



**School of Graduate Studies**

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To : Members of Graduate Council

From : Christina Bryce  
Assistant Graduate Secretary

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The next meeting of Graduate Council will be held on **Tuesday April 28<sup>th</sup> at 1:30 pm in Council Chambers (GH-111)**

Listed below are the agenda items for discussion.

Please email [cbryce@mcmaster.ca](mailto:cbryce@mcmaster.ca) if you are unable to attend the meeting.

## **A G E N D A**

- I. Minutes of the meeting of March 24<sup>th</sup>, 2015
- II. Business arising
- III. Report from the Associate Vice-President and Dean of Graduate Studies
- IV. Report from the Graduate Associate Deans
- V. Report from the Associate Registrar and Graduate Secretary
- VI. Report from the Assistant Dean, Graduate Student Life and Research Training
- VII. New Program Proposals: School of Social Work
  - Graduate Diploma in Critical Leadership in Social Services and Communities
  - Graduate Diploma in Community-Engaged Research and Evaluation
- VIII. New Program Proposal – M.A. in Music and Cognition
- IX. Graduate Calendar Revisions
- X. Faculty of Engineering Graduate Curriculum and Policy Committee Report
- XI. Faculty of Health Sciences Graduate Policy and Curriculum Committee Report
- XII. Faculty of Science Graduate Policy and Curriculum Committee Report
- XIII. Spring 2015 Graduands (to be distributed)

Graduate Council  
March 24th, 2015 1:30 pm  
GH 111

Present: Ms. S. Baschiera, Ms. B. Gordon, Dr. A. Deza, Dr. A. Shi, Dr. A. Holloway, Ms. C. Brown, Dr. T. Adams, Mr. R. Morton, Dr. S. McCracken, Dr. T. Porter, Dr. K. Bird, Dr. A. Grenier, Mr. C. Egan, Dr. B. Ibhawoh, Dr. M. Thompson, Dr. W. Wiesner, Dr. D. Welch, Mr. P. Self

Regrets: Dr. I. Zeytinoglu, Dr. G. McClelland, Dr. S. Streeter, Dr. A. Dean

By Invitation: Dr. R. Friendly, Ms. C. Brendan, Ms. C. Wood

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**I. Minutes of the meeting of February 13<sup>th</sup>, 2015**

The minutes of the meeting of February 13<sup>th</sup>, 2015, were approved on a motion by Dr. Thompson, seconded by Dr. Holloway.

**II. Business arising**

There was no business arising.

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

Dr. Sekuler reported that the School of Graduate Studies was in the process of accomplishing a number of different tasks, much of it associated with the Mosaic project. She noted that student portal had just gone live. The system will provide a lot of advantage to students ultimately but that a number of issues are still being worked out. The School of Graduate Studies is holding information sessions on Tuesdays and Thursdays, where programs can get advice and assistance to work through some issues.

Stephanie Baschiera noted that from the student side a lot of the changes will be with respect to terminology and that these will be reflected in the calendar. Brooke Gordon explained that student accounts and cashiering has gone live but that the scholarships module wouldn't be live until June. The way information has been collected about graduate student should be fairly consistent.

A council member asked if there was any intention of switching back to a monthly pay schedule once the Mosaic transition was complete. Dr. Sekuler explained that for various reasons, keeping it on term by term pay makes sense but that Graduate Studies is still interested in feedback about the issue. Brooke noted that a lot of the feedback received so far had been associated with the change instead of the way the money is paid out. Dr. Adams noted that they are still looking for representation from Faculties other than Science and Engineering for the working committee on graduate pay.

Dr. Sekuler further reported that the fellowship ranking has been completed and thanked everyone who sat on the committees. She also noted that the results from CGS awards will be formally announced on April 1<sup>st</sup> – this date is based on the tri-agency guidelines.

#### **IV. Report from the Graduate Associate Deans**

Dr. Welch reported on behalf of Dr. Hayward that the Master of Public Health program was approved by the ministry. Dr. Wiesner reported that the Business Ph.D. program is going through an IQAP review at the beginning of May. The Faculty is also developing an M.Sc. degree across disciplines within Business to provide a better crop of domestic applicants for their Ph.D. programs. Dr. Thompson announced that UNENE diploma had been approved. Dr. Ibhawoh noted that progress had been made on the M.A. in Music and Cognition and that a Ph.D. in Communication and Cultural Studies was also in development. Dr. Porter noted that the Faculty of Social Sciences had put quite a bit of work into their websites with respect to recruitment as well as a website for students involved in health and society disciplines across all Faculties at McMaster.

#### **V. Report from the Associate Registrar and Graduate Secretary**

Stephanie reported that the Quality Council had approved the two new Ph.D.s in Social Gerontology and Health Studies and that the proposed Labour studies Ph.D. and M.Sc. Child Life and Pediatric Psychosocial Care would be submitted in the near future. She explained that any new programs in development, hoping to have their first intake in 2017 should have a full proposal developed and have their Dean's Meeting early in the Fall of 2015. She also reported that approximately 200 Ph.D. candidates had signed up to attend the thesis defence information sessions.

#### **VI. Report from the Assistant Dean, Graduate Student Life and Research Training**

Peter Self reported on the following items:

- The Best Practices lunch on Thursday will be focused on Welcome Week. The team is also meeting with the Graduate Student Association to coordinate events as appropriate. Graduate Student Awards will still take place on the Friday of Welcome Week.
- A session on immigration was held on February 24<sup>th</sup> – a lawyer from Toronto was to speak to international graduate students about the changes in policies governing immigration.
- A day-long writing boot camp will be held on May 4<sup>th</sup> in Mills Library to support students working to complete their thesis.
- A series of sessions around academic grant writing will be held throughout April. On May 7<sup>th</sup> there will be a one day conference off campus for students interested in writing grants for non-academic purposes
- Bernice Downey has been hired as post-doc in the School of Graduate Studies to work with indigenous education initiatives. She will assist McMaster in partnering with Brock and Laurier in a roundtable on indigenous people contributing to a successful Canada.

#### **VII. RISO Policy – Policy on Academic Accommodation for Religious, Indigenous and Spiritual Observances**

Carol Wood, Chair of the interfaith issues working group within PACBIC presented the proposed policy. She noted that many students have sought accommodation and many have had uneven experiences. The aim of her group was to consolidate what has been working well and check with the other universities to create a fair and equitable policy. One of the main questions associated with the development of the policy was related to documentation. The decision was to accept requests for

accommodation on good faith and to require no documentation. The policy is intended to be fair and equitable but students are still responsible for their academic success. She noted that the policy focuses on in-course work and examinations and that not everything could be included in the policy, citing a query from health sciences regarding students who are in placements. The decision was made that that had to be a different policy and Carol's working group will consult on its development.

Ms. Wood explained that a fair amount of discussion about potential abuse. They recognize that there will be a minority of students who might attempt to abuse the policy but will not penalize the greater number of students with sincerely held beliefs. She notes that it is a straightforward policy with some recommendations and guidance about how to make those accommodations. The policy also includes dispute resolution.

Carolyn Brendan noted that there had been a number of revisions to the policy as it was developed, including clarification on faculty office versus program office. A timeline was also added for when an instructor was required to get back to a student on alternate arrangements.

Dr. Holloway moved and Dr. Welch seconded, **'that Graduate Council approve the Policy on Academic Accommodation for Religious, Indigenous and Spiritual Observances as described in the document.'**

The motion was **carried**.

#### **VIII. Teaching and Learning Certificate Courses**

Dr. Sekuler provided some background on the courses, noting that Graduate Council has already approved the certificate and that today the items being reviewed were the courses associated with the certificate. Rayna Friendly explained that the courses proposed are related to the pedagogical theory of teaching and learning. The proposed format is one that they hope will be convenient for graduate students. The zero-unit format was proposed so the courses could appear on a transcript but wouldn't pose any issues for funding or overload courses. The courses a range of workshops offered in a cohort model and involve having the students reflect on their experiences.

A council member noted that some of these courses already exist and asked if students would be expected to take them again or if they could just be counted toward the certificate. Rayna responded that courses previously offered could be counted toward the certificate and noted that there are two levels of the certification – two courses for the Foundation level and five courses for the Scholar level.

A council member asked about credits, noting that some had them and some didn't. Rayna explained that education 750 was a pre-existing course with credit – now it can be taken with credit or without. Dr. Sekuler noted that most programs don't allow it to be used as part of their degree requirements; the flexibility noted will allow students to take the course without complications for their existing degree requirements.

Dr. Thompson was concerned about confusion for students taking the course right now. He mentioned that language should exist noting that students planning to take this course for credit should contact their program to see if this could be taken for graduate credit. Dr. Welch noted that there is some language in the calendar and suggested that the calendar should be rid of all sentences noting that Education 750 can be taken for credit. Dr. Sekuler responded that a section could be developed in the calendar regarding the Education courses, noting that there is variation in the calendar copy between

programs where Education 750 is concerned. Dr. Thompson noted that the information also had to be changed on program websites.

Dr. Thompson moved and Dr. Welch seconded, **‘that Graduate Council approve the proposed Teaching and Learning Certificate Courses as described in the documents.’**

The motion was **carried**.

#### IX. Faculty of Business Graduate Curriculum and Policy Committee Report

Dr. Wiesner presented the changes from the Faculty of Business. The first change concerned the Health Management program admission references; currently two academic and two professional are required. As most of their students are working professionals, the program requested that the academic reference requirement be reduced to one and keep two professional references required. The second change proposed was from the Master of Finance program and was simply replacing A600 for Finance 600, a course specifically targeted to Master of Finance students. The third change requested was from MBA, a request for a change in course requirements from the accrediting body. They’ve created a series of non-credit workshops to ensure students acquire professional-related skills before they graduate. The final change was also from MBA regarding their admission requirements – it was primarily a change in wording related to the GMAT. Currently they state that a minimum score of 600 is required on the GMAT. In a review of competitor schools the program noted that very few of them stated their requirements this specifically. In practice they’re maintaining the 600 GMAT threshold but the change in language allows more flexibility in the admission decisions process. When a student doesn’t meet the 600 threshold, there is a committee to review to see if they should be accepted.

Dr. Thompson moved and Dr. Welch seconded, **‘that Graduate Council approve the curriculum changes proposed by the Faculty of Business as described in the document.’**

The motion was **carried**.

#### X. Faculty of Health Sciences Graduate Policy and Curriculum Committee Report

Dr. Welch reported on two items for approval on behalf of Dr. Hayward. The first was calendar copy to remedy the issue around the Clinical Behavioural Sciences program which had been listed in the undergraduate calendar. The other change was a very straightforward change to the Physiotherapy program requirements.

Dr. Holloway moved and Dr. Wiesner seconded, **‘that Graduate Council approve the curriculum changes proposed by the Faculty of Health Sciences as described in the document.’**

The motion was **carried**.

#### XI. Faculty of Social Sciences Graduate Policy and Curriculum Committee Report

Dr. Porter explained that the item presented for approval was the Ph.D. calendar copy for two new Ph.D. programs which have made their way through their approval process.

Dr. Welch noted that the courses and program itself had already been approved previously.

Dr. Porter moved and Dr. Welch Seconded, **'that Graduate Council approve the calendar copy for the proposed new Ph.D.s as described in the document.'**

The motion was **carried**.

## **XII. New Scholarships**

Dr. Shi moved and Dr. Adams seconded, **'that Graduate Council approve the new scholarships and the change to the terms of reference for the The H.Vincent Elliott Memorial Travel Bursary.'**

The motion was **carried**.

McMASTER UNIVERSITY  
GRADUATE PROGRAM PROPOSAL BRIEF  
FOR THE PROGRAMS

**Graduate Diploma**  
in Critical Leadership in Social Services and Communities

**Graduate Diploma**  
in Community-Engaged Research and Evaluation

Date:  
April 2015

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## 1. PROGRAM OBJECTIVES

The programs proposed here aim to foster progressive leadership, and progressive practices of research and evaluation, in the community and social service sectors. The proposed Graduate Diplomas are grounded in a recognition of the contemporary conditions of social service and community work. They build on expansive and critical definitions of leadership and recognize community-engaged research and evaluation as important means of sustaining robust and responsive social services.

- **The Graduate Diploma in Critical Leadership in Social Services and Communities** is designed for people who have completed a Master's degree and who wish to advance their skills and analysis in the specific area of leadership. It responds to a particular sector of potential students: those who are keen to engage in post-Master's educational opportunities for the purpose of enhancing critical professional practice (and who are rarely able to take time from professional commitments to complete a PhD).
- **The Graduate Diploma in Community-Engaged Research** is primarily intended for people with BSWs or BAs (though people with graduate degrees will also be welcomed to apply). It offers a set of courses focused on a topic of considerable contemporary relevance in the social service and community sectors. Courses completed as part of this graduate diploma may be considered as credits towards future Master's programs.

**Both graduate diplomas emphasize work experience in the admissions process.** Applicants to the Graduate Diploma in Critical Leadership are required to have experience providing leadership (formally or informally) in a social service agency or community initiative. Class discussion and assignments will draw significantly on students' own observations and actions as leaders. Applicants to the Graduate Diploma in Community-Engaged Research are required to have work experience in the sector sufficient to provide a familiarity with the issues and dilemmas that researchers and evaluators will encounter.

Both proposed Graduate Diplomas respond to particular trends in the community and social services sectors and labour force, described below.

### 1.1 Consistency of program with University's mission and academic plan

The Strategic Mandate agreement between the Ministry of Training, Colleges and Universities and McMaster University identifies **Human Behaviour, Culture, and Society** as an area of institutional strength for McMaster. This institutional strength is foundational to the programs proposed here: the social science study of human behaviour as it relates to culture and society - along with efforts to define ethical,

responsible interventions at individual, group and community levels - underpins curriculum and pedagogy in the School of Social Work.

In terms of areas for growth at McMaster, the Strategic Mandate Agreement highlights **Fostering Robust Societies**. The goal of fostering robust societies reflects very directly the School of Social Work's intentions for the proposed diploma programs. Robust societies require social and community services that sustain public sector entitlements and human rights and are at the same time responsive to complex and changing social circumstances. The proposed diplomas will foster critical leadership, and progressive practices of research and evaluation, in the community and social service sectors.

The proposed programs further align with the SMA in that they highlight **McMaster's collaborative work with employers and community partners**. Representatives from local community and social service agencies (many of whom are also potential students) have endorsed the programs presented in this proposal. Focus groups with community partners were held as part of the 2014 IQAP review and more recently in the preparation of this proposal. Participants included frontline community and social workers, as well as researchers, supervisors and managers in multiple sectors: child welfare; housing and homelessness; the violence against women sector; school-based social services; the disability sector; addiction services; healthcare.

These consultations indicated that programs focused on critical analysis of trends in social service organizations and communities, and in preparing students for ethical and effective leadership and research roles in increasingly difficult contexts, are valued local contributions. Our creation of these programs thus reflects the School's longstanding commitments to community engagement and reciprocity with community partners, commitments that echo those articulated by President Deane in *Forward with Integrity*.

### **Trends in the community and social services sector and labour force also inform the proposed Graduate Diplomas.**

Leadership is a subject of focused attention in social and community services. Members of the School of Social Work's Community-Professional Advisory Group report that social workers and community workers moving into supervisory roles are increasingly encouraged or required to seek advanced training in management and leadership. They note, as well, that current opportunities for management training are often ill-suited to the kinds of responsive, justice-oriented leadership they seek to foster (and that they look for when hiring). The proposed Graduate Diploma in Critical Leadership will thus be an important and welcome contribution to the local community.

In labour market terms, Employment and Social Development Canada's employment projections predict growth in the demand for managers of social services. Over the

period from now until 2022, job openings for Managers In Health, Education, Social And Community Services “are expected to total 62,679 and 52,739 job seekers... are expected to be available to fill the job openings” (an 8.4 percent excess demand) (Government of Canada: Employment and Social Development Canada, 2012a). The majority of job openings are projected to arise from retirements; over the projection period “the retirement rate in this occupation is expected to be one of the highest among all the occupations” (Government of Canada: Employment and Social Development Canada, 2012a). This latter point echoes that made by the School’s 2014 IQAP report reviewers, who pointed to the “pressing need to replace the generation of human service leaders who are approaching retirement” (Sieppert, Brown, & Hladki, 2014). The reviewers noted, as well, that there are few graduate-level educational opportunities in social service leadership in Canada.

Research and evaluation are also topics of growing salience in the social service and community work sectors. Emphasis is placed on ‘evidence-based’ practice, and formal evaluation of program and policy initiatives is increasingly required, and often tied to funding. Yet in many settings in which social services are provided ‘evidence’ is too narrowly defined to adequately capture and document processes of individual, family, group and community change. Adequate research and evaluation in this sector requires social science approaches to evidence and its sources. The Graduate Diploma in Community-Engaged Research and Evaluation will build capacity among local practitioners in social science research frameworks and methods, and participatory community engagement processes. The knowledge and skills developed through the program will enable students to craft locally relevant research questions; strengthen programs, policies and community initiatives; and build and sustain process of community and agency learning.

Employment and Social Development Canada’s employment projections indicate that, from now until 2022, the balance will continue between labour supply and demand for the occupational classification that includes Social Policy Researchers, Consultants and Program Officers, with job creation remaining stronger than average for all occupations (Government of Canada: Employment and Social Development Canada, 2012b).

The proposed programs thus accord well with McMaster’s approved Strategic Mandate Agreement with the Ministry; respond to identified educational needs in the local community; and are well aligned with trends in labour market demand.

1.2 Clarity and appropriateness of program requirements and learning outcomes in meeting University's Degree Level Expectations

### **Graduate Diploma in Critical Leadership in Social Services and Communities**

#### **Program Objective**

This proposed Graduate Diploma aims to foster progressive (critical, ethical) leadership in social services and in communities.

#### **Learning Outcomes**

By the time they have completed the program, all students will:

- A. understand how contemporary social, political and economic forces are (re)shaping social services and community work
- B. understand a range of theories of critical leadership and of social / organizational change, and the importance of aligning theories with contexts
- C. demonstrate a capacity to understand how contemporary social forces shape leadership and leadership practices in social and community services, and identify, analyze and convey how justice-oriented leaders (can) create space for alternatives.
- D. understand and be able to apply critical conceptual frameworks to evaluation practices in social services and communities, and identify justice-oriented alternatives or improvements

### **Graduate Diploma in Community-Engaged Research and Evaluation**

#### **Program Objective**

This proposed Graduate Diploma aims to foster critical and ethical practice in community-engaged research and evaluation.

#### **Learning Outcomes**

By the time they have completed the program, all students will:

- A. understand and be able to apply critical conceptual frameworks to evaluation practices in social services and communities, and identify justice-oriented alternatives or improvements
- B. understand the historical, theoretical and ethical bases of community-based research (CBR) and be able to apply and communicate CBR principles
- C. demonstrate a capacity to undertake a research-related community engagement process
- D. understand, and be able to communicate and apply, knowledge mobilization (KM) concepts

### 1.3 Appropriateness of degree nomenclature

The designations 'Critical Leadership in Social Services and Communities' and 'Community-Engaged Research and Evaluation' accurately reflect the content of the proposed programs and appropriately identify the specificity of their focus in relation to other graduate programs in the School of Social Work. The designation 'graduate diploma' accurately reflects the learning expectations achieved in these four-course programs (discussed in Section 6).

## 2. ADMISSION REQUIREMENTS

### 2.1 Appropriateness of program's admission requirements for the learning outcomes established for completion of program

#### **Graduate Diploma: Critical Leadership in Social Services and Communities**

##### **Eligibility**

To be eligible for admission, applicants are usually required to hold an MSW or an MA degree. People with BSWs or BAs may be eligible for this Graduate Diploma if they have extensive leadership experience in social and community services.

##### **Admissions requirements:**

- a) an MSW or MA degree with an average of at least an A- or (in exceptional circumstances) a BSW or BA with an average of at least A-
- b) community or social service leadership experience

##### **Applications are evaluated on the basis of four criteria:**

- a) Academic performance
- b) Personal statement
- c) Leadership experience
- d) Letters of reference

Students are expected to bring to the Graduate Diploma critical perspectives on leadership in community and social services. In their personal statements, applicants are invited to describe their leadership experience, and articulate how the graduate diploma intersects with their leadership practice and will contribute to their onward development; identify and provide an analysis of a leadership issue grounded in earlier studies and in experience in the field; and articulate academic and practice experience that illustrates their capacities for critical and innovative thinking.

## **Graduate diploma: Community-Engaged Research and Evaluation**

### **Eligibility**

To be eligible for admission, applicants are usually required to hold a BSW or a BA; applicants with MSWs or MAs are welcome.

### **Admissions requirements:**

- a) B+ (9.0) standing in senior level undergraduate courses
- b) experience working in social services or communities services

### **Applications are evaluated on the basis of three criteria:**

- a) Academic performance
- b) Personal statement
- c) Community or social service experience

In their personal statements, applicants are invited to articulate their community or social service work and their understanding of community engagement, and in particular to identify their experience with research and evaluation practice; to describe their interest in this specific program; and to provide a beginning outline of a community-based research or evaluation project important to them.

#### **2.2 Alternative requirements for admission into the program**

In cases where students do not meet the grade requirements, they may be admitted if their work experience is especially robust and well matched with the program objectives, and personal statements confirm the applicant's capacities and potential.

## **3. STRUCTURE**

#### **3.1 Administrative, governance and communication processes**

The School of Social Work is located in McMaster's Faculty of Social Sciences. It was established in 1968 in order to offer a generalist BSW program, first as a combined BA/BSW degree and then also as a post-degree BSW. A graduate program (MA in Social Welfare Policy) was instituted in 1973, its designation later changed to an MSW. The PhD program was introduced in 2008. Within the university, the School's reporting line is to the Dean of the Faculty of Social Sciences.

As both an academic department and a professional school with links and responsibilities to a range of community and professional organizations, the School's programs are framed by policies and academic requirements of McMaster's Policy on Academic Program Reviews, and - in the case of the BSW and MSW - by standards and expectations for professional accreditation set by the Canadian Association for Social Work Education (CASWE).

The School's administrative positioning in a Faculty of Social Science and our close interdisciplinary links with other social science departments are relatively rare among Schools of Social Work nationally. We are well integrated as a 'citizen' of the wider Faculty in numerous ways including four joint-appointed faculty (jointly appointed to Labour Studies, Health Aging & Society, and Globalization & the Human Condition). Within the Faculty, the School is especially valued for faculty members' experience and strengths in community engagement and experiential learning.

### **Graduate program governance structure**

The Graduate Program Chair is responsible for providing leadership with respect to the graduate programs in accordance with the School's philosophy, CASWE standards for MSW Programs, and University regulations for master's and doctoral programs. In this role, she currently receives three units of teaching credit and is oriented, supported and advised by the Graduate Administrative Assistant and, on some resource and planning questions, the School's Administrator. The Graduate Program Chair facilitates the work of the Graduate Studies Committee. The Graduate Studies Committee reviews applications and makes decisions about admissions. The Committee also considers issues of curriculum, program delivery, design and evaluation, making decisions where appropriate, or, for significant changes, making recommendations to the School of Social Work Faculty Committee. The Graduate Administrative Assistant is responsible for the everyday administration of the program, for organizing admissions and for advising students on registration and program requirements. She liaises with the School of Graduate Studies (SGS) and interprets SGS policies in the context of the current MSW and PhD programs.

In keeping with the School's philosophy and approach to governance, we are committed to seeking and enabling the participation of our various constituencies in our programs and in consultations on developments in the School's overall direction. Graduate students are represented on all School committees, with the exception of those concerned only with the undergraduate program and the Faculty Committee.

### **With changes to the School's program offerings, changes to the governance structure of the School's graduate programs will be necessary, as follows:**

- The Graduate Chair will continue to oversee all graduate programs
- **A new faculty role** will be established to oversee the graduate diplomas, including facilitating application review and admissions decisions; seeking feedback regarding curriculum, program design and delivery from all stakeholders; and recommending changes to the Graduate Studies committee
- **A new Administrative Assistant role** will be established to handle the everyday administration of the Diplomas, provide academic guidance to Graduate Diploma students, and liaise with the Graduate Administrative Assistant and faculty member responsible for the Graduate Diplomas

### 3.2 Appropriateness of program's structure and regulations to meet specified program learning outcomes and Degree Level Expectations

The proposed graduate diplomas will enter into a well-established structure in which people and parts of the whole communicate effectively. The proposed governance structures outlined above will ensure program learning outcomes are achieved as planned.

### 3.3 Rationale for program length

The graduate diplomas are designed to be completed in one 12-month year. We anticipate that some students will take the graduate diplomas over 16 months (allowing them to take a single course for four consecutive terms).

## 4. PROGRAM CONTENT

### 4.1 How curriculum addresses the current state of the discipline or area of study

In addressing the current state of the discipline, and the specific area of study of community and social service leadership and research, the proposed curricula will include attention to these general areas:

- Scholarship on the changing conditions of social service and community work, especially as those conditions shape possibilities for progressive change
- Critical theories and practices of leadership and social / organizational change
- Critical theories and practices of community-engaged research and evaluation

### **Graduate Diploma in Critical Leadership in Social Services and Communities**

Students in the Graduate Diploma in Critical Leadership in Social Services and Communities must take one of two courses that consider specific contexts of social work practice: institutional contexts (SW726/ 7AA<sup>1</sup>) or community contexts (SW721). They then take two courses focused explicitly on aspects of leadership: a theory and praxis course, and a course focused on leadership specifically in the contexts of contemporary social services and communities. Their final course considers critical approaches to evidence and evaluation, a key feature of contemporary leadership.

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<sup>1</sup> The existing course SW726 will be divided into two courses, one focused on the implications of changes in social service organizations for workers and service users (7AA) and one focused on implications of the same changes, for leaders (7BB).



The course requirements are:

One of:

- SW 7AA / Changing Social Service Organizations: Implications for workers and service users
- SW 721 / Community, Citizenship and Social Justice

And these three courses:

- SW 7BB / Changing Social Services, Changing Communities: Focus on Leadership
- SW 7XX/ Leadership & Organizational Change: Theories and Praxis
- SW 7YY/ Critical Approaches to Evidence and Evaluation in Social Services and Communities

### **Graduate Diploma in Community-Engaged Research**

Students in this Graduate Diploma will take as a foundation course SW 7YY, on critical approaches to evidence and evaluation. They will also take a Faculty of Social Sciences course on Community-Based Research (co-taught by a School of Social Work faculty member, SOCSCI 7ZZ) and one on approaches to knowledge mobilization in the social sciences (SOCSCI 700). A new course, SW 7DD, will support students to initiate an engagement process with community stakeholders, towards the refinement or early implementation of a community-engaged research or evaluation project.

The course requirements are:

- SW 7YY/ Critical Approaches to Evidence and Evaluation in Social Services and Communities
- SOCSCI 7ZZ / Critical Approaches to Community-Based Research
- SOCSCI 700/ Impacts and Uses of Social Science Research
- SW 7DD: Community-Engaged Research & Evaluation seminar

### **Course descriptions:**

#### **EXISTING COURSES**

##### **SOC WORK 721 / Community, Citizenship and Social Justice**

This course examines theories and practices of community and citizenship in Canada. We explore how notions of togetherness, common interests, active citizenship and rights and responsibilities are being constituted, enacted, practiced and challenged in the community, in the context of contemporary social, political and economic changes. Present-day constraints and possibilities for social justice through grassroots organizing, advocacy and community based research are a key focus of the course.

### **SOCSCI 7ZZ / Critical Approaches to Community-Based Research**

This course introduces students to critical approaches in community based research in the social sciences. It is intended for graduate students in the social sciences or related field who are interested or engaged in scholarship from a community-based perspective. The learning objectives of the course include: (1) a working knowledge of the theoretical foundation and history of community based research; (2) a practical understanding of the methods and methodologies taken up within community based research; (3) an entree into the practise of community based research through the development of a CBR proposal, with an attention to issues of collaboration, ethics, trust, equity and social justice.

### **SOCSCI 700/ Impacts and Uses of Social Science Research**

This course explores the following key questions: In what ways does social science research matter? Who uses social science research; how does research reach and affect them; what do they do with it? What does research have to do with knowledge, with social change? The course is open to all MA and PhD students in the Faculty of Social Sciences. Each session will be co-facilitated by a McMaster researcher experienced in mobilizing research knowledge to and with groups beyond the traditional academic audiences.

### **PROPOSED COURSES**

#### **SOC WORK 7AA/ Changing Social Service Organizations: Implications for workers and service users**

Examines the broad contextual forces shaping practitioners' work lives and practices: ongoing economic globalization; welfare restructuring and the erosion of social programs; the rise of managerialism and the importing of business models into public service delivery. Explores how these forces are embedded in everyday work relations and the social organization of practice, including such areas as recording, documentation, accountability mechanisms, risk management and performance evaluation. Identifies the tensions and dilemmas generated by these organizing forces for social workers and for those who use social services.

#### **SOC WORK 7BB /**

#### **Changing Social Services, Changing Communities: Focus on Leadership**

This course considers themes from 7AA in relation to leadership. Explores how broad contextual forces, particularly the rise of managerialism and cultural imperatives towards individual responsibility are embedded in organizational cultures and in practices of management and supervision. Identifies the impacts, tensions and dilemmas generated by these organizing forces for leaders who have commitments to care and justice. Considers possibilities and strategies for challenging and resisting oppressive structural arrangements, for using opportunities to promote the interests of service users and marginalized communities, for working toward equitable organizational practices, and for improving working environments.

**SOC WORK 7XX/****Leadership & Organizational Change: Theories and Praxis**

Presents an overview of theories of critical leadership theories and of social / organizational change: feminist, Indigenous, post-heroic etc. Includes attention to key debates in the critical study of leadership, the context-bound nature of leadership and approaches to social change, the identities and social locations of leaders.

**SOC WORK 7YY/****Critical Approaches to Evidence and Evaluation in Social Services and Communities**

Discourses of evidence-based practice increasingly permeate social services, and audit technologies abound. This course explores both the doing and discourses of research and accountability as they relate to critical practice in social services and communities. It supports students to examine the evaluation practices of a particular social service or community setting: to apply critical conceptual frameworks about evidence and accountability to the reporting requirements the agency engages and to the measures used to define success; and, drawing on literature in the field, to propose justice-focused improvements or alternatives.

**SOC WORK 7DD/****Community-Engaged Research & Evaluation seminar**

This course begins from the proposal students develop in SOCSCI7ZZ. Students will initiate dialogue with the agency or group for whom their proposal is intended. Supported by seminar discussion students will refine the proposal or take steps towards its implementation in dialogue with agency representatives, service users and community members. Major assignments include a draft plan and goals for the community engagement process b) a series of meetings with representatives of the community of interest to move forward on refining or implementing the CBR proposal, with short reflection papers linked to each meeting; c) a final assignment tailored to the student's project and stage of work.

#### 4.2 Unique curriculum or program innovations or creative components

Particularly in the course *Changing Social Services, Changing Communities: Focus on Leadership* we anticipate involving social workers and community workers currently providing leadership in human service agencies. Their 'leadership stories' will provide case studies for the course, with students encouraged to explore the dimensions of each case drawing on readings in other courses and their own leadership experiences. The *Community-Engaged Research & Evaluation seminar* will students offer a structured and well-supported opportunity to work with community partners, personalized and paced in relation to student and community partner readiness, and with deliberate attention to the integration of theory and practice.

#### 4.3 [For research-focused graduate programs] Nature and suitability of major research requirements

The proposed Graduate Diplomas aim to foster progressive (critical, ethical) leadership and research practices in social services and in communities. Both diplomas include a course, 7YY, specifically focused on critical approaches to evidence and evaluation in social and community service contexts. The Graduate Diploma in Community-Engaged Research and Evaluation supports students to develop a research proposal for and with a community partner. These research requirements are suitable for Graduate Diploma programs (discussed further in Section 6).

#### 4.4 Appropriateness of the courses for graduate level degrees

The programs described meet university requirements in terms of the minimum number of courses required for Graduate Diplomas (Graduate Diplomas at McMaster typically involve four half-courses), and the inclusion of elements appropriate to level. For learning outcomes and expectations, see Section 6.

Students with either Graduate Diploma may apply to Master's programs in accordance with the usual application procedures and deadlines. If admitted, students may apply to count completed diploma credits toward the course requirements of the Master's program. The transfer of credits in this manner will be at the discretion of the Associate Dean of Graduate Studies, Faculty of Social Sciences. If the credits are transferred, and the student has already been awarded the Graduate Diploma, then the diploma will be rescinded upon completion of the Master's program. This provision complies with the Senate's policy on double counting (Section 3.5 of the Senate Policy on Certificates and Diplomas).

### 5. MODE OF DELIVERY

#### 5.1 Appropriateness of proposed mode(s) of delivery to meet program learning outcomes and Degree Level Expectations and availability of necessary physical resources

Courses will be delivered in the classroom following usual course arrangements. However we expect to offer some courses in late afternoons or evenings, or weekends. We anticipate offering at least one course (likely 7YY) in the summer term, to respond to students' expressed interest in summer courses.

### 6. ASSESSMENT OF TEACHING AND LEARNING

- 6.1 Appropriateness of proposed methods for instruction and assessment of student achievement for intended Program Learning Outcomes
- 6.2 Plans for documenting and demonstrating the level of performance of students

## Graduate Diploma: Critical Leadership in Social Services and Communities

### Degree Learning Expectations for Graduate Programs

1. Depth and breadth of knowledge
2. Research and scholarship
3. Level of application of knowledge
4. Professional capacity / autonomy
5. Level of communication skills
6. Awareness of the limits of knowledge

Program Learning Outcomes			Program requirements
<i>By the end of the program, students graduating with a Graduate Diploma will:</i>	<b>Master's Degree Level Expectations</b>	<b>Teaching activities &amp; learning opportunities</b>	<b>Assessments and evidence</b>
	For each PLO, identify which DLE(s) it aligns with below.	What teaching activities & learning opportunities are students exposed to that will help them to achieve that PLO?	For each PLO, what is specifically collected from the student as evidence that they can/have achieved the PLO before they graduate?
A. understand how contemporary social, political and economic forces are (re)shaping social services and community work	1	7AA/ Changing Social Service Organizations: Implications for workers and service users OR 721/ Community, Citizenship and Social Justice	Major paper, focused on specific sector or setting with which the student is familiar, examining how the restructuring of social and community programs is (re)shaping work and interpersonal practices, and considering implications for identities and entitlements of workers and users of service in that sector  Major paper is a case study of a present-day popular attempt (successful or not) to form new or alternative policy on the municipal, provincial, federal or international level. The paper must include a clear discussion of the context of the movement, including how contemporary social, political and economic forces shape community and movement objectives, goals and tactics.

B. understand a range of theories of critical leadership and of social / organizational change, and the importance of aligning theories with contexts	1, 3, 4, 6	7XX/ Leadership & Organizational Change: Theories and Praxis	Paper outlining two or three leadership / change theories (situated in knowledge paradigms); use theory to reflect on their own practice and observation of leadership in social services and communities; outline resonance and dissonance of theory, limits, points of debate and tensions
C. demonstrate a capacity to understand how contemporary social forces shape leadership and leadership practices in social and community services, and identify, analyze and convey how justice-oriented leaders (can) create space for alternatives	3, 4, 5, 6	7BB / Changing Social Services, Changing Communities: Focus on Leadership	Analysis of leadership case studies presented by course guests with reference to knowledge in coursework  Presentation focused on specific sector or setting, focused on how the restructuring of social and community programs is (re)shaping governance in that setting; identify implications for leadership practice (constraints and possibilities)
D. be able to apply critical conceptual frameworks about evidence and accountability to research and evaluation practices in social services and communities, and to generate and communicate multiple possibilities for justice-oriented alternatives or improvements	3, 4, 5, 6	7YY/ Critical Approaches to Evidence and Evaluation in Social Services and Communities	Analysis of research/ evaluation/ accountability requirements and practices in a setting with which student is familiar  Presentation that applies critical conceptual frameworks to these requirements and practices: identifying contradictions, limits in relation to justice agenda; proposes alternative practices

This graduate diploma fully meets some of the key degree learning expectations of a Master's program. *Autonomy and professional capacity*, for example, will be among the criteria for applicant selection; we intend to draw into the program students who are already exercising initiative in their work settings, and taking personal responsibility for progressive change in those settings. *Autonomy and professional capacity (4)* and *Awareness of limits of knowledge (6)* - are deliberately nurtured in course assignments (particularly in 7XX and 7BB) that require students to address the complexity of (their own) leadership knowledge: to reflect carefully and critically on specific leadership practices (their own, and that of local leaders who will be classroom guests) in relation to the social forces operating in their settings at this point in time, to articulate the broad implications of their and others' actions, and to deliberately consider alternative approaches and interpretations.

This Graduate Diploma does not, however, meet Master's level DLEs with respect to research and scholarship, as it does not focus on developing research-related competence.

## Graduate Diploma: Community-Engaged Research and Evaluation

### Degree Learning Expectations: Graduate Programs

1. Depth and breadth of knowledge
2. Research and scholarship
3. Level of application of knowledge
4. Professional capacity / autonomy
5. Level of communication skills
6. Awareness of the limits of knowledge

Program Learning Outcomes		Program requirements	
	Master's Degree Level Expectations	Teaching activities & learning activities	Assessments and evidence
<b><i>By the end of the program, students graduating with a Graduate Diploma will:</i></b>	For each PLO, identify which DLE(s) it aligns with below.	What teaching activities & learning opportunities are students exposed to that will help them to achieve that PLO?	For each PLO, what is specifically collected from the student as evidence that they can/have achieved the PLO before they graduate?
A. understand and be able to apply critical conceptual frameworks to evaluation practices in social services and communities, and identify justice-oriented alternatives or improvements	1, 3, 5, 6	7YY/ Critical Approaches to Evidence and Evaluation in Social Services and Communities	Analysis of research/ evaluation/ accountability requirements and practices in a specific social service or community setting  Presentation that applies critical conceptual frameworks to these requirements and practices: identifying contradictions, limits in relation to justice agenda; proposes alternative practices
B. understand the historical, theoretical and ethical bases of community-based research and be able to apply and communicate CBR principles	1, 2, 3	SOCSCI 7ZZ / Critical Approaches to Community-Based Research	Reflection papers on approaches to CBR, CBR ethics, CBR outcomes and social justice  A major paper: identify a community of interest; situate yourself in relation to the community (consider issues of social location, shared or different life experience, power and legitimacy etc); describe an issue of concern for the community; drawing on course readings, propose a CBR approach to addressing community concerns; include critical reflection on your proposed approach

C. demonstrate a capacity to undertake a research-related community engagement process	[2], 3, 4	7DD: Community-Engaged Research & Evaluation seminar	<p><i>Assignments in this course will be designed to accommodate students at various stages. For those early in a process of connecting with a community group, a refined version of the CBR proposal created in 7ZZ could be the final course assignment; for those well into the process, the final assignment could be an ethics application, and/ or a report on preliminary data generation.</i></p> <p>With faculty support as needed, students will make/ formalize contact with representatives of their community of interest.</p> <p>Major assignments include: a) a draft plan and goals for the community engagement process, presented to the class and refined in discussion b) a series of meetings with representatives of the community of interest to move forward on refining or implementing the CBR proposal, with feedback from community partners and a short reflection papers linked to each meeting; c) a final assignment tailored to the student's stage of work as described above.</p>
D. understand, and be able to communicate and apply, knowledge mobilization (KM) concepts	1, 3, 4	SOCSCI 700/ Impacts and Uses of Social Science Research	<p>Students will work in teams to devise a knowledge mobilization project, meeting regularly with their KM mentor (either a McMaster faculty or representative from community agency)</p> <p>Assignments include a) KM proposal, drawing on relevant literature and b) a critical reflection paper based on the KM project experience.</p>

This Graduate Diploma addresses many of the learning expectations of a Master's degree. Students will have multiple opportunities to demonstrate capacities in relation to *Communication skills*, and *Application of knowledge*: in assignments that test oral and written presentation skills, and in community engagement processes that require effective interpersonal communication and group facilitation. These skills are explicitly assessed: in 7ZZ, for example, students will be provided feedback from instructors on the effectiveness of their research proposals along the dimensions that funding agencies employ, and in 7DD, students will receive feedback from community partners on the effectiveness of their presentation and engagement skills.

