (Bath)
Ivy Bourgeault, B.Sc. (Alberta), M.Sc., Ph.D. (Toronto)
Paul Contoyannis, B.Sc., D.Phil. (York)
John Lavis, M.D. (Queen's), M.Sc. (London School of Economics), Ph.D. (Harvard)
Lisa Schwartz, B.A., M.A. (McGill), Ph.D. (Glasgow)
Wayne Warry, B.A., M.A. (McMaster), Ph.D. (Australian National)
Donald Willison, B.Sc. (Toronto), M.Sc. (McMaster), Sc.D. (Harvard)
David Wright, B.A., M.A. (McGill), D.Phil. (Oxford)

Assistant Professor

Phil DeCicca, B.S. (Cornell), M.P.A. (Syracuse), M.A., Ph.D. (Michigan)
Alina Gildiner, B.A. (York), B.Sc., M.Sc., Ph.D. (Toronto)
Michel Grignon, M.Sc. (ENSAE, Paris, France), Ph.D. (Ecolo des Hautes Etudes en Sciences socials, Paris, France)

Glen Randall, B.A., M.A., M.B.A. (McMaster), Ph.D. (Toronto)
Jean-Eric Tarride, B.A., M.A. (Toulouse), Ph.D. (Concordia)

Ph.D. Degree

The purpose of the PhD in Health Policy is to train intellectual leaders in the field who will make seminal contributions to policy understanding and practice. The curriculum provides the student with theoretical and empirical tools for answering a range of questions about health policy, and the ability to develop new investigation approaches to move the field forward. An emphasis on theoretical and conceptual frameworks for policy analysis distinguishes this program from health degrees with a primary focus on empirical methodologies or on specific substantive problems.

The PhD program integrates intellectual resources for education and research across McMaster University. Participating faculty members have appointments predominantly in departments within the Faculty of Social Sciences, the Faculty of Health Sciences, and the School of Business. Graduates with a PhD in Health Policy will be well prepared for academic appointments in interdisciplinary departments or institutes. Their training will also prepare them for fruitful engagement with policy makers as providers of useful knowledge, insightful research, and innovative solutions to policy problems. Outside of academia, graduates would be qualified for leadership positions in government, policy consulting, non-governmental organizations throughout the health sector, and private industry.

The program offers three fields of specialization: *Health Economics, Political Studies*, and *Social Organization.*

Health Economics**:** The economics field addresses the economic analysis of health policies and health systems, as well as the economic analysis of responses to health policies. Topics may include, for example, health resource allocation, configuration of health human resources, economic evaluation of policy options, public and private financing of health care, societal investments in health production, etc. The dominant disciplinary perspective is that of microeconomics, but insight into economic behaviour may also be provided by perspectives such as business, psychology, and others.

Political Studies**:** The political studies field emphasizes the political aspects of health policy including the influences by political institutions, actors, values, and ideas operating within state and global jurisdictions. Topics of interest, for example, may include the role of historical institutional arrangements in shaping health governance reforms, the impact of global trade agreements on domestic home care and pharmaceutical policy, the role of the public, stakeholders, and prevailing values on policy agendas, etc. Political science is the dominant disciplinary perspective, with related areas including, for example, public policy analysis and administration, comparative public policy, law, political theory and philosophy.

Social Organization**:** The social organization field includes social science perspectives on the institutions, organizations, culture, and society that form the social fabric of health

systems (both for health creation and health care). Topics of interest for example include the generation and use of information, professional roles and behaviour, impacts of technology, political economies of health production, etc. Disciplinary perspectives include sociology, anthropology, business administration or management, and political science.

Admission

Admission to the Ph.D. program requires previous graduate training in a relevant field (e.g., social sciences, health professions, legal or administrative professions), with at least an A- grade average in past graduate coursework. A Master's degree is preferred. At least one graduate-level statistics half-course should be passed prior to admission. Students without this preparation in statistics may be admitted, but would be required to take a graduate statistics course in addition to normal program requirements. Successful applicants must also meet all School of Graduate Studies admissions requirements. Current admissions procedures, forms, and deadlines are available on the Health Policy program website: http://fhs.mcmaster.ca/hpphd/

Degree Requirements

The Health Policy PhD curriculum has three parts, which will normally be completed over a four-year period: (1) coursework (first and second years), (2) comprehensive examinations (first and second years), (3) the doctoral dissertation, which involves the approval and defense of the proposal for the doctoral research (third year), dissertation research (third and fourth years), and the completion, approval, and defense of the written dissertation (fourth year).

