June 21, 2012

To : Members of Graduate Council

From : Medy Espiritu
Assistant Secretary and SynApps System Administrator

The next meeting of Graduate Council will be held on Tuesday, June 26, 2012 at 2:00 p.m. in the Council Chambers, Gilmour Hall 111.

Listed below are the agenda items for discussion.

If you are unable to attend the meeting, please email espirit@mcmaster.ca.

AGENDA

I. Report from the Associate Vice-President and Dean of Graduate Studies

II. Report from the Associate Deans of Graduate Studies

III. Report from the Assistant Dean, Graduate Student Life and Research Training

IV. Report from the Associate Registrar and Graduate Secretary

V. Graduate Scholarships

VI. Calendar copy: Master of Science in Health Science Education
   Course *700 – Health Science Education I

VII. Other business
The McMaster Immunology Research Centre Faculty Scholarship Fund
Established in 2011 by faculty members within the McMaster Immunology Research Centre in support of graduate students. To be awarded annually by the School of Graduate Studies, upon recommendation by the Associate Dean of Graduate Studies (Health Sciences), to an outstanding full time M.Sc. or Ph.D. candidate enrolled in the Medical Sciences Graduate Program in the Faculty of Health Sciences at McMaster University. The award will be given to a student studying within the infection and immunity field.

The Philomathia Fellowship Fund
Throughout the seed funding period, the fund will support Fellowships which are eligible as matching funds for the Ontario Trillium Scholarships. The Philomathia Trillium Scholarships will be awarded to incoming international Ph.D. students at McMaster University who are undertaking studies in water policy or water-based research. Preference will be given to Engineering or Social Sciences students who are also pursuing certification through Water Without borders, the collaborative program with the UNU-INWEH.

Terms of reference for the Philomathia Fellowships beyond the five-year seed funding period will be established subsequently through consultation between the Foundation and the University.

Philomathia Travel Scholarships in Water Policy and Research
Throughout the seed funding period, the fund will support a travel scholarship, valued at $4,000 annually, to support travel to Kenya, India and other locations identified with the Philomathia project. To be awarded to graduate students pursuing studies in water policy or water-related research at McMaster University. Preference will be given to recipients of the Philomathia Fellowships and, where possible, granted on the recommendation of UNU-INWEH.

Terms of reference for the Philomathia Travel Scholarships in Water Policy and Research beyond the five-year seed funding period will be established subsequently through consultation between the Foundation and the University.

The Michael Kamin Hart Memorial Scholarship
Established in 2011 by the Michael G. DeGroote Institute for Infectious Disease Research, in honour of one of its students, Michael Kamin Hart. To be awarded to a student active in a M.Sc. program as of January in the current calendar year and associated with the Michael G. DeGroote Institute for Infectious Disease Research and who has demonstrated academic excellence. To be awarded annually by the School of Graduate Studies on the recommendation of the Executive Committee of the Michael G. DeGroote Institute for Infectious Disease Research.
**The Woodburn Heron Ontario Graduate Scholarship**
Established in 2012 by Norm Buckley, B.A. Hon. (Class of ‘77) and MD (Class of ’82) and his wife Diane, in memory of Woodburn (“Woody”) Heron, Professor of Psychology, to contribute to the funding of Ontario Graduate Scholarship programs. Up to two scholarships to be awarded by the School of Graduate Studies to master’s or doctoral students enrolled full time at McMaster University. Preference will be given to students in the McMaster Integrative Neuroscience Discovery & Study (MINDS) Program. If there are no eligible students from the MINDS Program, the scholarship will be awarded to a master’s or doctoral student from the Department of Psychology, Neuroscience and Behaviour.