However this Graduate Diploma does not meet all expectations at the same level as students in Master's programs do. For example, in relation to *Awareness of limits of knowledge* (5), while graduates from the Diploma will have an appreciation of the complexity of knowledge, they will have only beginning knowledge of the potential contributions of other methods and disciplines. Similarly, in relation to *Autonomy and Professional Capacity* (4), students will develop qualities and transferrable skills for employment, including around the exercise of initiative and personal accountability, but will be early in their preparation for decision-making in complex situations.



## **7. RESOURCES FOR ALL PROGRAMS**

- 7.1 Administrative unit's planned utilization of existing human, physical and financial resources and any institutional commitment to supplement the resources

As noted above, this proposal requires the addition of a .5 FTE Administrative Assistant. The position will be integrated carefully with the current administrative roles.

- 7.2 Participation of a sufficient number and quality of faculty who are competent to teach and/or supervise in the program

The substantive areas addressed by faculty members' research span social work's central commitment to addressing individual and social problems and to the pursuit of social justice. Included in the composite picture of faculty colleagues' research is attention to particular social and health problems and to the experience and knowledge of populations who are marginalized (e.g. Aboriginal communities, people living with HIV/AIDS, elderly people in poor health, people with intellectual disabilities, children and youth deemed at risk, low-income families, women living with breast cancer, immigrant communities). Many faculty members have specifically focused on how these populations and communities have come together to press for changes in the conditions of their collective lives. Faculty members' research has examined, as well, how discursive and material changes linked with the retrenchment of the welfare state have created particular tensions in the leadership and accountability practices of social service and community agencies.

Included among faculty members' research and teaching is attention to a wide range of practice issues: direct service practices, advocacy, community development, community-based and participatory research, pedagogy, policy design, program evaluation, and practice-based research.

- 7.3 Evidence of adequate resources to sustain the quality of scholarship produced

Library and information technology supports are adequate to sustain students' learning and scholarship. In the first year of the program we anticipate focused purchasing of monographs in critical management studies, critical studies of public service leadership, and community-based research and evaluation; beyond this, monograph purchasing will be integrated into regular library purchasing.

## **8. RESOURCES FOR GRADUATE PROGRAMS**

- 8.1 Plans for adequate numbers of faculty and staff to achieve program's goals

As described above, the School will require a .5 FTE Graduate Administrative Assistant to support the new programs.

In terms of faculty: The School's 2014 IQAP report highlighted the anticipated retirements of senior and very experienced colleagues. The reviewers recommended mid-career replacements for two retiring colleagues, and extension of the current CLA position (responsible for Field Development and Support at the undergraduate level).

In light of these recommendations, and in anticipation of these new graduate programs and expansion of graduate-level enrollment, faculty requirements are as follows:

- An Associate-level position to enhance capacity for graduate teaching, augment the School's substantive strengths in social service leadership, and take up administrative roles related to the new programs
- A .5 Assistant-level position to augment the School's strengths in community-engaged research and evaluation

#### 8.2 Plans to provide the necessary financial assistance for student

Graduate diploma students will not receive financial assistance from the University; however some may be able to secure support from their employers.

#### 8.3 Evidence that faculty research supervisors have ongoing funding, space and relevant research infrastructure to support students in program

The Graduate Diplomas will be coursework only. Faculty research funding, space and infrastructure are thus somewhat less directly salient to students' success than they are in other programs. Table 2 outlines research funding secured over the past five years by faculty members in the School of Social Work.

#### 8.4 Supervisory load distribution and qualifications

The Graduate Diplomas are course-based; supervision is not required for graduate diploma students. Table 1 outlines which faculty members are best prepared to teach in the Graduate Diploma in Critical Leadership in Social Services and Communities, and which in the Graduate Diploma in Community-Engaged Research and Evaluation.

#### 8.5 Evidence of prior experience in graduate teaching and research supervision for faculty

The School's annual admission target to the MSW program since 2008 (when the School's PhD program started) has been fifteen (15) students. Prior to that, we

typically admitted twenty (20) new students per year. The School's faculty members thus have substantial experience in graduate teaching and supervision.

## **9. QUALITY AND OTHER INDICATORS**

- 9.1 Definition and use of indicators that provide evidence of quality of the faculty
- 9.2 Evidence of a program structure and faculty research that will ensure the intellectual quality of the student experience

The research profile of the School's faculty indicates energetic and successful engagement in building knowledge, often in collaboration with community organizations and other disciplines. Description of these engagements in quantified terms conveys only a limited and partial picture of faculty activities, but an institutionally required summary of collective faculty scholarship on key indicators in 2012 was as follows: a) Peer-reviewed publications: 28 journal articles published, 18 journal articles accepted, 1 book; b) Conference presentations: 28 peer-reviewed, 23 invited; c) SSHRC & CIHR grants: 8 principal investigators, 17 co-investigators.

The substantive areas addressed by faculty members' research span social work's central commitment to addressing individual and social problems and to the pursuit of social justice, as outlined above. Methodologically, faculty members employ a range of critical approaches to knowledge-building (e.g. community-based, participatory, indigenous, arts-informed) – approaches that align with the School's focus on social justice and on power relations in research and practice.

Faculty members' research is funded by a variety of academic, community and professional sources, including academic granting councils, provincial, federal and municipal governments and foundations, and internal university funds for pedagogical research or pilot studies. Faculty members' success in publishing in theoretical, applied/professional, and public arenas is an area of particular strength in the School, and the range of outlets for publication is, as should be expected, wider than that found in an academic department including not only peer-reviewed disciplinary, interdisciplinary and professional journal articles and books, but also reports prepared in partnership with community-based organizations and advocates; reports prepared for governments; and research summaries and commentary prepared for wider audiences of concerned citizens.

## **10. CONSULTATION PROCESS**

- 10.1 Description of the consultation process undertaken during the development of the proposal

As part of the School's IQAP review in the spring of 2014 a group of community partners were asked to comment on the School's plans for graduate expansion. The group endorsed the idea of programs on social service leadership and on community-engaged research and evaluation. They noted in particular that

programs focused on critical analysis of trends in social service organizations and in communities, and in preparing students for ethical and effective leadership in increasingly difficult social and organizational contexts, would be an important and welcome contribution.

A planning group was struck in May of 2014 to develop this proposal. A draft proposal was presented at a faculty meeting in September 2014. At this meeting we had a wide-ranging discussion about student learning outcomes, and also about the contributions we hope these programs will make to the community and the discipline.

In October the School hosted a community consultation workshop, to which community partners, BSW program field instructors, and all alumni were invited. A 3-page description of the proposed programs was circulated to everyone who registered. Approximately 35 people attended, representing small grassroots organizations as well as large public sector institutions. The event began with a presentation by Jane Aronson, former Director of the School, about her research with social workers in positions of leadership in social and health service organizations. Professor Aronson reflected on the tensions public sector leaders experience between managing with a commitment to care and social justice and the imperatives of efficiency-driven organizational structures. Her presentation offered both motivation and rationale for the proposed programs.

After an overview of the program structure, workshop participants divided into groups to discuss the specific programs. Flip chart notes and audio recordings captured workshop participants' interest in the programs and the potential they perceived (personally, and for the wider community); ideas about what the program would have to include / offer / emphasize, for them to 'sign up' or endorse the programs; and ideas about missing aspects of the programs, or aspects that raised concerns. Key recommendations from this consultation have been integrated into this proposal and suggestions about more specific aspects of the program focus and organization documented for review as we further develop courses.

In summary, there is enthusiasm for these programs on the part of key leaders in local social services; the School's BSW and MSW alumni (many of whom are potential students); and current faculty. While our goals differ in some dimensions, we share the hope that the programs become a space for critical reflection on contemporary tensions in social services and communities and on the theory and practice of justice-oriented leadership and research in these contexts. Many of the people involved, as well, hold wider ambitions: that program graduates will contribute to a cultural shift in the very ideas of leadership and evaluation and their purposes, and, in so doing, will further the interests of services users and equity-seeking groups.

## REFERENCES

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- Sieppert, J., Brown, L., & Hladki, J. (2014). Institutional Quality Assurance Review: School of Social Work, McMaster University.

# APPENDIX A

# TABLE 1

The intent of this Table is to establish the strength and the focus of involvement of the faculty complement participating in each Graduate Diploma and whose CVs are provided in Appendix C.

Faculty Members in Graduate Program			
Faculty Name & Category of Appointment	Home Unit <sup>1</sup>	GD in Community-Engaged Research & Evaluation	GD in Critical Leadership in Social Services and Communities
<i>Category 1</i>			
Jane Aronson - Professor	Social Work		X
Stephanie Baker Collins- Associate	Social Work		X
Roy Cain - Professor	Social Work		
Mirna Carranza - Associate	Social Work	X	
Gary Dumbrill - Associate	Social Work	X	
Bonnie Freeman - Assistant	Social Work		X
Ann Fudge Schormans - Associate	Social Work	X	
Jim Gladstone - Professor	Social Work		
Saara Greene - Associate	Social Work	X	
Ameil Joseph - Assistant	Social Work		X
Sandra Preston - Assistant	Social Work		
Sheila Sammon - Professor	Social Work		X
Jennie Vengris - Lecturer	Social Work		
<i>Category 2</i>			
Donna Baines - Professor	Labour Studies/Social Work		
Randy Jackson - Lecturer	Social Work/Health, Aging & Society	X	
Chris Sinding - Professor	Social Work/Health, Aging & Society		
Rachel Zhou- Associate	Social Work/IGHC		
<i>Category 3</i>			
James Gillett - Associate	Health, Aging & Society	X	
Ailsa Fullwood - Research Facilitator & Knowledge Broker	Faculty of Social Sciences	X	

- Category 1: Core faculty members whose graduate involvement is exclusively in the School of Social Work.
- Category 2: Faculty members who are involved in teaching and/or supervision in other graduate program(s) in addition to being a core member of the graduate program under review.
- Category 3: Non-core faculty and instructors who participate in the teaching of graduate courses.

## APPENDIX A

**TABLE 2**

This table is intended to show the amount of funding available to support faculty research, over the past five years.

Year	SSHRC <sup>1</sup>		CIHR <sup>1</sup>		Other Peer Adjudicated		Other <sup>2</sup>	
	PI	Co-I	PI	Co-I	PI	Co-I	PI	Co-I
2010-11	14,036	618,241	222,013	2,161,610	190,520	0	22,300	2,448
2011-12	14,036	615,159	201,679	3,004,776	112,500	0	24,873	29,277
2012-13	14,036	615,159	226,638	3,535,939	112,500	453,809	5,000	39,005
2013-14	16,275	1,072,410	376,401	3,536,806	352,399	635,572	59,000	86,500
2014-15	65,717	1,054,294	351,401	2,393,880	157,251	428,809	103,010	38,112
Totals	124,100	3,975,263	1,378,132	14,633,011	925,170	1,518,190	214,183	195,342
	Total from SSHRC: 4,099,363		Total from CIHR: 16,011,143		Total peer adjudicated research grants, from agencies other than SSHRC and CIHR: 2,443,360		Total workshop, conference, and University allocated grants: 409,525	
	Total from Granting Councils: 20,110,506							

1 - Not including conference grants, equipment grants, or grants allocated by the university.

2 - Includes workshop and conference grants, and university allocated grants (such as SSHRC minor grants).



**LIBRARY RESOURCES TO SUPPORT THE  
PROPOSED NEW GRADUATE DIPLOMAS IN  
*CRITICAL LEADERSHIP IN SOCIAL SERVICES AND  
COMMUNITIES AND COMMUNITY-ENGAGED  
RESEARCH AND EVALUATION*  
APRIL 2015**

The University Library has evaluated our collection to support the current and potential information needs of students and faculty for the School of Social Work's proposed Graduate Diploma programs in Critical Leadership in Social Services and Communities and Community-Engaged Research and Evaluation.

As noted in the School's proposal, the new programs will draw on current School of Social Work faculty. The programs are course-based, incorporating both existing and several new courses to be developed, and while papers and presentations are anticipated as program requirements, the Diplomas will not include a thesis component. These factors help to shape the Library resources that students in the programs will require.

The Library provides resources in a variety of formats to support existing graduate programs and faculty research in the School of Social Work as well as related departments within the Faculty of Social Sciences, including Sociology, Health, Aging and Society, Economics, and Political Science. Resources related to leadership, management, and business are also acquired to support graduate-level research and teaching in the DeGroote School of Business. This being the case, we believe that the resources available provide sufficient scholarly support for the teaching and research needs of this program.

The School's proposal notes that focused purchasing of monographs in critical areas is expected during the first year of the program. The Library welcomes input from the School regarding needed information resources and priority of acquisition within the established budget for Social Work. A weakened Canadian dollar and increasing costs will make little additional money available in the Library's budget in the coming year, and assessing priorities will be a necessary part of acquiring the best resources for the School's needs. If further new courses or research areas are identified as additions to the program, they may require resources not currently available in the Library's collections and subscriptions. It will be important for the School to involve the Library early in any discussion of these changes or areas of growth.



## **LIBRARY RESOURCES**

### **Collection Development**

Library materials are obtained in a variety of ways, including firm and standing orders, monograph approval plans (in some areas), electronic and print subscriptions, consortial e-journal and e-book packages, and user-driven acquisition. Each department nominates a Faculty Library Representative from among their faculty. The function of the Library Representative is to serve as a communications link between the department and the Library, to assist us in making decisions about the value to students and faculty of new or existing electronic resources or serial subscriptions, and to recommend monograph titles for acquisition by the Library. As such, the Library Representative has an important role in shaping the Library's collection development.

### **Monographs**

McMaster University Library's holdings currently total more than two million volumes, with nearly 1.9 million distinct titles. The total annual expenditure on individual monograph acquisitions (i.e., those not purchased in large e-book packages) by the University Library in all formats is approximately \$700,000.

Print books, print journals, and reference resources for students in the School of Social Work's graduate programs are housed primarily in Mills Memorial Library (Humanities and Social Sciences). Some print resources relevant to these new programs may also be found in the Innis Library, which supports the DeGroote School of Business. Additionally, the Library has purchased or subscribed to more than 600,000 e-books and makes additional e-book titles available through a user-driven "on demand" process.

### **Serials & Electronic Resources**

The Library has purchased or maintains subscriptions to a range of electronic resources, including research databases, full text journals, monographs, numeric data and government publications. In addition, the Library identifies and provides access to select freely available material such as open access journals.

McMaster University Library participates in national (i.e., Canadian Research Knowledge Network) and regional (i.e., Ontario Council of University Libraries) consortium licenses for access to full-text electronic resources and whenever possible registers for campus-wide electronic access instead of print subscriptions. All full-text journals are accessible through the library's online catalogue (<http://library.mcmaster.ca/catalogue>) and through the e-journals portal at <http://sfx.scholarsportal.info/mcmaster/a-z>. The Library has embedded linking technology (SFX) into research databases, which allows users to link directly from the databases to full-text e-journal subscriptions or to our catalogue.

McMaster University students, faculty and staff may access electronic research databases and full-text electronic books and journals from on- or off-campus via the Library's proxy server.

Currently the McMaster community has access to over 800,000 electronic resources, including approximately 86,000 electronic journals and 678,000 e-books. The major e-book, conference proceeding, standards, and online journal suites which may be helpful to graduate students in the School of Social Work are:

- Books @ Scholars Portal
- Canadian Health Research Collection
- Canadian Public Policy Collection
- Journals @ Scholars Portal
- LGBT Life With Fulltext
- OECD iLibrary - Health Statistics
- ProQuest Sociology
- SpringerLink
- Springer e-books

## **REFERENCE RESOURCES**

### **Selective list of multi-disciplinary indexes and abstracts:**

- Academic OneFile
- Ageline
- ASSIA - Applied Social Sciences Index and Abstracts
- Canadian Research Index
- CINAHL
- Contemporary Women's Issues
- CPI.Q - Canadian Periodicals Index
- IBSS (International Bibliography of the Social Sciences)
- ProQuest Dissertations and Theses
- PsycInfo
- Social Sciences Abstracts
- Social Sciences Citation Index
- Social Services Abstracts
- Social Work Abstracts
- Sociological Abstracts

## **INFORMATION RESOURCES EXPENDITURES**

The Library's total Information Resources budget for fiscal year 2013/14 was \$7.475 million. The annual expenditure figures for the acquisition of library materials for the School of Social Work over the past five fiscal years are listed in Appendix A.

It is important to note that many of our serials subscriptions are now online and are paid from a centralized Library electronic resources budget, which in part accounts for the declining figures in serials expenditures at the department level. In addition to those expenditures specific to the School, the Library now spends in excess of \$4.9 million annually on electronic resources, many of which are multi-disciplinary.

Overall Library acquisitions expenditures have increased somewhat in the past five years. Significant pressure remains on the Library's Information Resources budget, due chiefly to the annual inflation of serials and e-resource subscriptions. The recent weakening of the Canadian dollar has had a significant impact on university library budgets across the country, as much of our spending occurs in non-Canadian currencies. The Library's memberships in national and regional consortia have reduced some costs and enabled access to many more resources than the budget funds would normally permit.

## **LIBRARY FACILITIES AND SERVICES**

The libraries of the University Library system are open approximately 97 hours per week during the term, with extended hours during examination periods. The Learning Commons at Mills Library is open until 2:00 AM five days per week (Sunday-Thursday) during the term to provide late-night study space. Both the Mills Learning Commons and the Thode Science and Engineering Library provide later hours on Fridays (until 10:00PM) during the term and are open 24/7 during exam periods. Combined, the library systems offer 3,200 public seats, 23 group study rooms, and 191 public computer stations. The library system includes two instructional spaces: the Wong Electronic Classroom in Mills Library and the ThInK Space in Thode Library, both of which can accommodate groups of up to 43 people. Videoconferencing and presentation facilities are available in the Connection Centre (43 seats), also located in Mills Library. Wireless network service is available throughout the libraries.

In January 2014 the University Library opened a dedicated graduate study room in Mills Library. The Graduate Reading Room is available to any currently registered graduate student or post-doctoral fellow as a space for reading or other quiet work, and is accessible during Mills Library's opening hours. Further information is available at <http://library.mcmaster.ca/news/22570>.

### **Library Catalogue**

Monographs, journals, and many other Library resources in both print and electronic formats are catalogued. Print resources are generally shelved by call number using the Library of Congress Classification system. The online catalogue (<http://library.mcmaster.ca/catalogue>) provides access to all collections of the libraries at

McMaster [Mills Memorial Library, H.G. Thode Library of Science & Engineering, Innis Library (Business), and the Health Sciences Library]. Most items circulate, with the exception of print journals, some government publications, special collections, and reference materials.

Information about all library materials, hours, services, the online catalogue, and access to electronic products is provided through the Library's website at <http://library.mcmaster.ca>.

### **Research/Reference Help**

Library staff provide research help (reference assistance) both in person at service desks in each library and remotely by telephone and e-mail. Research help is also available via chat using "Ask a Librarian," a consortial service provided by ten Ontario university libraries, facilitated by the Ontario Council of University Libraries (<http://ocul.on.ca/node/2121>). A dedicated librarian position, the Research and Advanced Studies Librarian, provides library instruction and more advanced reference consultations for McMaster graduate students, working in collaboration with other librarians and library staff.

### **Interlibrary Loan & Reciprocal Borrowing**

For items not available in McMaster's libraries, students can use RACER (<http://library.mcmaster.ca/borrow/ill>), OCUL's web-based interlibrary loan system, to borrow books, theses, government publications or copies of journal articles from libraries within Canada and elsewhere.

[Reciprocal agreements](#) with various library consortia allow McMaster faculty, staff, and students to borrow in person from other university libraries in Canada. McMaster faculty may also obtain borrowing privileges at many major university libraries in the United States (<http://www.oclc.org/membership/advisorycommittees/profile8.htm>).

### **Library Outreach**

McMaster University students, faculty and staff are encouraged to keep abreast of new services and developments in the Library by reading our *News & Events* blog (<http://library.mcmaster.ca/news>) or by subscribing to one of many library RSS feeds. In addition to our website, the Library maintains a social media presence, including Twitter feeds for both the University Library system overall (@maclibraries) and individual libraries such as Mills Memorial Library (@MacMillsLibrary), and Facebook pages, which share news and information.

Members of the Faculty of Social Sciences also participate in the University Library Advisory Council (<http://library.mcmaster.ca/content/university-library-advisory-committee-ulac-0>). The Council is an important aspect of both keeping the McMaster community abreast of developments in the Library and of incorporating community input into the Library's planning processes.

## Appendix A

SCHOOL OF SOCIAL WORK					
MONOGRAPH / SERIALS EXPENDITURES					
FY 09/10 - 13/14					
FISCAL YEAR	MONOGRAPH EXPENDITURES	NUMBER OF MONOGRAPHS PURCHASED	SERIALS EXPENDITURES	TOTAL	ELECTRONIC RESOURCES (Library Expenditures)
09/10	\$7,931	169	\$3,553	\$11,485	\$4,162,408
10/11	n/a	n/a	\$4,196	n/a	\$4,400,473
11/12	\$3,355	63	\$3,303	\$6,658	\$4,575,953
12/13	\$3,628	70	\$3,485	\$7,114	\$5,360,886
13/14	\$5,029	73	\$2,658	\$7,688	\$4,922,067
<b>Notes:</b>	FY13/14 - Monograph and serials expenditure amounts drawn from Symphony (library management system) rather than the university's financial system				
	FY12/13 - Additional one-time purchases of electronic resources increased the Library's expenditures in this area				
	Beginning FY11/12 - Number of monograph purchases reflects titles rather than volumes (i.e., a multi-volume work is counted as one title) and does not include microfiche or microfilm				
	FY10/11 - Tested a different budget model that did not provide separate department-level monograph funds				
	FY09/10 – Short-term e-book loans are included in the monograph expenditures. Not included in the monograph expenditures for subsequent years.				

McMASTER UNIVERSITY  
GRADUATE PROGRAM PROPOSAL BRIEF  
FOR THE PROGRAM  
MASTER OF ARTS IN MUSIC EDUCATION AND COGNITION  
[MMEC]  
April 17 2015

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## 1. PROGRAM

### 1.1. Consistency of program with University's mission and academic plan.

Recent years have seen tremendous advances in the fields of cognition and education. Allied with these advances have been important initiatives connecting health with the arts. This program aims to equip music educators and leaders in Ontario with knowledge and tools that will enable them to apply these advances in our understanding to “real world” situations, thereby enhancing our educational programs for the future, and enriching our contemporary community musical experiences. “One sentence from *Forward with Integrity* that seems to have resonated across campus these last two years is the simple assertion that ‘we are an institution devoted to the cultivation of human potential.’ Whatever validity and reasonableness we may wish to ascribe to other claims for what it is we are supposed to be doing in a university—equipping people to earn a living and to build a career, for example—those pale in comparison with the much greater ambition of fostering the human potential of our students, ourselves, and our society.”<sup>1</sup>

The central focus of the M.A. in Music Education and Cognition is the enhancement of culture, the enrichment of individual experience, and the integration and well-being of community and society through the development of strong and visionary leaders in Music Education and Cognition who will be equipped to foster passion and excitement for music at all ages and in a variety of contexts. The goal of the proposed program is to offer students a high-quality course of study that develops and enhances their understanding of the principles and practice of music in relationship to the broader contexts of human interaction, education, cognition, and society. This program supports active community engagement with music in schools, studios, amateur and professional music ensembles, and community organizations. Through application of expert knowledge in cognition and education we aim to enhance community wellness and to provide an integrated environment in which the arts can flourish in Ontario as part of an overall strategy of health and community.

Recent research has revealed that exposure to and engagement with music can bring about beneficial changes within cognition and can be used to modify and repair impaired-brain functioning; different types of developmental assets, both personal and social, are acquired from learning music, which, in turn, can have positive effects on emotional and psychological states; music fosters social well-being and can be used to improve the quality of life of vulnerable people within the community. This program will link neuroscience, cognitive science and educational research with music through a unique set of specially designed courses delivered by highly qualified faculty with interdisciplinary interests and skills. It will prepare students to use some of the most recent breakthroughs within the field of music education and cognition, preparing them to be innovators within the field of music cognition research, the education profession, and the broader music-making community. In doing so, it will prepare students to deal with complex concepts and the body of knowledge required of modern music-professionals.

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<sup>1</sup> Patrick Deane, “FWI: REFLECTIONS ON THE LANDSCAPE”. October 8, 2013.

The program is connected directly with the research interests and activities of the music faculty. The range of courses offered grows out of the research foci of the faculty, and connects with the most relevant nodal points where music interacts with society on multiple levels, whether in early-childhood development, the Ontario School Music Program, music in the community, or cutting edge research in the psychology of music. Current research activities of faculty will serve as models for best practice in the field.

The program brings together two areas of concentration, Education and Cognition, the former being strongly connected to community and to professions that engage with all levels of society from infancy to old age; the latter being focused on the research element, and connecting strongly with psychology and other disciplines—education alone, without a strong theoretical foundation is not robust; research alone without the practical connection to the community is nebulous. Faculty and students will be involved in a range of research activities in both the lab and the community: in community music ensembles, in private studios, and in the school systems. Together these two areas of concentration, education and cognition, build strong, balanced researcher-practitioners that are qualified to take leadership roles in the community, in public and private education, and to continue to pursue higher education at the doctorate level.

The program will encourage entrants directly from Bachelor's degrees, as well as more mature students from a range of professional and educational fields in the music industry. These goals are in harmony with McMaster's mission; we believe that the unique and innovative features of the program, coupled with an outstanding faculty will indeed contribute to McMaster's vision of "international distinction for creativity, innovation and excellence".<sup>2</sup> Central to the program is its intention to offer courses that are taught by active researchers in areas that are closely related to their research. In doing so, it aspires to foster critical thinking and a passion for learning among its students. The program is linked to the scholarly interests and activity of the Music faculty.

In accord with McMaster's vision, and its recent initiative, the Network for Community Campus Partnerships, the skills developed in this program will enable students to continue to grow after graduation as they contribute to their community music and educational organizations, and will enhance their career possibilities as they engage with a broader array of knowledge and professional skills.

The program is course based, requiring the completion of seven half-courses, plus one non-credit pass/fail course. The program is built around a core of five courses, MMEC 701-705 which explore key components of the program-Music Cognition, Research Methods, Community Music and Wellbeing, Musical Development and Education, and Music Analysis. Students are required to complete four of these five courses.

Surrounding this core is a series of additional courses that round out the program and provide a range of choices to the student. MMEC 706 is a reading course that allows the student to explore a particular area of interest in greater detail; MMEC 707 and 708 are Minor and Major Research Projects that give the student the opportunity for a more extensive experience in independent research. MMEC 709 and 710 are performance and pedagogy courses that provide opportunities to expand their musical potential and to

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<sup>2</sup> *McMaster Institutional Vision, Mission and Proposed Mandate Statement*, March, 2014.

apply theoretical concepts in music-making. MMEC 711, the Portfolio, a non-credit pass/fail course, is a forum which supports students in bringing all the threads of their graduate experience into a single comprehensive package.

A series of electives at the 600 and 700-levels provides opportunities for students to broaden their educational experience in both music and in related fields of inquiry, such as Cognitive Science of Language, Communication and New Media, Cultural Studies and Critical Theory, and Psychology, Neuroscience and Behaviour.

We have designed this program to be especially economical in terms of the use of faculty, administration, and physical resources. It requires only 9 units of instruction per year beyond our current offerings and it uses existing administrative resources. The existing range of laboratory and seminar spaces in the School of the Arts, will serve the needs of this new program.

McMaster is an ideal site for this new program, both in terms of the Music Faculty Complement, but also in terms of the broader academic and research contexts of centers such as CanChild, Collaborations for Health, Communication Studies, the Institute on Globalization & the Human Condition, Health, Aging, & Society, the Cognitive Science and Language Program, McMaster Institute for Innovation and Excellence in Teaching and Learning (MIETL), and McMaster Institute for Music and the Mind (MIMM).

In harmony with McMaster's goals, we will foster in-depth inquiry into the cognitive foundations of music, along with exposure to the richness of this nascent field of human exploration; we will be encouraging and equipping graduates to share their knowledge and enthusiasm with all levels of community music making; and we will be training young scholars in preparation for further study beyond the Masters degree.

According to McMaster's Vision Statement, "Research excellence and graduate education are inextricably linked. World-class researchers attract top graduate students, and top graduate students and postdoctoral researchers play an important role in expanding the University's research reputation. But universities will also be faced with increased demand for broadly based interdisciplinary Masters programs as educational expectations in society rise." We have built a proposal that matches the expectations of this vision statement.

### **The need for such a program in Ontario**

Research indicates that music education contributes to cognitive development: stronger connections between brain regions, more grey matter, improved brain structure and function, better memory and attention, higher IQ.<sup>3</sup> The quality of a child's music education is linked to their academic achievement. Elementary school students in higher quality music education programs had 20% improvement in standardized tests of English and math.<sup>4</sup> The thrust of this new program is to give teachers and leaders the skills and knowledge to be able to make this difference in learning and in cognitive development,

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<sup>3</sup> E. Glen Schellenberg, "Music Lessons Enhance IQ" *Psychological Science* 15.

<sup>4</sup> C. M. Johnson and J. E. Memott, "Examination of Relationships between Participants in School Music Programs of Differing Quality and Standardized Test Results", *Journal of Research in Music Education*. Vol. 54 (Winter 2006), Number 4.

building stronger minds for Ontario's knowledge-based economy. We believe strongly that this approach will be of particular service to the disadvantaged in our society, who often fail to live up to their potential due to insufficient quality of musical leadership and involvement.

This program is about connecting the principles of music cognition with their application in real-world situations from infancy through to adulthood. While we include classroom pedagogical strategies in the program, our focus is based more broadly on how people learn music, and on how this new wave of evidence-based knowledge can be implemented in music learning at all ages.

Our program will appeal to an array of students and professionals: professional music teachers, performers who are interested in teaching inside and outside of the usual school system, and private studio teachers, as well as an array of community music leaders.

Six Ontario universities offer master's degrees in music, with a variety of foci (see Table 1). These programs can be classified as (a) academic programs (Carleton, Ottawa, Toronto-Musicology, and York) which prepare students for Ph.D. studies; (b) Music Education programs (Toronto, Western), which are terminal degrees intended to ramp up the skill-sets of school music teachers; and (c) music and health (Wilfrid Laurier). The MMT at Wilfrid Laurier is a specialized technical program; the MA in Community Music is a brand-new program which is intended to enhance the skills of community music leaders.

In comparison to the above programs, the proposed MA in Music Education and Cognition at McMaster is distinctive in that it combines an academic rigour on the Music Cognition side, with an outreach and community directed focus on the Music Education side.

Table 1. For each university, only the master's programs most closely related to this proposal are included.

School	Degree	Focus of the program	Program length
Carleton	M.A.	Music and Culture	2 years
<b>McMaster</b>	<b>M.A.</b>	<b>Music Education and Cognition</b>	<b>1.5 years</b>
Ottawa	M.A.	Musicology or Theory	2 years
Toronto	M.A.	Musicology Music Education	2 years 1 year
Western	M.A.	Music Education	2 years
Wilfrid Laurier	M.A. MMT	Community Music Music Therapy	2 years 2 years
York	MA	Musicology	2 years

Through the international exposure and attention attracted by the McMaster Institute for Music and the Mind and our exciting young faculty, music faculty members are regularly contacted by prospective students interested in pursuing graduate musical study at McMaster. The recent opening of the LIVE Lab has further enhanced McMaster's reputation as an international hub for music cognition research. The 2016

opening of L.R. Wilson Hall, McMaster's new home for the liberal arts, which will include a state-of the art concert hall, practice and performance studios, will further enhance McMaster's reputation for the arts and more strongly connect it with the community. Our burgeoning and unique B. Mus. in Music Cognition is also producing a continual demand from students who see the value of this field of study and would like to enhance their knowledge and skills.

Graduates from our program will have a deep insight into the cognitive aspects of music and their application to music education. Graduates will be uniquely qualified, whether they continue into further education and research, into the teaching profession, or into community music making. They will be equipped to apply the insights of the latest research in music education and cognition to practical applications in the community, in infant musical-exposure and interaction, in the school system, in the private teaching studio, and in community music programs and performing ensembles. They will bring a deeper understanding to their practice as performers, teachers, and music leaders.

We expect that most graduates of this will program will directly apply their knowledge and skills in improving the quality of music education in the Province of Ontario, building stronger minds capable of competing in the global economy of the future. Others will directly apply their knowledge in raising the quality of music instruction in private music schools and studios throughout the province. Still others will take their knowledge and skills into the world of community music-making, where life-long learning and wellness are explored as keys to a healthy society. Others will apply their knowledge directly in their own professional music-making in the thriving music industry of the Hamilton and Toronto regions. Still others will use this program as a springboard to further research and development in doctoral programs in Canada and abroad.

### **1.2. Clarity and appropriateness of program requirements and learning outcomes in meeting the University's Degree Level Expectations**

Growing out of our overall objectives and context stated above, we have generated a series of Program Learning Outcomes that will equip graduates appropriately for work in the field. The following table lists the Program Learning Outcomes and indicates how they align with the requirements of the University's Degree Level Expectations for the Master of Arts.

<b>Program Learning Outcomes (PLOs)</b> <b>A Student graduating with an M.A. in Music Education and Cognition will . . .</b>	<b>Degree Learning Expectations (DLEs)</b> <b>This degree is awarded to students who have demonstrated:</b>
1. be able to work with the materials of music at a high level of competence. 2. be able to foster a healthy attitude in the community through music.	1. Depth and Breadth of Knowledge.
3. be familiar with current literature and concepts in the fields of music education and cognition. 4. be able to apply appropriate principles of Music Education and Cognition to a variety	2. Knowledge of Methodologies.

of research and teaching contexts, including appropriate methodologies.	
5. be able to engage in applied research and original evidence-based research to a specific problem or issue in music education and/or cognition.	3 . Level of Application of Knowledge.
6. be able to undertake projects in independent and group settings, including motivation, cooperation and intellectual integrity. 7. have an understanding of ethical behavior consistent with academic integrity and appropriate professional judgments. 8. be able to empirically assess the validity of theoretical claims and visualize data to explore complex issues	4. Professional Capacity/Autonomy.
9. be able to communicate effectively, both orally and in writing, in a professional setting. 10. be able to explain how outcomes based in one domain of knowledge (i.e. cognitive development) can inform and improve inquiries based in another (i.e. music education).	5. Level of Communication Skills.
11. be able to contextualize their experience of music education and cognition within the broader fields of musicology, education, psychology, and community.	6. Awareness of Limits of Knowledge.

### **1.3. Appropriateness of degree nomenclature**

M.A. in Music Education and Cognition is the most appropriate choice for the degree name. The program is designated Masters because it meets the DLEs of the Masters Level, and builds upon the entry level expectations of a Bachelor's degree. Master of Arts is appropriate in that it aligns with the standard nomenclature that covers these fields. The discipline is labeled Music Education and Cognition because these two aspects and their interconnection are the core of our program in its humanistic exploration of music in its experiential context, and it is suggestive of both the practical and scholarly components which form the degree.

## **2. ADMISSION REQUIREMENTS**

### **2.1. Appropriateness of program's admission requirements for the learning outcomes established for completion of the program**

Students will typically enter the program having completed an Honours Bachelor's Degree in Music with an excellent academic record, and thus will be prepared to

undertake the requirements for the Master's degree. Students may be admitted from other backgrounds, and community music practitioners will be encouraged to apply on the basis of the diverse educational and experiential backgrounds that they have attained.

### **Admission requirements (summary)**

Honours Bachelor degree or equivalent in Music with a minimum B+ average grade from an accredited university.

Two letters of reference, preferably from former university professors.

For international students, an official statement of English language test results (TOEFL or IELTS). TOEFL must be at least equal to the minimum requirement set by the University, and would be expected to be higher.

Statement of intent and background preparation.

Undergraduate research paper or other sample of scholarly research and writing.

### **2.2. Alternative requirements for admission into the program**

As noted above, other degrees or qualifications or experience will be considered on a case by case basis. In particular, students with a B.Sc. in Music/Cognition will receive particular consideration for this program.

In order to attract a deep pool of high quality applicants, we propose that prior work experience not be required as a condition for admission. We also propose to consider candidates with recognized bachelor degrees from various academic disciplines, provided that they demonstrate sufficient practical and theoretical skills and knowledge of music.

While the general notion of target applicants to this program includes music educators and scholars, we are interested in a broader range than simply classroom music teachers, such as: those engaged in creating and/or making music in schools, places of worship, community ensembles (bands, choirs, orchestras), retirement homes, private music studios, and other community venues.

Students coming into the program will, on the basis of these requirements, have the appropriate preparation to enable them to meet or exceed the PLOs/DLEs for this program within the normal course of study.

## **3. STRUCTURE**

### **3.1. Appropriateness of the administrative, governance and communication processes proposed in support of the program**

#### **Program structure.**

The program is course-based (7 half-courses), normally occupying the Fall, Winter and subsequent Fall terms. There is an option to do either a minor research project in lieu of one half-course, or a major research project in lieu of two half-courses. These independent courses may take place during the regular terms (Fall, Winter, Fall), or can also be completed in the Spring and/or Summer term before the final Fall term, subject to supervisor approval. Students may complete this program on a part-time basis.

Students will take at least four of the five core course (MMEC 701-705). These courses focus on developing students' analytical skills and broadening their

understanding of the core concepts of music education and cognition. The tools and knowledge students acquired throughout the program will be used to formulate and assess important problems within the field, and to develop strategies for their implementation. Students will be expected to read and evaluate current literature and be able to utilize their knowledge to investigate the types of problems they might encounter in their professional careers. Knowledge, intellectual progress and understanding will be measured in a variety of ways, including problem solving, discussion of scholarly papers, class presentations of their work, written assignments and papers, and course examinations.

Additional courses (MMEC 706 through 710) round out the program and provide a range of choices to the student. They also provide opportunities for a more extensive experience in independent research.

All students will also enroll in MMEC 711 Portfolio (non credit pass/fail), through which students will document the range and quality of their achievements in the program.

A series of electives at the 600 and 700-levels provides opportunities for students to broaden their educational experience in both music and in related fields of inquiry, such as Cognitive Science of Language, Communication and New Media, Cultural Studies and Critical Theory, and Psychology, Neuroscience and Behaviour.

### **Governance structure**

The Program will be administered by a Program Director appointed by the SOTA director in consultation with the music faculty. The Program Director will report to the Associate Dean, Graduate Studies and Research, and will also work with the appropriate offices and individuals, primarily within the School of the Arts, on the various activities involved in delivering the program, including student recruitment, financial assistance and academic advising, curriculum planning and implementation, instructional support, and student career preparation. The Program Director will be responsible for ensuring that the program's admission criteria are properly implemented and that all academic regulations governing the program and its students are properly applied.

Governance will be through an Academic Committee, comprising four members of the Music Faculty including the Program Director. The Academic Committee will provide academic direction and guidance to the Program.

Administration will be through the School of the Arts staff, in conjunction with the School of Graduate Studies. Among the responsibilities of the administration will be the clerical duties associated with publicity, recruitment, admission, student financial aid and scholarships, and community coordination.