(1) Students must complete between 15 and 36 units (5-12 half courses) of course work. Courses are chosen from the list of recommended courses for each curriculum area (listed below). Required coursework includes 3 terms of the Doctoral Seminar in Health Policy, 2-3 specialty field courses, 0-2 breadth field courses outside the student's specialty field, and 0-4 methodology courses, including both quantitative and qualitative or mixed methods.

Students without prior graduate training in a given area are required to take the maximum number of required courses for that area. Students who have completed some relevant training prior to admission may have relevant course requirements waived at the time of admission to the Health Policy PhD program. A minimum of 5 half-courses (3 doctoral seminar courses, 2 specialty field courses) may not be waived and must be completed while the student is enrolled in the Health Policy PhD program.

<u>Doctoral seminar</u>
3 terms of HLTH POL 711

Breadth field courses

0-2 half courses, one from each of two fields other than the student's specialty:

Health Economics: *HRM 787, *ECON/HRM 788; with program permission: *HLTH POL 750, *HLTH POL 798

Political Studies: *HRM 738, *HAS 704; with program permission: *HLTH POL 750, *HLTH POL 798

Social Organization: *SOCIOL 719, * HIST 759, *SW 710, *HRM 729; with program permission: *HLTH POL 750, *HLTH POL 798

Specialty field courses

2-3 half courses within 1 of the following 3 fields:

Health Economics: Required for all Health Economics field students, unless waived: *ECON/HRM 788,*ECON 727; Additional choices: *ECON/HRM 791,*ECON 793, *HRM 737, *HLTH POL 750, *HLTH POL 798

Political Studies: Required for all Political Studies field students, unless waived: *****HRM 738; Additional choices: *POLSCI 783, *POLSCI 785, *POLSCI 702, *POLSCI 740, *HLTH POL 750, *HLTH POL 798

Social Organization: Required for all Social Organization field students, unless waived: *SOCIOL 719; Additional choices: *SOCIOL 705, *SOCIOL 718, *SOCIOL 714, * HIST 759, *HRM 729, *POLSCI 786, *ANTHRO 709, *GLOBAL 701, *GLOBAL 720/ANTHRO 720, *HLTH POL 750, *HLTH POL 798

Methodology courses

0-4 half courses, including both quantitative and qualitative or mixed methods:

Quantitative Methods: Required for Health Economics specialty field students, unless waived *ECON 761; Additional choices for students in all specialty fields: *ECON 762, *ECON 795**,** *ECON 770, *HRM 727, *HRM 751, *HRM 762, *HRM 723, *HRM 731, *HRM 740, *HRM 737, *POLSCI 784, *SOCIOL 740, *SOCIOL 761, *HRM 705, *HLTH POL 750, *HLTH POL 798

Qualitative Methods: *HRM 745, *HRM 748, *SOCIOL 743, *SOCIOL 742, *SOCIOL 744, *HRM 705, *HLTH POL 750, *HLTH POL 798

Mixed Methods: *HRM 700, *POLSCI 796, *HRM 770, *HLTH POL 750, *HLTH POL 798

(2) Comprehensive examinations are completed during the first and second years of full time study, as the relevant coursework requirements are completed. Students complete three required comprehensive examinations in the following areas:

- Two breadth fields outside the student's specialty area (social organization, political studies, and health economics);
- One chosen specialty area (social organization, political studies, or health economics); and,
- Research methods (qualitative and quantitative empirical approaches)

(3) All Health Policy PhD students are required to research, write, and successfully defend a doctoral dissertation, which constitutes an original contribution to knowledge in the field of health policy. The dissertation is developed and completed under the guidance of the student's primary supervisor and a dissertation supervision committee consisting of at least two additional faculty members.