**The Xing (Scott) Jin Graduate Scholarship in Engineering**
Established in 2012 by Xing (Scott) Jin, MBA (Class of ’03). To be awarded by the School of Graduate Studies to master’s or doctoral students in the Faculty of Engineering’s Department of Electrical and Computer Engineering. Preference will be given to students who demonstrate high academic achievement.
HEALTH SCIENCE EDUCATION

The Master of Science in Health Science Education (MSc HS Education) is an interprofessional program designed to develop the skills in both the research and scholarship in health professions education. The program is targeted to health care practitioners & clinical educators (physicians, nurses, occupational therapists, physiotherapists, midwives, physician assistants etc.), and others who teach or would like to conduct research in health professions education. Non-Health practitioners will only be considered for the Full-time, thesis stream. The MSc in Health Science Education program provides students with opportunities to develop a comprehensive understanding of current professional practice in health science pedagogy and research principles in health science education. This program strives to provide synthesis of core competencies in the research scholarship of health professions education with practical application. Students will gain the research skills, pedagogical knowledge and professional experiences necessary to succeed a variety of areas of health science education and practice.

The MSchHS Education program offers online courses in cognition and curriculum, simulation/technical & non-technical skills, online learning, educational leadership, assessment and evaluation, and research methods. In addition, two mandatory in-person residency periods must be completed. The program offers students two completion pathways: a course-based option which is offered in online format through part-time studies (full time may be considered with special permission), or a thesis-based option offered in either part-time or full-time studies. The program will be highly accessible through blended delivery of online and in-class formats.

The objectives of the program are to:

• Integrate graduate level training in research scholarship, evidence-based education pedagogy, educational leadership, interprofessionalism, and McMaster’s FHS signature health science curriculum
• Enable knowledge, academic skill and attitude pertaining to health science education at the graduate level
• Enhance preparedness for advanced professional and inter-professional academic roles including leadership and research in health science education
• Engage learners with interactive learning strategies in both classroom and online learning formats
• Enable learners to utilize theory and education pedagogy for classroom and online learning, communication and assessment

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Tel: 905-525-9140 x22114
Fax: 905-572-7099
Email: hsed@mcmaster.ca
Website: http://fhs.mcmaster.ca/hsed/
Staff / Fall 2012

PROFESSORS
Baptiste, Susan, MHSc, (McMaster)/Rehabilitation Science
Law, Mary, PhD, (Waterloo)/Rehabilitation Science
Neville, Alan, MD, (Aberdeen), MEd, (Toronto)/Oncology
Norman, Geoff, PhD, (McMaster)/Clinical Epidemiology and Biostatistics
Reiter, Harold, MD, (Toronto)/Radiation Oncology
Solomon, Patty, PhD (Waterloo)/Rehabilitation Science
Walsh, Allyn, MD, (Western)/Family Medicine

ASSOCIATE PROFESSORS
Cairney, John, PhD (Western)/Family Medicine
Marshall, Denise, MD (McMaster)/Family Medicine
McNiven, Patricia, PhD (Toronto)/Midwifery
Noesgaard, Charlotte, MSc (Western)/Nursing
Risdon, Cathy, MD (McMaster), DMan (Hertfordshire)/Family Medicine

ASSISTANT PROFESSORS
Bayer, Ilana, PhD (Toronto)/Pathology and Molecular Medicine
Carusone, Soo Chan, PhD (McMaster)/Clinical Epidemiology and Biostatistics
Chen, Ruth, MSN (Yale)/Nursing
Dore, Kelly, PhD (McMaster)/Clinical Epidemiology and Biostatistics
Grierson, Lawrence, PhD (McMaster)/Family Medicine
Jung, Bonny, PhD (Western)/Rehabilitation Science
Kulatunga-Moruzi, Chan, PhD (McMaster)/Family Medicine
Martin, Lynn, PhD (Toronto)/Nursing
McKey, Colleen, PhD (Capella)/Nursing
Miller, Pat, PhD (McMaster)/Rehabilitation Science
Musson, David, MD (Austin), PhD (Western)/Anesthesia
Salfi, Jennine, PhD (McMaster)/Nursing
Sherbino, Jonathan, MD (Ottawa), MEd (Toronto)/Medicine
Wainman, Bruce, PhD (York)/Midwifery
Whyte, Rob, MD (McMaster)/Anesthesia