The proposed governance structure and initial composition of members is outlined below.

i. Program Director

William Renwick (acting)

ii. Academic Committee

School of the Arts

1. Dr. Rachel Rensink-Hoff
2. Dr. William Renwick
3. Dr. Michael Schultz



#### 4. Dr. Matthew Woolhouse

##### **Communication**

The Program Director, supported by the staff, will be responsible for ensuring that all communications related to the program are directed to the appropriate individuals and University bodies. As stated above, the Program Director will report to the Associate Dean, Graduate Studies and Research in the Humanities.

##### **3.2. Appropriateness of program's structure and regulations to meet specified program learning outcomes**

The three terms (Fall, Winter, Fall)<sup>5</sup> of the full-time program provide a substantial period of teaching and learning to meet the Program Learning Outcomes. As the Table in section 5.1 indicates, the required PLOs can be attained through a variety of course combinations; students will have a degree of flexibility and choice while they are completing the degree requirements.

Amongst the core courses (Music 701-705) there is no prerequisite structure. They may be taken in any order and are considered complementary to one another. This open structure will be of particular assistance to part-time students. Students are required to complete four of these core courses; any combination of the four will cover all the Program Learning Outcomes demanded of the program. Successful course completion requires a grade of B- or above.

Students graduating from the program must meet the expectation of the program as well as the University's Degree Level Expectations for a master's degree.

##### **3.3. Rationale for program length**

The full-time program comprises three terms, fall, winter, and fall. The intervening spring and summer terms may be used by students pursuing independent research projects. A total of 7 credit half-courses (or project equivalent) is required. Each course is one term, so students will take 2-3 courses per term. This format and length provides students with their analytical tool-kit and contextual background, focusing on the core themes of music education and cognition and providing them with an opportunity to investigate specialized topics. The first fall term provides students with fundamental knowledge and skills in Music and the Mind. The winter term is devoted to deepening students' understanding of analytical skills as well as their knowledge of a theoretical framework and problems in Music Education and Cognition. The final fall term comprises a combination of analytical applications of concepts learned in earlier terms and opportunities for students to focus on topics of particular interest. The fall term is of particular importance in that during that time the new cohort will have strong interactions and mentorship from the old cohort of the previous year, thus maintaining a sense of continuity in the program from year to year.

Part-time students will be accommodated both in terms of extended program length and through appropriate course-scheduling to be developed in response to the needs of the evolving student body.

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<sup>5</sup> Students electing MMEC 706, 707 or 708 will have the option of completing these courses during the spring and/or summer terms, with the permission of the instructor.

## 4. PROGRAM CONTENT

### 4.1. How curriculum addresses the current state of the discipline or area of study

Current trends in music education and research are strongly focused towards music cognition, music in community, and music in human development and health. Building on McMaster's recognized excellence in Health Education and in Music and the Mind, this program will allow students who are neither science nor health majors, but who are already, or intend to be, active leaders in our communities, institutions, and schools, to connect with music in the areas of cognition, education, and community.

Courses will generally contain components of literature review, which give appropriate background context and connection with current trends, as well as independent and group projects and studies that will enable students to experience the classroom concepts in practice.

The core courses, MMEC 701-705 focus on principal areas and themes of the program. These are supplemented by a range of elective courses MMEC 706-711 and MMEC 6H03, 6MT3, 6OC3, 6V03 and 6Y03 that expand upon the core. This range of offerings is then further expanded and contextualized through the offering of electives from other disciplines across the university. The required course MMEC 711 provides for the production of a summative portfolio.

#### Core Courses

Students must complete four of the following core courses.

MMEC 701: Issues in Music Cognition

MMEC 702: Research Methods in Music Cognition

MMEC 703: Community Music & Wellbeing

MMEC 704: Musical Development & Education

MMEC 705: Seminar in Music Theory and Analysis

#### Required non credit pass/fail course

MMEC 711: Portfolio (course with no instruction)

#### Elective Courses

MMEC 706: Reading Course (3-unit half-course: subject to instructor approval)

MMEC 707: Minor project (3-unit half-course: subject to instructor approval)

MMEC 708: Major project (6-unit full-course: subject to instructor approval)

MMEC 709: Performance and Pedagogy (3 units) (self-funding)

MMEC 710: Performance and Pedagogy (6 units) (self-funding)

The following courses will be cross-listed with similarly themed third- and fourth-level offerings. They will provide more variety in the program and permit students additional focus on areas of special interest.<sup>6</sup>

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<sup>6</sup> Note: we would also like to create a second undergraduate course in Music Therapy that would be cross-listed to form the course MMEC 6MT3: Music Therapy in Practice. This would serve to better link our

MMEC 6H03: Seminar in Tonal Analysis (c-1 with Music 4H03)  
 MMEC 6OC3: Advanced Choral Methods (c-1 with MUSIC 4OC3)  
 MMEC 6V03: Seminar in Music Education (c-1 with MUSIC 3V03)  
 MMEC 6Y03: Topics in Musicology (c-1 with MUSIC 4Y03)

### **Suggested elective courses outside Music**

Other electives from across the University may be chosen with the approval of the Program Director and the consent of the department involved. Possible courses the themes of which intersect with this program include the following:<sup>7</sup>

Cognitive Science of Language

COGSCIL 721: Fundamentals of the Cognitive neuroscience of Language

Communication and New Media

CSMM 711: Sound as Art and Research

Cultural Studies and Critical Theory

CSCT 705: Music, Gender, and Sexuality

Psychology, Neuroscience and Behaviour

PSYCH 710: Statistics and Research Design

PSYCH 722 / Developmental Psychology

PSYCH 723 / Cognitive Psychology

PSYCH 724 / Perception

PSYCH 726 / Behavioural Neuroscience

PSYCH 727 / Learning

### **4.2. Unique curriculum or program innovations or creative components**

The combination of Music Education and Cognition and will give students a strong academic basis combined with a practical application, whereby the two aspects can be drawn together. In addition, the emphasis on community engagement is intended to encourage students to flourish as musical leaders and innovators in society. Several of the courses connect beyond the university, whether through community involvement, or through web publication and conference presentation. These experiences are intended to better prepare students for the variety of contexts in which they may expect to be involved in the future. Through elective courses, students will also be able to associate with related programs of Cognitive Science of Language, Communication and New Media, Cultural Studies and Critical Theory, and Psychology, Neuroscience and Behaviour. In doing so, the program uniquely prepares students for professional opportunities in which a combination of technical skills and institutional knowledge are important.

### **4.3. Nature and suitability of major research requirements**

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program to the health side of campus and to take advantage of the expertise of our instructor in Music Therapy, Rachel Finnerty. However, we are not able to mount this course at this time.

<sup>7</sup> It is recognized that among the following are courses with limited capacity to accept non-program students, and that some are offered only in alternate years. We expect that only a minority of our students who have particular research interests will wish to enroll in these courses. The majority of our students will for the most part focus on the elective options within the Music Program itself.

The M.A. in Music Education and Cognition is a course-based program. Within each course research requirements will vary, ranging from readings in the area of study, to summary reports, to short independent analyses, studies and applications, and to presentation of findings, whether as term-papers, verbal/visual presentations or internet projects. MMEC 702, 703, 704, and 705 each contain a research project; thus the students will have plenty of opportunity to undertake independent research. In addition, MMEC 707 and 708, Minor and Major Independent Research Projects, provide students the opportunity to develop a more in-depth study under the supervision of a faculty member and with the approval of the Program Director. These courses allow for a greater focus and concentration in specific areas of study.

In all cases the nature of the research will be directly connected with the principal goals of the program, the understanding and application of cognition in music education and community involvement.

#### **4.4. Appropriateness of the courses for the graduate degrees**

The program normally requires applicants to have an undergraduate degree in Music. The program's courses will utilize resources appropriate for graduate level study and students will be expected to read and critically evaluate original papers from the literature of Music Cognition and Music Education. They will be expected to develop a sound knowledge of the main themes in the literature and their applicability to musical practice. In addition, students will be expected to apply the concepts and tools learned in the courses to a variety of problems in Music Cognition and Music Education.

The 700-level courses all require independent inquiry, research, and presentation at the masters level.

### **5. MODE OF DELIVERY**

#### **5.1. Appropriateness of proposed mode of delivery to meet the Program Learning Outcomes and Degree Level Expectations and availability of necessary physical resources**

The program makes use of a range of modes of delivery. Courses are largely in seminar format, comprising lecture, discussion, and small-group work. Learning activities include independent readings in the literature and creative applications, supplemented by class discussion and summary reports. Students will also engage in original research projects, placements in community music organizations, peer-review activities and editorial experience.

Peer-review is an important component of MMEC 703, 704, and 705. Through this process students strengthen their critical skills. Through the process of evaluating the in-progress work of their peers they reflect upon their own understanding and development, and they expand their abilities to interact on a professional level. This process typically results in a much stronger integrity to students' work.

Results of this range of activity will include written reports and oral presentations (individual and group), as well as participation public forums such as McMaster Music and the Mind initiatives, McMaster University Music Education Outreach Series, Music Education and Cognition conferences (when appropriate), and web publication. The

Portfolio provides a guided process for students to assemble their completed work into publicly presentable form.

The following table summarizes the way in which the MMEC courses target the Program Learning Outcomes described above. It will be seen that two or more of the five 'core' courses (MMEC 701-705) target each of the PLOs demanded of the program. By this means we can ensure that all successful students will attain all of the PLOs to a satisfactory level.

**Table of PLO coverage for courses.**

PLOS	1	2	3	4	5	6	7	8	9	10	11
MMEC 701			x		x	x		x	x		x
MMEC 702	x		x	x	x	x			x	x	
MMEC 703		x		x	x	x	x		x		x
MMEC 704		x	x	x	x	x	x		x	x	x
MMEC 705	x				x	x		x	x		
MMEC 706			x						x		
MMEC 707					x	x			x		
MMEC 708					x	x			x		
MMEC 709	x				x						
MMEC 710	x				x						
MMEC 711						x			x		

Detailed Program Learning Outcomes for each course are provided in Appendix 11.4.

## **6. ASSESSMENT OF TEACHING AND LEARNING**

For most courses the primary method of assessment is instructor evaluation of both on-going work (assignments of various kinds) and of final projects, in terms of the goals set out for each course and in the context of the teaching and learning objectives of the program as a whole. The instructor will also evaluate the students' ongoing contributions to class discussion as examples of quality of public presentation and interaction.

MMEC 703, 704, and 705 include a peer-evaluation component. While this peer evaluation is an important part of the learning process, and serves well as a means to quality control, in all cases the instructor is responsible for the determining the final assessment of attainment of the learning objectives.

The performance courses, MMEC 709 and 710 include a final jury-exam by two faculty members.

The supervisor evaluate MMEC 711 (Portfolio) will evaluate the student's success in demonstrating individual initiative and integrity in preparation of the portfolio, taking into account the full range of Program Learning Outcomes that are expected.

Details regarding the assessment of teaching and learning for each course are provided in Appendix 11.4.

### **6.1. Appropriateness of proposed methods of instruction and assessment of student achievement**

As noted above, instructional methods will include lectures, class discussions, problem solving, case analyses and student presentations, keeping in mind that instructional methods will vary, both in type and proportion, from course to course. Class sizes of 10-20 will foster individual motivation and interaction.

In addition to the above methods, we believe strongly in community and public connections. To this end our courses include web-publication, conference presentations, campus presentations, and community music ensemble placements.

Suitably qualified and motivated students will be permitted to undertake specialized studies in independent research projects or musical performance.

In all cases we place emphasis on connecting the content and production of the program to 'real-world' experiences that will appropriately qualify students for leadership roles in arts and education.

### **6.2. Plans for documenting and demonstrating the level of performance of students**

For each of the core courses an independent written research project or the equivalent is required. (For details please see the course outlines in Appendix 11.1.) All of these documents will become part of the student's portfolio, as developed under the rubrics of MMEC 711. The portfolios will also contain other samples of student work as deemed appropriate in consultation with the Program Director and with the support of McMaster's student educational services. These portfolios will also be kept on file in the School of the Arts for reference and for future program review and development.

## **7. RESOURCES FOR ALL PROGRAMS**

### **7.1. Administrative unit's planned utilization of existing human, physical and financial resources and any institutional commitment to supplement the resources**

The M.A. in Music Education and Cognition will draw largely upon existing human, physical, and financial resources.

In terms of human resources, for teaching and administration we plan to use our existing team. Mounting the new core graduate courses will require financing to the equivalent of nine units per year. We anticipate the need for some administrative assistance on start-up in order to establish the correct protocols of the program in accordance with McMaster policies and procedures.

The physical resources will include teaching and research areas currently in use by the Music Area of SOTA; these facilities are essentially seminar rooms and labs. In addition, students and faculty in the program will utilize the new L.R. Wilson Hall, McMaster's new campus home for the Liberal Arts. This LEED certified building, funded by the province of Ontario, McMaster University, and L.R. Wilson, will include classrooms, research spaces and labs, practice and instruction facilities, including a percussion studio, performing arts facilities, including a 350-seat concert hall, public gathering and community spaces, and gardens. Construction began in June, 2013, and it is expected to open in 2016.

The program will be administered through the existing SOTA office in Togo Salmon Hall. Shared office space will be provided to students.

**7.2. Participation of a sufficient number and quality of faculty who are competent to teach and/or supervise in the program**

All of full-time faculty in the Music Area will be able to contribute to both instruction and supervision. All of these personnel have considerable teaching experience and most also have significant experience in graduate supervision. (Faculty profiles are found in Appendix 11.8; full CVs are provided in Appendix 11.9)

**7.3. Evidence of adequate resources to sustain the quality of scholarship produced**

All faculty on the team are highly productive scholars and researchers. All are operating under sufficient resources to maintain their research well into the future. We see no reason to doubt that the quality of our scholarship will in any way diminish through the establishment of the new program. On the contrary, we see it as a natural way forward, which will provide an exciting learning and research environment for the Music Area and for McMaster as a whole.

**8. RESOURCES FOR GRADUATE PROGRAMS**

**8.1. Plan for adequate numbers of faculty and staff to achieve program's goals**

The faculty complement indicated in Appendix 11.8 is sufficient to cover all the required courses in the M.A. in Music Education and Cognition. Indeed, all of the required courses can be taught by more than one full-time faculty member. This arrangement will also accommodate faculty research leaves or, should they occur, secondments to administrative positions.

The program requires nine units of new instruction per year. Under this scheme, recognizing that four of the five core courses will be on rotation, all of the core courses (MMEC 701-705) will be covered with the nine units of instruction.

As independent studies, MMEC 706-708 will be 'overload-courses' offered by Music faculty.

MMEC 709 and 710 will be self-funding, using course fees to cover the expenses of private instrumental instruction.

MMEC 711 will be overseen by the Program Director, but will have no instructional units assigned to it.

The instructional resources needed for the 600 level courses will be covered by the corresponding undergraduate courses.

Current staff will administer all aspects of the program, including administrative support for the Program Director.

**8.2. Plan to provide necessary financial assistance for students**

Students will normally be provided with at least one master's level TA-ship over the duration of the program. Scholarship funding will also be sought to support students. Students may also be eligible for OSAP funding. McMaster Bursary funding is also

available to qualified students. Research Assistantships connected with the MAPLE and NOKIA labs may also be available, depending upon research needs and availability of funds.

### **8.3. Evidence that faculty research supervisors have ongoing funding, space and relevant research infrastructure to support students in program**

Due to the primarily course-based nature of the program, additional funding, space and infrastructure is not needed to support the program. Nevertheless, it will be possible for students, particularly those electing MMEC 707 (Minor Project) or MMEC 708 (Major Project) to conduct research within our existing research laboratories, the MAPLE lab and the NOKIA lab. Faculty currently hold grants which support the funding of student research assistants in these labs. Most faculty are members of MIMM, and students will be encouraged to engage in the variety of events and activities, such as the NeuroMusic Conference and the MIMM Journal Club.

### **8.4. Supervisory and load distribution and qualification**

In order to undertake MMEC 707 (Minor Project) or 708 (Major Project), students must secure the agreement of a faculty member. At this time any such supervisions will be on overload, and at the discretion of the faculty member. Our intention is that a minority of students will be permitted to undertake this option, thus minimizing the burden on faculty.

### **8.5. Evidence of prior experience in graduate teaching and research supervision for faculty**

Amongst the faculty we have considerable experience at the graduate level. Dr. Renwick, as a faculty member of the earlier M.A. in Music Criticism at McMaster, besides being Director of the program, undertook graduate instruction and supervision at the M.A. level for 17 years. He has also served on several Ph.D. committees for Social Sciences at McMaster. Dr. Kinder has also served for many years as a member and supervisor in the earlier M.A. in Music Criticism. Drs. Woolhouse and Schutz currently supervise graduate students from across the campus in research and in thesis supervision. See Appendix 11.5, Table B.

## **9. QUALITY AND OTHER INDICATORS**

### **9.1. Definition and use of indicators that provide evidence of quality of the faculty**

The faculty involved in the program are expert researchers in the following fields:

- Music cognition;
- Music education;
- Brain mechanisms involved in listening to and engaging in music;
- Social factors involved in music learning and participation;
- The role of music in individual and community wellbeing;
- Advanced music theory and technology.



All full-time members of the Music Area currently active in teaching and research are included as members of the program's teaching faculty.<sup>8</sup> All regular teaching faculty have Ph.D.'s.<sup>9</sup> Of the seven faculty listed, five hold the rank of Assistant Professor (Drs. Mitchell and Schutz have been recommended for promotion to Associate Professor effective of July 1 2015), and two the rank of Full Professor. Drs. Kinder and Renwick have many years experience teaching at the graduate level in the earlier M.A. in Music Criticism. Teaching activity for the three years ending Winter 2014 is presented in Appendix 11.5, Table A.

## **9.2. Evidence of a program structure and faculty research that will ensure the intellectual quality of the student experience**

The program is structured in order to provide students with (a) fundamental tools in music cognition and education (b) an in-depth experience that applies these tools in examining topics in music cognition and education, and (c) an opportunity for specialization in cognitive and educational applications, through the choice of electives. The elective courses will offer students the opportunity to augment their analytical skills and knowledge of core topics with specific knowledge in areas of education and cognition. This combination of strengths will give our students an outstanding educational experience.

The faculty are all outstanding researchers and educators. The faculty also have considerable involvement and interest in the musical community. (Refer to the CVs in Appendix 11.9.) The program and course content are designed to align faculty research interests and activities with student learning in the strongest possible manner, such that all of the required courses and most of the electives will be taught by active researchers whose scholarly activity is related to the course being offered. The Music area also encourages one-on-one interactions between faculty members and students, as we believe that these are an important contributor to a student's intellectual development. It is the close intertwining of teaching and research that is the strongest evidence that there will be a high degree of intellectual rigour and a dynamic student learning experience.

## **10. CONSULTATION PROCESS**

### **10.1. Description of the consultation process undertaken during the development of the proposal.**

The original idea for this program was declared about 2004, at the time that the McMaster Institute for Music and the Mind was established. At that time the Music Area agreed to terminate its existing M.A. in Music Criticism in order to channel its energy in this new direction.

Discussions with the faculty from the Department of Psychology continued, and this helped to establish our new hires in music cognition.

Discussions with faculty in the Cognitive Science of Language and the Dean of Humanities helped to move the process along.

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<sup>8</sup> It is anticipated that Dr. Kinder will retire before this program is established.

<sup>9</sup> David Gerry is currently in the final stages of a Ph.D. in Psychology at McMaster. As of July 1, 2014 David Gerry has reverted from full-time to sessional due to budget constraints.

The 2012 IQAP along with the Dean's response indicated a high degree of enthusiasm for the establishment of this program. Following the IQAP we set about collaboratively developing the proposed program.

In consultation with the Associate Dean of Research and Graduate Studies, Humanities, and staff of the School of Graduate Studies we developed a detailed proposal through the spring of 2014.

During the summer of 2014 the financial aspects were studied in accordance with the new budget model and the office of the Dean of Humanities determined that the program would be financially viable as proposed.

Consultations continued through the fall of 2014, in particular with staff of MIIETL, to develop a robust DLE and PLO strategy, while staff of McMaster Library provided a report on McMaster Library's resources and facilities in support of this program.

In December 2014, meetings were held with the Acting Dean of Graduate Studies, Associate Dean of Research and Graduate Studies, and Dean of Humanities in order to focus the program and ensure its alignment with faculty and university priorities.

In January 2015 the proposal was circulated widely through the university leadership in order to seek advice and approval.

## **11. APPENDICES**

### **11.1. Course descriptions**

#### **MMEC 701 Music Cognition**

The field of music cognition/psychology has grown rapidly since its origins in the mid-twentieth century, and now covers topics as diverse as the evolutionary origins of music, music perception, responses to music, performance, composition and improvisation, and the role of music in everyday life. Five principle topic areas will be addressed throughout the 12-week course: (1) *Evolution*—including universals in music processing, and social and personal functions of music from cross-cultural perspectives; (2) *Perception*—including the cognition of pitch, tonality, timbre, musical time and memory; (3) *Responses*—including physiological and emotional responses, expression, aesthetics and musical preferences; (4) *Brain*—including the neurobiological basis of the musical experience, brain plasticity, and music and language; (5) *Performance*—including measurement and models, sight-reading, performing from memory, gesture, and the physical and psychological health of musicians.

This material of this course—a detailed overview of some of the core trends within music cognition—will be delivered using a mixture of traditional lecture-based classes and student-led journal-paper analysis; thus the course's format will be a balance of instruction and seminar-type activities.

Each student will undertake to critically assess leading papers from the topic areas covered in the course. Students will be encouraged to examine the weaknesses and strengths within each field and to suggest ways in which the research they examine might be developed in the future.

Towards the end of the course students will form “idea-incubation clusters”, each consisting of 4-5 students. Each cluster will be required to present to the class and instructor (1) a specific, testable hypothesis relating to material studied in the course, and (2) the experimental method(s) by which could in theory be tested and assessed.

Assessment of students’ progress and understanding of the course material will be based upon 5 short written assignments—to be completed following each of the principle topic areas, and a take-home final exam essay in which students may explore an aspect of the course that interests them in more detail.

The successful student will have a firm grasp of the principle areas of research within the field of music cognition, and be able to understand how this body of knowledge can be applied practically to real-world problems. In addition, successful students will be able to talk knowledgeably about the field to laypersons, both individually and as part of a team.

### **MMEC 702 Research Methods in Music Cognition**

The heart of any cognitively-based exploration of music is a firm understanding of the basic principles and approaches of experimental design and analysis. Through this course students will gain an overview of contemporary “best practices” for empirical study of musical issues. The course will review basic experimental design, data analysis, and visualization techniques through the lens of contemporary explorations done by top scholars in the field.

Through the course of this class, students will complete a final project that will demonstrate mastery of key concepts related to the empirical assessment of a cognitive and/or educational problem. To complete the project, students will identify an issue of broad importance to music cognition/education and exhibit fluency in the design of an empirical assessment of the issue.

A successful student will reach an evidenced-based conclusion of the issue at hand, with a recommendation for its implication to broader musical practice.

Evaluations will be based on an assessment of the final written project to ensure that it meets the rigorous standards of a master’s level course project.

### **MMEC 703: Community Music and Well-being**

This course will examine music from a number of perspectives to address music’s place within the context of community. Studies abound demonstrating the profound impact that both choral singing and instrumental music can have on individuals and communities. Through analysis of current research, students will spend the first six weeks of the course investigating meanings of creating, performing and listening to music and identify processes that promote wellbeing across developmental stages, ages, cultures, social class, and musical interests. The research will be approached thematically according to three important aspects of music and well-being: 1) psychological factors, 2) physiological effects, and 3) social benefits, and will culminate in a literature review.

As an extension of the research into these three topic areas, students will spend the latter half of the course engaging in an experiential action research project with a community music ensemble or organization with the goal of understanding at a grassroots

level the significant role that music plays in sustaining individuals and communities as well as the importance of this relationship to the nature of music-making that occurs. This final project could take on a number of formats, including a lecture-demonstration, concert, video, or written report.

### **MMEC 704: Musical Development and Education**

A great deal of research has been published in the past few years in the field of musical development, changing the ways educators are able to study, define and debate the many issues surrounding the ways students engage with music. Musical behavior is complex and multi-faceted; it is a part of an infant's world from the very beginning, and is found in all of the world's cultures.

This course will provide a timely summary of current research in the field of musical development, thus allowing participants to be familiar with current concepts and literature and will identify many of the challenges educators face in trying to better understand the field. After completion of the course, students will be able to apply appropriate principals of music education and cognition, as well as contextualize their experience in the field of music education within the fields of psychology and cognition, to their research and teaching. Through research projects (independent and group), participants will be able to assess the validity of theoretical claims, visualize data and communicate their findings (oral and written) while engaging in ethical and well-designed projects. The material covered will consist of five modules:

- **Development:** A review of how the brain develops, ways of understanding musical development, and the nature of musicality.
- **Engagement:** Students will evaluate claims about the non-musical benefits of the exposure to music by examining the literature connecting musical training with cognitive development, literacy aesthetic response, perception of emotion, and social development.
- **Differences:** This module focuses on individual differences encountered during musical training, including motivation, giftedness and disability.
- **Skills:** Students will examine the development of vocal and instrumental ability, creativity and the use of technology to enhance learning.
- **Context:** A look at current global practice in the field of music education, including non-western musical traditions, will be an indispensable component of this course.

Evaluation: Students will demonstrate their understanding of the material through a variety of methods, including:

- Oral presentations (both in class as well as in community forums) to showcase their knowledge and understanding as well as to develop their communication skills
- The completion of an independent research project or paper connecting the fields of music cognition and music education.
- Formulate questions for future research and curriculum development.

- Formulate potential pedagogical applications, which could be undertaken in the classroom or studio.
- Be encouraged to present at a major conference (Ontario Music Educators' Association, McMaster Music and the Mind annual conference, etc.)
- Present a public talk on their research as part of the McMaster University "Music Education Outreach" series in the community.

After completing the course, students will possess a sound understanding of musical development and its relationship to education—whether it be in the classroom, private teaching, or working with ensembles—enabling them to plan music curricula, generate developmentally appropriate projects, and engage in effective pedagogical practice.

### **MMEC 705 Music Analysis**

The objective of the course is to develop students' abilities to engage in the discourse of musical structure and perception. It explores the formal properties of music and links them to notions of musical experience and culture. This course will normally be based around either a theoretical issue (such as current cognitive applications in music analysis) or around a musical genre (such as sonata forms in the early classical period).

Students will engage in group analysis of a selected set of shorter musical works in various styles. Background will be provided through instructor-selected readings from current periodicals and other literature. Through these means students will develop their and refine both their analytical skills and their ability to express their ideas clearly and forcefully.

Each student will undertake an independent analytical project stemming from the main theme of the course and contextualized through appropriate readings. Students will be expected to maintain frequent contact in order to keep up with the readings and to take an active part in the discussion. The student will develop an original interpretation or thesis and develop a coherent analytical perspective on the work. The student will report on his/her work in an oral presentation and in a written article. Each of these may be supplemented with musical examples (graphic and/or aural).

In addition students will collaborate in the production of an issue of the web-journal *McMaster Music Analysis Colloquium* (<http://www.humanities.mcmaster.ca/~mus701/macmac.htm>)<sup>10</sup> through which process they will develop skills in organization, in peer-review, in logical discourse, and in creative presentation. Cooperative work is encouraged, as each student takes a role in the editorial team. As such they will be involved in the editorial process from peer-review through to editing and production.

The students will be evaluated on the basis of the shorter class assignments indicated above, on their principle research project, in both oral and written presentations, and on the quality of their contributions to the group-production of the on-line journal.

The successful student will be able to analyze a range of musical styles and genres to a high level of competence and contextualize his/her understanding in terms of musical experience and culture. The successful student will be able to communicate with

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<sup>10</sup> This will be a continuation of the Journal originally begun in Music 701 of the earlier graduate program.

considerable insight concerning the structural and expressive elements of musical composition. The successful student will be able to organize and present ideas, and to work cooperatively with others to a deadline.

### **MMEC 706 Reading Course**

The student will undertake an independent program of readings, established in conjunction with the faculty supervisor, focusing on a particular area of interest within the fields of Music Education and Cognition. The student will report on their reading in a series of engagements with the supervisor. The course will culminate in a paper which may take the form of a review-essay, an annotated and critical bibliography, or other approved summative work. Instructor permission required.

### **MMEC 707 Minor Project**

Directed research under the supervision of a faculty member in the student's area of interest (requires approval of the supervisor).<sup>11</sup>

The student will submit a written proposal for an independent research project in music education and/or cognition, including appropriate background reading and context, an explanation of method(s) to be employed, a description of the nature of the project, and an overview of possible outcomes and the significance of the work in the context of music education and cognition. The student must secure the agreement of a professor to act as supervisor for this course.

Once a proposal is approved by the supervisor, the student may begin the work. The details of the work, the specific methods of delivery, of demonstration of achievement and of evaluation are to be determined in each case on the basis of the approved written proposal.

### **MMEC 708 Major Project**

Directed research under the supervision of a faculty member in the student's area of interest (requires approval of the supervisor).<sup>11</sup>

The student will submit a written proposal for an independent research project in music education and/or cognition, including appropriate background reading and context, an explanation of method(s) to be employed, a description of the nature of the project, and an overview of possible outcomes and the significance of the work in the context of music education and cognition. The student must secure the agreement of a professor to act as supervisor for this course.

Once a proposal is approved by the supervisor, the student may begin the work. The details of the work, the specific methods of delivery, of demonstration of achievement and of evaluation are to be determined in each case on the basis of the approved written proposal.

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<sup>11</sup> While it is possible that a supervisor from another department or faculty be appointed to serve, it is expected that in practice this will only happen on rare occasions, and that most supervisions will be undertaken by faculty of the Music Program itself.

### **MMEC 709 Performance and Pedagogy (3 units)**

Intensive study of the technique and repertoire of any orchestral instrument, piano, organ, harpsichord, voice, recorder, saxophone, or guitar, or conducting . The student will undertake a course of lessons at an advanced level, exploring a particular musical repertoire and/or techniques and that complement the objectives of the Program in Music Education and Cognition. Topics will be determined by the student in consultation with the instructor and set forth in an initial abstract proposal. Sample topics are: piano-repertoire for intermediate to advanced adult performers with small hands; current methods for developing German diction; graded study materials for baroque instrumental performance. The student will also submit a short summary reflection on the material studied and its implications for performance, cognition, and/or education. Permission of the Graduate Program Committee required. NB: This course will be self-funding. Anti-requisite: MMEC 710.

### **MMEC 710 Performance and Pedagogy (6 units)**

Intensive study of the technique and repertoire of any orchestral instrument, piano, organ, harpsichord, voice, recorder, saxophone, or guitar, or conducting. The student will undertake a course of lessons at an advanced level, exploring a particular musical repertoire and/or techniques and that complement the objectives of the Program in Music Education and Cognition. Topics will be determined by the student in consultation with the instructor and set forth in an initial abstract proposal. Sample topics are: piano-repertoire for intermediate to advanced adult performers with small hands; current methods for developing German diction; graded study materials for baroque instrumental performance. The student will also submit a short summary reflection on the material studied and its implications for performance, cognition, and/or education. Permission of the Graduate Program Committee required. NB: This course will be self-funding. Anti-requisite: MMEC 709.

### **MMEC 711: Portfolio.**

(no instruction, required course, no credit)

Students will undertake a self-guided portfolio preparation that documents the range and quality of their work in the program. Students will be guided in this process with the help of the university's extensive student-support programs, including the acclaimed Learning Portfolio Program, including workshops, individual consultations and web-conferencing.

The portfolio will be evaluated on a pass/fail basis in terms of demonstrating:

Initiative, personal responsibility, accountability.

Intellectual independence.

Effective written communication in a professional setting.

Independence, motivation and intellectual integrity.

The Portfolio allows students to collect in one place evidence of their curricular and co-curricular activities. The portfolio is intended to support the student's advancement into his/her further goals in the field.<sup>12</sup>

**MMEC 6H03 Seminar in Tonal Analysis** (c-1 with Music 4H03)

Advanced Studies in Analysis. Possible topics include: Schenkerian analysis, song cycles of Schubert, advanced set theory. Seminar (two hours); one term.

**MMEC 6OC3: Choral Methods** (c-1 with MUSIC 4N03)

Basic techniques of how to teach singing are presented as well as choral rehearsal techniques and choral literature for K-12 and community choirs. Two lectures, one lab; one term.

**MMEC 6V03: Foundations of Music Education** (c-1 with MUSIC 3V03)

A study of the philosophical, psychological and sociological foundations of music education, leading to the formation of a personal philosophy of music education. Seminar (two hours); one term.

**MMEC 6Y03: Topics in Music History** (c-1 with MUSIC 4Y03)

An intensive examination of a composer, period, genre, or issue from the style areas of "classical" music, film music, popular music, or jazz. Seminar (two hours); one term.

## 11.2. Schedule for the Program

The following list indicates the proposed scheduling of course offerings for this program.

Fall term: MMEC 701, 703, 704, 705, 709.

Note: MMEC 701, 703, 704, and 705 are offered in alternate years, such that 701 and 703 alternate with 704 and 705.

Winter term: MMEC 702, 706, 709.

Fall and Winter term: MMEC 710

MMEC 707 and 708 are independent projects. Their scheduling is flexible.

MMEC 711 is a graduation requirement which occupies the length of the program.

MMEC 6H03, 6OC3, 6V03, and 6Y03 are offered in alternate years.

The above schedule maximizes efficiency of teaching resources and promotes mentoring of each junior cohort by the senior cohort by offering in each fall-term two core courses in which most, if not all, of the students will be enrolled.

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<sup>12</sup> "McMaster University is committed to providing students with a learning experience that educates for capability and can guide students to meet and expand upon their individual learning goals. Capability, as described in *The Emerging Landscape*, extends beyond practical skills and knowledge to include continual growth as well as the ability to adapt, expand critical thinking, improve performance and generate new knowledge." The Student Learning Portfolio; M. Tompkins and D. Paquette D. Frenette, "Learning Portfolio Models in Health Regulatory Colleges of Ontario, Canada," *Journal of Continuing Education in the Health Professions*, 2010, 30, 57.



### 11.3. Costing and Budget Sheets (attached)

### 11.4. PLOGDL Teaching and Learning Outcomes Spreadsheet (attached)

### 11.5. Faculty teaching and supervision

Table A

<b>Teaching – 2011-2014*</b>			
<b>Faculty Name and Rank</b>	<b>Undergraduate</b>	<b>Graduate</b>	<b>Area or Department</b>
<b>Professor</b>			
Kinder, Keith	Music 3O03, 4OI3, 1GR3, 2GR3, 3GR3, 4GR3, 1GB3, 2GB3, 2GB3, 4GB3, 4V03, 4X03		Music
Renwick, William	Music 1CC3, 3CM3, 3CT3, 3H03, 4CO3, 4HO3, 4ZO3, 4ZZ3		Music
<b>Assistant Professor</b>			
Schutz, Michael  NB: Dr. Schutz has been recommended for promotion to Associate Professor effective July 1, 2015.	Music 1GP3, 2GP3, 2MC3, 3GP3, 3P03 4GP3. 4J03, 4P03 MUSICCOG 2MA3 (PSYC 2MA3), 3B03 (PSYC 3MB3), 3QQ3, 4QQ3		Music
Woolhouse, Matthew	Music 1AA3, 2CC3, 2DO3, 2HO3, 4HO3		Music
Mitchell, Andrew	Music 1A03, 1B03, 1BB3, 2B03, 2BB3, 2F03, 3Y03, 3YY3, 4Y03,		Music
Gerry, David	Music 1A03, 1AA3, 1E06, 1GF3, 2A03, 2E06, 2GF3, 2T03, 2U03, 3AA3, 3E06, 3GR3, 3JO3, 3L03, 4E06, 4GF3, 4L03, 4Q03, 4V03		Music

Rensink-Hoff, Rachel	1D03, 1GC3, 1GW3, 2GC3, 2GW3, 3GC3, 3GW3, 3N03, 3O03 3V03, 4GC3, 4GW3, 4OC3, 4V03		Music
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Table B

Thesis Supervision							
Faculty Name & Rank	Master's*		Doctoral		Post-Doctoral Fellows		Faculty Area
Category	In Progress	Completed	In Progress	Completed	In Progress	Completed	
<b>Professor</b>							
Kinder, Keith		7					Music
Renwick, William		4					Music
<b>Assistant Professor</b>							
Schutz, Michael	4	2	2	1			Music
Woolhouse, Matthew		2	2				Music
Mitchell, Andrew							Music
Gerry, David							Music
Rensink-Hoff, Rachel							Music

### 11.6. Research Facilities and Resources

McMaster is internationally known for its cutting-edge research in music and the mind. The majority of the faculty are members of McMaster Institute for Music and the Mind. The Music Area itself has two important research facilities, the MAPLE Lab and the NOKIA Lab. Several music faculty possess grant funding that can support graduate-student research and conference attendance.

#### MAPLE Lab

The Music, Acoustics, Perception & LEarning (MAPLE) Lab is a dynamic, interdisciplinary research facility housed in the School of the Arts. Affiliated with the McMaster Institute for Music and the Mind, the lab serves as a research hub for dozens of

undergraduate students each year, as well as select graduate students from the Department of Psychology, Neuroscience, & Behaviour (PNB). Recently renovated through an infrastructure grant from the Canadian Foundation for Innovation, the lab contains two state of the art sound isolation booths as well as a variety of research-dedicated percussion instruments. Current research includes projects exploring the communication of emotion in music, how “moving to the beat” improves musical listening, and the role of body movements in shaping an audience’s perception of a musical performance. The lab is currently home base for a large scale software development project, creating the next generation of tools facilitating innovative interdisciplinary research questions. For more information, visit [www.maplelab.net](http://www.maplelab.net).

### **Digital Music Lab in Association with Nokia**

The Digital Music Lab in Association with Nokia was founded in 2012 for the purpose of analyzing the Nokia Corporation’s global music download data from sociological, cultural and musicological perspectives. To fully explore the huge research potential of these data, students working in the lab receive in-depth training in database management (MySQL), statistics and related software applications. In addition, the lab also undertakes dance-based research using motion capture and eye-tracking technology, and develops and empirically tests formal models of musical-pitch perception. A \$75,000 SSHRC Insight Development Grant, awarded to Dr. Matthew Woolhouse, the lab’s director, currently supports much of the lab’s research. For more information, visit [www.digitalmusiclab.org](http://www.digitalmusiclab.org).

### **McMaster Institute for Music and The Mind**

The McMaster Institute for Music and the Mind is an interdisciplinary group of researchers including psychologists, neuroscientists, music theorists, musicians, mathematicians, kinesiologists, health scientists, and engineers. At the institute, scientists, researchers, and musicians study questions about the physical structure, evolution, neural processing, performance, and perception of music. Specific questions concern how the auditory and motor systems interact to produce music, how performers synchronize with each other, how people encode and recognize music, and how groups in society are defined by the music they play. Critically, the developmental neuroscience perspective informs the research community on how music induces emotional reactions, how musical experience and training affect brain development, and how musical training/exposure affects language, cognitive, and social abilities in both children and adults. This institute brings together science and the arts in a unique and innovative way, with the goal of enhancing the scientific study of music across Canada and internationally.

### **The LIVE Lab at MIMM**

Funded by the Canada Foundation for Innovation, the Ontario Ministry of Research and Innovation, and McMaster University, the LIVE Lab supports cutting edge research through Multi-person EEG and Audience Physiology, Virtual Acoustics, Motion Capture, Video Wall, and Sound Recording. It should be noted that the LIVE lab is managed by the Faculty of Science, and there is no existing agreement regarding special or preferred

access by other programs. As such, any engagement with this facility would be worked out through a future agreement.