- Normally by the beginning of the third year of full time study, the doctoral dissertation proposal is formally presented and defended before a committee;

- The doctoral dissertation research is normally completed during the third and fourth years of full time study, with the completion, approval, and defense of the written dissertation by the end of the fourth year.

Supervision

Each student will be assigned a provisional faculty supervisor upon admission to the program. A final faculty supervisor and a three member supervisory committee will be appointed within 6 months of the student's enrollment in the program. At least two (of three) supervisory committee members must be core faculty members of the Health Policy PhD Program. The faculty supervisor and supervisory committee provide guidance and monitor the student's progress. The supervisory committee is expected to meet with the student at least annually to assess the student's progress and to file a written progress report with the Program.

Additional Regulations

Students and prospective applicants should consult the Graduate Calendar for a complete description of regulations concerning the PhD degree and graduate studies at McMaster University.

Courses

Below are listed courses offered by the Health Policy Program. The descriptions of additional courses relevant to the curriculum are listed elsewhere in the Graduate Calendar, under the primary department or program offering the course.

HLTH POL 711 / Doctoral Seminar in Health Policy / Giacomini, Lavis

The Doctoral Seminar in Health Policy is dedicated to the advanced study of health policy problems, ideas, and analytic approaches. It provides an opportunity for doctoral students with diverse experiential, methodological, and theoretical training to focus on common interests and problems that characterize the field of health policy. The seminar will highlight the frontiers of knowledge in the field and foster interdisciplinary communication and integration.

***HLTH POL 750 / Special Topics in Health Policy / Staff**

This course explores a current health policy topic area in depth applying analytic frameworks from health economics, political studies, or social organization, as well as addressing the relationship of conceptual frameworks to empirical questions and methods in the area. Examples of possible topic areas include: decision making, comparative health systems, environmental health, regulation, privatization, health human resources, public participation, health policy ethics, technology assessment, knowledge translation, etc. Because course content varies from term to term, students should check with the instructor regarding its applicability to specific Health Policy PhD program curriculum requirements.

***HLTH POL 798 / Independent Study in Health Policy / Staff**

The Independent Study is designed to allow students to develop a course tailored to their specialized learning objectives. Students work independently under the guidance of a faculty member to read, analyze, and apply relevant literature to inquiry in health policy concepts, substantive topics, or methods. Please note that the application of this course toward Health Policy program curriculum requirements is conditional on review of the independent study plan by the Health Policy PhD program for relevance to a specialty field or methodology area outlined in the program curriculum.

e-HEALTH

A new interdisciplinary, inter-faculty M.Sc. program in eHealth will be offered at McMaster University, beginning in the academic year 2008/09, pending approval by the Ontario Council on Graduate Studies.

eHealth (also known as Health Informatics) is defined as 'The knowledge, skills and tools which enable information to be collected, managed, used and shared to support the delivery of healthcare and to promote health.' The objective of the program is to produce Masters level graduates with high quality training in the broad interdisciplinary area that spans eHealth, emphasizing industry-relevant academic research and development.

The program is based on a collaborative partnership among the Faculties of Health Sciences, Engineering and the DeGroote School of Business. It is administered by the DeGroote School of Business. Three Departments are major collaborators in the program: the Department of Clinical Epidemiology and Biostatistics (Faculty of Health Sciences), the Department of Computing and Software (Faculty of Engineering), and the Information Systems Area in the DeGroote School of Business. Additional faculty members with eHealth interests from other departments also participate in the program.

Enquiries: 905-525-9140 Ext. 23603
Fax: 905-528-0556
E-mail: ehealth@mcmaster.ca
Website: http://mscehealth.mcmaster.ca/

STAFF/ FALL 2008

PROFESSORS

R. Brian Haynes, B.Sc., M.D. (Alberta), M.Sc., Ph.D. (McMaster), F.R.C.P.(C), Clinical Epidemiology and Biostatistics/ Medicine

Anne Holbrook, B.Sc. Pharm. (Toronto), Pharm. D. (Philadelphia), M.D., M.Sc. (McMaster), F.R.C.P.(C) / Medical Sciences / Physiology/Pharmacology