Admission Requirements

Candidates for admission to this health science education program will have an honours-equivalent, four-year bachelor’s degree or related health professional degree (e.g. Bachelor of Health Sciences from the Nursing, Physician Assistant or Midwifery Programs), an MD, or a Master of Science in Physiotherapy or Occupational Therapy, etc. Additional requirements include:

- A four-year undergraduate degree with at least a B+ from an AUCC Member School (equivalent to a McMaster 8.5 GPA out of 12.0) in the final year in all courses in the [health science related] discipline.
- An official transcript of academic work completed to date at all post-secondary institutions attended, sent directly from the issuing institution(s). If the final degree does not show that a completed degree has been conferred, an official copy of the diploma is also required.
• Two confidential letters of recommendation from recent mentors (either those in an academic position or health practitioners) most familiar with the applicant’s academic work, sent directly from the instructors.
• Curriculum Vitae to include work experience and list of educational experiences.
• Written personal Statement of Intent that explains why the applicant is seeking graduate education in this program (2 pages, 12 pt font, 1” margins):
  o Explanation of what is desired from this degree, and if they are applying for the course-based or thesis-based stream, full or part time.
  o Explanation of their area of interest.
• If English is not the applicant’s native tongue, an official copy of the applicant’s TOEFL Test of English as a Foreign Language score or other evidence of competency in English. A minimum TOEFL (IBT) score of 92 (550 on the paper – base TOEFL or 237 on the computer-based test) is required.
• Preference will be given to those with teaching experience in a health-related discipline. However, applicants without teaching experience will be considered.
• Full time thesis students can find information on funding at http://sfas.mcmaster.ca/, and item 5.2.1 (Financial Support for Full-time Students) in the Graduate Calendar.

Admission is competitive. Meeting the minimum standards does not guarantee admission to the program.

To apply and pay the application fee online, consult the Graduate Studies website at http://graduate.mcmaster.ca/prospective-students/application-procedure

Program Requirements

The general regulations for Master’s degrees may be found at the beginning of this Calendar. Minimum requirements for candidates of the MSc in Health Science Education program are outlined below.

Course-based option students must:
  • Complete, with at least a B- standing:
    o The program’s four required courses (two quarter courses and two half courses)
    o Three graduate approved electives (half courses)
    o A scholarly paper

Thesis-based option students must:
  • Complete, with at least a B- standing
    o The program’s four required courses (two quarter courses and two half courses)
    o One graduate approved elective (half course)
    o A thesis

COURSES

All courses are half courses (*) with the exception of the two-quarter courses (#) (HS 700 & HS 707). Additional information on program courses can be viewed at the Health Science Education website, http://fhs.mcmaster.ca/hsed/
#HS 700 / Health Science Education I: Fundamentals of Health Science Education
An overview of the program and courses including the over-arching goals, learning outcomes, instructional methods, content, resources, assessment methods, and faculty. This course is designed for graduate students from a wide range of health science disciplines and is offered in an intensive summer on-campus format. *Pending Graduate Council Approval*

*HS 701 / Cognition & Curriculum in Health Science Education*
This course explores the science of memory, thinking, learning and its application to teaching and curriculum design in health science education. Students will relate and apply epistemologies and theoretical frameworks from cognitive and educational psychology, teaching strategies and methods, such as PBL, concept-based learning, simulation-based learning, etc. to their teaching practice area. This course is offered online.

*HS 702 / Educational Research Methods in Health Science Education*
In this course students are introduced to a range of research methods used to assess learning in health science programs. Major topics include psychometrics, epidemiology, experiments, quantitative, and qualitative methods.