### **11.7. Library and database resources (attached)**

### **11.8. Faculty Professional biographies**

#### **David Gerry**

David Gerry maintains a busy schedule as a teacher, researcher, performer and clinician. David is currently completing his PhD in Music Cognition at the School of Psychology, Neuroscience and Behaviour, McMaster University, where he works with Dr. Laurel Trainor. His doctoral research was funded in part from the Grammy Foundation in Los Angeles. He holds the M. Mus. and B. Mus. Perf. from the Faculty of Music, University of Toronto and an ARCT diploma from the Royal Conservatory of Music, which also awarded him the gold medal in flute. David is also a graduate of the Talent Education Institute in Japan, where he studied with Shinichi Suzuki and Toshio Takahashi. He is currently Assistant Professor of Music Education at the School of the Arts, McMaster University. David's research has been published in numerous publications, including *Developmental Science* and the *New York Annals of Science*. He has been a keynote speaker at numerous education conferences and recent appearances have included lecturing, playing and teaching in New Zealand, Japan, and Alaska. David is also on the faculty of the Great Lakes Flute Centre. For many years he was the music specialist at Trail Ridge Montessori School in Grimsby, Ontario. He is a Registered Teacher Trainer for the Suzuki Association of the Americas and the European Suzuki Association. His students at McMaster have continued their education at many of North America's leading graduate programs, including those at Eastman, McGill, the University of British Columbia, the University of Buffalo and New York University.

#### **Keith Kinder**

Keith Kinder is currently Professor of Music and Director of the School of the Arts at McMaster University, where he conducts the McMaster Chamber Orchestra and the McMaster Concert Band, and is responsible for the Music education program. Prior to his appointment at McMaster, Dr. Kinder served on the faculty of the University of Prince Edward Island, and taught instrumental music in the schools of Nova Scotia. He holds degrees from the University of Western Ontario (B.Mus., Mus. Ed.), Northwestern University (M.Mus., Trombone Performance), and the University of Colorado (D.M.A., Instrumental Conducting).

An internationally recognized researcher on wind band music, Dr. Kinder appears regularly at conferences all over the world and publishes in international journals dedicated to his research interests.

He is the author of *Best Music for Chorus and Winds* (Manhattan Beach), *The Wind and Wind Chorus Music of Anton Bruckner* (Greenwood), *Prophetic Trumpets: Homage, Worship and Celebration in the Wind Band Music of Richard Wagner and*

*Franz Liszt* (Pendragon), and *This Awareness of Beauty: the Orchestral and Wind Band Music of Healey Willan* (Wilfrid Laurier University Press).

### **Andrew Mitchell**

Andrew Mitchell earned a B.Mus. degree in Piano Performance from the University of Saskatchewan and an M.A. and Ph.D. in Musicology from the University of Western Ontario. His graduate research focused on the medieval chant of the Franciscan order. He has delivered papers at International Congress of Medieval Studies, the Canadian Society of Medievalists and the Antiphonaria Study Group and has had research published in *Studiia Musicologica Academiae Scientiarum Hungaricae* and by the *Institute of Medieval Music*. In 1997, he began work as a researcher for the SSHRC funded CANTUS Latin chant database, a project that was a pioneer in the field of digital musicology. Continuing in that position until 2009, Dr Mitchell trained and supervised the work of many graduate students. Since the completion of his doctorate in 2004, he has taught on various topics in the history of Western Music at UWO, the University of Waterloo, Lakehead University and McMaster University, where he was appointed as a Teaching Professor in 2010.

### **Rachel Rensink-Hoff**

Rachel Rensink-Hoff is an Assistant Professor of Music at McMaster University where she directs the choral program and teaches courses in conducting, vocal-choral pedagogy and music education. Prior to her appointment at McMaster, she taught at the University of Western Ontario where she completed both her Doctorate in Music and Masters in Choral Conducting. Rachel has also undertaken additional choral studies at the Eastman School of Music Summer Conducting Institute, the Voice Care Network of St. Johns University, Minnesota, and the University of Toronto. Her undergraduate degree in Vocal Music Education was completed at Calvin College, Michigan. Dr. Rensink-Hoff currently serves as President of Choirs Ontario and sits on the Advocacy Committee for the Association of Canadian Choral Communities. She serves frequently as adjudicator, conference presenter and workshop clinician and publishes regularly in *Anacrusis*, *Canadian Music Educator*, *Choral Journal* and *Dynamic*. Her dissertation, "Community Choral Singing: Balancing Factors of Leisure Participation and Musical Achievement" won the Outstanding Choral Dissertation award of the Association of Canadian Choral Conductors in 2010. Her current research interests lie in the areas of choral repertoire and programming, conducting pedagogy, and community outreach through choral singing.

### **William Renwick**

William Renwick completed B. Mus, and M. Mus. degrees at the University of British Columbia, following which he took the M. Phil. and Ph.D. degrees in Music Theory at the City University of New York, where he specialized in Schenkerian studies under Carl Schachter, Joel Lester, and Charles Burkhart. He is Professor of Music Theory in the School of the Arts, McMaster University. His research interests encompass studies in

tonal counterpoint and analysis and Gregorian chant as well as computer applications in music research. His publications include *Analyzing Fugue: A Schenkerian Approach* (Pendragon, 1995), *The Langloz Manuscript: Improvising Fugue from Thoroughbass* (Oxford, 2001), and *Chant: Old and New* (Institute of Medieval Music, 2012), as well as articles in *Journal of Music Theory*, *Music Theory Spectrum*, *Music Analysis*, *Bach Perspectives*, *Music Theory Online*, *Theoria*, *Computers in Music Research*, *Canadian University Music Review*, *Journal of Music Theory Pedagogy*, and other journals. He is currently engaged in publishing the first modern edition of the *The Sarum Rite* (sarum-chant.ca). In 2002 he was a Fellow of the Mannes Institute for Advanced Studies in Music Theory. He is a founding member of the Gregorian Institute of Canada, and of the McMaster Institute of Music and the Mind. In 2013 he was Keynote speaker at the Gregorian Institute of Canada Conference in Vancouver. William Renwick is also an organist, composer, and choral director. He holds the Associate degree of the American Guild of Organists and the Fellow of the Royal Canadian College of Organists. He has performed concerts and recitals throughout the region. In 1999 he served as co-chair of The Canadian Organ Festival in Hamilton. He is Music Director at Saint Mary the Virgin Church in Hamilton Ontario, and director of the Hamilton Schola Cantorum.

### **Michael Schutz**

Michael Schutz is Assistant Professor of Music Cognition/Percussion and a core member of the McMaster Institute for Music and the Mind. He is the founding director of the MAPLE Lab, researching Music, Acoustics, Perception, and LEarning. His research has attracted over \$1 million in funding from agencies such as the Canadian Foundation for Innovation (CFI), National Sciences and Engineering Research Council (NSERC), National Institutes of Health (NIH) and the Ontario Early Researcher Award program. Schutz was Programming Chair for the 2013 meeting of the Society for Music Perception and Cognition (Toronto), and was from 2007-2013 the Chair of the Percussive Arts Society Music Technology Committee. His research has been featured on both television and radio broadcasts, receives regular attention in print media, and currently appears in at least five major textbooks including *Psychology of Music* (Psychology Press, 2010), *Cognitive Psychology* (Pearson, 3rd edition), and *The Psychology of Music in Multimedia* (Oxford University Press, 2013). A popular speaker, he has been invited to give keynote lectures numerous institutions, including Michigan State University, Western University of Ontario, Indiana University, and McGill University. Prior to his appointment at McMaster, he served as Director of Percussion Studies at Longwood University in Virginia, where he performed regularly with many ensembles including the Roanoke Symphony, Opera on the James, and the Oratorio Society of Virginia. His unique academic background includes bachelor's degrees in both Computer Science (BS) and Music Performance (BMA) from Penn State University, in addition to a MM in Music Performance from Northwestern University and a PhD in Experimental Psychology from the University of Virginia.

## **Matthew Woolhouse**

Matthew Woolhouse holds a GGSM from the Guildhall Conservatoire of Music, and an MPhil and Ph.D from the University of Cambridge, UK. He is Assistant Professor of Music Cognition and Music Theory at McMaster, the founding Director of the Digital Music Lab in Association with Nokia, a core member of the McMaster Institute for Music and the Mind, and Associate member of the departments of Psychology, Neuroscience & Behaviour, and Communication Studies & Multi-Media. Woolhouse's research – featured in numerous television and radio broadcasts, and regularly within print media – explores music downloading, the pro-social effects of dance, and musical pitch perception. As a music professor he teaches courses in harmony, theory and advanced analysis. His work is published in a number of leading music journals, including *Music Theory Spectrum*, *Empirical Musicology Review*, *Journal of New Music Research*, and *Musicae Scientiae*. He is the recipient of numerous awards and grants, including a \$75,000 SSHRC Insight Development Grant in 2012, and as a co-principal investigator on a \$500,000 CFI-LOF Grant, awarded in 2012. Prior to his arrival at McMaster, Woolhouse was a Research Fellow in Cognitive Musicology at Wolfson College, University of Cambridge, UK.

### **11.9. Faculty full CVs (attached)**

Program Learning Outcomes (PLOs)		Program Requirements	
By the end of the program, student graduating with a Masters degree will...	Master's Degree Level Expectations (DLEs)	Teaching Activities & Learning Opportunities	Assessments and Evidence
	For each PLO, identify which DLE(s) it aligns with below.	For each PLO, what teaching activities and learning opportunities are students exposed to that will help them to achieve that PLO?	For each PLO, what is specifically collected from the student as evidence that they can/have achieved the PLO before they graduate?
1. be able to work with the materials of music at a high level of competence.	1. Depth and Breadth of Knowledge.	MMEC 702: The student will learn about the application of the latest research to their area of interest through reading relevant and current literature in the field. He/she will report the findings as part of the final project. MMEC 705: The student will undertake directed analysis tasks that develop towards an independent analysis project, supported by appropriate analytical and theoretical literature. Alongside peer evaluation of developing research projects their will continual instructor evaluation of class participation, including evidence of insight and synthesis of ideas and instructor assessment of final completed work. MMEC 709-710: The student will develop a high level of performance practice in a given repertoire or genre through a series of private lessons and independent practice and study, and relate this expertise to an educational or cognitive context.	MMEC 702: The instructor will assess the quality and competence of the final research project to determine if the student has indeed been able to demonstrate a high level of competence. MMEC 705: The principal demonstration of a high level of competence will be the final completed analysis project that embodies original analytical work contextualized in terms of best music theory practices. This will be supplemented by peer evaluation of developing research projects and continual instructor evaluation of class participation. MMEC 709-710: In addition to ongoing evaluation of progress and attainment, the student's level of competence will be evaluated by a final jury-exam of two or more faculty.
2. be able to foster a healthy attitude in the community through music.	1. Depth and Breadth of Knowledge.	MMEC 703: Through placements with community music organizations and ensembles, students will explore the social, psychological and physiological effects of music participation to advance their understanding of how music functions to build and sustain individuals and communities. MMEC 704: Through reading and class discussion will explore the psychological and physiological effects of music in local and global society, and consider the role of music in the health of individuals and communities.	MMEC 703: The assessment will be based on the instructor's evaluation of students' journal; entries and final project (lecture-demonstration, concert, video or written report). If the situation warrants (i.e. placement in a community music organization or school) this evaluation will be augmented by external evaluation from community music. MMEC 704: Continual evaluation of class participation by instructor, the presentation of an in-class oral presentation and the completion of a review paper in which this learning outcome is considered.



3. be familiar with current literature and concepts in the fields of music education and cognition.	2. Knowledge of Methodologies.	<p>MMEC 701: The student will critically assess leading papers from the topic areas covered in the course through readings and class discussion, and report their findings in a series of short written assignments.</p> <p>MMEC 702: The student will undertake reading, both general and discipline specific, that deal with methodology; a report on relevant knowledge and methodologies will form a division of the student's final project.</p> <p>MMEC 704: The student will undertake a review of the current literature in the field of music cognition and music education, with an emphasis on musical development, pedagogy and current educational practice. This review will form the context for the independent project.</p> <p>MMEC 706: The student will undertake a program of readings focusing on a particular area of interest within the fields of Music Education and Cognition. The student will report on their reading in a series of engagements with the supervisor. The student will prepare a final paper (review-essay, annotated and critical bibliography, or other approved summative work).</p>	<p>MMEC 701: The instructor will evaluate the quality and thoroughness of a series of written assignments.</p> <p>MMEC 702: The instructor will assess the thoroughness and accuracy with which this objective is met within the term project.</p> <p>MMEC 704: In addition to continual evaluation of class participation, the instructor will assess the presentation of an in-class oral presentation and the completion of a review paper on a topic relevant to the student research interests.</p> <p>MMEC 706: The instructor will evaluate the level of knowledge and understanding through the engagements with the student and assessment of the final paper.</p>
4. be able to apply appropriate principals of Music Education and Cognition to a variety of research and teaching contexts, including appropriate methodologies.	2. Knowledge of Methodologies.	<p>MMEC 702: The student will demonstrate the application of the methodology of music cognition to a particular issue of the student's interest, developed through an original empirical research project.</p> <p>MMEC 703: Students will interact with current literature, looking at music as an agent for community-building, health and well-being, and prepare a literature review paper.</p> <p>MMEC 704: Through reading and discussion of the current literature, the student will complete a proposal for an independent research project or pedagogy project with the potential for use in school curriculum.</p>	<p>MMEC 702: The instructor will assess the thoroughness with which the student has applied particular methodologies to the completion an original research project.</p> <p>MMEC 703: The instructor will evaluate the effectiveness with which the student interacts with current literature, both within in class discussion and in the literature-review paper.</p> <p>MMEC 704: In addition to peer evaluation of developing research projects and instructor evaluation of appropriate application in class discussion, the instructor will assess evidence of insight and synthesis of ideas in the final completed project.</p>

5. be able to engage in applied research and original evidence-based research to a specific problem or issue in music education and/or cognition.

3 . Level of Application of Knowledge.

<p>MMEC 701: As part of a group the student will present to the class a specific, testable hypothesis relating to material studied in the course, and the experimental method(s) by which could in theory be tested and assessed. MMEC 702: The student will apply the methodology of music cognition to a particular issue of the student's interest, developed through an original empirical research project. MMEC 703: The student will use knowledge acquired through the review of current literature and synthesized during in-class discussion to develop an action research project with a community organization or ensemble. MMEC 704: The student will use knowledge acquired during the review of current literature and synthesized during in-class discussion to develop a hypothesis for an original project in research or curriculum development as the basis of an oral presentation and a research paper. MMEC 705: The student will apply background reading and in-class discussion to the analysis and presentation of a selection from the musical repertory, developing and supporting an original thesis or interpretation for publication in McMaster Music Analysis Colloquium. MMEC 707-708: The student will develop an independent research project on a specific problem in music education and/or cognition, formulate appropriate methodologies, and present the results of the work in a written paper. MMEC 709-710: The student will direct their work towards a specific problem in music education or music cognition that will be applicable in a broader context. This will include a written abstract describing the issue, and a summary concluding report.</p>	<p>MMEC 701: The instructor will assess the student's competence, individually and within a group, in the application of evidence-based research to a specific problem. MMEC 702: The instructor will assess the extent to which the student has been able to undertake and complete an original research project. MMEC 703: Besides ongoing peer-evaluation of a developing research question, the instructor will evaluate the extent to which the student has succeeded in completing an original evidence-based final project. MMEC 704: On the basis of in-class discussion, peer evaluation, oral presentation, and final paper, the instructor will assess the student's research on an original problem in music education or curriculum development. MMEC 705: Peer-evaluation of developing thesis and presentation will help to refine the student's analytical and thought process; the instructor will evaluate the quality and integrity of the oral presentation and the final research paper. MMEC 707-708: The instructor will evaluate the work in progress through each stage, providing guidance where appropriate, and will assess the quality of the completed paper in terms of consistency, originality, integrity and value. MMEC 709-710: The instructor will evaluate the initial abstract proposal and the concluding report.</p>
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6. be able to undertake projects in independent and group settings, including motivation, cooperation and intellectual integrity.	4. Professional Capacity/Autonomy.	<p>MMEC 701: As part of a group the student will be required to work as part of a team, and to make an oral presentation to the class. MMEC 702: The student will develop the skills of independent research as they undertake an original research project of some complexity which requires a well-organized plan of research and an understanding of the context of that research. MMEC 703: The student will explore his/her emerging research questions in the context of a community music organization or ensemble and present findings in a format of his/her choosing at the conclusion of the course; the student will also be encouraged to present his/her work at the annual poster session held in conjunction with “McMaster Institute for Music and the Mind.” MMEC 704: The student will be part of a peer-review team which will evaluate the work of his/her peers in an ongoing format; the student will present his/her work in curriculum development in cooperation with local music educators and present his/her work at the annual poster session held in conjunction with “McMaster Institute for Music and the Mind.” MMEC 705: The student will be part of a peer-review team which will evaluate the work of his/her peers in an ongoing format; will cooperate as a member of the editorial team in the assembly and publication of an issue of the on-line journal, McMaster Music Analysis Colloquium. MMEC 707-708: The student will work independently under supervision in an original research project and present the results of the work in a written paper. MMEC 711: The student will prepare a portfolio that documents the his/her initiative in creating an independent presentation of his/her attainments in music education and cognition, with the assistance of MIETL and the supervisor.</p>	<p>MMEC 701: Through observation and discussion, the instructor will evaluate the student's success in attaining the objectives of the group work. MMEC 702: The instructor will assess the extent to which the research project demonstrates independent thought, motivation, and intellectual integrity. MMEC 703: The instructor oversight of the quality and depth of the student's research questions and explorations. MMEC 704: The instructor will oversee the peer-review process and evaluate the efficacy of the student's contributions; the instructor will evaluate the effectiveness student's curriculum project in the classroom, as well as the poster presentation of the research projects. MMEC 705: The instructor will oversee the peer-review process and evaluate the quality of the student's contributions; the instructor will evaluate the student's contribution to the on-line journal. MMEC 707-708: The instructor will evaluate the ongoing progress of the student, focusing on his/her ability to work independently in the formation of a thesis/hypothesis, development of a methodology, and successful completion and presentation of the project. MMEC 711: The supervisor will evaluate the portfolio as demonstrating individual initiative and integrity the requirements on a pass/fail basis.</p>
7. have an understanding of ethical behavior consistent with academic integrity and appropriate professional judgments.	4. Professional Capacity/Autonomy.	<p>MMEC 703: The student will attend one of the regularly scheduled seminars on research ethics and integrity presented by the McMaster Ethics Research Board (MREB). MMEC 704: The students will attend one of the regularly scheduled seminars on research ethics and integrity presented by the McMaster Ethics Research Board (MREB).</p>	<p>MMEC 703: Attainment of this Program Learning Outcome will be on the basis of the student attending one of the regularly scheduled seminars on research ethics and integrity presented by the McMaster Ethics Research Board (MREB). MMEC 704: Students will be familiar with current University policy on academic integrity and research ethics.</p>

8. be able to empirically assess the validity of theoretical claims" and "visualize data to explore complex issues	4. Professional Capacity/Autonomy.	MMEC 701: The student will undertake to critically assess leading papers from the topic areas covered in the course. Students will be encouraged to examine the weaknesses and strengths within each field and to suggest ways in which the research they examine might be developed in the future; students will report in a series of short written assignments. MMEC 705: The student will systematically apply analytical techniques to demonstrate the validity of the music analysis and interpretation.	MMEC 701: The instructor will evaluate the written assignments to evaluate the student's competence in assessing the value and quality of current research. MMEC 705: The instructor will evaluate the integrity of the student's analytical work.
9. be able to communicate effectively, both orally and in writing, in a professional setting.	5. Level of Communication Skills.	MMEC 701: The student will undertake a series of short written assignments and will as part of a group make an oral presentation to the class. MMEC 702: The student will prepare a final written report to the standards expected of professional scholarship. MMEC 703: The student will present his/her research in class and will be encouraged to submit a proposal for a presentation at a major conference or, an article for publication in a journal. MMEC 704: The student will present his/her research and curriculum development in an oral in-class presentation and will be encouraged to submit a proposal for a presentation at a major conference, (Ontario Music Educators' Association, McMaster Music and Mind Annual conference etc.) MMEC 705: The student will develop an open-access analytical project published collaboratively in the web-based journal, <i>McMaster Music Analysis Colloquium</i> , and will present their research in an oral class presentation supported by appropriate media. MMEC 706: The student will report on their reading in a series of engagements with the supervisor. The student will prepare a final paper (review-essay, annotated and critical bibliography, or other approved summative work). MMEC 707-708: the student will present the results of the work in a written paper. MMEC 711: The student will prepare a portfolio that documents the student's initiative in creating an independent presentation of his/her attainments in music education and cognition, with the assistance of MIETL and the supervisor.	MMEC 701: The instructor will evaluate the quality and presentation of the written assignments and the exam- essay. MMEC 702: The instructor will assess the quality of presentation to determine if the student has attained an appropriate level of skill. MMEC 703: Peer assessment of ideas for action research project; instructor assessment of student's level of preparedness, participation, and presentation. Motivation for a professional level of attainment will be supported by encouraging students to submit a proposal for a presentation at a major conference or, an article for publication in a journal. MMEC 704 : Peer assessment of essay organization, development of ideas, appropriate presentation. Instructor assesses student's level of preparedness, participation, and presentation. Motivation for a professional level of attainment will be supported by encouraging students to submit a proposal for a presentation at a major conference, (Ontario Music Educators' Association, McMaster Music and Mind Annual conference etc.) MMEC 705: Peer assessment of essay organization, development of ideas, appropriate presentation. Instructor assesses student's level of preparedness, participation, and presentation. Additional motivation will come through knowledge that the analytical work will be published publicly in <i>McMaster Music Analysis Colloquium</i> . MMEC 706: The instructor will evaluate the level of oral and written communication through personal engagements and the final paper. MMEC 707-708: The instructor will evaluate the quality of the written work for clarity, consistency, and style in meeting professional publication standards. MMEC 711: The supervisor will evaluate the effectiveness of the presentation in the portfolio as meeting professional standards on a pass/fail basis.
10. be able to explain how outcomes based in one domain of knowledge (i.e. cognitive development) can inform and improve inquiries based in another (i.e. music education).	5. Level of Communication Skills.	MMEC 702: The student will complete a research paper which will include explanation of the implications of the research for practical applications in music teaching and or music performance and listening. MMEC 704: The student will use knowledge acquired through literature review, discussion and peer input to the development of curriculum and pedagogical practice that combines cutting-edge research with real-world educational applications.	MMEC 702: The instructor will assess the final project to determine the student's success in connecting a theoretical basis (such as cognitive development) with a practical application (such as music education). MMEC 704: The instructor (in conjunction with peer assessment) will determine the extent to which the student has been able to apply knowledge in the discipline to the development of curriculum and pedagogy.

11. be able to contextualize their experience of music education and cognition within the broader fields of musicology, education, psychology, and community.

6. Awareness of Limits of Knowledge.

<p>MMEC 701: The student will undertake to critically assess leading papers from the topic areas covered in the course through a series of short written assignments. MMEC 703: The students will apply the knowledge gained through the literature review to his/her 6-week practicum with a community organization or ensemble, and synthesize the theoretical with the practical in a final course project. MMEC 704: Through participation in the class, the student will be able to synthesize his/her knowledge of the field and use his/her knowledge to inform his/her work in the classroom and studio.</p>	<p>MMEC 701: The instructor will evaluate the student's ability to contextualize through the written assignments. MMEC 703: The instructor will evaluate these outcomes as expressed in the literature review and in the final project (lecture-demonstration, concert, video written report or other approved format). MMEC 704: The instructor will evaluate the student's oral and written during the semester, and also evaluate the public talk by the student (part of the public of lectures and workshops "McMaster University Music Education Outreach Series" to be held in various locations across the city).</p>
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MA in Music Education and Cognition.

The following are responses from various parties across the university.

Dr. Michael Thompson, Assoc. Dean, Grad Studies, Engineering

Dr. Steven Brown, Psychology, Neuroscience & Behaviour

Dr. Sue Becker, Psychology, Neuroscience & Behaviour

Dr. Alexandre Sévigny, Communication Studies

Dr. Charlotte Yates, Dean, Faculty of Social Sciences

Dr. Laurel Trainor, Psychology, Neuroscience & Behaviour

Dr. David Ogborn, Communication Studies and Multimedia

Dr. Susan Denburg, Associate Vice-President, Academic, Faculty of Health Sciences

Dr. John Connolly, Linguistics & Languages

Dr. Susan Fast, English and Cultural Studies

Dr. Peter Walmsley, Chair of English and Cultural Studies

Dr. Doug Welch, Associate Dean of Science (Graduate Studies)

"Associate Dean Grad Studies (Eng)" <adeangse@mcmaster.ca>  
Subject: Re: MA in Music Education and Cognition  
Date: Thu, 8 Jan 2015 17:15:48 -0500  
To: "Engineering, Dean" <deaneng@mcmaster.ca>  
Cc: "Coley, Ken (coleyk)" <coleyk@mcmaster.ca>, renwick@mcmaster.ca, "Bonny  
Ibhawoh-Assoc. Dean (GS&R) Humanities" <adeangrh@mcmaster.ca>

Dear Dr. Renwick,

The Faculty of Engineering is happy to see this Master's degree going forward. We wish you success.

As a comment I noted that you seem to be targeting school teachers as potential applicants yet its not clear in the program description if there is a path for part-time enrolment. The course delivery roll out seems too rigorous. Perhaps you would consider including some mention of whether this is exclusively full-time or if there is potential for part-time students, and if so then how would they get through the program.

Best regards,

Mike

Dr. Michael Thompson  
Associate Dean Grad Studies (Eng)  
McMaster University

**Note: the revised version of the document addresses these issues. WR**

Steven Brown <stebro@mcmaster.ca>  
Subject: Re: MA in Music Education and Cognition  
Date: Thu, 8 Jan 2015 18:00:28 -0500  
To: William Renwick <renwick@mcmaster.ca>

Dear William,

I am, in theory, supportive of this Master's program. I myself don't do educational research, and so i can't imagine that i would be supervising students in this program. But you should feel free to list my name as a participating faculty member in the program.

Regards,  
Steven Brown



From: Sue Becker <becker@mcmaster.ca>  
Subject: Re: MA in Music Education and Cognition  
Date: Fri, 09 Jan 2015 10:39:08 -0500  
To: William Renwick <renwick@mcmaster.ca>

Dear Dr. Renwick,

I strongly support your proposal for the MA in Music Education and Cognition.

My research is a bit tangential to this endeavor. I study the neural bases of learning, memory and neural reorganization after hearing loss. The latter area does connect with music cognition via my collaborations with Ian Bruce, Laurel Trainor and Larry Roberts. So although I would not be a central player in your proposed area, I'd be happy to co-supervise potential students in this program whose research may connect with my own.

best,

Sue

Dr. Alexandre Sévigny" <seigny@mcmaster.ca>  
Subject: Re: MA in Music Education and Cognition  
Date: Sun, 11 Jan 2015 08:22:44 -0500  
To: William Renwick <renwick@mcmaster.ca>  
Cc: Alexandre Seigny <seigny@mcmaster.ca>

Dear William,

I would be very happy to participate. I am honoured to be asked!

Kind regards,

Alexandre (Alex or Sacha) Sévigny, PhD, APR, MCIPR  
Director,  
McMaster-Syracuse Master of Communications Management  
+1.905.525.9140 Ext. 27661

"Yates, Charlotte" <yatesch@mcmaster.ca>  
Subject: MA in Music Education and Cognition  
Date: Mon, 12 Jan 2015 19:34:44 +0000  
To: "Renwick, William (renwick)" <renwick@mcmaster.ca>  
Cc: Dean SocialScience <deansoc@mcmaster.ca>, "Porter, Tony (tporter)"  
<tporter@mcmaster.ca>

Dear Dr. Renwick,  
Thanks for sharing the proposal brief for a Master of Arts in Music  
Education and Cognition. Our Faculty of Social Sciences has no concerns with this  
proposal,  
and we will be pleased to support this program moving forward through  
the various required committees and approvals, within and beyond the  
university.  
Best wishes  
Charlotte Yates

\*\*\*\*\*

Charlotte A.B. Yates, Ph.D.  
Dean, Faculty of Social Sciences

Laurel Trainor <ljt@mcmaster.ca>

Subject: Re: MA in Music Education and Cognition

Date: Mon, 12 Jan 2015 20:28:14 -0500

To: William Renwick <renwick@mcmaster.ca>

Cc: Laurel Trainor <ljt@mcmaster.ca>, Patrick Bennett <pjbennett@mac.com>, Bruce Milliken <millike@univmail.cis.mcmaster.ca>, "Dr. David I. Shore" <dshore@mcmaster.ca>, Faculty of Science Dean <deansci@mcmaster.ca>

Hello,

I have read through your proposal, and in general I think it is good. Given that you are targeting music students I don't think that it will conflict with Psych programs. We should be able to accommodate a few students if they have the relevant background, with the following caveats:

(1) PSYCH 710: Statistics and Research Design: This is a required course for our students, so we will likely have to limit the number of non-PNB students who can take it. Hopefully there would not be too many students in your program who would want this course.

(2) As far as the rest of the courses:

PSYCH 722 / Developmental Psychology

PSYCH 723 / Cognitive Psychology

PSYCH 724 / Perception

PSYCH 726 / Behavioural Neuroscience

PSYCH 727 / Learning

Again we can probably accommodate a few students, but it would depend on our enrollments within PNB. You should also note that these courses are not offered every year. Indeed, many years we would only offer one of these courses. So we cannot guarantee your students spots in these courses.

(3) It is possible that I might supervise one of your students on a research project, as might some other PNB faculty. However, we each already supervise many research project students in PNB, both at the graduate and undergraduate levels, so in practice I suspect that not too many students might be accommodated in this way.

Otherwise, congratulations on the proposal. Looks like an exciting new program,  
Laurel

Laurel Trainor, Ph.D.

Director, McMaster Institute for Music and the Mind

Professor, Psychology, Neuroscience & Behaviour

McMaster University

1280 Main Street West, Hamilton, ON, Canada L8S 4K1

office: 905-525-9140 x23007

fax: 905-529-6225

David Ogborn <ogbornd@mcmaster.ca>  
Subject: Re: MA in Music Education and Cognition  
Date: Tue, 13 Jan 2015 16:13:29 -0500  
To: William Renwick <renwick@mcmaster.ca>

Dear William,

I'd be happy to supervise independent studies in this program, should the specific students be of high calibre and the interests aligned in some way. I tend to be kept quite busy with our own students though...

Yours truly,  
David

-----  
Dr. David Ogborn, Associate Professor  
Communication Studies and Multimedia  
McMaster University

"Denburg, Susan" <denburgs@mcmaster.ca>  
Subject: RE: MA in Music Education and Cognition  
Date: Tue, 13 Jan 2015 21:41:43 +0000  
To: "Renwick, William (renwick)" <renwick@mcmaster.ca>  
Cc: "Dean of Humanities (deanhum)" <deanhum@mcmaster.ca>, "Hayward, Catherine" <haywrdc@mcmaster.ca>, "Hickey, Mary" <hickeym@mcmaster.ca>

Dear Dr. Renwick,

Dr. Kelton passed this proposal on to me for a response.

Let me congratulate you on an exciting and innovative program that is well-conceived and well-planned. Recognizing that we are not directly involved in the proposal, we would have no difficulty supporting it through the formal approval process.

Good luck in taking this program forward and in launching it in the near future.

Best regards,

Susan Denburg

Susan D. Denburg PhD  
Associate Vice-President, Academic  
Faculty of Health Sciences  
Strategic Advisor to the President  
McMaster University  
HSC 2E5C  
tel: 905-525-9140 ext 22110  
fax: 905-525-8311

From: "Dr. John Connolly" <jconnol@mcmaster.ca>  
Subject: Re: MA in Music Education and Cognition  
Date: Tue, 13 Jan 2015 17:28:00 -0500  
To: William Renwick <renwick@mcmaster.ca>

Dear Bill,

I will be happy to have a look at the attached when I get a moment. In the meanwhile I am quite willing to say that I will support this program as it proceeds through the many bureaucratic steps at McMaster. Also, I can say, in principle, that I would be willing to be involved in the program as a potential supervisor.

Good luck with the process.

Best,  
John

John F. Connolly, Ph.D. / Professor & Chair, Senator William McMaster Chair in the  
Cognitive Neuroscience of Language / Department of Linguistics & Languages /  
McMaster University, Hamilton, Ontario, Canada L8S 4M2/905-525-9140 x27095 /  
jconnol@mcmaster.ca / <http://www.humanities.mcmaster.ca/~>

Susan Fast <fastfs@mcmaster.ca>  
Subject: Re: MA in Music Education and Cognition  
Date: Tue, 13 Jan 2015 18:12:16 -0500  
To: William Renwick <renwick@mcmaster.ca>

Hi Bill,

Thanks for sharing your proposal. Unfortunately, I just can't take anything else on, including more graduate students; I'm saying no to ECS students right now. In addition, I really don't see how my research and teaching expertise intersects with the program as described here, so I'm not sure I'd be very helpful.

Have you checked with Peter Walmsley about listing my ECS grad course under electives?

Csct 705, Music, Gender and Sexuality.

Best,  
Susan

Susan Fast  
Professor, English and Cultural Studies  
Director, Graduate Program in Gender Studies and Feminist Research  
McMaster University  
1280 Main St. W.  
Hamilton, Ontario, Canada L8S 4L9  
Phone: 905 525 9140 ext. 24715



Peter Walmsley <walmsley@mcmaster.ca>  
Subject: Re: MA in Music Education and Cognition  
Date: Thu, 15 Jan 2015 11:02:34 -0500  
To: William Renwick <renwick@mcmaster.ca>

Thanks William. I'm looking forward to reading this over: it seems very carefully prepared. As for Dr. Fast's graduate course, I'm sure we can work out some availability for MEC students. All best, Peter

--

Peter Walmsley  
Chair of English and Cultural Studies  
Editor, Eighteenth-Century Fiction  
McMaster University

From: Doug Welch <adeangss@mcmaster.ca>  
Subject: Re: Fwd: Re: Faculty of Science feedback on MA in Music Education and Cognition draft proposal  
Date: Wed, 04 Mar 2015 12:41:47 -0500  
To: William Renwick renwick@mcmaster.ca

Dear William,

I have read through the Feb 17, 2015 draft proposal for the MA in Music Education and Cognition. As you know, the prior consultation between faculty in the potentially most-affected program - Psychology, Neuroscience, and Behaviour - was significant and positive.

On behalf of the Faculty of Science, I am pleased to endorse this exciting proposed program and look forward to its creation and the mutual benefits that will accrue to McMaster when it prospers.

Best regards,  
Doug Welch

Associate Dean of Science (Graduate Studies)  
McMaster University



**LIBRARY RESOURCES TO SUPPORT  
THE PROPOSED NEW GRADUATE  
PROGRAM  
MASTER OF ARTS IN  
MUSIC EDUCATION AND COGNITION  
NOVEMBER 2014**

The University Library has evaluated our collection to support the current and potential information needs of students and faculty for the School of the Arts' proposed Master of Arts in Music Education and Cognition (MMEC).

As noted in the School's proposal, the program will draw on existing School of the Arts faculty. It will be a primarily course-based program, with new courses being developed within existing faculty research areas, and will not include a thesis component, though students may elect independent reading and project courses. Additionally, students will be able to elect courses that cross departmental lines, taking advantage of existing course offerings in other graduate programs.

The Library provides resources in a variety of formats to support existing programs and faculty research in the School of the Arts, as well as in such related areas as Psychology, Neuroscience and Behaviour, Communication Studies and Multimedia, and English and Cultural Studies. This being the case, we believe that the resources available provide sufficient scholarly support for the initial teaching and research needs of this program. The Library welcomes input from the School regarding needed information resources and priority of acquisition within the established budget for Music.

If further new courses and research areas are identified as additions to the program, they may require resources not currently available in the Library's collections and subscriptions. It will be important for the School to involve the Library early in any discussion of these changes or areas of growth.

## **LIBRARY RESOURCES**

### **Collection Development**

Library materials are obtained in a variety of ways, including firm and standing orders, monograph approval plans (in some areas), print or online subscriptions, consortial e-journal and e-book packages, and user-driven acquisition. Each department nominates a Faculty Library Representative from among their faculty. The function of the Library Representative is to serve as a communications link between the department and the Library, to assist us in making decisions about the value to students and faculty of new or existing electronic resources or serial subscriptions, and to recommend monograph titles for acquisition by the Library. As such, the Library Representative has an important role in shaping the Library's collection development.

## **Monographs**

McMaster University Library's holdings currently total more than two million volumes, with nearly 1.9 million distinct titles. The total annual expenditure on individual monograph acquisitions (i.e., those not purchased in large e-book packages) by the University Library in all formats is approximately \$700,000.

Print books, print journals, and reference resources for students in School of the Arts graduate programs are housed in both Mills Memorial Library (Humanities and Social Sciences). Additionally, the Library has purchased or subscribed to more than 600,000 e-books and makes additional e-book titles available through a user-driven "on demand" process.

## **Serials & Electronic Resources**

The Library has purchased or maintains subscriptions to a range of electronic resources, including research databases, full text journals, monographs, numeric data and government publications. In addition, the Library identifies and provides access to select freely available material such as open access journals.

McMaster University Library participates in national (i.e., Canadian Research Knowledge Network) and regional (i.e., Ontario Council of University Libraries) consortium licenses for access to full-text electronic resources and whenever possible registers for campus-wide electronic access instead of print subscriptions. All full-text journals are accessible through the library's online catalogue (<http://library.mcmaster.ca/catalogue>) and through the e-journals portal at <http://sfx.scholarsportal.info/mcmaster/a-z>. The Library has embedded linking technology (SFX) into research databases, which allows users to link directly from the databases to full-text e-journal subscriptions or to our catalogue.

McMaster University students, faculty and staff may access electronic research databases and full-text electronic books and journals from on- or off-campus via the Library's proxy server.

Currently the McMaster community has access to over 800,000 electronic resources, including approximately 86,000 electronic journals and 678,000 e-books. The major e-book, music streaming, and online journal suites which may be helpful to graduate students in Music are:

- Classical Scores Library
- Journals @ Scholars Portal
- JSTOR
- Naxos Music Library
- Oxford Scholarship Online
- Project MUSE
- Smithsonian Global Sound for Libraries

## **Reference Resources**

Selective list of indexes, abstracts, and online reference resources:

- Arts & Humanities Citation Index
- BHI - British Humanities Index
- Canadian Music Periodical Index
- Doctoral Dissertations in Musicology-Online
- Humanities Abstracts
- Music Index

Selective resources supporting research in cognition, education, and society:

- CogNet
- Ebsco Communication Source
- ERIC
- PsycINFO
- Social Sciences Abstracts
- Sociological Abstracts
- Web of Science

## **INFORMATION RESOURCES EXPENDITURES**

The Library's total Information Resources budget for fiscal year 2013/14 was \$7.475 million. The annual expenditure figures for the acquisition of library materials for Music over the past five fiscal years are listed in Appendix A.

It is important to note that many of our serials subscriptions are now online and are paid from a centralized Library electronic resources budget, which in part accounts for the declining figures in serials expenditures at the department level. In addition to those expenditures specific to the Department, the Library now spends in excess of \$4.6 million annually on electronic resources, many of which are multi-disciplinary.

Overall Library acquisitions expenditures have increased somewhat in the past five years. Significant pressure remains on the Library's Information Resources budget, due chiefly to the annual inflation of serials and e-resource subscriptions. Ontario's introduction of the Harmonized Sales Tax beginning in 2010 has also increased our costs. The Library's memberships in national and regional consortia have reduced some costs and enabled access to many more resources than the budget funds would normally permit.