Donna Ciliska, B.Sc.N., M.Sc.N (Western), Ph.D. (Toronto) / Nursing

Robert Issenman, M.D. / Pediatrics

Franya Franek, M.Sc., RNDr. (Charles, Prague), Ph.D. (Toronto) / Computational Engineering and Science

Ryszard Janicki, M.Sc. (Warsaw), Ph.D., D.Hab. (Polish Academy of Sciences) / Computing and Software

Thomas Maibaum, B.Sc. (Toronto), Ph.D. (London)/ Canada Research Chair / Computing and Software

Ali Montazemi, H.N.D. (Teeside Polytechnic, U.K.), M.Sc. (Southampton), PhD. (Waterloo) / Information Systems

Yufei Yuan, B.S. (Fudan), Ph.D. (Michigan) /Information Systems / Wayne C. Fox Chair in Business Innovation

ASSOCIATE PROFESSORS

Nick Bontis, B.A., Ph.D. (Western) / Strategic Market Leadership & Health Services Management / Director, Undergraduate Programs

Kenneth R. Deal, B.S., M.B.A., Ph.D. (SUNY at Buffalo) / Strategic Market Leadership & Health Services Management

Maureen Dobbins, B.Sc.N. (McMaster), Ph.D. (Toronto) / Nursing

Lisa Dolovich, B.Sc. Pharm (Toronto), M.Sc. (McMaster), Pharm. D. (Toronto) / Physiology/Pharmacology / Clinical Epidemiology and Biostatistics

Douglas G. Down, B.A.Sc., M.A.Sc. (Toronto), Ph.D. (Illinois, Urbana-Champaign) / Computing and Software

Khaled S. Hassanein, B.Sc. (Kuwait), M.A. Sc. (Toronto), M.B.A. (Wilfred Laurier), Ph.D. (Waterloo), P.Eng. / Chair Information Systems / Director, McMaster eBusiness Research Centre

Milena Head, B.Math (Waterloo), M.B.A., Ph.D. (McMaster) / Information Systems / Associate Dean, DeGroote School of Business

David Koff, M.D. (Rene-Descartes) , Chair, Department of Radiology

Ann McKibbon, B.Sc. (Guelph), M.L.S. (Western), Ph.D. (Pittsburg) / Clinical Epidemiology and Biostatistics

W.F. Skipper Poehlman, B.S. (Niagara), B.Sc. (Brock), M.Sc., Ph.D. (McMaster), P.Eng. / Computing and Software

Parminder Raina, B.Sc. (Saskatchewan), Ph.D. (Guelph) / Clinical Epidemiology and Biostatistics

Rolf J. Sebaldt, B.Sc., M.D., C.M. (McGill), F.R.C.P.C., F.A.C.P. / Clinical Epidemiology and Biostatistics / Medicine

Lehana Thabane, B.Sc. (Lesotho), M.Sc. (Sheffield), Ph.D. (Western) / Clinical Epidemiology and Biostatistics

Ruta Valaitis, B.A., B.Sc.N. (Windsor), M.H.Sc. (McMaster), Ph.D. (Toronto) / Nursing

Alan Wassyng, B.Sc. (Hons), M.Sc., Ph.D. (Witwatersrand) / Computing and Software

Donald Willison, B.Sc. (Toronto), M.Sc. (McMaster), Sc.D. (Harvard) / Clinical Epidemiology and Biostatistics

ASSISTANT PROFESSORS

Christopher Anand, B.Math (Waterloo), M.Sc., Ph.D. (McGill) / Computing and Software

Pamela Baxter, B.A. (Wilfred Laurier), B.Sc.N., M.Sc., Ph.D. (McMaster) / Nursing

Ilana Bayer, Ph.D. (Toronto) / Pathology and Molecular Medicine

Catherine Connelly, B.Comm. (McMaster), M.Sc., Ph.D. (Queen's) / Human Resources & Management

Sarah Garside, H.B. Arts and Sci., M.D. (McMaster), Ph.D. (McMaster), F.R.C.P.(C) / Psychiatry and Behavioural Neurosciences

Elkafi Hassini, B.Sc., (Bilkent), M.A.Sc., Ph.D. (Waterloo) / Operations Management