*HS 703/Assessment and Evaluation*
In this course students explore theories and concepts underlying assessment, assessment strategies, and evaluation planning for health science education at the course and program level. Assessment topics include theory of measurement, reliability, validity, and generalizability theory and its application to assessment and evaluation instruments appropriate for health science academic and clinical settings, written examination formats, such as multiple choice and performance measures. Students will develop a basic knowledge of program evaluation including conceptual frameworks for program evaluation, instrumentation, data collection and data sources, and reporting results. *Pending Graduate Council Approval*

*HS 704/Simulation and Technical & Non-Technical Skills*
In this course students will explore, characteristics of high fidelity and low fidelity simulations for teaching and clinical performance assessment. In addition, both technical and non-technical skills will be reviewed from the perspective of evidence based teaching and assessment. *Pending Graduate Council Approval*

*HS 705/E-Learning*
In this course students explore the theory and application of the pedagogies, knowledge and teaching skills relevant to current and emerging learning technologies. Topics include the benefits and challenges of online learning, managing faculty and student transformation from classroom to online teaching and learning, facilitation of online discussions, and the design of learning activities and selection of technological resources for online learning. *Pending Graduate Council Approval*

*HS 706/Leadership*
The goal of this course is to enable students to relate the theoretical and conceptual fundamentals of educational leadership in academic health sciences and community health care context, such as change management, mentorship and power relations to their own practice as
a result of sustained inquiry into their own work. An Interprofessional team facilitates this course. *(Pending Graduate Council Approval)*

**#HS 707/ Health Science Education II**
This course explores scholarship and the process of writing and preparing a manuscript for journal submission, and development of programmatic research. Students present works in progress and provide feedback to their peers. This course is offered in an intensive summer on-campus format. *(Pending Graduate Council Approval)*

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**HS 708/ Scholarly Paper**
The Scholarly Paper is the final degree requirement for the course-based MSc. The paper should reflect the student’s ability to integrate ideas that reflect their analysis and use of knowledge in areas of health science teaching and learning, research and leadership in a scholarly way as well as the ability to independently apply and discuss these concepts in a concise, critical, and coherent manner. The paper will demonstrate integrative thinking and focus on a topic selected by the student in consultation with their Scholarly Paper Supervisor, Reader 1 and Reader 2 and submitted to the MSc HS Ed Administrative Assistant prior to commencement. Students will develop a proposal individualized to the student’s area of interest that addresses the MSc Health Science Education’s Guidelines for Scholarly Papers. The scholarly paper is distinctive from a thesis, as it does not require the collection or analysis of primary data or the conduct of research with subjects, although this may be an option in some circumstances. The scholarly paper will be graded by the scholarly paper Supervisor and two additional Readers. The student may start some components of the paper in a preliminary form during their program. Students will be encouraged to present part of their paper during the Health Science Education II course. Depending on the specific topic, some students may need to conduct fieldwork to collect necessary data and in such cases appropriate ethics approval may be required. Supervisory feedback will be provided on an ongoing basis online, by telephone videoconference, or in person should a face-to-face meeting at McMaster University be required. The Scholarly Paper Topic Approval form is available on the HS Ed website at http://fhs.mcmaster.ca/healthscienceeducation/

**HS 709/ Thesis**
For the thesis option, students will complete a formal written research proposal that outlines their project plan prior to commencing research and submit it for approval to their Supervisory Committee within six months of entry into the program for full-time students and within one year of entry for part-time students. The thesis will demonstrate integrative thinking, understanding and reviewing the relevant literature and involve conducting original research, and will focus on a health science education topic that is selected by the student in consultation with their thesis Supervisor.

The proposal will be individualized to the student’s area of interest that addresses the Thesis Guidelines established by the MSc Health Science Education program. Some components of the paper maybe started in a preliminary form by the student during their program. Students will be encouraged to present part of their thesis research (e.g. literature review) during the Health Science Education II Scholarly paper presentations course. Students who plan to conduct fieldwork to collect necessary data will seek appropriate ethics approval. Supervision feedback
will be provided on an on-going basis by email online, telephone, videoconference, or in person should a face-to-face meeting at McMaster University be required.