## **LIBRARY FACILITIES AND SERVICES**

The libraries of the University Library system are open approximately 97 hours per week during the term, with extended hours during examination periods. The Learning Commons at Mills Library is open until 2:00 AM five days per week (Sunday-Thursday) during the term to provide late-night study space. Both the Mills Learning Commons and the Thode Science and Engineering Library provide later hours on Fridays (until 10:00PM) during the term and are open 24/7 during exam periods. Combined, the library systems offer 3,200 public seats, 23 group study rooms, and 191 public computer stations. The library system includes two instructional

spaces: the Wong Electronic Classroom in Mills Library and the ThInK Space in Thode Library, both of which can accommodate groups of up to 43 people. Videoconferencing and presentation facilities are available in the Connection Centre (43 seats), also located in Mills Library. Wireless network service is available throughout the libraries.

In January 2014 the University Library opened a dedicated graduate study room in Mills Library. The Graduate Reading Room is available to any currently registered graduate student or post-doctoral fellow as a space for reading or other quiet work, and is accessible during Mills Library's opening hours. Further information is available at <http://library.mcmaster.ca/news/22570>.

## **Library Catalogue**

Monographs, journals, and many other Library resources in both physical and electronic formats are catalogued. Print resources are generally shelved by call number using the Library of Congress Classification system. The online catalogue (<http://library.mcmaster.ca/catalogue>) provides access to all collections of the libraries at McMaster [Mills Memorial Library, H.G. Thode Library of Science & Engineering, Innis Library (Business), and the Health Sciences Library]. Most items circulate, with the exception of print journals, some government publications, special collections, and reference materials.

Information about all library materials, hours, services, the online catalogue, and access to electronic products is provided through the Library's website at <http://library.mcmaster.ca>.

## **Research/Reference Help**

Library staff provide research help (reference assistance) both in person at service desks in each library and remotely by telephone and e-mail. Research help is also available via chat using "Ask a Librarian," a consortial service provided by ten Ontario university libraries, facilitated by the Ontario Council of University Libraries (<http://ocul.on.ca/node/2121>). A dedicated librarian position, the Research and Advanced Studies Librarian, provides library instruction and more advanced reference consultations for McMaster graduate students, working in collaboration with other librarians and library staff.

## **Interlibrary Loan & Reciprocal Borrowing**

For items not available in McMaster's libraries, students can use RACER (<http://library.mcmaster.ca/borrow/ill>), OCUL's web-based interlibrary loan system, to borrow books, theses, government publications or copies of journal articles from libraries within Canada and elsewhere.

[Reciprocal agreements](#) with various library consortia allow McMaster faculty, staff, and students to borrow in person from other university libraries in Canada. McMaster faculty may also obtain borrowing privileges at many major university libraries in the United States (<http://www.oclc.org/membership/advisorycommittees/profile8.htm>).

## **Library Outreach**

McMaster University students, faculty, and staff are encouraged to keep abreast of new services and developments in the Library by reading our *News & Events* blog (<http://library.mcmaster.ca/news>) or by subscribing to one of many library RSS feeds.

Members of the Faculty of Humanities also participate in the University Library Advisory Council (<http://library.mcmaster.ca/content/university-library-advisory-committee-ulac-0>). The Council is an important aspect of both keeping the McMaster community abreast of developments in the Library and of incorporating community input into the Library's planning processes.

## Appendix A

DEPARTMENT OF MUSIC				
MONOGRAPH / SERIALS EXPENDITURES				
FY 09/10 - 13/14				
FISCAL YEAR	MONOGRAPH & SCORES EXPENDITUR ES	SERIALS EXPENDITUR ES	TOTAL	ELECTRONIC RESOURCES (Library Expenditures)
09/10	\$15,096	\$9,157	\$24,252	\$4,162,408
10/11	n/a	\$10,448	\$11,556	\$4,400,473
11/12	\$7,055	\$10,696	\$17,751	\$4,644,168
12/13	\$7,620	\$9,928	\$17,548	\$5,360,886
13/14	\$6,046	\$10,421	\$16,467	\$4,922,067
Notes:	FY13/14 - Monograph and serials expenditure amounts drawn from Symphony (library ILS) rather than the university's financial system			
	FY12/13 - Additional one-time purchases of electronic resources increased the Library's expenditures in this area			
	Beginning FY11/12 - # of monograph purchases reflects titles rather than volumes (i.e., a multi-volume work is counted as one title) and does not include microfiche or microfilm			
	FY10/11 - Tested a different budget model that did not provide separate department-level monograph funds			
	Beginning FY10/11 - Short Term Loans are not included in the Monograph Expenditures			
	FY08/09 & 09/10 - Short Term Loans are included in the Monograph expenditures			



# Graduate Study at McMaster University

When McMaster moved to its current graduate organization, the aims of graduate work were described as "the highest development of the powers of reasoning, judgment, and evaluation in intellectual concerns; specialized training in professional skills; initiation into research or scholarly work and development of a capacity for its successful and independent pursuit; the fruitful pursuit of research and scholarly work". This description remains as valid today as it was then.

Research is central to graduate work, and McMaster's strong research orientation has a pronounced effect on the character of its graduate programs. The numerous research achievements of McMaster faculty members have been recognized by grants, prizes, medals, and fellowships in academic societies. Such distinctions attest to the qualifications and dedication of faculty members in developing and disseminating knowledge. The education that McMaster faculty provide is valuable not only for the graduate student's career but also for the student's development as a person.

## 1.1 Programs of Study

McMaster University offers graduate programs that lead to one of the following degrees:

Master of Arts in Anthropology, Classics, Communication and New Media, Cultural Studies and Critical Theory, Economics, Economic Policy, English, French, Gender Studies and Feminist Research, Geography, Globalization, Health and Aging, History, Philosophy, Political Science, Religious Studies, Sociology, and Work and Society;

[Master of Biomedical Discovery and Commercialization \(First Offering September 2016\)](#)

Master of Business Administration;

Master of Applied Science in Biomedical Engineering, Chemical Engineering, Civil Engineering, [Computational Science and Engineering](#), Electrical and Computer Engineering, Engineering Physics, Materials Engineering, Mechanical Engineering, Software Engineering;

Master of Communications Management;

Master of Engineering in Chemical Engineering, Civil Engineering, [Computational Science and Engineering](#), Computer Science, ADAMI Design and Manufacturing, Electrical and Biomedical Engineering, Electrical and Computer Engineering, Engineering Physics, [Manufacturing Engineering](#), Mechatronics, Nuclear Engineering (UNENE), Software Engineering; Software Engineering and Virtual Systems Design;

[Master of Engineering in Manufacturing Engineering](#)

Master of Engineering Design;

Master of Engineering Entrepreneurship and Innovation;

Master of Engineering and Public Policy;

Master of Finance;

Master of Health Management;

[Master of Public Health](#)

Master of Science in Biochemistry, Biology, Chemical Biology, Chemistry, Cognitive Science of Language, [Computational Engineering and Science](#)[Science and Engineering](#), Computer Science, Earth and Environmental Sciences, eHealth, Geography, Global Health, Health and Radiation Physics, Health Research Methodology, Health Science Education, Kinesiology, Materials

Science, Mathematics, Medical Sciences (~~Blood and Vasculture; Cancer and Genetics; Infection and Immunity; Metabolism and Nutrition; Neurosciences and Behavioural Sciences; Physiology/Pharmacology~~), Neuroscience, Nursing, Occupational Therapy, Physics and Astronomy, Physiotherapy, Psychology, Radiation Sciences (~~Radiation Biology~~), Radiation Sciences (Medical Physics), Rehabilitation Science, and Statistics;

Master of Social Work;

Master of Technology Entrepreneurship and Innovation;

MD/Ph.D. in Medicine and Biochemistry, Medical and Biomedical Engineering, Medicine and Health Research Methodology; Medicine and Medical Sciences, Medicine and Neuroscience.

Doctor of Philosophy in Anthropology, Biochemistry, Biology, Biomedical Engineering, Business Administration (Accounting; Finance; ~~Human Resources~~Management of Organizational Behaviour and Human Resources; Information Systems; Management Science; Marketing), Chemical Biology, Chemical Engineering, Chemistry, Civil Engineering, Classics, Cognitive Science of Language, Computational Science and Engineering, Computer Science, Earth and Environmental Sciences, Economics, Electrical and Computer Engineering, Engineering Physics, English, French, Geography, Health Policy, Health Research Methodology, History, Kinesiology, Materials Engineering, Materials Science, Mathematics, Mechanical Engineering, Medical Sciences (~~Blood and Vasculture; Cancer and Genetics; Infection and Immunity; Metabolism and Nutrition; Physiology/Pharmacology~~), Neuroscience, Nursing, Philosophy, Physics and Astronomy, Political Science, Psychology, Radiation Sciences(~~Radiation Biology~~), Radiation Sciences (Medical Physics), Rehabilitation Science, Religious Studies, Social Work, Sociology, and Software Engineering.

## 1.2 Responsibilities to Graduate Students

The principal responsibilities that McMaster University has for the academic endeavours of its graduate students are shared by the School of Graduate Studies, the Faculty, the Department, the Supervisory Committee, and the Faculty Advisor. The following summarizes the responsibilities of each of these bodies.

### 1.2.1 The School of Graduate Studies

The name "School of Graduate Studies" refers to the Associate Vice-President & Dean and Associate Deans of Graduate Studies, the Graduate Council, and the registrarial duties associated with graduate administration.

The Associate Vice-President & Dean of Graduate Studies provides leadership in maintaining and improving the standards of graduate scholarship in the University. The responsibilities include: being the School's voice in graduate matters concerning research and its funding, scholarships and assistantships, the development of graduate programs and policy statements affecting graduate work; being the designated chair of Ph.D. dissertation oral examinations; approving the nomination of external examiners for Ph.D. theses and receiving the examiners' reports. The Associate Deans of Graduate Studies routinely act as the Dean's delegates. They recommend revision or development of regulations or policies affecting graduate work, refer matters of policy and curriculum to the Graduate Curriculum and Policy Committees, and deal with student appeals. In addition to acting on behalf of the Graduate Admissions and Study Committees as described below, the responsibilities of the Associate Deans include the awarding of McMaster Graduate Scholarships by acting on recommendations received from departments offering graduate work.

The Associate Graduate Registrar and Secretary of the School administers the academic affairs of students enrolled in the School of Graduate Studies. This responsibility includes: registering graduate students; assessing tuition fees; maintaining records and files for applicants and new or in-course students and arranging Ph.D. oral examinations.

The Executive Director, Strategic Planning & Administration administers the financial affairs of the School of Graduate Studies. This responsibility includes: managing all graduate scholarships, administering the graduate payroll, and allocating scholarship funds for graduate programs.

## 1.2.2 The Faculty

For each Faculty there is a Graduate Admissions and Study Committee, which is chaired by an Associate Dean of the School of Graduate Studies. This committee, or the Associate Dean on its behalf, is responsible for matters concerning both incoming and in-course graduate students. More specifically, these responsibilities include:

- determining the admissibility of applicants;
- receiving reports on the progress of students and making decisions thereon, including recommendations to require a student to withdraw;
- ensuring that program requirements have been met prior to the awarding of degrees; approving off-campus courses and leaves of absence; and
- deciding on applications from students for special consideration with respect to academic regulations.

In all of these matters, the Committee or the Associate Dean acts on recommendations made by departments.

## 1.2.3 The Department (or Graduate Program)

Typically, many of the duties of the Department in regard to graduate students are carried out by the Department Chair and the Graduate Advisor (in some programs these are referred to as Graduate Coordinators or Area Coordinators) for the Department.

For some programs (e.g. interdisciplinary graduate programs), these duties are carried out by the Program Director, Co-Director or Associate Director and for some Health Science programs, the Assistant Dean. For purposes of graduate studies policies stated in sections 1 through 6 of the Graduate Calendar, all reference to Department Chair shall mean, in the graduate programs of the Faculty of Health Sciences, Program Coordinators, Program Director or appropriate Assistant Dean. The departmental duties include making recommendations to the Graduate Admissions and Study Committee of the Faculty as noted above. The Department is responsible for matters such as:

- ensuring that every student has, at all times, a faculty advisor or a properly constituted supervisory committee;
- reviewing annually each student's academic progress and reporting thereon;
- conducting comprehensive examinations and language examinations, when these are required;
- preparing and distributing guidelines and departmental regulations for supervisors and students;
- ensuring that each student is properly trained in all safety practices, guidelines, and policies for the use of any resources required in carrying out their work, where appropriate.

In performing those duties that relate to individual students, the Department relies on advice from the Supervisory Committee or the faculty advisor.

In those cases in which a Supervisory Committee or faculty advisor determines that a student's progress is unsatisfactory, and recommends that the student be required to withdraw, the Department is expected to verify the reasons for the recommendation. If the recommendation is confirmed, the Department will forward the recommendation to the Associate Dean of Graduate Studies, who will receive it and act on behalf of the Faculty Admissions and Study Committee.

If the Department is not convinced that the recommendation is appropriate, the Department may attempt to mediate between the supervisor and student, or may attempt to find an alternate Supervisory Committee or faculty advisor. If that is not possible because all members with expertise in the student's topic are already on the Supervisory Committee, then the Department may find it best to encourage the student to transfer elsewhere. If the student is very close to completion, the Department may advise the student to continue in the program despite the lack of Supervisory Committee support.

## 1.2.4 The Supervisory Committee

The Supervisory Committee, or the faculty advisor when no such committee is required, provides advice to the Department as noted above. Additional responsibilities include, where applicable:

- planning and approving the student's program of courses and research;
- approving thesis proposals;
- deciding, within departmental regulations, on the timing of the comprehensive examination and, language and other examinations;
- maintaining knowledge of the student's research activities and progress;
- giving advice on research;
- providing the student with regular appraisals of progress or lack of it;
- initiating appropriate action if the student's progress is unsatisfactory, including any recommendation that the student withdraw;
- deciding when the student is to write the thesis and giving advice during this process;
- acting as internal examiners for the thesis.

## 1.2.5 The Faculty Advisor

When a supervisory committee is not required, a faculty advisor will be assigned by the Department. Like the supervisory committee, the advisor will provide advice to the Department as noted in Section 1.2.3 above. His/her responsibilities will include: planning and approving the student's program of courses and research; deciding within departmental regulations, on the timing of the comprehensive examination, and language and other examinations; maintaining knowledge of the student's research activities and progress; giving advice on research; providing the student with regular appraisals of progress or lack of it (i.e., the student and student advisor have a mutual obligation to meet on a regular basis); initiating appropriate action if the student's progress is unsatisfactory, including any recommendation that the student withdraw.

## 1.2.6 Guidelines for Graduate Course Instructors

For most faculty members and graduate students alike, the graduate classroom offers a unique site of intellectual development, exploration, and exchange. The following guidelines are intended to highlight best practices to help instructors plan and run successful graduate courses, and to optimize the learning experience for graduate students. These guidelines supplement the official *Policy on Graduate Course Outlines*, to which all graduate courses must adhere.

In fields that include diverse knowledge bases or skill sets, the instructor may wish to meet with prospective students before the course starts, particularly with students who are from outside the home program or department. Such a meeting might include a discussion of the overall objectives and content of the course, an explanation of the methods of assessment, and a description of the expertise and skill level expected of the student.

The graduate course instructor may decide to recruit one or more faculty members or field experts to give special lectures during the course. Such an invitation should be made well in advance of the lecture date. Invited instructors usually are not expected to evaluate the students. However, there may be rare cases in which an invited instructor contributes some aspect of course evaluation. In that event, the official course instructor still bears ultimate responsibility for overall evaluation and course outcome. Accordingly, best practice would be for the invited instructor to receive information, preferably in writing, about evaluation criteria and expectations that are consistent with the course outline. Students also should be informed of the mechanism and mode of evaluation.

To receive credit for a course, each student is responsible for confirming ~~on SOLAR~~ [in the Mosaic Student Center](#) that his/her ~~registration-enrollment~~ status is appropriate for that course. Students are responsible for ensuring that they have formally ~~registered-enrolled~~ for the course ~~(including any seminar course)~~ through their department or graduate program. Best practice suggests that the instructor should remind students of their responsibilities at the first meeting of the course. If the instructor becomes aware that a student is not listed on the ~~class list/grade sheet~~ [roster](#), or that the ~~class list/grade sheet~~ [roster](#) includes the name of a student who has not been attending the class, the instructor should inform the department/graduate program.

As noted in the *Policy on Graduate Course Outlines*, the course instructor is responsible for providing each student with evaluations of the student's academic performance at various stages during the course, and, whenever possible, a list of due dates.

It is best practice in graduate courses for each student to receive at least one written evaluation prior to the 'drop' date so that students can have the chance to withdraw from the course without academic penalty. Such an evaluation could take any of a number of forms (e.g., evaluations of a seminar presentation, a written assignment, or a collaborative work).

At the graduate level, students normally are expected to actively participate in courses (i.e., contribute to discussion, be encouraged to ask questions), and instructors often award marks for participation. Participation marks typically amount to a relatively minor proportion (e.g., 5-20%) of the final grade. Some students, particularly those whose first language is not English, may be reluctant to participate in a discussion in class. Best practice suggests that these students should be recognized early and, whenever possible, tactfully drawn into the discussion by the instructor. The ultimate aim of any graduate course is not only to convey information to and exchange information with students, but also to equip students with the confidence and ability to exchange information with others, both in the spoken word and in writing.

Although instructors are required to provide written course outlines at the beginning of courses, the *Policy on Graduate Course Outlines* also provides instructors with the opportunity to alter a course's content to reflect shifting research interests as long as the students are informed of such changes promptly and *in writing*. Even in the case of changing content, best practice is for instructors to adhere to the original course outline in terms of the amount of work expected from the students, the schedule of assignments, due dates, and the evaluation scheme.

Best practice suggests that instructors should calculate and provide final grades to the School of Graduate Studies for *all students* by the date stipulated in the Graduate Calendar. Final marks also should be provided to the students in a timely manner. Although there may be rare instances in which the instructor may need to report grades before all work is complete for a student, instructors should be aware that a grade of "incomplete" will be converted to an "F" and recorded on the student's transcript.

## 1.3 Responsibilities of Graduate Students to the University

Just as the University has responsibilities to graduate students, they have responsibilities to the University.

The student's responsibilities include, but are not limited to:

- **registering/enroll** annually until graduation, withdrawal, or withdrawal in good standing due to time limit;
- paying fees as required;
- complying with the regulations of the School of Graduate Studies as set out in this Calendar.

Where applicable, students are responsible for complying with such conditions as may be laid out in an accepted letter of offer. Students are also responsible for complying with the regulations governing graduate students at McMaster University with respect to full- and part-time status (see sections 2.5.2 and 2.5.3) and, in particular, for informing the School of Graduate Studies of any change in employment status. Students are further responsible for informing the School of Graduate Studies within two weeks, which acts as the official keeper of student records, of any change in personal information such as address, name, telephone number, etc. Students are also responsible for reporting through the department any change in student status, course registration, or withdrawal.

With regard to research and study, students are responsible for maintaining contact and meeting regularly with the faculty advisor, thesis/project supervisor or supervisory committee, for observing departmental guidelines, and for meeting the deadlines of the department and the School of Graduate Studies. If there is a problem with supervision, it is the student's responsibility to contact the Department Chair or Graduate Advisor. The provisions for changing a supervisor are outlined in Section 2.7.

Students who undertake to write a master's or doctoral thesis assume responsibility both for creating drafts of the thesis and for responding to direction from the Supervisory Committee. The student shall have the responsibility to write and ultimately to defend the thesis, and the Supervisory Committee has the responsibility to offer guidance in the course of the endeavour, and to recommend or not recommend the completed thesis for defence.

In order to receive a degree, the student must fulfill all departmental or program requirements and all University regulations, including those of the School of Graduate Studies. Students who have outstanding financial accounts at the end of the academic year will not receive their academic results, diplomas, or transcripts.

Since [registration-enrollment](#) permits access to libraries and certain other academic facilities (including off-campus facilities), it also implies a commitment on the part of each graduate student to use such facilities in accordance with applicable rules, including all safety practices, guidelines and policies. Inappropriate behaviour that is deemed to be in violation of such practices and/or policies may lead to denial of access to the facility. If such a denial of access to facilities means that a student can no longer fulfill his/her academic obligations, the student will be required to withdraw involuntarily from his/her academic program. (see also Section 6.2)

Full-time students are obliged to be on campus, except for vacation periods or authorized off-campus status, for all three terms of the university year. Vacation entitlement is discussed in Section 2.5.6. Any absence of one week or longer from campus, which is not part of the student's vacation entitlement requires the supervisor's approval in writing. If the absence exceeds two weeks, the approval of the department chair is also required. In accordance with government regulations (see Section 2.5.2) students who will be absent from campus for more than four weeks in any one term require not only permission from the Department but also that of the appropriate Associate Dean of Graduate Studies and must submit a petition for special consideration. Note that this permission is needed even for field work or study elsewhere in the world, in order to allow the University to comply with the regulation requiring that a written explanation for such absences be lodged in the Graduate School office. Students may arrange, through the Department and the Associate Dean of Graduate Studies, to be "full-time off-campus" for periods of up to a year. In cases of unauthorized absence the student will be deemed to have withdrawn voluntarily from graduate study and will have to petition for readmission. No guarantee of readmission or of renewal of financial arrangements can be made.

## General Regulations of the Graduate School

Please note: if there is any discrepancy between a department or program handbook and the School of Graduate Studies Calendar, then the School of Graduate Studies Calendar shall prevail.

It is the student's responsibility to:

- Maintain current contact information with the University, including address, phone numbers, and emergency contact information.
- Use the University provided e-mail address or maintain a valid forwarding e-mail address.
- Regularly check the official University communications channels. Official University communications are considered received if sent by postal mail, by fax, or by e-mail to the student's designated primary e-mail account via their @mcmaster.ca alias.
- Accept that forwarded e-mails may be lost and that e-mail is considered received if sent via the student's @mcmaster.ca alias.

## 2.1 Admission Requirements

McMaster University seeks candidates for graduate study who show high scholarly promise. Admission to a graduate program is based on a judgement by the University that the applicant can successfully complete the graduate degree program. The University's minimum requirements are identified in this section. [Degrees and grades from foreign universities are evaluated for their equivalency to McMaster's](#). Departments or programs may establish additional requirements, such as scores on the Graduate Record Examination (GRE). Applicants should read the admission statement for the program or department, as well as the section here. Admission is competitive: meeting the minimum requirements does not guarantee admission. Final decisions on matters of admission rest with the Graduate Admissions and Studies Committee for each Faculty. The admission decision is not subject to appeal.

## 2.1.1 Admission Requirements for Master's Degree

The University requires, as the major indicator of ability to complete a Master's program successfully, the holding of an Honours bachelor's degree with at least a B+ average (equivalent to a McMaster 8.5 GPA out of 12) in the final year in all courses in the discipline, or relating to the discipline, in which the applicant proposes to do graduate work. In a Master's program in the Faculty of Engineering the requirement is at least a B- average (equivalent to a McMaster 7.0 GPA). Strong letters of recommendation are also required.

~~Degrees and grades from foreign universities are evaluated for their equivalency to McMaster's.~~ In recognition of the changes taking place in the structure of university education as a consequence of the Bologna Accord, three-year, first-cycle degrees that meet the criteria of the "Framework for Qualifications of the European Higher Education Area" will be accepted in place of a four-year Honours degree. The equivalent of at least a B+ average (B- in Engineering) will still be required. A Diploma Supplement should accompany the official transcript [item (a) under Section 2.2].

Prospective applicants who lack some background in the discipline they wish to enter should consult the Undergraduate Calendar with regard to Continuing Student status. A continuing student is a university graduate who is not currently enrolled in a degree program, but who wishes to take one or more undergraduate classes.

Prospective applicants who did not attain the required standing in their undergraduate degree, but who have several years of work experience that is relevant to the program they wish to undertake, should discuss their situation with the department of interest. Evidence of ability to do graduate work will still be required.

## 2.1.2 Admission Requirements for Ph.D. Degree

Applicants may be admitted to a regular Ph.D. program at one of three stages in their academic work. First, entry after completion of a Master's program. Second, admission to Ph.D. studies from a Master's program at McMaster without completing the Master's degree. Students still enrolled in a Master's with thesis program beyond 22 months must complete the degree requirements including the thesis prior to admission to the Ph.D. program. And third, in exceptional cases, admission may be directly from a bachelor's degree.

1. For applicants who hold a Master's degree, the primary requirements are distinction in their previous graduate work (equivalent to at least a McMaster B+), and strong letters of reference.
2. Students enrolled in a Master's program at McMaster University may be transferred to the Ph.D. program prior to completion of the Master's degree. Not sooner than two terms and no later than 22 months after initial registration in the Master's program here, students may request to be reclassified as Ph.D. students. After proper review, the department will recommend one of the following:
  - a. admission to Ph.D. studies following completion of the requirements for the Master's degree;
  - b. admission to Ph.D. studies without completion of a Master's program;
  - c. admission to Ph.D. studies but with concurrent completion of all requirements for a Master's degree within two months from the date of reclassification;
  - d. refusal of admission to Ph.D. studies.

For students in (b), the recommendation for admission to Ph.D. must identify which if any courses taken as a Master's student can be credited toward the requirements for the Doctoral program.

In cases where students are transferred to the Ph.D. without completing their Masters, in the absence of a program-specific requirement, a student would have to complete at least half their Masters course complement in addition to their Ph.D. requirements.

A student in (b) may re-register as a candidate for the Master's degree, provided that work to date has met the standards for the Master's program.

Students in (c) who do not complete the requirements for the Master's degree within the two months will lose their status as a Ph.D. candidate and be returned to Master's status.

3. In certain programs, applicants with a first degree only, may be admitted directly to Ph.D. studies. Such students must show sufficient promise, including at least an A average. Within one calendar year the progress of students admitted to Ph.D. studies directly from a Bachelor's degree will be reviewed by their supervisory committee and the program. The program then will recommend one of the following:
  - a. proceed with Ph.D. studies;
  - b. not proceed with Ph.D. studies but re-register as a Master's candidate;
  - c. withdraw from the University.

A student admitted to a Ph.D. program who re-registers as a candidate for a Master's degree must meet all of the requirements for the Master's degree in order for it to be awarded.

Transfers to a Ph.D. program take effect at the start of the next term, or are retroactive to September 1st for students whose request to transfer is received by the School of Graduate Studies by the end of the second week of October. Students are encouraged to transfer before the fall term.

## **2.1.3 Admission Requirements for Part-Time Ph.D. Degree**

Admission to a part-time Ph.D. program is possible only for an individual holding a Master's degree whose circumstances preclude uninterrupted full-time doctoral studies. Because of the divergent nature of academic disciplines, part-time doctoral work is not feasible in some areas. Accordingly, no Department or Program is obligated to offer part-time doctoral work. As part of their applications prospective part-time students are required to provide a plan of study, including a clear account of when and where the thesis research is to be conducted. If facilities at the place of employment are to be used for the research, the signed agreement of the employer, recognizing the conditions surrounding graduate work, is also required. In addition, departments may have other requirements for admission to a part-time doctoral program. A part-time doctoral student must be geographically available on a regular basis, and must be able to participate regularly in departmental seminars and colloquia.

## **2.1.4 Admission of Students to a Cotutelle Ph.D. Degree**

A cotutelle is a single Ph.D. awarded by two post-secondary institutions, typically from different countries. A cotutelle degree is a unique way to promote and structure research collaborations, and allows students access to a broader range of research supervision than would be available at a single institution.

Students interested in a cotutelle Ph.D. degree must have finalized arrangements completed within the first 12 months of their Ph.D. study. Partner university arrangements may vary and students must investigate what is required to fulfill that institution's cotutelle requirements. For information on how to apply please view the Cotutelle Policy on the McMaster Senate Secretariat's website: <http://www.mcmaster.ca/policy/index.html>

## **2.1.5 Admission of Students with Related Work Experience or Course Work Beyond the Bachelor's Degree**

As noted in Section 2.1 of the Graduate Calendar, "Admission to a graduate program is based on a judgement by the University that the applicant can successfully complete the graduate degree program". Some potential applicants may not satisfy our admission requirement for a 4-year honours degree with a B+ average in the final year. However, work experience and/or completed course work beyond the Bachelor's degree, may have some bearing on the applicant's ability to complete a graduate program. The admissions process will recognize these accomplishments as follows.

Admission to graduate studies for a student with related work experience and/or course work beyond the Bachelor's degree will be based on the following criteria:

1. References from reliable sources, which specifically identify the applicant's aptitude for research and graduate education.



2. University 4-year undergraduate degree or equivalent, completed more than 4 years ago, together with additional course work taken since that time.
3. Significant record of workplace experience, the relevance of which will be assessed by the graduate program of choice.

## 2.1.6 Admission Requirements for Graduate Diploma Programs

See Section 12 for descriptions of McMaster's approved diplomas. The admission requirements for a graduate diploma are the same as are identified in Section 2.1.1 for admission to a Master's program.

Graduate Diploma students with at least a B+ average in their diploma course work may be eligible to transfer to a Master's degree in a related program, subject to the recommendation of the department or program to the relevant Faculty Graduate Admissions and Study Committee. If the diploma has not been completed, [transfer](#) credit may be given toward the degree requirements for all graduate courses completed successfully. Approval of the department is required for any such credit to be applied toward a degree; it is not automatic. Departmental or program approval is normally based on an assessment of the amount of additional coursework that will be required for the degree.

If a student wishes to enter a related Master's program after the diploma has been completed, credit may be granted towards the subsequent degree program for those courses completed successfully, with a limit of one full course or half of the course requirements for the degree, whichever is less.

## 2.1.7 Admission Requirements for Post-Degree Students

A Post-degree Student is one who has not been admitted to a graduate degree or diploma program but who holds a university degree and has been given permission to take a specific graduate course. Permission to take a course as a post-degree student requires the approval of the course instructor, the Department Chair, and the School of Graduate Studies. An application is required for each course.

Although acceptance as a post-degree student carries no implications with respect to acceptance for a degree program in the School of Graduate Studies, the level of academic achievement expected for admission under this category is the same as that required of students admitted to a Master's program (Section 2.1.1). Courses taken as a post-degree student may be eligible for credit toward a Master's degree in a related program, to a maximum of one-half of the degree's course requirement, subject to the recommendation of the department or program to the relevant Faculty Graduate Admissions and Study Committee.

A student who has completed a relevant undergraduate degree and is not admissible under current standards, but who is currently in (or has had) full-time employment in the intended area of study may be admitted as a post-degree student. In such cases, any courses taken as a post-degree student will not be available for credit in a subsequent graduate program, because they will have been necessary to demonstrate admissibility.

The deadline for registration is the same as for graduate degree programs (see Sessional Dates, Registration ).

(Note: A Graduate Diploma is distinct from a baccalaureate, [undergraduate diploma](#), Master's or Ph.D. degree, or diplomas and certificates awarded by the Centre for Continuing Education at McMaster University).

## 2.1.7 Non-Credit Participants in Graduate Courses

Graduate courses are not normally open to "auditors" who attend a course without the usual qualifications and without seeking academic credit. Under some circumstances, however, people who are not registered graduate students and who do not meet the requirements for admission as Post-degree (see Section 2.1.4) may attend a graduate course. This requires the written permission of the course instructor, the Department Chair, and the School of Graduate Studies. Upon completion of the course, and subject to

confirmation from the instructor that his/her expectations regarding the student's participation were met (i.e. that the student attended at least 80% of the instruction), a transcript notation "Audit" will be recorded. No other grade will be assigned. Enquiries should be directed to the instructor or the Chair of the Department offering the course.

A fee is charged for each course taken as a non-credit participant (by persons who are not registered graduate students). See Section 5.1, Fees for Graduate Students, for the fee schedule.

## 2.1.8 Visiting Students

**Visiting Students** are individuals who are currently registered in a graduate degree program in another university, and who have made arrangements through both their home university and a graduate program at McMaster to spend some time at McMaster as part of their degree program at the home university. While they are visiting students, they will not be enrolled in a degree program at McMaster. They are not part of any official exchange agreement including Ontario Visiting Graduate Student (OVGS) arrangement, although there may be an agreement between the McMaster program and their home institution. McMaster currently allows out-of-province and international students to visit in one of three ways: to take course work in a specific program; to conduct research in a specific lab; or to participate in an internship with a specific program or faculty member. In any case, students will be **registered-enrolled** as full time students for a maximum of one year. Acceptance is on the recommendation of the department or program at McMaster. Details about these options are available in Section 11 of the Graduate Calendar.

The student is expected to pay the incidental fees (see Section 5.1, Fees for Graduate Students) and the appropriate Canadian or international equivalent per course fee for the time that they are registered here. It may also be necessary for them to enrol in the UHIP program to ensure adequate health insurance coverage during their stay.

## 2.1.9 Exchange Students

**Exchange students** are individuals who much like visiting students, are **registered-enrolled** in a graduate degree program in another university and are paying fees to that university. The difference between a visiting student and an exchange student is that the exchange student participates in a formal exchange program between McMaster University and their home institution. A complete list of exchange agreements that McMaster participate in can be found on the Office of International Students Affairs webpage (<http://oisa.mcmaster.ca>).

Students participating in a formal exchange program are not assessed incidentals, or course fees, and are entitled to take a full course load (assuming they are registered for a full course load at their home institution). It may be necessary for them to enrol in the UHIP program to ensure adequate health insurance coverage during their stay.

## 2.1.10 English Language Requirements

English is the language of instruction and evaluation at McMaster, except in the M.A. and Ph.D. programs in French. Hence it is essential that all students (except in the French program) be able to communicate effectively in English.

Applicants whose native language is not English will be required to furnish evidence of their proficiency in the use of the English language. Such applicants are required to supply this evidence as part of their application. Applicants may be exempted from this requirement if they have completed a university degree at which English is the language of instruction.

The most common evidence is a score on the International English Language Testing System (IELTS) or the Test of English as a Foreign Language (TOEFL). Equivalent scores on other recognized tests may also be considered.

Students taking the IELTS are required to achieve a minimum score of 6.5 with a minimum score of 5.5 in each category.

TOEFL requirements may vary across programs.

- In most Faculties a minimum of 92 IBT (internet-based test) is required.
- In Business, Ph.D. and MBA programs require a minimum score of 100 with a minimum of 22 in the reading component, 22 in the listening component, 26 in the speaking component and 24 in the writing component on the IBT. The Master of Finance Program Requires a minimum score of 92.
- In Engineering, some programs require a minimum score of 80. Please check with the program to see specific requirements

Students who have completed an Academic ESL program through Canadian academic institutions may petition to have this considered in lieu of TOEFL.

## 2.2 Application for Admission

Enquiries about graduate work should be made directly to the department of interest. Our online application system is located at

<http://graduate.mcmaster.ca/graduate-students/future-students/how-to-apply.html>  
<https://gradapplication.mcmaster.ca/account/instructions.asp>

Applications may be submitted at any time but applicants should refer to the department or program to which they are applying for department specific deadlines. However, most University scholarships and awards are adjudicated in late March or early April, so students applying later than March cannot be considered for these awards.

Applications from outside Canada should be completed at least five months before the desired date of entry in order to allow for any delays and for obtaining the necessary visa.

### Application Fee

Applications must be accompanied by the required \$100 application fee. This fee is non-refundable and must be paid in Canadian dollars by means of a credit card payment or a cheque drawn on a Canadian bank made payable to McMaster University. Cheques drawn on Canadian banks should also include a \$15 processing fee for a total of \$115.

### Required Documents

The following items are required before your online application will be considered complete.

- One official transcript of academic work completed to date, sent directly from the issuing institution. If the final transcript does not show that a completed degree has been conferred, an official copy of your diploma is also required.
- Two confidential letters of recommendation from instructors most familiar with your academic work. Please note that McMaster University uses the Electronic Referencing System. By entering the email address of your referee through the online application, the system will automatically send an eReference request on your behalf.
- see Section 2.1.9 - *English Language Requirements*
- Statement of interest in pursuing graduate studies.

A graduate of a university outside Canada may also be required to submit a description of undergraduate and graduate courses taken in the field of specialization and in similar fields.

### Collection of Personal Information

Under the authority of the *McMaster University Act, 1976*, and by applying to McMaster or by enrolling in a program at the University, students expressly acknowledge and agree that the collection, retention, use and disclosure of relevant personal information is necessary for McMaster University to:

- establish a record of the student's performance in programs and courses;
- to assist the University in the academic and financial administration of its affairs;
- to provide the basis for awards and government funding; and
- to establish the student's status as a member of relevant student governmental organization.

Similarly, and in compliance with McMaster University's access to information and protection of privacy policies and Canadian and Ontario privacy laws, the University provides personal information to:

- the Canadian and Ontario government for the purposes of reporting purposes; and
- to appropriate student government organizations for the purposes of allowing such organizations to communicate with its membership and providing student government-related services consistent with the enrolment by a student at the University.

By applying and/or enrolling at McMaster University the student expressly consents to this collection, retention, use and disclosure of such personal information in this manner. Questions regarding the collection or use of personal information should be directed to the University Secretary, Gilmour Hall, Room 210, McMaster University.

## 2.3 ~~Advance~~Transfer Credit and Determination of Course Equivalency

Application for ~~advance-transfer~~ credit is normally done through the admissions process or as a petition for in course students and in both cases requires an Associate Dean's approval. Credits from other institutions must have been received in the last 5 years with a minimum grade of B-. In general, no credits used towards a previous degree or used as a basis of admission will be approved as credit toward a McMaster graduate degree. Normally, a maximum of 50% of the course degree requirements only will be approved for ~~advance-transfer~~ credit. Approved ~~advance-transfer~~ credit appears as a senior-course with a grade notation of T on the student's transcript with no grade.

Credits from other institutions can be used to substitute a specific McMaster University course requirement; however, the student may be required to take alternate courses. Students wishing to apply for advance credit or course requirement equivalency should fill out the Petition for Advance Credit or Course Requirement Equivalency-Special Consideration form and submit it to their program office for consideration. School of Graduate Studies (GH 212).

## 2.4 Acceptance

Initial assessment of completed applications is the responsibility of departments. If that assessment is favourable, the department will recommend to the School of Graduate Studies Office of a favourable decision, or by the department of a negative decision. Applicants may be accepted conditionally before completing their present degree programs. Such conditions must be cleared at the time of registration.

Official letters of admission are sent only by the School of Graduate Studies, and are valid only for the program and term stated in the admission letter. Successful applicants are required to respond in writing to the offer of admission within the interval identified in the offer letter. Some programs require a deposit fee when accepting the offer of admission. The value of the deposit fee will be deducted from the student's tuition fees. If circumstances develop making it impossible for a student to begin graduate work in the specified term, the department and the School reserve the right to revoke the offer of admission, and any financial aid offered.

The graduate program and the University reserve the right to revoke an offer of admission if a final transcript does not meet admission requirements or if it contains an annotation about an academic integrity or code of conduct matter.

## 2.5 ~~Registration~~Enrollment

### 2.5.1 Procedures

All graduate students, in both the regular and part-time programs, are required to [register-enroll](#) and pay fees annually in September until they graduate or withdraw. If they fail to do so they do not retain the status of graduate student and must apply for re-admission if they wish at a later date to continue their studies. If the department approves, a student may be allowed to begin graduate work in the winter or summer term (January or May), in which case they will first register at the start of that term, but in any following years will [register-enroll](#) in September.

It is the joint responsibility of the student and program to determine the appropriate program of study.

## 2.5.2 Provincial Definition of Full- and Part-time Status

Under the regulations of the Government of Ontario, A full-time graduate student must:

- a. be pursuing his or her studies as a full-time occupation;
- b. identify himself or herself as a full-time graduate student;
- c. be designated by the university as a full-time graduate student;
- d. be geographically available and visit the campus regularly. Without forfeiting full-time status, a graduate student, while still under supervision, may be absent from the university (e.g. visiting libraries, doing field work, attending a graduate course at another institution, etc.) provided that, if any such period of absence exceeds four weeks in any one term, written evidence shall be available in the Graduate Studies Office to the effect that the absence has the approval of the department or program Chair and Graduate Associate Dean.
- e. be considered to be a full-time graduate student by his/her supervisor or equivalent (designated by the university).