Anthony Levinson, M.D., M.A. (Sussex), M.Sc. (McMaster), FRCP(C) Assistant Professor and John R. Evans Chair Health Sciences / Educational Research and Instructional Development

Christopher Longo, B.A. (York), M.Sc. (Western), Ph.D. (Toronto) / Strategic Market Leadership & Health Services Management

David Musson, M.D. (Western), Ph.D. (Texas at Austin) / Anesthesia

Kamran Sartipi, M.Sc. (Tehran), M.Math, Ph.D. (Waterloo) / Computing and Software

Jean-Eric Tarride, B.A., M.A. (Toulouse), Ph.D. (Concordia) / Clinical Epidemiology and Biostatistics

ASSOCIATE MEMBERS

David H. Chan, B.Sc.E.Eng. (Louisiana) M.D. (Toronto), C.C.F.P., M.Sc. (McMaster) F.C.F.P., Associate Professor / Family Medicine

Alex Drossos, B.E.Sc., B.Sc., M.B.A (McMaster), M.Ed (Toronto, in progress), M.D. (St. George's, in progress), Adjunct Professor (McMaster) / Health Services Management

Karim Keshavjee, B.Sc. (McGill), M.Sc. (Toronto), M.D. (Toronto), M.B.A. (Toronto), C.C.F.P. / InfoClin

Mark Morreale, B.Sc. (Toronto), M.Sc. (Queen's) / Clinical Epidemiology and Biostatistics

Rocco Piro, B.Sc. (McMaster), Director, IT, Faculty of Health Sciences

Nancy Wilczynski, B.A., M.Sc., Ph.D. (McMaster) / Clinical Epidemiology and Biostatistics

Andrew Worster, B.Sc., M.Sc. (New Brunswick), M.D. (Dalhousie), M.Sc. (McMaster), C.C.F.P. (EM), F.C.F.P. / Medicine / Clinical Epidemiology and Biostatistics

PROFESSORS EMERITI

Norman P. Archer, B.Sc. (Alberta), Ph.D. (McMaster), M.S. (New York) / Information Systems

William F. Smyth, B.A. (Toronto), M.Sc. (Ottawa), Ph.D. (Curtin), C.Eng., F.B.C.S., F.I.C.A. / Computing and Software

Areas of Specialization

Students may specialize in one of the three fields in the program: health sciences, computer science, or business. All students are required to complete the three core courses, and a variety of elective courses in each field are available to cater to individual interests. Student specialization interest must be declared when applying for admission. Each student is assigned a supervisor from the student's field of interest upon registration, and a second member of the supervisory committee from one of the other two fields is appointed to ensure that the student maintains a broadly focused view of the eHealth field. All students must participate in and contribute to a seminar series designed to acquaint students with recent advances in the eHealth field.

Admission

Students entering the eHealth program may be admitted from a variety of suitable undergraduate degrees. They will belong to a community with a variety of backgrounds in related fields, with common interests in information technology to support health services delivery and research. The main requirements are a good background in computing and a strong interest in the use of computing support in healthcare applications. A background from the health sciences, life sciences, business, or computer science is an asset, but not a requirement. The Admissions Committee will in each case judge the candidate's suitability for the program. Students who are judged to be deficient in computer or mathematics skills may be given conditional admission until they can successfully complete specified background courses or

modules. A minimum B+ average in the final year of a four year undergraduate degree program is required for admission. Applicants for the full-time options must also pass a face-to-face interview that evaluates their suitability for internship placement, a required component of the program.

Degree Options and Internship

A candidate for the M.Sc. eHealth degree may choose to take the program either full-time or part-time. The full-time program has two options: thesis or course-project. In the thesis option, students must complete the three required courses plus one elective course from the field of specialization (a total of four courses), and complete and defend a Master's thesis successfully. The thesis option is not open to part-time students. Completion of the M.Sc. thesis option is the preferred route to a Ph.D. program in a similar field (e.g. Health Research Methodology, Computer Science, or Business). In the course-project option (which may be taken full or part-time), students take the three required courses, two electives from the field of specialization, and two other electives from the other two fields (for a total of seven courses). All courses must be completed with at least a B- standing.