Thesis students must submit a written thesis and oral defense (in person) before a committee comprised of the Graduate Program Director, the student’s Supervisory Committee and an external examiner.

**Anticipated completion time**
The anticipated completion time of all program requirements for students enrolled in the FHS Health Science Education program is 2 years for a full-time student and 4 years for a part-time student from initial enrollment.
# Recommendation for Change in Graduate Curriculum - For Change(S) Involving Courses

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

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

<table>
<thead>
<tr>
<th>DEPARTMENT/PROGRAM</th>
<th>Faculty of Health Sciences/Master of Science in Health Science Education</th>
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<tbody>
<tr>
<td>COURSE TITLE</td>
<td>Health Science Education I</td>
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<tr>
<td>COURSE NUMBER</td>
<td>HS 700</td>
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<tr>
<td>COURSE CREDIT</td>
<td>FULL COURSE ( )</td>
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<tr>
<td>INSTRUCTOR(S)</td>
<td>Drs. Kelly Dore &amp; Lawrence Grierson</td>
</tr>
<tr>
<td>PREREQUISITE(S)</td>
<td></td>
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**NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)**

- NEW COURSE [Y]
- DATE TO BE OFFERED: Fall 2012
- WAS THE PROPOSED COURSE OFFERED ON DEAN’S APPROVAL? [No]

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

**IF YES, PROVIDE THE DATE:**

**ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).** **NOTE:** CROSS-LISTING OF COURSES REQUIRES WRITTEN APPROVAL FROM EACH DEPARTMENT AND FACULTY CONCERNED.

**CHANGE IN COURSE TITLE**

**Provide the NEW 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 CHANGES**

**EXPLAIN:**

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

This course offers an overview of the program, including the over-arching goals, learning outcomes, instructional methods, content, resources, and assessment methods. This required course is designed for graduate students from a wide range of health science disciplines and is offered in an intensive on-campus format during a four-day residency period.

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

The week-long course will include an orientation session on the program as well as sessions on all 6 of the core and elective courses (Cognition and Curriculum, Assessment and Evaluation, Research Methods, Online Learning, Simulation/Technical & Non-Technical Skills, & Leadership in the Health Sciences). These sessions will provide an orientation to the course content and provide “core” information which will form the foundation of knowledge for students as they progress through the program. In addition to the content topics, sessions will be held on Research and Scholarship, Research in Education, and Fundamentals of Online Learning, as well as sessions on Student Support Resources, Research Ethics, Library Access and the Simulation-based Learning Labs. The in-person session will also provide students the opportunity to get to know their peers, faculty, and potential graduate supervisors.
1. **STATEMENT OF PURPOSE** (How does the course fit into the department’s program?)

This course is a mandatory four-day residency period for the FHS MSc Health Science Education program. It will provide an orientation and introduction to the program. Foundational elements of the programs content will be presented.

2. **EXPECTED ENROLMENT:**

25 students

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

This course takes place across four days and consists of all day student/professor contact time with various lectures, tours, information sessions, assignments, and problem-based learning groups.

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

The residency period will be marked as a pass/fail. Evaluations may include mandatory attendance, as well as an evaluation of feedback given to peers using online tutorials. Students will be asked to give short presentations on their background and an existing problem in the field of health professions education that they have identified from their program or elsewhere. They will also be asked to synthesize articles (provided) from the viewpoint of that problem and post their synthesis online. Participants will then be paired into reader teams to provide feedback to each other online.

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).**

See attached course information.

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

NA

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

Name: Kelly Dore  Email: dore@mcmaster.ca  Extension: 22956  Date: June 8/2012

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

SGS/Medy/2011