## 2.5.3 McMaster University's Regulations for Full- and Part-time Status

In accordance with the above provincial regulations, McMaster requires students to register annually, and to confirm their status as a full-time graduate student. Only full-time graduate students are eligible for scholarship support. University-related employment should be limited to an average of ten hours per week for full-time students, and full-time students are expected to limit time spent on employment both inside and outside the University.

Exceptions to this rule are possible with the approval of the School of Graduate Studies. A full-time student seeking an exception must provide a study plan that has been approved by the departmental graduate studies committee or its equivalent, along with a written statement from the student's supervisor. Ph.D. students who seek an exemption from the rule must arrange for a supervisory committee meeting, with a report of that meeting submitted to the Graduate School, every four months during the time they are employed beyond ten hours per week. No exceptions totalling 505 hours or more in a single academic year will be approved.

All active graduate students other than full-time graduate students as defined above are part-time graduate students.

## 2.5.4 Employment Regulations

In the McMaster context, there are three terms in the School of Graduate Studies for purposes of interpreting the rule in Section 2.5.3 limiting employment with the University to ten hours per week on average: Fall (September through December); Winter (January through April); and Summer (May through August). These are deemed to have 17, 17, and 18 weeks respectively. The ten-hour limit includes work as a Teaching Assistant at McMaster.

If the student is to be employed at the University other than as a TA ([or Research Assistant in lieu of a TA](#)), the School of Graduate Studies should be informed in writing of the nature of the employment, and the approval of the supervisor and the chair of the department is required. The approval of the School of Graduate Studies is required if the student is to be hired for University teaching.

## 2.5.5 Leaves of Absence

### General Regulations

Leaves of absence are normally granted on a term-by-term basis. Whenever possible the leave should start and end at the beginning of a term (i.e., January 1, May 1, or September 1). During the period of a Leave the student cannot expect to be given supervision or be entitled to use the University's [academic facilities](#). During a Leave of Absence, no tuition will be charged, nor will the student be eligible for any scholarship support. [Students on a leave of absence have to pay applicable supplemental fees and will be able to use the services associated with those fees](#). The length of time for completing the degree, and for scholarship support eligibility (see qualifier below), will be extended by the duration of the Leave on the resumption of studies. If a leave begins or ends in the middle of a term, term count will be determined upon return in consultation with the Associate Dean.

Leaves of absence affecting Teaching Assistantship duties are covered by the Collective Agreement with Local 3906 (Unit 1) of the Canadian Union of Public Employees.

Students should be aware that in the event of Leaves of Absence, continuation of the same research project and/or supervisor cannot be guaranteed. Students applying for a leave of absence for personal reasons must normally have completed at least one year of full time graduate studies. Students who have not completed a minimum of 16 weeks of graduate studies at McMaster will not be eligible for parenting leave scholarship funding as noted below. For additional information related to parental and maternity leaves, please refer to the next section.

### Reasons for Leaves of Absence

A leave of absence for up to one year is permitted for reasons of illness, provided that the request is supported by adequate medical documentation. Students who have successfully completed at least one full year in a graduate program may apply for a leave of absence once for up to one year for other personal circumstances, provided that the student's supervisor and the department support the request. Alternatively, the student may request withdrawal (Withdrawal at the Request of the Student). Should the student opt to withdraw, he/she may be eligible for reinstatement upon reapplication.

A leave of absence to obtain externally paid relevant work experience may be granted for one term for a Master's student and for two terms for a Ph.D. student. No two Leaves taken to obtain relevant work experience may be consecutive.

A leave of absence will not be granted to pursue another program of study.

Note: Students who hold fellowships, scholarships or grants from NSERC, SSHRC, CIHR, or OGS should be aware that these agencies have policies governing the interruption and continuation of awards that may differ from the University's policy on leaves of absence. Students holding such awards and who intend to keep them are responsible for ensuring that any leave of absence taken does not conflict with the granting agency's regulations. The appropriate agency should be contacted for details.

### **Parenting Leave Policy**

#### **Intent**

The Parenting Leave Policy (the "Policy") is intended to assist parents in successfully combining their graduate studies and family responsibilities with minimum financial and/or academic impact. The University will provide the following arrangement for parents requiring parenting leave from their studies. The Policy applies only to full time graduate students as defined by the School of Graduate Studies.

#### **Definitions**

**"McMaster Graduate Scholarship Funds"**- The sum total of departmental and graduate scholarships as well as research account support committed to the student. It does not include funding from external sources; funding from employment such as Teaching Assistantships or Research Assistantships, or; most scholarships held in trust.

**"Parent"** - Includes the birth mother of a child; a person with whom a child is placed for adoption; and a person who is in a relationship of some permanence with a parent of a child and who intend to treat the child as his or her own.

**"Parenting Leave"** - An unpaid leave of absence from studies of up to 52 weeks' duration for a birth mother of a child or up to 37 weeks' for the parent of child who is not the birth mother.

### **Leave of Absence from Studies**

#### **Eligibility**

A leave of absence for up to 52 weeks is permitted for Parenting Leave. A student electing not to take the maximum amount of time available for parenting leave will not have the option of taking any unused portion at a later date.

#### **Parameters**

A Parenting leave for the birth mother may consist of two parts - a pregnancy leave and parental leave. The pregnancy leave must begin, at the earliest, up to 17 weeks before the anticipated due date or on the date the child comes into the care and control of the parent for the first time and lasts for 17 weeks. The parental leave must begin right after the pregnancy leave and lasts for up to 35 weeks. Alternatively, the birthing mother may only take the parental leave. In this case the leave can be a maximum of 37 weeks in length and must begin at latest within 52 weeks after the birth of the child or the date on which the child comes into the care and control of the parent for the first time.

The Parenting leave for a non-birth mother can be a maximum of 37 weeks in length and must begin at latest within 52 weeks after the birth of the child or the date on which the child comes into the care and control of the parent for the first time.

It is understood that when a student takes a Parenting leave, the duration of the leave will not be counted as time towards the time limits in which the student is required to complete or make progress in his or her graduate studies program.

In order that the student's supervisor and/or program can make suitable arrangements to cover ongoing responsibilities during the student's absence, students are expected to provide as much notice as possible of the intention to take a Parenting Leave under this Policy.

A student is normally expected to give at least four weeks' notice of the date on which he/she intends to take his/her leave(s) and at least four weeks' notice of the date on which he/she intends to return from leave, should this date be different from the date agreed upon at the time the leave was granted.

A Parenting Leave or a portion thereof *may* be taken simultaneously with a Pregnancy and/or Parental leave from employment, in accordance with the Employment Standards Act, should the student also be an employee of McMaster University.

If both parents of a child are McMaster Graduate Students, only one parent is eligible to access Parenting Leave under this Policy at any one time. This Policy does not preclude the other parent from applying for a leave of absence under another policy or program and the approval or denial of that leave application will be determined on the basis of the parameters of that leave policy or program.

### **Combination with Other Leaves**

If a student is also an employee, it is incumbent upon the student to review their terms and conditions of employment and/or Collective Agreement (if any) and apply for the appropriate leave of absence from employment there under.

### **Financial Support from the School of Graduate Studies for Parenting Leave**

#### **Eligibility**

Students who have not completed a minimum of 16 weeks of graduate studies at McMaster will not be eligible for Financial Support under This Policy. They will remain eligible for a leave of absence from studies, in accordance with the above.

#### **Parameters**

A student in receipt of McMaster Graduate Scholarship Funds who has a child (or children) by birth or adoption may receive the financial support available under the Policy for a minimum period of 4 months and a maximum period of 8 months.

A student electing not to take the maximum amount of time available will not have the option of taking any unused leave at a later date.

A student in receipt of McMaster Graduate Scholarship Funds who takes a Parenting Leave under the Policy will be entitled to continue to receive graduate scholarship funds at the normal monthly rate, to a maximum of \$750 per month and to a maximum total of \$3,000, provided that a "Leave of Absence Information Form" has been submitted to and approved by the School of Graduate Studies.

The formula used to determine the "normal monthly rate" when a student is not currently in receipt of scholarship funds is the total of their McMaster Graduate Scholarship Funds averaged over the previous or current academic year depending on the start date of the parenting leave.

#### **Combination with Other Forms of Financial Support**

To maximize flexibility, the financial support available under the Policy can be combined with stipends from sources, excluding those from the Tri-Agencies (noted below) and can be spread over a period of between 4 and 8 months at the discretion of the student. However, in no case will funding for Parenting Leave from the School of Graduate Studies exceed a total of \$3000 (and \$750.00/month).

If the parent of the child for whom the Parenting Leave is being taken is eligible to receive parental support from CIHR, NSERC, SSHRC or another agency that provides parental support for the leave at any time during the Parenting leave, the parent is not eligible for financial support under McMaster's Parenting Leave Policy.

When two McMaster graduate students are the parents of a child, only one of those students will be entitled to claim the financial support under the Policy.

Financial support during Parenting Leave for students who are also employees of the University, provided as part of their terms and conditions of employment, are distinct and separate from the financial support available under this Policy. Other financial benefits, except as specifically excluded herein, can be taken concurrently with the financial support provided under this Policy provided that the individual meets the eligibility requirements for those plans for the duration for which they are accessing financial support under those plans.

The financial support provided under this Policy is not considered an approved Supplemental Unemployment Benefit Plan for the purposes of receiving Employment Insurance. Therefore, students wishing to access financial support under this Policy in addition to Employment Insurance ("EI") benefits should be aware that Human Resources and Skills Development Canada ("HRSDC") may consider financial support under this Policy to be earnings and could therefore require repayment of some of all EI benefits received. It is incumbent upon the student accessing financial support under this Policy to contact HRSDC if they have questions in this regard.

For questions on the administration of the Policy, contact the School of Graduate Studies.

## **2.5.6 Vacations**

Full-time graduate students are expected to be on campus for all three terms of the university year, as specified in Section 1.3. In addition to statutory holidays (see Sessional Dates ) and the weeklong closing of the University from late December until early January, normal vacation entitlement is two weeks of vacation during the year, to be scheduled by mutual agreement with the research supervisor and the employment supervisor. ~~Exception~~ An exception to this ~~allotment~~ allotment requires approval from the supervisor or in their absence a member of the supervisory committee.

## **2.5.7 Appeals and Petitions for Special Consideration**

The University wishes to assist students with legitimate difficulties. It also has the responsibility to ensure that degree, program and course requirements are met in a manner that is equitable to all students. Students may submit, in a prompt and timely



manner, a *Petition for Special Consideration* to the office of the Associate Dean of the School of Graduate Studies in those instances where a student acknowledges that the rules and regulations of the University have been applied fairly, but is requesting that an exception be made because of special circumstances (compelling medical, personal, or family reasons). The appropriate form may be found on the School of Graduate Studies website. The student's supervisor and Associate Chair are normally required to provide their independent assessments of the student's statement in the petition. Supporting documentation will be required but will not ensure approval of the petition. The authority to grant petitions lies with the School of Graduate Studies and is discretionary. It is imperative that students make every effort to meet the originally-scheduled course requirements and it is a student's responsibility to write examinations as scheduled.

In accordance with the Student Appeal Procedures, decisions made on Petitions for Special Consideration cannot be appealed to the Senate Board for Student appeals. Where any student feels there may have been discrimination on grounds in a protected social area as outlined in the Ontario Human Rights Code, they may initiate a complaint with the Office of Human Rights & Equity Services in Room 212 of the McMaster University Student Centre. In Health Sciences, Graduate Students should also consult the Advisor on Professionalism in Clinically-Based Education.~~In accordance with the Student Appeal Procedures, decisions made on Petitions for Special Consideration cannot be appealed to the Senate Board for Student appeals. However, if a student believes that a decision is a violation of his/her human rights, he or she must contact the office of Human Rights and Equity Services in room 212 of the McMaster University Student Centre, to initiate a complaint.~~

## 2.6 Graduate ~~Course Work~~Curriculum

### 2.6.1 Averaging of Letter Grades

Grades in graduate courses are reported as letter grades. However, instructors may record grades for individual components of the course either as letter or numerical grades. The averaging of letter grades assigned to individual components of a course must be done by using the McMaster 12-point scale, as follows: A+ = 12, A = 11, A- = 10, B+ = 9, B = 8, B- = 7, C+ = 6, C = 5, C- = 4, D+ = 3, D = 2, D- = 1, F = 0. Further, all .5 marks should be rounded up. The passing grades for courses at the graduate level are A+, A, A-, B+, B, and B-. Graduate students enrolled in undergraduate courses will be subject to the same set of passing grades as courses at the graduate level.

Graduate Student Grading Scale:

Grade	Points	Pass/Fail
A+	12	P+
A	11	P
A-	10	F
B+	9	
B	8	
B-	7	
F	0	

Note: Grades in graduate courses are reported as letter grades. Averaging of letter grades must be done using the McMaster 12-point scale.

Example of Weighted Average Calculation, using the grade points and units for courses completed:

Course Grade	Grade Points		Course Units		
A-	10	*	6	=	60
B	8	*	6	=	48
B+	9	*	3	=	27
F	0	*	3	=	0
		Total	18	-	135
To calculate Average: $135 \div 18 = 7.5$					

Note: 6-unit course is equivalent to a full course  
3-unit course is equivalent to a half course

Note: McMaster University's Policy on Graduate Course Outlines is available at:  
<http://www.mcmaster.ca/policy/faculty/Conduct/GraduateCourseOutlines.pdf>

## 2.6.2 Course Levels and Types

Courses available for graduate credit are numbered either at the 700- or 600-level (e.g. 771 or 6D06). Courses are restricted in enrolment to graduate students, with the exception of those undergraduate students registered in approved, accelerated M.Eng. programs and with written permission of their department (or program) chair, director, or designate. (Departments may have restrictions on the number of 600-level courses allowed for graduate credit). Graduate students taking 600-level courses are regularly required to do extra course work beyond that required of undergraduates in the corresponding 400-level course. Each department offers only a selection of its courses in any given year.

All Graduate courses have a unit value, with the standard being 3 units for a one term course, 6 units for a two term course and 1.5 units for a course lasting for half a term.

~~For 700-level courses, there are three types of courses. Full-year (i.e. two-term) courses do not have a prefix. One-term courses (half courses) are indicated by an asterisk (\*) sign preceding the course number. Half-term (quarter courses or modules) are indicated by a pound (#) sign preceding the course number.~~ In all cases, the expectation is that the course will meet at least three hours per week (on average). For 600-level courses, the first character represents the level of the course (combined graduate-undergraduate), the second character is a letter identifying the specific course within a department, the third character is a letter identifying the area of study within a program or simply a zero, and the fourth character indicates the number of units of course credit. Generally, 3-unit and 4-unit courses are one-term courses; 6-unit courses are full-year courses.

## 2.6.3 ~~Course Categories~~ Requirement Designations

Where a student wishes to designate a particular course towards a program other than their primary academic program a special request is required. The requirement designation form is available on the School of Graduate Studies website.

Courses can be designated as being in one of the ~~six~~ five categories:

**Masters** (Count towards the Master's degree requirements)

This category identifies the courses that are to count towards the Master's degree requirements (including any additional graduate requirements or undergraduate courses specified by the supervisory committee or Department Chair). The passing grades for an M course are A+, A, A-, B+, B, and B-.

**Doctoral** (Count towards the Doctoral degree requirements)

This category identifies the courses that are to count towards the Doctoral degree requirements (including any additional graduate requirements or undergraduate courses specified by the supervisory committee or Department Chair). The passing grades for a D course are A+, A, A-, B+, B, and B-.

**Extra Courses** (Extra Course)

This category identifies courses that the student is taking with the approval of the supervisor but that are not necessary to the student's current degree program. If a failing grade (i.e. less than B-) is received in a course taken as Extra, the courses (and grade) will not appear on the student's transcript unless because of academic dishonesty. Students may petition to change the designation of an EC course to an M or D course prior to the deadline to drop a course provided that this change is supported by the supervisor and program. Changes of designation after the drop date will not be approved. Courses designated as EC may subsequently be counted towards graduate degree requirements and the course designation changed to M or D, if approved by the Faculty Admissions and Study Committee or the Associate Dean acting on its behalf. The passing grades for an EC course are A+, A, A-, B+, B, and B-.

Courses that are required by the supervisory committee or the Department Chair as additional requirements in excess of the stated minimum for the program must be designated as M or D.

**DIP (Diploma Course)**

This category identifies courses that are to count towards the requirements for a diploma. The passing grades for a DIP course are A+, A, A-, B+, B, and B-.

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**CER (Certificate Course)**

This category identifies courses that the student is taking as individual courses not counting towards the requirements for a diploma. The passing grades for a CER course are A+, A, A-, B+, B, and B-.

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**AUD (Audit Course)**

Graduate courses are not normally open to "auditors" who attend a course without seeking academic credit. Under some circumstances, however, graduate students may audit a graduate course. This requires the written permission of the course instructor and the student's supervisor (or graduate advisor if no supervisor exists) on the form entitled 'Audit Add Form'. Permission must be obtained prior to the deadline for adding courses. Upon completion of the course, and subject to confirmation from the instructor that his/her expectations regarding the student's participation were met (usually that the student attended at least 80% of the course), a transcript notation of "Audit" for that course will be recorded. No other grade will be assigned. Enquiries should be directed to the instructor or the Chair of the Department offering the course.

A fee may be charged for a course taken for audit if the graduate student is in a part-time program. See Section 5.1 - Fees for Graduate Students, for the fee schedule.

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McMaster students enrolled in a program wishing to take a course at another institution need to fill out the OVGS form apply on-line in the Student Centre (see section 6.10 - Inter-University Cooperation - Ontario Visiting Graduate Student ).

## 2.6.4 Failing Grades and Incomplete Grades

All instances of failures are reviewed by the appropriate Faculty Committee on Graduate Admissions and Study or the Associate Dean acting on its behalf. The Faculty Committee on Graduate Admissions and Study or the Associate Dean acting on its behalf requests a departmental recommendation regarding the student, and this recommendation is given considerable weight. In the absence of a departmental recommendation to allow the student to continue, the student will be required to withdraw. Those allowed to remain in the program must either repeat or replace the failed course. A failing grade in a **CER Certificate**, **DIP Diploma**, **Masters** or **Doctoral** course remains on the transcript. Students who fail a second course will not normally be allowed to continue in the program.

Under exceptional circumstances a course instructor may approve an extension for the student for the completion of work in a course and assign an Incomplete grade (INC). Normally this extension is in the range of a few weeks. A student who receives this permission must complete the work as soon as possible, and in any case early enough to allow the instructor to report the grade to

the School of Graduate Studies by the date specified in the Sessional Dates near the beginning of this Calendar. If the INC grade is not cleared by the deadline, a failing grade will automatically be recorded.

## 2.6.5 Required Course and Training for All Graduate Students

All graduate students, including part-time students, must complete and pass the course *SGS #101 Academic Research Integrity and Ethics* within the first twelve months after their admission to graduate studies at McMaster. The purpose of this course is to ensure that the standards and expectations of academic integrity and research ethics are communicated early and are understood by incoming students. All students are required to take and pass SGS #101. Students may not graduate or register in subsequent academic year without having successfully completed this course. The course description for *SGS #101* may be found in Section 11.

All graduate students are required to complete appropriate training required to complete their research and studies (health and safety training, ethics training, biosafety training, etc.), as determined by their home Department or Program. All graduate students also are required to complete and pass *SGS #201 Accessibility for Ontarians with Disabilities Act (AODA)*, which can be completed on-line [www.mcmaster.ca/accessibility]. Having an understanding of how we can identify and reduce attitudinal, structural, information, technological, and systemic barriers to persons with disabilities is core to McMaster University's commitment to supporting an inclusive community in which all persons are treated with dignity and equality, and completion of AODA training is critical as McMaster's graduates move forward in their varied, chosen professions.

Students may not graduate or register for subsequent years in their program until they have completed their required training.

## 2.6.6 Milestones

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In addition to course work, most graduate programs have a series of non-course academic requirements that are designated as part of the curriculum, examples - seminars, workshops and comprehensives. These requirements are tracked via a series of milestones and progress can be viewed on the student center, and once complete will appear on the student's transcript. Please refer to individual program descriptions for further details of non-coursework requirements. These milestones are considered formal components of your academic progress.

## 2.7 Supervision

It is the responsibility of the department/program to ensure that every graduate student has, at all times, a faculty advisor or a properly constituted supervisory committee. The department/program should ensure that the members of a supervisory committee are sufficiently competent and experienced to serve at the required level. In identifying a supervisory committee, the department/program should consider the following, among other things: the balance of the committee by rank and experience; publications and other demonstrations of competence in scholarship or research on the part of the supervisor. Supervisory committees for Ph.D. candidates shall be reviewed annually by the department/program.

While the supervisor and student have a mutual obligation to meet on a regular basis, the department/program shall ensure there is a formal regular meeting of each Ph.D. supervisory committee at least once within the academic year (September-August), and possibly more often, to discuss the student's progress. Each Ph.D. supervisory committee must report annually on the student's progress and the department/program chair must forward such reports to the School of Graduate Studies. The report formally documents the supervisory committee's assessment of the progress of the student's program.

The department/program should prepare a set of guidelines for supervisors and students. The guidelines should deal with the selection and functioning of supervisory committees and should cover the joint responsibilities of faculty members and graduate

students. The guidelines may be attached to or incorporated in department/program handbooks which give regulations supplementary to those in the Calendar. Items relevant to graduate supervision should be approved by the appropriate Faculty Committee on Graduate Admissions and Study. A copy of the guidelines shall be given to each faculty member and each graduate student.

It is possible to change supervisors or the membership of a supervisory committee, although this is not the norm. If the direction of the research changes, membership can be changed by mutual consent of the parties involved. Supervisors and/or supervisory committee members may not resign without the department's/program's approval. A change in supervisor is at the discretion of the department/program, not the student or supervisor.

If a student feels that she/he is receiving unsatisfactory supervision, he/she should consult the Department/Program Chair or Graduate Advisor. If this avenue is not sufficient, the student is encouraged to speak with the appropriate Associate Dean of Graduate Studies about the problem (see Section 4.5 - Supervision).

Graduate students and supervisors are encouraged to familiarize themselves with the McMaster University Graduate work Supervision Guidelines for Faculty and Students, which follow below and to list of policies, policies on accommodations available on the School of Graduate Studies website at <http://graduate.mcmaster.ca/current-students/policies.html>.

## **2.7.1 Graduate Work Supervision Guidelines for Faculty and Students**

### Preamble

The relationship between the graduate student and supervisor/advisor is unique and provides a remarkable opportunity to guide and mentor the student engaged in advanced academic learning. What is considered 'good' supervision will vary from discipline to discipline, and it naturally evolves as the student advances through a graduate program. This document provides suggestions to initiate, promote, and sustain successful student-supervisor/advisor relationships.

### Guidelines for the Graduate Student

1. Commitment to scholarly activity is a pre-requisite for graduate success.
2. To support mentorship and guidance, the student must engage in effective, timely and on- going communication with the supervisor/advisor regarding the status of their project.
3. The student should discuss expectations with the supervisor/advisor to ensure that there is a mutual understanding of research goals and related activities, coursework, timelines and deadlines.
4. The student must manage their time, meet deadlines, and prepare for regularly scheduled meetings (e.g., with the supervisor/advisor and supervisory committee). Students should recognize that graduate program academic expectations will not be modified if they choose to engage in other activities, such as working outside of his/her graduate studies, studying for professional program entrance exams or applying for jobs or postdoctoral fellowships. Student- supervisor meetings for thesis work typically occur at least monthly, although meeting regularity will vary amongst disciplines and at various stages. Students are encouraged to discuss concerns about the type and amount of supervision needed for their work with their supervisor. Students are expected to inform the academic head of the graduate program if they are concerned about inadequate or inappropriate supervision.
5. The student is expected to develop effective communication and collaborative skills and to demonstrate respect for others. The student should carefully and earnestly consider advice, suggestions, comments and criticisms received from the graduate supervisor/advisor. The student should expect timely, but not immediate, responses (regarding meetings, feedback on written work, etc.) from the supervisor/advisor and supervisory committee.
6. The student is obliged to act ethically in conducting graduate work. This includes, but is not limited to, following McMaster University policies on the ethical conduct of research and academic integrity. The student is required to document and honestly report research data, to conscientiously cite information and data sources, and to seek guidance on any data exclusions. He/she must acknowledge contributions of the supervisor/advisor, committee members and others, in accordance with the norms of their academic discipline.

7. It is the student's responsibility to carry out all work safely and in accordance with standard operating procedures. Potentially dangerous tasks should not be done while impaired and should not be done until properly trained. It is the student's duty to learn about safe practices, ask questions, and seek appropriate help and guidance on safety matters.
8. It is the student's responsibility to be aware of all the requirements, regulations, and guidelines outlined in the Graduate Calendar as well as all University policies pertaining to graduate work.  
See [http://graduate.mcmaster.ca/images/files/graduate/forms/Graduate Work Supervision Guidelines.pdf](http://graduate.mcmaster.ca/images/files/graduate/forms/Graduate%20Work%20Supervision%20Guidelines.pdf) (see Appendix).

Guidelines for Supervisors and Advisors of Graduate Students

1. The supervisor/advisor must be aware of the inherent power imbalance in the relationship with students, behave professionally, and communicate appropriately. He/she must provide a safe, healthy environment that fosters productive scholarly work, curiosity, and freedom of expression. The environment must be free from harassment, discrimination, and intimidation.
2. The supervisor/advisor is expected to have sufficient time and resources (as appropriate for the field) to support the student's work effectively. It is the supervisor's responsibility to ensure that students have appropriate safety training, and that they carry out all work safely, and in accordance with standard operating procedures, once properly trained.
3. The supervisor/advisor should help the student develop a realistic thesis/research plan with reasonable plans, that balance exploration with achievable, manageable and focused goals, and allow completion of scholarly work "in time."
4. The supervisory committee must approve thesis project plans, including those that are part of a larger collaborative project led by others (e.g. research team members or collaborators).
5. The supervisor/advisor may encourage the student to undertake some research that is not formally part of their scholarly paper project or thesis project, provided that it will not negatively impact the student's academic progress. If appropriate, the additional work can be supported by a research assistant stipend.
6. The supervisor/advisor should be aware that a student might experience changes in motivation and productivity. The supervisor/advisor should be prepared to adapt his/her mentorship approach to promote success in a range of different situations.
7. The supervisor/advisor is expected to be aware of accommodation policies, procedures and support services, and to support students with disabilities in designing and organizing accommodations. They are expected to be respectful of graduate students who are dealing with stressful situations and personal difficulties. When appropriate, the supervisor/advisor should direct the student to campus resources and other supports. The supervisor/advisor is responsible for promoting a culture of respect and collaboration and encouraging timely conflict resolution when disputes arise, which may require consultation with the supervisory committee or others (e.g. head of the graduate program).
8. The supervisor must regularly communicate and have face-to-face meetings with the student to provide feedback on the student's progress, strengths, weaknesses, gaps in knowledge, and how well the student is addressing deficiencies. Written summaries of feedback should be prepared when there are significant deficiencies. When a student is struggling with meeting graduate program/thesis work expectations, a supervisory committee meeting should be scheduled early to assess progress and plans, and to provide a clear statement of requirements to meet expectations.
9. The supervisor/advisor and supervisory committee are required to provide students with timely, but not instantaneous, feedback. As an example, corrections to a thesis chapter, major research project, or a manuscript optimally should occur within a few weeks. Faculty should be aware that they must respond to a draft of the thesis within the timelines outlined in the graduate calendar.
10. Supervisors/advisors who undertake a research leave or other leaves must communicate to their graduate students, and graduate student applicants, the plans to provide supervision during the leave. Supervisors/advisors who will be away from campus for extended periods of time must name an alternate faculty member, with graduate supervisory privileges, who will have day-to-day responsibility and signing-authority for students.
11. The supervisor/advisor is expected to encourage increasing independence as the student progresses through graduate work. Although the supervisor/advisor is not expected to be a copy editor for the student's written work, he/she should review and provide feedback on materials that the student produces prior to external review or defence.
12. Students' contributions to research must be acknowledged in accordance with the University policies and the norms of the academic discipline.
13. When feasible and appropriate, supervisors/advisors are expected to encourage students to submit their graduate work for presentation at conferences and workshops, and for publication.

14. The supervisor/advisor should recognize that there are multiple career paths available to different students, and should be respectful of the student's choice of career path, providing advice, where appropriate, on the best way for the student to reach his/her career goals. The supervisor also should be aware of professional development opportunities for the student offered through the Department/Program, Faculty, or University, and should encourage the student to take advantage of such opportunities.
15. It is the supervisor/advisor's responsibility to be aware of all the requirements, regulations, and guidelines outlined in the Graduate Calendar and University policies. See [http://graduate.mcmaster.ca/images/files/graduate/forms/Graduate Work Supervision Guidelines.pdf](http://graduate.mcmaster.ca/images/files/graduate/forms/Graduate%20Work%20Supervision%20Guidelines.pdf) (see Appendix).

## 2.8 Theses

### 2.8.1 General

The thesis will be a coherent work prepared as an electronic document (an e-thesis) that provides a complete and systematic account of the research accomplished by the writer. A printed paper version is no longer acceptable for thesis defense or for storage in the university library after a successful defense. A Doctoral student may prepare and defend either a standard e-thesis (see 'GUIDE FOR THE PREPARATION OF MASTER'S AND DOCTORAL THESES', ~~May 2011~~; [http://graduate.mcmaster.ca/images/files/graduate/ThesisGuide\\_Final\\_May2011.pdf](http://graduate.mcmaster.ca/images/files/graduate/ThesisGuide_Final_May2011.pdf) November 2014 [http://graduate.mcmaster.ca/images/Thesis\\_Defence/Guide\\_for\\_the\\_Preparation\\_of\\_Masters\\_and\\_Doctoral\\_Theses-December\\_2014.pdf](http://graduate.mcmaster.ca/images/Thesis_Defence/Guide_for_the_Preparation_of_Masters_and_Doctoral_Theses-December_2014.pdf)) or a "sandwich" e-thesis at oral examination (also known as the 'thesis defense'). Normally, a Master's student may submit only a standard e-thesis (see 'Thesis Guide' section 5.2). Each department or program offering graduate work is wholly responsible for setting up oral examinations for Master's candidates (see 'Thesis Guide' Sections 6.1 and 6.2). The School of Graduate Studies is wholly responsible for arranging all Ph.D. oral examinations (see 'Thesis Guide' Sections 6.3, 6.4, and Appendix 1).

~~Starting on May 1, 2011, a~~ All candidates for Master's or Doctoral degrees who have successfully completed their oral examinations and who have made all required revisions to the satisfaction of their supervisor must upload an electronic version of their final e-thesis to 'MacSphere' (see section 2.8.3 below). The e-thesis must be presented in a format acceptable to the School of Graduate Studies. Please note that changes to an e-thesis will not be accepted after it has been uploaded to MacSphere and that the document uploaded should be the version approved by your supervisory committee after the defence. Having filed the e-thesis to MacSphere, the student may choose to purchase printed and bound copies for their personal use or for presentation. Details of selected companies who are organized to print and bind the thesis are listed on the School of Graduate Studies website (<http://www.mcmaster.ca/graduate>). The cost of printing and binding will be borne by the student.

No research for the Master's or Ph.D. degrees at McMaster may be secret or classified. All e-theses will be available to readers through MacSphere.

Individual Departments or graduate programs may issue special instructions concerning the expected forms of graphs, tables, maps, diagrams, and sound and video files which may be included within the e-thesis. Accepted forms of bibliographical reference in the particular discipline and other matters of format should be discussed with the thesis supervisor. Students may also refer to the instructions set forth in Kate L. Turabian's A Manual for Writers of Term Papers, Theses, and Dissertations (7th ed., 2007). In those instances where an examiner requests a printed copy of the thesis, it is the student's responsibility to produce a print version well before the oral examination. Doctoral students and their supervisors should keep in mind that theses of extraordinary length are to be discouraged. The preparation of a lengthy Ph.D. thesis almost certainly extends the time that the student takes to complete his or her degree. As a general rule, doctoral students are urged to limit their theses to no greater length than three hundred (300) pages of text (Master's thesis to less than 200 pages). In cases where students and their supervisors believe that responsible scholarly treatment of the thesis topic requires substantially greater length than that specified above, a written approval from the appropriate Associate Dean of Graduate Studies must be obtained before the external examiner is contacted.

### 2.8.2 Response Times for Theses

Supervisory committees should respond to the draft of a Ph.D. thesis within 2 months. Providing comments on individual chapters will take proportionately less time. Very long theses or chapters may take more time. There are busy periods within the academic year when the time taken to provide comments might be a bit longer than this norm. However, in no case should the response time exceed 3 months.

For Master's theses the corresponding times are 1 month and 2 months. Master's students are entitled to defend within 2 months of providing the final draft of the thesis to the department/program.

## 2.8.3 Publication of Electronic Theses at McMaster University

Every successfully-defended thesis for a Master's or a Ph.D. degree shall be published substantially as it was approved at the thesis defense, including any changes mandated by the defense committee, through the University Library's MacSphere and the Library and Archives of Canada. To this end, as a final requirement of the degree, each student must sign a license enabling such digital publication, and must upload the thesis to MacSphere in electronic form. Note that the student may request postponement of digital publication for up to one year at the time of uploading the thesis to MacSphere, and all such requests will be automatically granted. E-publication delays normally would be requested for the shortest amount of time required to facilitate publication with external organizations, to protect any right to immediate commercial gain, or to permit a patent application to be completed. Students wishing extensions of their initial postponement must apply directly to the Associate Vice-President & Dean of Graduate Studies, at least 4 weeks before the termination of the initial e-publication postponement, with a full description of why an additional delay is requested and what steps have been taken to address the issues that required the initial delay. The Associate Vice-President & Dean of Graduate Studies will determine whether further publication postponement is warranted, and, in no case will a publication delay of more than 2 years be permitted.

## Regulations for Master's Degrees

Master of Applied Science, Master of Arts, Master of Communications Management, Master of Engineering, [Master of Engineering in Manufacturing Engineering](#), Master of Engineering Design, Master of Engineering Entrepreneurship and Innovation, Master of Engineering and Public Policy, Master of Finance, Master of Health Management, [Master of Public Health](#), Master of Science, Master of Social Work, Master of Technology Entrepreneurship and Innovation. Regulations for the M.B.A. program may be found in the M.B.A. Calendar, available from the DeGroote School of Business.

## 3.1 General

Three types of Master's programs are available, although not all departments offer each type. The first is the thesis program, consisting of both course work and a research thesis. The second type entails a project rather than a thesis, as well as course work. ~~In some departments~~ [Finally, some programs offer a course work-only program](#) ~~is available curriculum. The decision on the choice of curriculum for Masters students can either be determined at the time of application or after the student is admitted, please~~ ~~C~~consult the departmental listings to see [what types of options](#) are available in a specific discipline.

If a department offers more than one of these types, the ability for a student to switch between them is not automatic, but is sometimes permitted. Approval of the supervisor and department chair (or graduate chair/advisor) is required. In many departments, there will be consequences for the level of financial support to the student. As well, there are likely to be consequences for the expected time to completion. Both financial support and expected time to completion should be clarified prior to approval of the change. If such a change is approved, notification should be sent to the School of Graduate Studies by the department or program, along with any change to the payroll authorization. Graduate Studies approval is not required.



The regular Master's programs are designed for those students who can devote their full time to graduate studies. (See Section 2.5.2 for the definitions of a full-time student.) Some departments also offer part-time programs. Consult the departmental listing in this Calendar to see whether or not a part-time program is available in a particular department.

Prior to the 2001-2002 academic year, all Master's degrees awarded within the Faculty of Engineering were designated as Master of Engineering (M. Eng.) degrees. On April 11, 2001, the University Senate approved the use of the Master of Applied Science (M.A.Sc.) designation for thesis-based degrees in the Faculty of Engineering. Non-thesis Master's degrees in the Faculty of Engineering retain the M. Eng. designation.

## 3.2 Program Requirements

A Master's program involving a thesis will normally be somewhat more specialized and will involve fewer courses than is the case in a Master's program without a thesis. A course Master's program is constructed by departments to contain a sufficient number of courses to make possible a diversified experience, for the student.

The student who is presenting a thesis as part of a program is required to complete, with at least B- standing, at least one full graduate course (or equivalent). Certain programs regularly prescribe additional graduate courses. In accordance with OCGS requirements, no more than one-third of the departmental minimum course requirements may be at the 600-level. The student may be required or permitted by the department to take courses in addition to those prescribed for graduate credit. In consultation with the programs concerned, one or more graduate courses in a related subject may be taken outside of the program.

Students will be required to meet any additional requirements of the program, including special seminars or colloquia. Such requirements are subject to approval by the appropriate Graduate Curriculum and Policy Committee.

## 3.3 Thesis

A thesis may be submitted at any time. The final date for submitting a thesis to the department for Fall or Spring Convocation is found in the Sessional Dates Section. The thesis will be examined by a committee of not fewer than three members (including the supervisor and an examiner external to the supervisory committee) who will be appointed by the department/program chair; the thesis will be defended by the candidate in an oral examination before this committee. The Associate Vice-President & Dean of Graduate Studies may appoint members to these committees. The time of the defense will be set by the department/program chair; normally this will be about two weeks after the completed thesis (as an electronic file; see section 2.8) has been submitted to the department for examination.

After a successful examination and all requested changes have been made, the student will upload the final e-thesis to MacSphere (see section 2.8). Students must submit their final thesis within four weeks of a successful defence when only minor changes are required of the student by the examining committee. When major revisions are required by the examining committee, the student will have one term (4 months) to complete those changes. The student may wish to have printed copies of the final thesis suitably bound for personal use or for presentation. The student will be responsible for the cost and distribution of any bound copies.

Tuition fees continue to be assessed until all degree requirements are met, including the successful submission of the final approved thesis to MacSphere.

Please note: when a thesis is submitted and published to MacSphere students must be aware that their name will appear as author of the document. In exceptional circumstances a pen name may be used subject to written approval of the AVP and Dean of Graduate Studies.

## 3.4 Project

In departments where there is the option of submitting a project, the department regulations must be observed. If the project is to be submitted to the University Library, the rules governing Master's theses must be followed.

## 3.5 Supervision

The general regulations regarding supervision, described earlier (Section 2.7, "Supervision"), apply to Master's students. If the student is registered in a thesis degree program, the thesis supervisor will have been identified by mutual consent, based on the nature of the thesis research. If the student is registering in a degree program without a thesis, a faculty advisor will be assigned. In either case, the advisor may be changed with the approval of the Department, as described in Section 2.7.

## 3.6 Program Duration

The amount of work in a regular (full-time) Master's program for a student with good preparation varies across the campus, but generally, programs involving a thesis are designed to take longer than those without a thesis. Programs with a thesis typically take sixteen to twenty months. Twelve-month non-thesis programs occur in Anthropology, Classics, Cultural Studies and Critical Theory, Economics, Economic Policy, English, Finance, French, [Global Health](#), History, Physics, Political Science, and Sociology.

For students in a regular program, the permissible time for completion of a Master's degree program is limited to three years from their initial registration in the program. For those students admitted to a part-time Master's program, and who complete all degree requirements while registered part-time, the permissible time is limited to five years from their initial registration. Please note, students who choose to move from part-time to full-time or from full-time to part-time will be governed by the time to completion and fees associated with the degree to which they were admitted. For more information please see Section 5.1 - Fees for Graduate Students.

Each student's progress is reviewed annually by the department and on a more frequent basis by the supervisor. A student whose work is unsatisfactory may at any time be required to withdraw from the University. In those cases in which a student does not manage to complete the degree before the end of the time limit specified above, the University has no further obligation to provide supervision. Upon consultation with the department and on its recommendation, the student will be shown as having been "withdrawn in good standing due to time limit".