Students taking the thesis option are expected to complete their programs and submit their research theses within 20 months of registration. Full-time students taking the course-project option are expected to complete their programs within 20 months, including a project which will normally be a scholarly paper arising from a relevant study in eHealth. Full time students are limited to a maximum of three years from initial registration. Part-time students are expected to complete their programs within four years of registration, but are limited to a maximum of five years. They are also required to complete a project that is a scholarly paper relevant to eHealth, often for their current employer if the employer is in a healthcare industry.

In addition to coursework, all full-time students must complete an eight month paid internship placement with a company, healthcare institution, or government agency. All efforts are made to ensure that the placement is closely aligned with the student's research or project interests, and ultimately with the student's career goals.

Required Courses

All required and elective courses are half courses.

HRM 724 / Fundamentals of eHealth and the Canadian Health Care System / McKibbon

This tutorial-based course will cover a broad range of eHealth topics from the perspective of health care delivery. Topics include a definition of eHealth; health care data; hospital and primary care information systems (i.e. electronic health records [EHR] systems); specialty components of an EHR system; how health professionals use data; human/cognitive factors in development and implementation of eHealth applications; standards, vocabulary and nomenclatures and how used; aggregation of health information; patient information systems and consumer eHealth; research and evaluation of eHealth applications and using eHealth applications; implementation issues and privacy, security, and confidentiality; and the future of eHealth.

Prerequisite: Two day orientation to the Canadian Health Care System, for eHealth program students with a non-health academic background, held before the HRM 724 course begins.

BUS K736 / Management Issues in eHealth / Archer

This course covers a number of topics relevant to the management of electronic health systems. The topics will be presented in an integrated manner that will promote an understanding of health system governance, project management, accountability, risk analysis, management, ethical, privacy, legal and regulatory standards, and policies. It will demonstrate real issues by focusing on a team-based case study through much of the course that covers the life cycle process of managing a project to implement an eHealth system, beginning with needs analysis and ending with implementation, evaluation, and maintenance.

Prerequisite or corequisite: K603 Information Systems Management (see MBA calendar) or equivalent.

CAS 757 / Modern Software Technology for eHealth / Sartipi

This course exposes the graduate students in Software Engineering and Computer Science programs to the challenges in the field of Electronic Health (eHealth). The course introduces a collection of modern architectures and technologies that are recommended by standardization organizations to build the infrastructure that meets the emerging demands in the growing network of healthcare systems. The topics include: challenges in ultra large systems; standard healthcare data formats; clinical decision support systems; data and knowledge interoperability; autonomic computing; integration of existing healthcare systems; and service oriented architectures.

Prerequisites: HRM 724 and BUS K736; Knowledge of information representation and communication of information among computer systems..

Elective Courses

For course details, see MBA Calendar (BUS courses); and the Graduate Calendar: Computing and Software (COMP SCI, SOFT ENG, CAS courses); Health Research Methodology (HRM courses); Clinical Health Sciences (CHS courses); Medical Sciences (MED courses); and Nursing (NUR courses). Other courses may be approved through special permission.

BUS C722 / Management of Population Health / Longo

BUS K723 / Databases & Data Warehouses / Yuan

BUS K724 / eBusiness Strategies / Hassanein

BUS K725 / Business Process Reengineering / Montazemi

BUS K731 / Project Management / Lutz

BUS K784 / Privacy and Security / Yuan

BUS O734 / Supply Chain Management / Hassini

BUS P727 / Strategic Knowledge Management / Bontis

SOFT ENG 6M03 / Databases / CAS Staff

COMP SCI 6WW3 / Web Systems and Web Computing / Sartipi

COMP SCI 6CD3 / Distributed Computer Systems / CAS Staff

SOFT ENG 6D03 / The Human-Computer Interface / CAS Staff

CAS 703 / Software Design / CAS Staff

CAS 704 / Embedded Real Time Software Systems / CAS Staff

CAS 730 / Machine Learning & Related Topics / Bruha

CAS 747 / Software Architecture Modeling and Reverse Engineering / Sartipi

CAS 750 / Model-Based Image Reconstruction / Anand

HRM 721 / Fundamentals of Health Research Methods & Evaluation / McKibbon, Levine

HRM 727 / Theory and Practice of Measurement / Norman

HRM 737 / Economic Analysis for the Evaluation of Health Services / Gafni

HRM 740 / Advanced Decision Analysis in Health Technology Assessment / Goeree

HRM 748 / Population & Public Health / Raina

HRM 762 / Evaluation of Health & Health Care Programs / Brazil

HRM 787 / Principles of Health Economics / Birch

HRM 788 / Health Economics / Hurley

CHS 730 / Determinants of the Health of Populations / Krueger

MED 760 / Principles of Pre-clinical Drug Discovery / Crankshaw

NUR 708 / Information & Computing Technology Application in Health: Theory and Practice / Valaitis

GRADUATE FACULTY PARTICIPATION **GPCC meeting May 5, 2008**

PROGRAM:	AREA	STATUS	Membership Type	FUNDING
Health Research Methodology				
Abdel El-Shaarawi	HRM	Assoc. Member	MSc Program - courses only	
Deborah Marshall	HRM	Assoc. Prof (P/T)	PhD Program - Full membership status	
Ann McKibbon	HRM	Assoc. Prof	PhD Program - Full membership status	
Nancy Wilczynski	HRM	Asst. Prof (P/T)	PhD Program - Full membership status	
Medical Sciences				
Chumei Li	CG	Assoc. Prof	Serve on MSc & PhD supervisory committees	Conditional upon obtaining 2 yrs external funding for supervision
Shirya Rashid	MN	**Asst. Prof.**	Serve on MSc & PhD supervisory committees	Conditional upon obtaining 2 yrs external funding for supervision
Nursing				
Jennifer Everson	NURS	Assoc. Clinical Prof (P/T)	Serve on MSc & PhD supervisory committees	
Lynn Martin	NURS	Assoc. Prof	MSc & PhD committees and courses	
Rehabilitation Science				
Nancy Pollock	RS	Assoc. Clinical Prof	Serve on PhD supervisory committees - already has full MSc approval and upgrading to PhD program, committees only	

McMaster University

SCHOOL OF GRADUATE STUDIES

RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING DEGREE PROGRAM REQUIREMENTS / PROCEDURES

PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:

1. This form must be completed for **ALL** changes involving degree program requirements/procedures. **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	Neuroscience
NAME OF PROGRAM	Neuroscience Graduate Program

PROGRAM DEGREE	**Ph.D. (X)**	**M.A. ( )**	**M.A.Sc. ( )**	**M.B.A. ( )**	**M. Eng. ( )**	**M.Sc. ( )**	**Diploma Program ( )**	**Other *(Specify)***

NATURE OF RECOMMENDATION *(PLEASE CHECK APPROPRIATE BOX)*

CHANGE IN ADMISSION REQUIREMENTS		**CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE**		**CHANGE IN COURSE REQUIREMENTS**	X

CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR	X	**EXPLAIN:** Change the PhD Degree requirement section to reflect the proposed reduced number of required courses.
OTHER		**EXPLAIN:**

DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:

The exisitng course requirement for PhD students is a minimum of 3 one term courses beyond the Masters Degree requirements. At least two of the courses must be from the list of Neuroscience courses and at the 700 level.

Three courses were required because at the time that was the minimum required by the School of Graduate Studies.

PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE *(Attach additional pages if space is not sufficient.)*

The proposed change is to a minimum of 1 one term course beyond the Masters Degree requirements (all students must take Neuro700(full course)). The course must be from the list of Neuroscience courses and at the 700 level. The supervisory committee, in consultation with the student, may require additional course work.

The reasons for the reduction in the number of required courses are twofold. First, Neuroscience is a research intensive program and it is essential that students have amply time to work in the laboratory on their research projects. Second, it provides more flexibility to tailor the program of study to meet the needs and background preparation of the student.

RATIONALE FOR THE RECOMMENDED CHANGE:

PROVIDE IMPLEMENTATION DATE: ***(Implementation date should be at the beginning of the academic year)***

ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.

PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR:

CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: K. Murphy Email: kmurphy@mcmaster.ca Extension: 23025 Date: 15 February 2008

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