In the case of a student in a thesis program, if a completed thesis is submitted, and is acceptable to the department, the student can be readmitted in order to defend the thesis. However, thesis program students who have been withdrawn in good standing should be aware that they may be required to complete additional course work before being permitted to proceed to a defense of the thesis. In all cases, the department must first declare that the submitted thesis is ready for defense before the student will be readmitted. Students can only be readmitted to defend at the beginning of the academic term.

A student enrolled in a course work or project program may also be readmitted if this is deemed acceptable by the student's department. However, course work and project program students who have been withdrawn in good standing should be aware that they may be required to retake courses in which the content is judged by their department to have changed significantly since first completion and/or may be required to take additional courses that are necessary to fulfill current program requirements.

At the time of readmission [to defend](#), the student will be required to pay a fee (equivalent to one term's tuition at the current part-time level 5 rate - see section 5.1) to compensate for the costs of the defense and subsequent processing of the thesis.

## Regulations for the Doctor of Philosophy Degree

## 4.1 General

The regular doctoral programs at McMaster have been designed for students who can devote full time to their studies. Academically, full-time Ph.D. study is the best and most efficient way to undertake the degree. However, some departments at McMaster University will consider individual applicants holding a Master's degree whose circumstances preclude uninterrupted full-time graduate work to undertake Ph.D. studies. Because of the divergent nature of academic disciplines, part-time Ph.D. work is not feasible in some areas.

Accordingly, no Department or Program is obligated to offer part-time Ph.D. work. Consult the department listings for information as to whether a part-time program is available in any particular department, or correspond with the department directly.

## 4.2 Program Requirements

McMaster University does not have a minimum course requirement for the Ph.D. Instead, it is left to each graduate program to establish its own minimum requirement, subject to the approval of the appropriate Graduate Curriculum and Policy Committee, and Graduate Council. In accordance with OCGS requirements, no more than one-third of the program's minimum course requirements may be at the 600-level.

Students should consult that section of the Calendar applicable to the graduate program in which they are interested.

The supervisory committee may also require a student to take courses in addition to the minimum prescribed by the program's regulations. These additional courses must be relevant to the student's program. They may be taken in another program and may be at either the undergraduate or the graduate level. The student who is required to take undergraduate courses may register for a maximum of 12 units of such work.

Students will be required to meet any additional requirements of the program, including special seminars or colloquia. Such requirements are subject to approval by the appropriate Committee on Graduate Curriculum and Policy.

## 4.3 Examinations

All Ph.D. candidates at McMaster are expected to acquire, during the course of their studies, a comprehensive knowledge of the discipline or sub-discipline to which their field of research belongs. The Comprehensive Examination is designed to test students for this breadth of knowledge and the ability to integrate ideas. The form of the exam and its administration are the responsibility of the department in which the student is registered, not of the student's supervisory committee.

The outcome will be reported to the School of Graduate Studies as "pass with distinction", "pass", or "fail."

If the Comprehensive Examination consists of multiple components, a second failure of the same single component will constitute a second failure of the Comprehensive Examination.

If the result of the Comprehensive Examination is "fail", the student must be given a second opportunity to take the examination, or those portions on which the failure occurred. This second opportunity is given in place of any 're-read' of a comprehensive exam, which is explicitly excluded from the Student Appeal Procedures, and in recognition of the fact that the failure may occur on the oral part of the examination. If a student chooses to withdraw from the program prior to that second opportunity, the result "fail" will remain on the student's record. A second failure will result in the student being withdrawn ~~by the beginning of the following month~~ at the end of the month in which the decision is rendered.

Normally, for full-time students, the comprehensive examination will be completed between the 12th and 20th month after the student began doctoral-level work at McMaster University, with an upper limit of 24 months. Individual exceptions require the

approval of the appropriate Faculty Committee on Graduate Admissions and Study. Programs which offer part-time Ph.D. programs must require such students to complete the Comprehensive Examination by the end of the 36<sup>th</sup> month.

Departments may hold transfer, qualifying, or entrance exams at the start of a student's doctoral program, but those exams are distinct from the comprehensive exam.

There is no University-wide foreign language requirement for Ph.D. students. Many departments, however, do have such a requirement (see departmental regulations).

All departmental examination rules and practices are subject to approval by the Faculty Committee on Graduate Curriculum and Policy, which may refer questions to Graduate Council.

## 4.4 Thesis

A candidate must present a thesis which embodies the results of original research and mature scholarship. In the case of sandwich theses, mature scholarship specifically includes substantial and significant contributions to the composition of text in papers with multiple authors. The student must be authorised by a majority of the supervisory committee before producing the final version of the thesis for oral defense. Normally the thesis will be distributed to committee members and examiners in an electronic format (see Section 2.8 - Theses).

When a majority of the supervisory committee have approved the final version of the thesis, it may be submitted to the School of Graduate Studies for examination. The oral defense will not be arranged by the Thesis Coordinator until a majority of the supervisory committee has submitted a report approving the thesis for defense and an agreed date of defense has been received.

### Selection of the Examining Committee

Selection of an external examiner is the responsibility of the Associate Vice-President & Dean of Graduate Studies. To aid in that selection, the supervisory committee is required to provide, through the Chair of the Department (or equivalent), the names and contact information for three potential examiners, at least one month prior to the submission of the thesis. The nominees must not have primary appointments at McMaster University, and they must be at arm's length\* from all members of the supervisory committee and the student. To maintain this distance, all communication with a potential or selected external examiner that is related to the examination and defense of the student must originate only from the School of Graduate Studies. The external examiner will provide a written report to the Associate Vice-President & Dean of Graduate Studies judging whether the thesis is satisfactory for defense or not. The external examiner will provide this assessment regardless of their ability to be present at the defense.

The examining body will consist of the following members: the student's supervisor, ~~at least~~ two members of the supervisory committee and an external examiner. The examining committee must not exceed four voting members. If there are more than three members on the students supervisory committee, the additional members are welcome to attend the defence and ask questions in the time allotted for audience members. If the external examiner cannot attend the oral defense, either in person or through tele- or video-conferencing, one additional representative of the faculty at large will be selected as an attending external examiner. In this case, the original (non-attending) external examiner will remain a member of the examining committee, but their contribution to evaluation of the candidate will be restricted to the written thesis. In unusual situations where the supervisor is not available to participate in the defense for an extended period, the program Chair may designate a different faculty member to serve on the examining committee in place of the supervisor.

The definition of 'arm's length' is as follows: The nominees should not have been a research supervisor or student of the supervisor or the student within the last 6 years; should not have collaborated with the supervisor or the student within the past 6 years, or have made plans to collaborate with these individuals in the immediate future. There also should be no other potential conflicts of interest (e.g., personal or financial). External examiners should not have been employed by or affiliated with the student's or supervisors' Department within the past 6 years, nor expect to become employed in the Department in the immediate future.

### Scheduling and Conducting the Oral Examination (Oral Defense)

If the external examiner approves the thesis for oral examination, an oral defense will be convened by the Associate Vice-President & Dean of Graduate Studies, chaired by herself or her delegate and conducted by all members of the examining committee. Quorum for the examination will be the Chair of the examining committee and the supervisory committee plus one additional examiner. The oral defence will be open to members of the university community and the public who wish to attend as observers, unless the student requests a closed defence. The Ph.D. defence presents the culmination of a number of years of scholarly work which are publicly funded. It is important, therefore, that in all but exceptional circumstances the student presents the result of this effort to the public. The examination proper will be conducted only by the members of the examining committee. When they have completed their questions, the Chair may permit a few minutes of questioning by visitors. Normally the student will attempt to answer visitors' questions, but these are not to be considered part of the examination for the degree. Observers will withdraw prior to the committee's deliberations on the student's performance at the defense. Normally, examination of the candidate will not take more than two hours. In no case should it take more than three.

If the external examiner does not approve the thesis for an oral defense, the appropriate Associate Dean will convene a meeting with the student's supervisory committee to discuss the external examiner's report. The supervisory committee and student will make every effort to address the concerns of the examiner, and the revised thesis may be re-assessed again by the external examiner. In rare cases, a new external examiner may be appointed by the Associate Vice-President and Dean of Graduate Studies.

After a discussion of the examination, the Chair will ask for a vote on each of the two questions, the acceptance or rejection of the **written document** and the success or failure of the **defense**. If the examiners approve both the written thesis and the defense, the Chair will ask the examiners to complete the Examination Report by initialling appropriately. The student will be invited back to the examination room for congratulations by the committee. In the event the written thesis is approved conditionally, the Chair of the examination committee is responsible for ensuring that (1) the candidate is advised of the conditions in writing, (2) the candidate receives and understands the 'Final Thesis Submission form' to be used by the Supervisor to confirm that the conditions have been met, and (3) the supervisor is also aware of the form. The Chair will complete and sign the Examination Report and return it to the School of Graduate Studies.

However, if there are two or more negative or abstaining votes on either question, with at least one of these votes being from a member of the supervisory committee, the candidate will be deemed to have failed the defense, and a reconvened oral defense must be held at a later date. The candidate should be told as clearly as possible by the Chair and the examining committee what he/she must do to improve the written thesis and/or the defense of it. The reconvened defense is the candidate's final opportunity to complete the degree. Membership on the reconvened examining committee should be the same as that for the original defense, except that one or two substitutions are permitted in order to expedite scheduling of the reconvened defense. If the written thesis, or the defense of it, fails a second time, that decision is final, and is not open to appeal.

After a successful defense, the candidate must correct any errors detected by the readers to the satisfaction of the Supervisor and then submit an electronic copy to the School of Graduate Studies via MacSphere (see Section 2.8.3 - Publication of Electronic Theses at McMaster University). The fee for archiving the thesis is paid by the student. Students must submit their final thesis within four weeks of a successful defence when only minor changes are required of the student by the examining committee. When major revisions are required by the examining committee, the student will have one term (4 months) to complete those changes.

Tuition fees continue to be assessed until all degree requirements are met, including the successful submission of the final approved thesis to MacSphere.

Please note: when a thesis is submitted and published to MacSphere students must be aware that their name will appear as author of the document. In exceptional circumstances a pen name may be used subject to written approval of the AVP and Dean of Graduate Studies.

## 4.5 Supervision

The general regulations in regard to supervision, described earlier (Section 2.7), apply to doctoral students.

Students will be expected to confer with the Chair of the Department/Program and others in choosing a supervisor for their entire doctoral program, including the proposed research. As soon as possible, and in any case not later than six months following their arrival, a supervisory committee will be appointed by the department/program, on the recommendation of the students and their possible supervisors. The supervisory committee will consist of at least three members. Two, including the supervisor, must be from within the department/program. A third member, whose scholarly interests include the area of the student's main interest, may be from outside the department/program. One member may be appointed from outside the University with the permission of the Associate Vice-President & Dean of Graduate Studies. If the need arises, the membership of a supervisory committee will be subject to change by the same procedures involved in its appointment (see Section 2.7 - Supervision). Supervisory committee members, including supervisors, may not resign without the department's/program's approval. The duties of the Ph.D. supervisory committee will be as follows:

- to assist in planning and to approve the student's program of courses and research;
- to approve the thesis proposal;
- to decide, within departmental regulations, on the timing of the comprehensive examination and, where applicable, of the language and other examinations;
- to maintain knowledge of the student's research activities and progress;
- to give advice on research, usually through the student's supervisor;
- to provide the student with regular appraisals or progress or lack of it;
- to perform such other duties as may be required by the department;
- to report on the above matters annually, in writing, on the approved form to the department, which in turn will report to the Faculty Graduate Committee on Admissions and Study;
- to initiate appropriate action if the student's progress is unsatisfactory, including any recommendation that the student withdraw, for approval by the department and the Faculty Committee on Graduate Admissions and Study;
- to decide when the student is to write the thesis and give advice during this process;
- to act as internal examiners for the student's thesis;
- to act as members of the examination committee for the final oral defense when so appointed.

The supervisory duties of the department/program will be as follows: to provide all Ph.D. students in its doctoral program with copies of the complete departmental regulations of the program (such regulations are subject to approval by the Faculty Committee on Graduate Curriculum and Policy); to approve the membership and work of the supervisory committee; and, when necessary, to make changes in the membership; to report this membership to the Faculty Committee on Graduate Admissions and Study; at least once a year to review each student's course grades and research progress, as reported by the supervisory committee; to conduct comprehensive examinations; to conduct or arrange for language examinations when these are required; to attest to the Faculty Committee on Graduate Admissions and Study that all departmental and University requirements for the degree have been satisfied; to name any departmental representatives to the examination committee for the final oral defense of the thesis; to replace any members of the supervisory committee, including the supervisor when on leave of absence or, if necessary, when on research leave.

Part-time students must have their course grades and research progress reviewed at least once a year by the supervisory committee.

## 4.6 Program Duration

The minimum time in which to complete a Ph.D. program at McMaster is three calendar years beyond the bachelor's level or two calendar years beyond the master's level. However, the minimum time may be reduced by up to one year for graduate work beyond the Master's level taken in a university or research institution approved by the Faculty Committee on Graduate Admissions and Study.

Completion of the Ph.D. degree is normally limited to six years from initial registration in a regular doctoral program at McMaster. The time for completion of the Ph.D. program for those admitted to a part-time program is normally limited to eight years from initial registration at McMaster as a Ph.D. student.

Each student's progress is reviewed annually by the department and on a more frequent basis by the supervisory committee. A student whose work is unsatisfactory may at any time be required to withdraw from the University.

In those cases in which a student does not manage to complete the degree requirements before the end of the time limit specified above, the University has no further obligation to provide supervision. Upon consultation with the department and on its recommendation, the student will be shown as having been "withdrawn in good standing due to time limit".

If a completed thesis is submitted, and is acceptable to the department, the student can be readmitted in order to defend the thesis. Students who have been withdrawn in good standing should be aware that they may be required to complete additional course work before being permitted to proceed to a defense of the thesis. In all cases, the department must first declare that the submitted thesis is ready for defense before the student will be readmitted. Students can only be readmitted to defend at the beginning of the academic term.

At the time of readmission to defend, the student will be required to pay a fee (~~equivalent to one term's tuition at the current part-time level 5 rate~~—see section 5.1) to compensate for the costs of the defense and subsequent processing of the thesis.

## Financial Matters

### 5.1 Fees for Graduate Students

(The Board of Governors reserves the right to amend fees after the printing of this statement.) These regulations apply to tuition and student fees. They cover the various charges which would be incurred for reasons of late payment or late registration. The ~~2014~~2015-2015-2016 fees schedule is in effect for a period of September 1, ~~2014-2015~~ to August 31, ~~2015-2016~~ and applies to all graduate students whether registered in regular or part-time degree programs. ~~These fees are intended as a guide, p~~Please consult the Accounts and Cashiers website ([http://www.mcmaster.ca/bms/student/SAC\\_fees\\_grad.html](http://www.mcmaster.ca/bms/student/SAC_fees_grad.html)) for the official graduate fees.

#### ~~2014-2015 Schedule of Fees-~~ (~~Graduate – Research Program, Canadian Fees~~)

<del>New Students (Term 1)</del>	<del>Fall</del>	<del>Winter</del>	<del>Spring</del>	<del>Total</del>
- Regular Tuition Fees	2,336.00	2,336.00	2,336.00	7,008.00
- Part-time Fees	1,168.00	1,168.00	1,168.00	3,504.00
-				
<del>Returning Students-</del>	<del>Fall</del>	<del>Winter</del>	<del>Spring</del>	<del>Total</del>
<del>(Terms 2-4 in September 2014)</del>	-	-	-	-
- Regular Tuition Fees	2,336.00	2,336.00	2,336.00	7,008.00
- Part-time Fees	1,168.00	1,168.00	1,168.00	3,504.00
-				
<del>Returning Students</del>	<del>Fall</del>	<del>Winter</del>	<del>Spring</del>	<del>Total</del>

(Terms 5-7 in September 2014)	-	-	-	-
- Regular Tuition Fees	2,336.00	2,336.00	2,336.00	7,008.00
- Part-time Fees	1,168.00	1,168.00	1,168.00	3,504.00
-				
<b>Returning Students</b>	<b>Fall</b>	<b>Winter</b>	<b>Spring</b>	<b>Total</b>
(Terms 8-10 in September 2014)	-	-	-	-
- Regular Tuition Fees	2,249.00	2,249.00	2,249.00	6,747.00
- Part-time Fees	1,125.00	1,125.00	1,125.00	3,375.00
-				
<b>Returning Students</b>	<b>Fall</b>	<b>Winter</b>	<b>Spring</b>	<b>Total:</b>
(Terms 11 or greater in September 2014)	-	-	-	-
- Regular Tuition Fees	2,166.00	2,166.00	2,166.00	6,498.00
- Part-time Fees	1,083.00	1,083.00	1,083.00	3,249.00
-				
<b>Discounted Fees (Ph.D. only)</b>	<b>1,083.00</b>	<b>1,083.00</b>	<b>1,083.00</b>	<b>3,249.00</b>
(Terms 13 or greater in September 2014)	-	-	-	-
-	-	-	-	-
<b>Readmission to Defend Thesis</b>	-	-	-	-
- 1,083.00	-	-	-	-
<b>-2014-2015 Schedule of Fees</b>				
<b>(Graduate--Research Program, International Fees)</b>				
<b>All Levels</b>	<b>Fall</b>	<b>Winter</b>	<b>Spring</b>	<b>Total</b>
- Regular Tuition Fees	5,587.00	5,587.00	5,587.00	16,761.00
- Part-time Fees	2,867.00	2,867.00	2,867.00	8,601.00
-	-	-	-	-
<b>Discounted Fees (Ph.D. only)</b>	<b>1,083.00</b>	<b>1,083.00</b>	<b>1,083.00</b>	<b>3,249.00</b>
-				
<b>Mandatory Supplemental Fees (Full time)</b>	<b>Sept. 2014</b>	<b>Jan. 2015</b>	<b>May 2015</b>	
Administrative Services	21.78	14.52	7.26	



Student Services	116.85	77.90	38.95
GSA Fee	55.31	55.31	27.65
GSA Health Insurance Plan	186.00	125.34	0.00
GSA Dental Insurance Plan	170.00	113.34	0.00
HSR (Bus Pass)	182.70	182.70	0.00
Sports Complex Building Fee	35.31	23.54	11.77
GSA Capital Building Fee	60.00	40.00	20.00
- <b>Total</b>	827.95	632.65	105.63
-			
<b>Mandatory Supplemental Fees (Part time)</b>	<b>Sept. 2014</b>	<b>Jan. 2015</b>	<b>May 2015</b>
Administrative Services	10.89	7.26	3.63
Student Services	58.41	38.94	19.47
GSA Fee	33.47	33.47	16.73
GSA Health Insurance Plan	186.00	125.34	0.00
GSA Dental Insurance Plan	170.00	113.34	0.00
HSR (Bus Pass)	0.00	0.00	0.00
Sports Complex Building Fee	35.31	23.54	11.77
GSA Capital Building Fee	40.00	26.67	13.33
- <b>Total</b>	534.08	368.56	64.93
-			
<b>2014-2015 Post Degree (Canadian)</b>	<b>up to 1 Half course</b>	<b>up to 2 Half courses</b>	<b>up to 3 Half courses</b>
Tuition	1,168.00	2,336.00	3,504.00
Administrative Services	3.63	7.26	10.89
Student Services	19.44	38.88	58.32
GSA Fee	11.15	22.30	33.45
Sports Complex Building Fee	11.77	23.54	35.31
GSA Capital Building Fee	13.33	26.67	39.99
- <b>Total</b>	1,227.32	2,454.65	3,681.96
-			

<b>2014-2015 Post Degree (International)</b>	<b>up to 1 Half course</b>	<b>up to 2 Half courses</b>	<b>up to 3 Half courses</b>
Tuition	2,867.00	5,734.00	8,601.00
Administrative Services	3.63	7.26	10.89
Student Services	19.44	38.88	58.32
GSA Fee	11.15	22.30	33.45
Sports Complex Building Fee	11.77	23.54	35.31
GSA Capital Building Fee	13.33	26.67	39.99
- <b>Total</b>	<b>2,926.32</b>	<b>5,852.65</b>	<b>8,778.96</b>
<b>2014-2015 Special Program Fees</b>			
<b>DEGREES:</b>			
<b>Advanced Design and Manufacturing Institute</b>			
2,700.00 per half course			
<b>Health Research Methodology (HRM) – On-line courses</b>			
International 3,039.00 per half course plus mandatory part-time supplementary fees			
<b>Master of Business Administration (MBA) *</b>			
<u>Canadian</u>			
Level 1 Full-time 8392.00 per term (25,176.00 annually) plus mandatory supplemental fees (please see MBA in-course website for mandatory supplemental fees)			
Part-time (per course) 2,098.00 (6,294.00 annually) plus mandatory supplemental fees			
Level 2 Full-time 8,240.00 per term (24,720.00 annually) plus mandatory supplemental fees			
Part-time (per course) 2,060.00 (6,180.00 annually) plus mandatory supplemental fees			
Co-op Placement Fee (if applicable) 1,750.00			
<u>International</u>			
All Levels Full-time 16,052.00 per term (48,156.00 annually) plus mandatory supplemental fees			
Part-time (per course) 4,013.00 (12,039.00 annually) plus mandatory supplemental fees			
Co-op Placement Fee (if applicable) 1,750.00			
<b>* MBA Mandatory Supplemental Fees</b>			
Canadian and International Full-Time All Levels:	-		
Athletics & Recreation Activity Fee (per term)	37.79		
MBA Association Fee	152.50		
Business Employment Services Fee	265.00		
Educational Trading Centre Fee	15.00		
GSA Health Plan Fee	196.00		

-	
Canadian and International Part-Time All Levels:	-
Athletics and Recreation Activity Fee (per term)	18.89

#### Master of Communications Management

Canadian 3,647.00 per course plus PT mandatory supplemental fees  
 International 4,013.00 per course plus PT mandatory supplemental fees

#### 2014-2015 Schedule of Fees (Graduate – Course-Based or Professional Program (M.Eng and M.E.M.E), Canadian Fees)\*

New Students (Term 1)	Fall	Winter	Spring	Total
- Regular Tuition Fees	2,574.00	2,574.00	2,574.00	7,722.00
- Part-time Fees	1,287.00	1,287.00	1,287.00	3,861.00
-				
Returning Students	Fall	Winter	Spring	Total
(Terms 2-4 in September 2014)	-	-	-	-
- Regular Tuition Fees	2,528.00	2,528.00	2,528.00	7,584.00
- Part-time Fees	1,264.00	1,264.00	1,264.00	3,792.00
-				
Returning Students	Fall	Winter	Spring	Total
(Terms 5-7 in September 2013)	-	-	-	-
- Regular Tuition Fees	2,482.00	2,482.00	2,482.00	7,446.00
- Part-time Fees	1,241.00	1,241.00	1,241.00	3,723.00
-				
-				
Returning Students	Fall	Winter	Spring	Total
(Terms 8-10 in September 2014)	-	-	-	-
- Regular Tuition Fees	2,389.00	2,389.00	2,389.00	7,167.00
- Part-time Fees	1,194.00	1,194.00	1,194.00	3,582.00
-				
-				
Returning Students	Fall	Winter	Spring	Total
(Terms 11 or greater in September 2014)	-	-	-	-

-	Regular Tuition Fees	2302.00	2,302.00	2,302.00	6,906.00
-	Part-time Fees	1,150.00	1,150.00	1,150.00	3,450.00
* Plus mandatory supplemental fees	-	-	-	-	-

-

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**-2014-2015 Schedule of Fees**  
**(Graduate – Course-based or Professional Programs (M.Eng and M.E.M.E), International Fees)\***

All Levels		Fall	Winter	Spring	Total
-	Regular Tuition Fees	5,922.00	5,922.00	5,922.00	17,766.00
-	Part-time Fees	3,039.00	3,039.00	3,039.00	9,117.00
* Plus mandatory supplemental fees		-	-	-	-

-

**Master of Engineering Design**

Canadian

Level 1 Full-time 5,806.00 per term (17,418.00 annually) plus mandatory supplemental fees  
Part-time 2,979.00 per term (8,937.00 annually) plus mandatory supplemental fees  
Level 2 Full-time 5,701.00 per term (17,103.00 annually) plus mandatory supplemental fees  
Part-time 2,925.00 per term (8,775.00 annually) plus mandatory supplemental fees

International

All Levels Full-time 6,867.00 per term (20,601.00 annually) plus mandatory supplemental fees  
Part-time 3,523.00 per term (10,569.00 annually) plus mandatory supplemental fees

**Master of Engineering Entrepreneurship and Innovation / Master of Technology Entrepreneurship and Innovation**

Canadian

Level 1 Full-time 6,674.00 per term (20,022.00 annually) plus mandatory supplemental fees  
Part-time 3,336.00 per term (10,008.00 annually) plus mandatory supplemental fees  
Level 2 Full-time 6,554.00 per term (19,662.00 annually) plus mandatory supplemental fees  
Part-time 3,276.00 per term (9,828.00 annually) plus mandatory supplemental fees

International

All Levels Full-time 10,212.00 per term (30,636.00 annually) plus mandatory supplemental fees  
Part-time 5,104.00 per term (15,312.00 annually) plus mandatory supplemental fees

**Master of Engineering and Public Policy**

Canadian

Level 1 Full-time 5,806.00 per term (17,418.00 annually) plus mandatory supplemental fees  
Part-time 2,979.00 per term (8,937.00 annually) plus mandatory supplemental fees  
Level 2 Full-time 5,701.00 per term (17,103.00 annually) plus mandatory supplemental fees  
Part-time 2,925.00 per term (8,775.00 annually) plus mandatory supplemental fees

#### International

All Levels Full-time 6,867.00 per term (20,601.00 annually) plus mandatory supplemental fees

Part-time 3,523.00 per term (10,569.00 annually) plus mandatory supplemental fees

#### **Master of Finance**

All Levels Full-time 12,600 per term (37,800 annually) plus mandatory supplemental fees

Per-course fee 2,520

#### **Master of Health Management**

Canadian 2,600.00 per 1/2-course plus PT mandatory supplemental fees

International 5,200 per 1/2-course plus PT mandatory supplemental fees

#### **Master of Science – Health Science Education**

##### Canadian

Level 1 Full-time 7,560.00 annually plus mandatory supplemental fees

Part-time 5,040.00 annually plus mandatory supplemental fees

Level 2 Full-time 7,560.00 annually plus mandatory supplemental fees

Part-time 5,040.00 annually plus mandatory supplemental fees

Per-course 1,855.00

##### International

Full-time 17,213.00 annually plus mandatory supplemental fees

Part-time 8,833.00 annually plus mandatory supplemental fees

Per-course 2,968.00

#### **MD/Ph.D. Program**

This program covers both the MD and Ph.D. curriculum over a period of seven years. During the MD years, students will be assessed tuition fees based on tuition for the MD programs. During the Ph.D. years, students will be assessed tuition fees based on tuition for full time Ph.D. students as shown on the schedule above. Mandatory supplemental fees are based on full time rates. During the MD portion of curriculum, extra fees will be assessed for the Learning Resource fee, Medical Society fee, Health Screening fee, and Respiratory Mask Fitting fee.

#### **Occupational Therapy/Physiotherapy Fees**

<b>Canadian Fees</b>	<b>M.Sc. (OT)</b>	<b>M.Sc. (PT)</b>
Tuition Fees – Level one	9,496.00	9,496.00
————— Level two	9,324.00	9,324.00
Administrative Services	21.78	21.78
Student Services	116.85	116.85
GSA Fee	55.31	55.31
GSA Health Insurance Plan	186.00	186.00
GSA Dental Insurance Plan	170.00	170.00

HSR (Bus Pass)	182.70	182.70
Sports Complex Building Fee	35.31	35.31
GSA Capital Building Fee	60.00	60.00
Learning Resource Fee	165.04	254.44
Communicable Disease Screening Fee	27.06	27.06
Respiratory Mask Fitting Fee	22.14	22.14
		10,627.59
<b>Total -- Level One</b>	10,538.19	
-		10,455.59
<b>-----Level Two</b>	10,366.19	-
-		
<b>International Fees</b>	<b>M.Sc. (OT)</b>	<b>M.Sc. (PT)</b>
Tuition Fees	33,451.00	33,451.00
Administrative Services	21.78	21.78
Student Services	116.85	116.85
GSA Fee	55.31	55.31
GSA Health Insurance Plan	186.00	186.00
GSA Dental Insurance Plan	170.00	170.00
HSR (Bus Pass)	182.70	182.70
Sports Complex Building Fee	35.31	35.31
GSA Capital Building Fee	60.00	60.00
Learning Resource Fee	165.04	254.44
Health Screening Fee	27.06	27.06
Respiratory Mask Fitting Fee	22.14	22.14
-		
<b>Total</b>	34,493.19	34,582.59
<b>Rehabilitation Science -- On-line</b>		
Canadian 1,493.00 per 1/2 course plus PT mandatory supplemental fees		
International 2,674.00 per 1/2 course plus PT mandatory supplemental fees		
<b>UNENE</b>		
2,500.00 per 1/2 course plus PT mandatory supplemental fees		
<b>DIPLOMAS:</b>		

**Advanced Neonatal Nursing Diploma**

13,157.00 per year

Post-master-degree students also pay PT supplemental fees

**Gender Studies and Feminist Research Diploma**

Canadian 1,168 per 1/2 course

International 2,705 per 1/2 course

Post-master-degree students also pay PT supplemental fees

**Nuclear Technology Diploma**

1,349.00 per 1/2 course plus post-degree supplementary fees

**Primary Health Care Nurse Practitioner**

—— 2,336.00 per term plus supplementary fees

**Professional Accountancy**

—— 1,100.00 per 1/2 course plus supplementary fees

—— 550.00 per quarter module

—— 400.00 Workshop Fee

**POST-DEGREE Special Program Fees**

Tuition is equivalent to the Domestic or International (whichever applies) per course fee plus:

Administrative Services	3.63	7.26	10.89
Student Services	19.44	38.88	58.32
GSA Fee	11.15	22.30	33.45
Sports Complex Building Fee	11.77	23.54	35.31
GSA Capital Building Fee	13.33	26.67	39.99

**Visiting students (Research Only)**

Zero tuition plus post-degree mandatory supplemental fees on a per-term basis

**Visiting students (Course-based)**

Course fee or program fee as appropriate

**Notes: Notes:**

Students promoted to a Doctoral program from a Master's program will be considered as new admissions for the purpose of time limits for completion of the degree requirements, eligibility for financial assistance, and fee assessment.

Some international students may be eligible to pay Canadian fees depending on various immigration policies, and the Ministry Funding Manual. International students in Term 7 or greater of a Master's program or Term 13 or greater of a Ph.D. program will pay Canadian fees.

#### Fees assessed on a term by term basis

Most students will pay regular fees and these fees are assessed on a termly basis. Part-time fees apply only to those students originally offered admission to a part-time program. If students change status from full time to part time, they will still be required to pay regular fees. The part-time fees will allow registration in up to 3 half courses per academic year. Students registering in more than 3 half courses will be assessed full-time fees ~~(not students in the UNENE, ADML, Health Management, Rehabilitation Science (on-line), and Communications Management programs)~~.

-In situations where a student in a part-time program completes the degree or withdraws from the university, fees for the academic session will be assessed by the number of terms or number of half courses (whichever is the greater). Term count is adjusted if student changes status from part to full time at a ratio of 2:1.

#### Fees assessed on a course basis

Students in professional programs such as UNENE, ADML, Health Management, Rehabilitation Science (on-line), and Communications Management will be assessed fees for each course that they take. The limit of 3 half courses per year does not affect their status.

Ph.D. students who have been registered as full-time for longer than the normal period of funding eligibility (as defined in Section 5.2.1) will be assessed discounted fees.

A fee is charged for each course taken on the basis of Section 2.1.7 by persons who are not registered graduate students. The fee for certain courses may be higher.

Students on leave of absence do not pay tuition fees but do pay mandatory supplemental fees. Students who are on leave for a complete academic year do not pay mandatory supplemental fees. Students who have "withdrawn in good standing due to time limit" do not pay fees until readmission. See Section 5.1.4 (Readmission Tuition Charges). Students admitted in January or May, will have a slightly different schedule of fees.

Enquiries should be referred to the School of Graduate Studies, 905-525-9140 Ext. 23679. E-mail: [askgrad@mcmaster.ca](mailto:askgrad@mcmaster.ca) Student Accounts and Cashiers (<http://www.mcmaster.ca/bms/student/>) 905-525-9140 ext. 24478

## 5.1.1 Payment of Fees

In order to register a student must either:

- a. pay by cash or cheque, full tuition and all additional fees for the full year;
- or**
- b. have made arrangements with Students Accounts & Cashiers

In all cases, scholarships awarded to a student will be applied towards tuition and all other mandatory supplemental fees on a student's account. For those ~~who selected Payroll Deduction on the Payment Agreement, and~~ who hold a teaching assistantship ~~(or a research-assistant-in-lieu)~~ the sum of financial support, less appropriate employment taxes and deductions but including scholarship, must exceed the amount of tuition and all other mandatory supplemental fees to be eligible for payroll ~~deduction~~ from the teaching assistantship ~~(or research-assistant-in-lieu)~~.

## 5.1.2 Non-payment of Fees or Charges

Students with outstanding accounts at the end of the academic year will:



- a. not receive academic results; and
- b. not be permitted to register for the next academic year until the account is settled.

### 5.1.3 Discounted Fees - Ph.D. Students

Full-time Ph.D. students (Canadian and international), who have reached term 13 or greater of their Ph.D. studies, will be charged tuition at a discounted fee rate. The discounted tuition rate is normally equal to 1/2 of the Canadian tuition rate.

### 5.1.4 Readmission Tuition Charges

Students who do not register and pay tuition for any academic session are deemed to have withdrawn. These students and those who have been withdrawn in good standing due to time limit are required to apply for readmission. Master's or Ph.D. students withdrawn in good standing who are being readmitted to defend their thesis pay fees at the "Readmission to Defend" rate and are not eligible for a refund.

Students who withdrew voluntarily or did not register for an academic session and wish to apply for readmission are readmitted at the registration status they were at the time of withdrawal and charged the current calendar rate of tuition and supplemental fees accordingly. Readmissions in this category are not eligible for the part-time rate unless the student was registered in a part-time program at the time of withdrawal.

### 5.1.5 Refund of Tuition Fees

A student, who completes the degree requirements, withdraws from the program, or takes a leave of absence prior to the end of the academic year will be entitled to a refund, based on the method of payment per section 5.1.1. The refund is based on the **number of full months remaining in the academic year on the schedule set out by Student Accounts and Cashiering** (<http://www.mcmaster.ca/bms/student/>). (Note: a refund does not apply to students who are readmitted.) Mandatory supplemental fees are not refundable.

## 5.2 Financial Assistance

### 5.2.1 Financial Support for Full-time Students

The University normally provides four types of financial support to full-time students: employment income, graduate/department or research scholarships, internal scholarships and bursaries, and external awards tenable at the university. A student's letter of offer or award letter from the University will include all details of financial support. Students with questions regarding financial support should contact their department or graduate program directly for assistance.

The University provides graduate scholarship awards to most regular graduate students in Ph.D. programs and in many Master's programs. These students must be full-time as defined in section 2.5.2. Such scholarships are awarded annually. A Ph.D. student is normally eligible for his/her first four years. Students in Master's programs are usually supported for their first three to six terms depending on the department. Subsequent support is at the department or graduate program's discretion, unless the offer of admission guarantees otherwise.

Teaching Assistantships (TA) (or Research Assistantship-in-lieu under the collective agreement between Canadian Union of Public Employees, Local 3906, Unit 1 and McMaster University) and contract employment income are offered to many graduate students registered in full-time programs. TA duties vary according to department but will normally consist of performance in connection with undergraduate teaching, such as leading tutorials, demonstrating labs, and marking assignments. The award of a TA may vary but should not exceed 10 hours per week, plus three hours of training per term. TA funding is contingent on

fulfillment of the employment obligations and maintaining satisfactory work performance, as stated in the letter of offer or employment contract. No exceptions totalling 505 hours or more in a single academic year will be approved. Employment is paid as earned over the period in which the work is performed. Note that employee number and student number are different.

## 5.2.2 Financial Payments to Graduate Students

International students must provide a clear demonstration of their means of financial support in order to obtain a student visa. The Faculties may provide tuition bursary funds to visa students to assist with tuition fees. These funds will be applied towards tuition and all other mandatory supplemental fees on a student's account.

For students receiving sufficient scholarship support, after tuition and all other mandatory supplemental fees have been paid, payments will normally be made on the fourth Thursday of each month. The direct deposit method of payment is mandatory.

The University is required by law to deduct Canada Pension Plan and Employment Insurance premiums on all employment income. Income Tax will be assessed on employment income only. Your net earnings will be deposited bi-weekly, one week in arrears, directly into a Canadian Bank account of your choice. A statement of your earnings will be sent to your campus address each pay. The direct deposit method of payment is mandatory.

Teaching Assistantships (TA) (or Research Assistantship-in-lieu under the collective agreement between Canadian Union of Public Employees, Local 3906, Unit 1 and McMaster University) and contract employment income are offered to many graduate students registered in full-time programs. TA funding is contingent on fulfillment of the employment obligations and maintaining satisfactory work performance, as stated in the letter of offer or employment contract. TA duties vary according to department but will normally consist of performance in connection with undergraduate teaching, such as leading tutorials, demonstrating labs, and marking assignments. The offer of a TA may vary but should not exceed 10 hours per week, plus three hours of training per term. No exceptions for the number of hours of work totaling 505 hours or more in a single academic year will be approved.

McMaster is transitioning to a new Person ID in PeopleSoft that is 9-digits: 00XXXXXXX. For the months of September and October 2014 students will have both an Employee ID, if you are employed at the university, and a separate Student Number (7-digits).

If the student withdraws or graduates from the program part way through an academic year, the student is not entitled to any further portion of the award. Note that monies owing to McMaster, such as taxes or award repayments to an external agency, will be deducted from the student's financial support as necessary.

## Additional University Regulations Affecting Graduate Students

### 6.1 Academic and Research Integrity

The following brief statements ~~is~~ are excerpted in part from the McMaster University Academic Integrity and Research Integrity Policies ~~Policy~~. For guidance on how to proceed in the case of suspected academic dishonesty or research misconduct, please consult the Office of Academic Integrity and the complete ~~policy~~ policies at <http://www.mcmaster.ca/academicintegrity> and <http://www.mcmaster.ca/policy/faculty/Research/Research%20Integrity%20Policy.pdf>. The Associate Deans of Graduate Studies are available for confidential consultations on matters related to academic and research integrity.

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## Academic Work

Academic work includes any academic paper, term test, proficiency test, essay, thesis, research report, evaluation, project, assignment or examination, whether oral, in writing, in other media or otherwise and/or registration and participation in any course, program, seminar, workshop, conference or symposium offered by the University.

For graduate students, comprehensive/qualifying exams, any research work, and thesis work (a thesis proposal, or thesis draft, or draft of one or more chapters) also constitute academic work and must adhere to standards of academic integrity.

## Academic Dishonesty

### Definition

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage.

Wherever in this policy an offence is described as depending on "knowingly," the offence is deemed to have been committed if the person ought reasonably to have known.

### Students (Undergraduate and Graduate)

Students are responsible for being aware of and demonstrating behaviour that is honest and ethical in their academic work. Such behaviour includes:

- a. following the expectations articulated by instructors for referencing sources of information and for group work;
- b. asking for clarification of expectations as necessary;
- c. identifying testing situations that may allow copying;
- d. preventing their work from being used by others, e.g., protecting access to computer files; and
- e. adhering to the principles of academic integrity when conducting and reporting research.

Students are responsible for their behaviour and may face penalties under ~~this policy~~, [e.g. Academic Integrity or Research Integrity policies](#) if they commit academic dishonesty [or research misconduct](#).

### Graduate Students

Graduate students, having been deemed admissible to higher studies, are expected to be competent in the acknowledgement of other people's work, whether that work is in print or electronic media.

Graduate students are expected to understand the demands of ethical conduct of research, ~~and~~ reporting research results [and behave ethically and responsibly in conducting and reporting research](#). All graduate students are responsible for familiarizing themselves with the definition of research misconduct in the University's policy, namely, "a researcher must be honest in proposing, seeking support for, conducting, and reporting research; a researcher must respect the rights of others in these activities."

## 6.2 Code of Conduct

McMaster University is a community dedicated to furthering learning, intellectual inquiry, and personal and professional development. Membership in the community implies acceptance of the principle of mutual respect for the rights, responsibilities,

dignity and well-being of others and a readiness to support an environment conducive to the intellectual and personal growth of all who study, work and live within it.

The *Code of Conduct* outlines the limits of conduct considered to be consonant with the goals and the well-being of the University community, and defines the procedures to be followed when students fail to meet the accepted standards.

Copies of the *Code of Conduct* may be obtained from the website at [http://studentconduct.mcmaster.ca/student\\_code\\_of\\_conduct.html](http://studentconduct.mcmaster.ca/student_code_of_conduct.html).

For Health Sciences graduate students, a supplementary guideline, Professional Behaviour Code of Conduct for Learners, applies to learners in health care professions and research. This guideline outlines the professional behaviours in all academic and clinical settings that must be understood and followed.

Copies of the Professional Behaviour Code may be obtained from the website.

## 6.3 Appeal Procedures

The University has a responsibility to provide fair and equitable procedures for the lodging and hearing of student complaints arising out of University regulations, policies and actions that affect students directly. The procedures described in the Student Appeal Procedures are intended to provide a mechanism to fairly address alleged injustices.

Students who wish to raise questions or who have a concern are strongly encouraged to communicate informally with their instructors, the Chair of his/her Supervisory Committee (or the Department Graduate Advisor where no committee exists), the Department Chair and/or the Associate Dean of Graduate Studies, the University Ombud, or the appropriate administrative officer *before* seeking a review under the formal procedures. Experience has shown that many complaints can be resolved satisfactorily through informal communication. Students are requested to speak with the University Secretary regarding a complaint before submitting an application.

Students should seek remedies for their grievances as promptly as possible and must do so within the time limitations set out in the Student Appeal Procedures.

A Master's or Ph.D. thesis, ~~and a Ph.D. comprehensive exams~~ are specifically excluded from the re-read procedures identified in the Student Appeal Procedures, ~~as is a Ph.D. comprehensive exam~~. If a student does poorly in any of these examinations, the original examining committee is required to allow the student a second opportunity at the examination ~~after at least a week~~. If the student fails on that second attempt, no ~~further "re-read" of the examination is permitted~~; ~~additional examinations are permitted~~.

The Student Appeal Procedures may be found at:

<http://www.mcmaster.ca/policy/Students-AcademicStudies/StudentAppeal.pdf>

## 6.4 Ownership of Student Work

In Canada, the author is the immediate owner of the copyright in an original work, except when the author is employed to create such material. 'Copyright' is an exclusive property right to publish, produce, reproduce, translate, broadcast, adapt or perform a work, as defined in the Copyright Act (R.S.C. 1985, c. C-42, as amended). For work done by a graduate student, McMaster has the following policies related to the interpretation of copyright and other aspects of intellectual property rights. These policies distinguish in general between items done solely by the student and those undertaken as part of a joint research effort.

In the former case, the intellectual property is primarily the student's, but the University reserves certain rights as detailed in the remainder of this section. In the latter case, the intellectual property rights involve the student, the research supervisor, (and possibly other individuals as well), the University, and on occasion the financial sponsor of the research. If the work is

anticipated to have commercial possibilities, it is recommended that the parties involved agree in writing beforehand on the sharing of any financial returns. The Associate Deans of Graduate Studies are available for confidential consultations on matters of ownership of student work involving faculty and/or other individuals.

## 6.4.1 Examinations, Reports and Papers Done as Part of Course Requirements

When work that is eligible for copyright is submitted to meet a requirement of a course, the University acknowledges the student's ownership of the copyright, but places the following conditions on the submission of the work to meet course requirements.

- a. The original physical document becomes the property of the University. This applies particularly to examination answer scripts, and may also be applied to term papers and other course work.
- b. Except for examination scripts, the University receives a royalty-free, non-exclusive licence to make copies of the work for academic purposes within the University, and to circulate the work as part of the University library collection.

## 6.4.2 Theses and Master's Project Reports

As with other papers, the University recognizes that the student holds copyright to the finished thesis. Copies of the thesis shall have on them in a prominent place on the title page the international copyright notice.

The student is required to sign a licence to the University library (and for Ph.D. students an additional licence to the National Library). (See Section 2.8.3 above.) These licences grant the two libraries permission to reproduce the thesis and to circulate it, but do not affect ownership of the copyright.)

However, the University also recognizes that the ideas in the thesis will often arise from interaction with others. In some cases, this interaction will have been solely with the thesis supervisor; in other cases, a larger research team will have been involved. For this reason, it is understood that the copyright refers only to the written document of the thesis. The ideas, or commercial exploitation of the work may or may not be the exclusive property of the student. For the student who has worked closely with a supervisor, or as part of a research group, the rights to publish, patent, or commercially exploit the results of the research are shared with the supervisor and/or the research group, and with the University. In those cases in which the work has been supported in part by research grants or contracts, there may be other conditions affecting any patent or commercial exploitation. (The student should be made aware of any such conditions before work begins.)

## 6.4.3 Computer Programs

Computer programs written as part of employment duties, as for example by a teaching assistant, are the property of the employer, as specified in the Copyright Act. Computer programs written as part of course work, a project or a thesis may also have value as a potentially marketable intellectual property. The University recognizes that such software may arise in two different ways, and accordingly has two policies. In setting forth these policies, it is understood that in those cases in which software development draws upon other software owned or licensed by the University, the terms and conditions of the licence or purchase must be followed.

- a. Where a student develops such software at the direct request of a supervisor, and under supervision, it is assumed that there is joint ownership of the intellectual property rights. In such cases, it is recommended that the individuals involved co-author a working paper documenting the software, rather than including it as an appendix to a thesis or report. Prior agreement between the student and supervisor that this is to be the case would ~~be helpful~~ be helpful, but is not mandatory.
- b. Where a student develops such software on his/her own, as for example for an independent project in a course, copyright remains with the student. As a condition of using University computing facilities, the student is required to

grant the University a royalty-free licence to use the software. This includes the right of the University to distribute copies of the software to McMaster faculty, staff, and students for the University's administration education and research activities. This licence does not include the right to use the software for commercial purposes or to distribute the software to non-McMaster people.

## 6.4.4 Research Data

As with computer software, the University recognizes that research is conducted and data are acquired in two different fashions. When the data are acquired as part of a joint or collaborative effort, such as one relying on the equipment within a laboratory, they are not solely the property of the student, although some of the data may ultimately appear in tables or appendices in a completed thesis. As a general rule, such data are the joint property of the student and the research supervisor, either of whom has the right to make them available to other individuals as well. Both student and supervisor are responsible for insuring that proper acknowledgement of the contributions of the student, supervisor, and other members of the research team is made when the data are released in any form.

When the data are acquired through the student's individual effort, and without the use of University laboratories or funding, then they are usually the property of the student making that effort. However, exceptions may occur when the student collects data using research instruments, including interview schedules and questionnaires, developed wholly or in part by the research supervisor or by some other person or agency. In such instances the right to ownership and/or use of the data may be shared among the parties involved. Given the range of possible alternatives it is not possible to set absolute guidelines in advance covering all such situations. Consequently, it is recommended that students and supervisors make clear agreements in advance concerning the ownership and use of data collected in this fashion. Ownership of data may also be affected by the terms of a research contract that has supported the work.

## 6.4.5 Equipment

If University resources have been applied to the construction or design of equipment, it is not the property of the student, but of the University. Equipment constructed or designed as part of course or thesis work is the property of the student if the work, materials, and workroom space have been provided by the student or other non-University source. Ownership of newly constructed equipment may also be specified in a research contract that has supported the work.

# 6.5 McMaster University Policy for Academic Accommodation of Students with Disabilities

McMaster University is committed to ensuring that each student is afforded an academic environment that is dedicated to the advancement of learning and is based on the principles of equitable access and individual dignity. To this end, the University has a Centre for Student Development and is continuously making improvements to its facilities to maximize access for all students. The School of Graduate Studies, along with the relevant academic department(s) and the Centre for Student Development, encourages academically qualified students to investigate the full range of possibilities at McMaster.

As with all applicants, those with disabilities are expected to select graduate programs that are appropriate for their skills and abilities. Materials provided to applicants by departments should describe specific program requirements, including the nature of research and/or course work, to ensure that the applicant is aware of the expectations for successful completion of the program. Students with pre-existing disabilities, as well as students who become disabled after their admissions to graduate studies, may require special support services and accommodations in order to complete their programs successfully. The University will take reasonable steps to provide such services and accommodations that do not compromise the quality and integrity of the student's academic program. Self-identification is voluntary and confidential, and access to information must be approved by the applicant. To facilitate accommodation, however, McMaster University urges applicants to declare any disabilities, as well as to provide details concerning accommodations provided by their previous educational institutions, at the time of application. Such

declaration is encouraged particularly in cases where it is felt that the disability may have affected past academic performance, and/or where accommodation may be required in order for the student to complete his/her graduate program. Applicants who have been identified and who are offered admission will need to consult with their Department/Program Chair and the Centre for Student Development as early as possible, and preferably prior to enrolment, to identify and implement an appropriate accommodation plan. At all times, concern for maintaining the dignity of the individuals involved will be paramount. Failure to disclose a disability at the time of admission, however, may delay or otherwise compromise the accommodation process.

Special services and accommodations are provided on an individual basis, are disability specific, and are consistent with the academic objectives of the course and program. McMaster University's *Policy for Academic Accommodation of Students with Disabilities* outlines the steps that must be taken in order to arrange for such services and accommodations (see Sections 31-34 inclusive). The full policy is available from the Centre for Student Development.

## 6.6 Student/Faculty Non-Disclosure Agreements

The School of Graduate Studies encourages the cooperation of faculty with the private sector. Often cooperation will permit the involvement of graduate students. When this happens, it is not unusual for a company to protect its interests by asking the faculty member and the student to sign a confidential Non-disclosure Agreement. Such agreements, even those signed only by the faculty member but referring to student involvement, can restrict conditions for a number of matters important to students, such as their wish to publish research results, the thesis defense, and the deposit of the thesis with libraries. In many cases, the restrictions are reasonable and do not clash with academic principles that require the presentation of research findings for peer assessment.

In those instances where a Non-disclosure Agreement has been signed, a supervisor must notify the Associate Vice-President & Dean of Graduate Studies in writing of the Agreement, giving a brief description of its contents and assessing the impact on the thesis defense or dissemination of the thesis.

Students are advised to discuss any non-disclosure waivers or comparable agreements with the department chair, graduate advisor, or the School of Graduate Studies, before signing.

It has been common practice, in cases where a corporation wishes to protect its interests in a discovery, to delay placing copies of a thesis in libraries for up to twelve months after the oral defense, but not for longer periods.

It has not been common practice in these same cases to limit attendance at oral defences to only examination committee members; nor has it been common practice to have examination committee members agree to non-disclosure agreements. The pertinent guiding principle is that oral defences are public events.

Students in doubt about how these norms of academic activity apply to their circumstances should approach the Associate Vice-President & Dean of Graduate Studies.

## 6.7 Conflict of Interest Guidelines, School of Graduate Studies

### 6.7.1 General

There shall be no prohibition on the grounds of family relationship against the admission of persons as full- or part-time graduate students or against the eligibility for financial awards of such persons. Faculty members normally shall not take part in any proceedings at any level which affect the graduate standing of a spouse or other relative (including admission, financial assistance, promotion, courses of instruction, supervisory, thesis and examining committees). It is understood that the merits of each individual shall be the overriding consideration in all such cases.

## **6.7.2 Conflict of Interest in the Evaluation of Graduate Students**

All faculty members responsible for the evaluation of graduate students have a general responsibility to the University to ensure that they are not in a position of conflict of interest (or the appearance of a conflict of interest) in their obligations to the University with regard to the nature of their relationships with graduate students. Specifically, a faculty member may not be involved in the evaluation of a graduate student if the faculty member has a close family relationship with the student (including spouse, parent, child, sibling, niece/nephew or spouses of the foregoing), if the faculty member is, or has been engaged to be married to the student, or if the faculty member has (or has had) an intimate personal relationship with the student. Evaluation includes grading course work or examinations (including the defense of a thesis) and supervision, whether as the principal supervisor or as a member of a supervisory committee.

A faculty member should question the propriety of evaluating a graduate student if there exists a distant family relationship with the student, or if the faculty member and the student maintain or have had a business relationship or any other relationship which should reasonably give cause for concern.

Questionable cases should be referred to the Associate Vice-President & Dean of Graduate Studies for a decision.

## **6.8 Student Academic Records**

Student academic records are the property of the University. The University has developed procedures designed to protect the confidentiality of student records. A student may have access to her or his file, but documents received from a third party in confidence will not be disclosed.

Transcripts are issued only with the consent of the student.

## **6.9 McMaster University Workplace and Environmental Health and Safety Policy**

McMaster University is committed to provide and maintain healthy and safe working and learning environments for all employees, students, volunteers and visitors. This is achieved by observing best practices which meet or exceed the standards to comply with legislative requirements as contained in the Ontario Occupational Health and Safety Act, Environmental Protection Act, Nuclear Safety and Control Act and other statutes, their regulations, and the policy and procedures established by the University. To support this commitment both McMaster University and its employees are responsible jointly to implement and maintain an Internal Responsibility System directed at promoting health and safety, preventing incidents involving occupational injuries and illnesses or adverse effects upon the natural environment.

The University is responsible for the provision of information, training, equipment and resources to support the Internal Responsibility System and ensure compliance with all relevant statutes, this policy and internal health and safety programs. Managers and Supervisors are accountable for the safety of workers within their area, for compliance with statutory and University requirements, and are required to support Joint Health and Safety Committees. Employees are required to work in compliance with statutory and University requirements, and to report unsafe conditions to their supervisors.

Contractors and subcontractors undertaking to perform work for McMaster University must, as part of their contract, comply with all relevant workplace and environmental health and safety statutes and to meet or exceed the University's Workplace and Environmental Health and Safety Program requirements.



In addition to the above stated managerial responsibilities, Deans, Directors, Chairs, Research Supervisors and other Managers are also accountable for the safety of students, volunteers and visitors who work and/or study within their area of jurisdiction. Students are required by University policy to comply with all University health, safety and environmental programs.

## Implementation:

The authority and responsibility for the administration of procedures and programs to provide for the implementation of this policy ~~is assigned~~ **is assigned** to the Office of the Vice President, Administration.

The Risk Management Support Group is responsible for facilitating the development, implementation and auditing of the Health and Safety Programs effective under this policy. This is achieved through the implementation of a risk management system that is directed at supporting the Internal Responsibility System through the application of best practices for the management of occupational, environmental, public health and safety related risks.

The Office of the Vice President, Administration will provide reports to the University Board of Governors concerning the status and effectiveness of the Workplace and Environmental Health and Safety System and any notices of violation issued to the University regarding breaches of workplace health and safety or environmental protection statutes.

## 6.10 Inter-University Cooperation - Ontario Visiting Graduate Student

It is possible for a graduate student registered at McMaster University to take a graduate course at another Ontario university for credit toward the McMaster degree. To do so, the student must complete the form for an Ontario Visiting Graduate Student (available ~~from the School of Graduate Studies website~~ **online using the student centre**) and describe the course to be taken, the term in which it will be taken, and the reasons for taking the course. Approval of the student's Department Chair and Supervisor are required before the form is submitted for approval to the School of Graduate Studies, which will send it to the host university. The course selected must be required for the student's program, must be a graduate level course, and must not be available at McMaster University. Auditing of courses or registration for "extra" courses is not permitted.

## General Information

### Counselling Services

Human Rights and Equity Services - <http://www.mcmaster.ca/hres>  
International Student Services - Tel. 905-525-9140 ext.24700; [iss@mcmaster.ca](mailto:iss@mcmaster.ca) ext.  
Ombuds Office - <http://www.mcmaster.ca/ombuds>  
Student Accessibility Services - <http://sas.mcmaster.ca/>  
Student Financial Aid and Scholarships - <http://sfas.mcmaster.ca>  
Student Success Centre - <http://studentsuccess.mcmaster.ca/>

### Health Services

Environmental and Occupational Health Support Services - Tel . 905-525-9140 Ext. 24352  
Ontario Health Insurance Card - Tel . 905-521-7825 (Service Ontario)  
Student Wellness Centre - <http://wellness.mcmaster.ca>  
University Health Insurance Plan - Tel . 905-525-9140 Ext. 24748; [iss@mcmaster.ca](mailto:iss@mcmaster.ca)  
Workplace Safety and Insurance Board Coverage for Graduate Students (Working at McMaster) - <http://www.workingatmcmaster.ca>

### Housing and Conference Services and Hospital Services

Conference and Event Services - <http://conference.mcmaster.ca>

Hospitality Services - <http://hospitality.mcmaster.ca>  
McMaster Community Homes Corporation - Tel . 905-578-3833; E-mail: [receptionist@communityhomes.ca](mailto:receptionist@communityhomes.ca)  
Off-Campus Housing - <http://macoffcampus.ca> (Off-Campus Resource Centre)  
On-Campus Housing - <http://housing.mcmaster.ca> (Housing and Conference Services)

#### Student Associations

Graduate Students Association (GSA) - <http://www.mcmaster.ca/gsa>  
McMaster University Alumni Association - <http://www.mcmaster.ca/ua/alumni>

#### Other University Services/Facilities

Athletics and Recreation - <http://www.marauders.ca>  
Bookstore and Post Office - <http://www.bookstore.mcmaster.ca> (Titles Bookstore)  
Day Care Facilities at McMaster

- McMaster Children's Centre Incorporated - <http://www.mcmaster.ca/mcmcc>
- McMaster Students' Union Child Care Centre - Tel. 905-526-1544 E-mail: [dthomson@msu.mcmaster.ca](mailto:dthomson@msu.mcmaster.ca)

Parking Services - <http://parking.mcmaster.ca>  
Security Services - <http://security.mcmaster.ca>  
University Chaplain Centre - <http://www.mcmaster.ca/chaplain>

#### Special Resource Services/Facilities

Centre for Continuing Education - <http://www.mcmastercce.com>  
Centre for Leadership in Learning - <http://cll.mcmaster.ca>  
McMaster Media Production Services - <http://www.media.mcmaster.ca>  
McMaster Museum of Art - <http://www.mcmaster.ca/museum>  
Office of International Affairs - <http://www.mcmaster.ca/oia>  
Office of Sustainability - <http://www.mcmaster.ca/sustainability/index.html>  
University Library - <http://library.mcmaster.ca>  
University Technology Services (UTS) - <http://www.mcmaster.ca/uts>

## Graduate Scholarships, Bursaries and Other Awards

(<http://graduate.mcmaster.ca/graduate-scholarships>)

### 8.1 Overview

The following information is intended to provide details about the various forms of scholarship support available at McMaster. Students with questions regarding financial support should contact their department or graduate program (hereafter referred to as the department) directly for assistance.

All efforts have been made to ensure the accuracy of information of awards on the School of Graduate Studies website. However, it is ultimately the responsibility of fellowship and award applicants themselves to verify program deadlines and/or requirements with external agencies. The School of Graduate Studies cannot be held responsible for any error or omissions, but would appreciate being informed of these, for correction or addition in the next edition.

#### 8.1.1 General Regulations

Graduate students at McMaster University are expected to apply annually for external funding opportunities that may be available to them and as directed by the department.

Scholarships (including fellowships, prizes, medals and awards) and bursaries may be cancelled without notice if the conditions under which they are granted are violated. To hold an award at McMaster University, students must:

- Have been unconditionally admitted into the eligible graduate degree program for which funding was granted;
- Be registered full-time and progressing satisfactorily in the eligible graduate degree program; part-time students are normally not eligible to receive scholarship support;
- Accept the terms and conditions of the award;
- Comply with all academic regulations of McMaster University and the requirements of the scholarship and/or award;
- Not hold or accept full-time employment while holding the award; and
- Agree to have McMaster University administer the award in accordance with its policies and procedures.

In accordance with the *Freedom of Information and Protection of Privacy Act* and McMaster University's Statement on the collection of Personal Information and the Protection of Privacy, where notice is given, the University is permitted to publish an individual's name, Faculty, program and award information. McMaster University publishes the names of recipients of most scholarships and awards, in the University's convocation program and other award publications.

## 8.1.2 Value and Duration of Award

The value and duration of scholarships and awards are detailed in the terms of letter of offer or award letter. Should a successful applicant receive an internal scholarship or external award subsequent to the letter of offer, McMaster's normal practice is to adjust the contributions to the applicant's offer in such a way that the applicant benefits from the additional award, but not to the extent that it simply adds the value of the award to the original offer. The fractional financial benefit of an internal scholarship or external award varies by program but is consistent within a given program.

Any approved change in degree, program, registration, supervisor or research area must be reported to the School of Graduate Studies and may result in a change to the value and/or duration of the award. The value of some external awards must be refunded if conditions of the awards are not met.

## 8.2 Graduate Scholarships

Upon admission to McMaster, graduate students are automatically considered for funding by the various departments. Offers that include funding will state the amount and duration of funding, conditions for renewal (if any), terms of continued funding, and other relevant details. Continued funding for graduate students from the University or from individual programs will be based on satisfactory progress of the student in his/her program as determined by academic criteria or as specified in an offer of funding. If the student has been awarded a Graduate or Departmental Scholarship, he/she should be aware that the funds for this scholarship might come from funds awarded by the School of Graduate Studies and/or from the department. The student may also receive a Research Scholarship provided by funds from the supervisor. If the student has been awarded an Entrance Scholarship, he/she should realize that it is for the first term of study only and is not renewable.

### 8.2.1 Internal Scholarships and Bursaries

Internal scholarships (including fellowships, prizes, medals and awards) and bursaries (hereafter referred to as awards) support students registered in a specific program or Faculty through the generous contributions of our benefactors and donors, and initiatives from the School of Graduate Studies. Selection is based on academic merit, research excellence and potential or financial need. Adjudication for internal awards normally occurs at the department level. Departments forward their recommendations to the School of Graduate Studies for final approval. It is critical that students consult with their departments regarding eligibility, application procedures and deadlines as each department will have its own process for internal review. Deadlines for the various internal awards vary and are explained in more detail on the School of Graduate Studies website, which are listed alphabetically by their complete official names.

The University reserves the right not to grant an award in the absence of a suitable candidate, or to limit the number of awards where too few suitable candidates exist. Where the terms of such awards become impossible to fulfill, the University may amend the terms of an award to carry out the nearest possible intent of the donor, while still ensuring that the benefit of such award continues. The University also reserves the right to withdraw and/or to suspend granting of an award, or to adjust the stated value and/or number of awards in years in which insufficient income is available due to fluctuations in investment markets.

Additional bursaries or financial assistance may be available through the Office of Student Financial Aid & Scholarships (Gilmour Hall, Room 120).

## 8.2.2 External Awards Tenable at the University

External awards tenable at the University are given by federal and provincial government agencies and other private organizations that rely on McMaster University to recommend candidates, facilitate payments, and ensure compliance of terms and conditions of the award. Examples of these agencies include the Canadian Institute of Health Research (CIHR), the Natural Sciences and Engineering Research Council (NSERC), the Social Sciences and Humanities Research Council (SSHRC), and the Ontario Graduate Scholarships (OGS). Applicants must be invited by their department to submit an application to these competitions and verify eligibility requirements with the external agencies.

Awards from external agencies are sometimes renewable. The application process for the majority of these awards is usually held one year in advance of receipt of the award (for example, competitions are held in October for awards starting in May, September or January of subsequent year). Applications and eligibility requirements are usually indicated on respective government agency web sites by late August. Deadlines vary ~~but by agency but normally~~ occur in ~~early October~~ the Fall of each academic year.

As the recipient of a CIHR, NSERC, SSHRC, OGS or similar award, the student may be required to complete additional acceptance/refusal forms, and provide copies to the department. If the student changes his/her status, or is granted a leave of absence, the student may be required to notify the external agency as outlined in the guidelines (or terms and conditions) of the award. It may also be the case that the external award is subject to restrictions that require altered terms of the original letter of offer, or forfeit the award.

## 8.3 Funding Application Deadlines

Students interested in applying for scholarships and awards should contact their home departments for specific details on the application process and department internal deadlines. Dates and information from external agencies may be updated periodically and without notice. Changes to internal due dates within departments or programs, and the School of Graduate Studies, will be updated accordingly.

## Governing Bodies

### 9.1 Senate

The University Senate consists of approximately 65 members, including the Chancellor, the President (Chair), the Vice-Presidents, the Associate Vice President & Dean of Graduate Studies, the Faculty Deans, three members from the Board of Governors, four members from the Alumni Association, and 32 faculty members. In addition, there are 12 student members, one graduate and one undergraduate from each of the six Faculties. The students are elected by and from the students in their respective Faculties.

The Senate has ultimate responsibility for determining academic policy, which includes new academic programs, changes in curriculum, standards for admission to the University, matters arising in connection with the award of scholarships and prizes, examination policy, academic regulations, procedures for student appeals, criteria and procedures for granting tenure and promotion to faculty members, the codes of conduct for students and so on. Website: <http://www.mcmaster.ca/univsec>

## 9.2 Graduate Council

The Graduate Council is a deliberative, administrative, and executive body responsible directly to Senate but otherwise autonomous. Its membership consists of the Chancellor, the President and Vice-Chancellor, the Provost and Vice-President (Academic), the Associate Vice President & Dean of Graduate Studies (Chair), the Associate Deans of Graduate Studies, the Faculty Deans, the University Librarian, the University Registrar, the Secretary of Senate, the Vice-President (Research and International Affairs), the Assistant Dean (Graduate Student Life and Research Training), the Executive Director (Strategic Planning & Administration), the Associate Graduate Registrar and Secretary of the School of Graduate Studies, eighteen faculty members (three from each faculty), and twelve graduate students (two from each faculty).

The responsibilities of the Graduate Council have been specified in some detail by Senate and are outlined in the By-laws of the Senate of McMaster University and the Senate Resolutions. The more significant ones may be summarized by noting that it regulates matters concerning graduate work of common concern to the entire University, acts upon recommendations concerning graduate work from each Faculty upon matters of particular concern to that Faculty, reports to Senate on graduate matters, recommends candidates for graduate degrees, stipulates conditions for the awarding of graduate scholarships, and stipulates the departments eligible to offer graduate work.

### 9.2.1 Executive Committee of Graduate Council

The Executive Committee of Graduate Council is composed of the Associate Vice President & Dean of Graduate Studies (who acts as Chair), the Associate Deans of Graduate Studies as Deputy Chairs, the President and Vice-Chancellor, the Provost and Vice-President (Academic), one faculty member from each Faculty, and the Associate Graduate Registrar and Secretary of Graduate Studies.

The Executive acts as nominating committee, academic policy committee, and on any other matters put before it by Graduate Council or the Associate Vice-President & Dean. This body acts on behalf of Council in instances where there is some urgency (e.g., during the summer months when there are no regularly scheduled meetings).

### 9.2.2 Scholarships Committee of Graduate Council

The Scholarships Committee of Graduate Council is composed of the Associate Deans of Graduate Studies (who act as co-chairs) and ~~fourteen~~ faculty members (representing all six faculties). This committee is responsible for acting upon all recommendations and applications for internal endowed fellowships and scholarships, and external scholarships. ~~Many of the scholarships listed in section 8 refer to the Scholarships Committee in its capacity as a selection committee.~~

## 9.3 Standing Committees

### 9.3.1 Faculty Graduate Curriculum and Policy Committees

Each of the six Faculties has a Committee on Graduate Curriculum and Policy which is responsible for dealing with matters of policy and curriculum affecting the Faculty, including new developments, course changes, changes in degree requirements, and

new programs and fields of study arising from departmental proposals. The Faculty then acts upon the recommendations of this committee.

### 9.3.2 Faculty Graduate Admissions and Study Committees

For each Faculty, there is also a Committee on Graduate Admissions and Study responsible for determining admissibility of any applicant on the recommendation of the department, approving each student's course program, reviewing annually the progress of each student, making necessary decisions thereon, recommending awarding of degrees, deciding upon applications from students for special consideration, and ~~acting-acts on the final decisions from as~~ a hearings committee for student appeals and cases of alleged academic dishonesty ~~and research misconduct~~. Normally, the Associate Dean of Graduate Studies for the Faculty handles the matters on behalf of the committee. The Secretary of all Committees, to whom business items may be addressed, is the Associate Graduate Registrar and Secretary of Graduate Studies.

To : Graduate Council

From : Christina Bryce  
Assistant Graduate Secretary

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At its meeting on November 24<sup>th</sup>, 2014, February 6<sup>th</sup>, 2015 and via e-ballot on March 9<sup>th</sup>, the Faculty of Engineering Graduate Curriculum and Policy Committee approved the following graduate curriculum recommendations.

The enclosed documents were forwarded for approval to the Faculty of Engineering for its meeting on March 25<sup>th</sup>, 2015

**FOR APPROVAL OF GRADUATE COUNCIL:**

- **Civil Engineering**
  - Change to Comprehensive Procedure
- **Electrical and Computer Engineering**
  - Change to Course Requirements (Accelerated Option)
- **Mechanical Engineering**
  - ADMI Program Change
- **School of Engineering Practice**
  - Change to Course Requirements (M.Eng.D., M.E.E.I., M.T.E.I., M.E.P.P.)
  - Change to Calendar Description (M.E.E.I and M.T.E.I.)
  - Change in Course Requirements and Calendar Section: Advanced Standing
  - Change to Admission Requirements (B.Tech students)
- **UNENE**
  - New Diploma Calendar Copy

**FOR INFORMATION OF GRADUATE COUNCIL:**

- **Biomedical Engineering (Also approved by the Faculty of Health Sciences)**
  - New Cross-listed Course** - Statistical Methods in Health Sciences Research
- **Chemical Engineering**
  - Course Cancellation – 741 Energy Systems Engineering
  - New Course
    - 6A03 Energy Systems Engineering
    - 777 Dynamics of Polymers and Complex Fluids
- **eHealth (Also approved by the Faculty of Business and Faculty of Health Sciences)**

- New Cross-listed Course
    - 767 Information Privacy and Security
- **Electrical and Computer Engineering**
  - New Courses**
    - 6BF3 Medical Imaging
  - Change to Course Number**
    - 6BC4 Modelling of Biological Systems
- **School of Engineering Practice**
  - Course Cancellations**
    - \*6EE3 Breakthrough Technology Venture Development
    - \*722 Positioning and Shaping an Enterprise
    - \*723 New Venture Business Strategy
    - \*724 Taking a New Venture to Market
    - \*734 Leadership and Management Development
    - \*745 Design of Sustainable Community Infrastructure I
    - \*765 Creativity and Innovation
  - New Courses**
    - \*6EL3 Leading Innovation
    - \*753 Enterprise Opportunity Development
    - \*755 Business Launch and Development
    - \*756 International Water Policy
    - 772 Innovation Studio
    - \*773 Leadership for Innovation
  - Course Title Changes**
    - \*746 Design of sustainable Community Infrastructure II
    - \*748 Design of Local Sustainable Communities
    - \*771 Walter G. Booth School of Engineering Practice Seminar Series
  - Course Title and Description Changes:**
    - \*6E03 Entrepreneurial Processes and Skills
    - \*761 Design Innovation





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

<b>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</b>								
<p>1. This form must be completed for <b><u>ALL</u></b> changes involving degree program requirements/procedures. <b><u>All</u></b> sections of this form <b><u>must</u></b> be completed.</p> <p>2. An electronic version of this form (must be in MS WORD <b><u>not</u></b> PDF) should be emailed to the Assistant Secretary, School of Graduate Studies.</p> <p>3. A representative from the department is <b><u>required to attend</u></b> the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.</p>								
<b>DEPARTMENT</b>		Civil Engineering						
<b>NAME OF PROGRAM</b>								
<b>PROGRAM DEGREE</b>	<b>Ph.D. (x)</b>	<b>M.A. ( )</b>	<b>M.A.Sc. ( )</b>	<b>M.B.A. ( )</b>	<b>M. Eng. ( )</b>	<b>M.Sc. ( )</b>	<b>Diploma Program ( )</b>	<b>Other (Specify)</b>
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>								
<b>CHANGE IN ADMISSION REQUIREMENTS</b>		<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>		<b>x</b>		<b>CHANGE IN COURSE REQUIREMENTS</b>		
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>			<b>EXPLAIN:</b>					
<b>OTHER CHANGES</b>		<b>EXPLAIN:</b>						
<b>DESCRIBE THE <u>EXISTING</u> REQUIREMENT/PROCEDURE:</b>								
<p>The PhD Comprehensive Examination Regulations were recently revised for students who started in September 2013 and later. These regulations have two parts. Part A is intended "to test the candidate's knowledge, both breadth and depth, of undergraduate material in the major field of study...." This is a 4-hour written exam with three questions, followed by an oral exam scheduled on the next business day. <b>Part A is normally held within 12 months, of admission to the PhD program.</b> Part B involves a written research proposal, followed by an oral examination, and is normally completed within 20 months of admission to the PhD program.</p>								

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

The proposed changes do not change the overall structure of the comprehensive exam format; they have been written only to clarify current ambiguities and to streamline the process. The comprehensive exam will still be completed within 18 months of admission to the doctoral program for students who pass both parts in their first attempt, and within 24 months in all cases.

The proposed new regulations are attached. The main changes are:

1. The written component of Part A will be conducted in two sittings annually, with the oral exam scheduled within one week, rather than one day, after the written exam. The two sittings will be scheduled in the week following the end of graduate courses each term (i.e. mid-April and early December). **Part A will still be conducted within 12 months for all students.**
2. Clarifications have been added regarding how the subject areas to be tested in Part A will be communicated to the student.
3. The previous regulations stated that Part A is an "open-book/closed-door examination" but that "all open book material shall be provided by the Examination Committee." This has been clarified **to allow students to bring their own materials into the exam, as was the original intent.**
4. Computers have been prohibited by default, although this requirement may be waived by the Examination Committee as necessary.
5. Students are required to give an oral presentation of their responses to Part A, so a statement has been added that students will be provided with a copy of their questions and answers.
6. Several minor corrections have been included to address inconsistencies in the current regulations, without changing the intent.

**RATIONALE FOR THE RECOMMENDED CHANGE:**

Most of the changes to the regulations are to address unforeseen issues that were identified as the first round of students completed Part A. These changes are minor clarifications of the process that is already intended by the current regulations; they are not substantive changes.

Slight changes have also been made to simplify Part A, which is intended to examine students' graduate-level understanding of undergraduate material. This part was never intended to be specific to students' research programs, so an opportunity was identified to reduce the workload on Examination Committee members by allowing them to reuse some questions for multiple students in similar fields of study. In order to do this, it was necessary to have students write Part A on the same day, rather than scheduling each exam individually. As a result, two sittings per year are proposed. The intent is that the oral part of the exam will also be conducted on the same day for all students, but it will not generally be possible for faculty members to review all responses before the next business day. Therefore, this timeline has been extended from one day to one week.

We have defined the timelines for all components of the comprehensive examinations, including re-examinations, to ensure that students who pass Part A and/or Part B in the first attempt will complete the entire process within 20 months of admission to the doctoral program. Students who do not pass either part in their first attempt will still complete the entire process within 24 months of admission to the doctoral program.

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

September 2015

<b>ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.</b>
No.
<b>PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR:</b>
N/A
<b>CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:</b>
Name: Carol Robinson      Email: crobin@mcmaster.ca      Extension: 24287      Date submitted: Oct 3, 2014

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, cbryce@mcmaster.ca

SGS/2013



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

<b>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</b>								
<p>1. This form must be completed for <b>ALL</b> changes involving degree program requirements/procedures. <b>All</b> sections of this form <b>must</b> be completed.</p> <p>2. An electronic version of this form (must be in MS WORD <b>not</b> PDF) should be emailed to the Assistant Secretary, School of Graduate Studies.</p> <p>3. A representative from the department is <b>required to attend</b> the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.</p>								
<b>DEPARTMENT</b>		Electrical and Computer Engineering						
<b>NAME OF PROGRAM</b>		M. Eng Degree in Electrical and Biomedical Engineering						
<b>PROGRAM DEGREE</b>	Ph.D. ( )	M.A. ( )	M.A.Sc. ( )	M.B.A. ( )	M. Eng. (X)	M.Sc. ( )	Diploma Program ( )	Other (Specify)
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>								
<b>CHANGE IN ADMISSION REQUIREMENTS</b>		<input type="checkbox"/>		<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>		<input type="checkbox"/>		<b>CHANGE IN COURSE REQUIREMENTS</b>
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>		<input checked="" type="checkbox"/>		<b>EXPLAIN:</b> Adding 600 level courses in final undergrad year for graduate credit				
<b>OTHER CHANGES</b>		<b>EXPLAIN:</b>						
<b>DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:</b>  Two 600 level courses, Elec Eng 6BC4 and Elec Eng 6BE4 can be taken in the fourth undergraduate year for graduate credit.								

<p><b>PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE</b> (<i>Attach additional pages if space is not sufficient.</i>)</p> <p>The 600 level courses that can be taken in the fourth undergraduate year for graduate credit are ElecEng *6BC3, ElecEng *6BD4, ElecEng *6BE4, ElecEng *6BF3, ElecEng *6CL4, ElecEng *6TL4 and ElecEng *6TN4</p>
<p><b>RATIONALE FOR THE RECOMMENDED CHANGE:</b></p> <p>Giving students more undergraduate biomedical course options at the 600 level for M.Eng degree credit</p>
<p><b>PROVIDE IMPLEMENTATION DATE:</b> (<i>Implementation date should be at the beginning of the academic year</i>)</p> <p>September 1, 2015</p>
<p><b>ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.</b></p>
<p><b>PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR:</b></p> <p><b>M.Eng Degree in Electrical and Biomedical Engineering</b></p> <p>This program is open to graduates who have maintained a minimum average of B in each year of the B. Eng program in Electrical and Biomedical Engineering at McMaster University. The program consists of a minimum of three consecutive terms in which the candidate is required to complete successfully six graduate half courses (or equivalent), of which at least four must be 700 level and up to two 600 level courses approved by the department, followed by an independent study term. The 600 level courses that can be taken in the fourth undergraduate year for graduate credit are ElecEng *6BC3, ElecEng *6BD4, ElecEng *6BE4, ElecEng *6BF3, ElecEng *6CL4, ElecEng *6TL4 and ElecEng *6TN4. At the conclusion of the final term, the candidate is required to submit and defend a report on an approved project which must demonstrate ability to carry out independent study and reach a satisfactory conclusion in an area of biomedical engineering</p>
<p><b>CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:</b></p> <p>Name: Kerri Hastings      Email: <a href="mailto:hastings@mcmaster.ca">hastings@mcmaster.ca</a>      Extension: 24826      Date submitted: Feb. 3/15</p>

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, [cbryce@mcmaster.ca](mailto:cbryce@mcmaster.ca)

SGS/2013



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

<b>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</b>								
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<b>DEPARTMENT</b>		Mechanical Engineering						
<b>NAME OF PROGRAM</b>		Advanced Design and Manufacturing Institute (ADMI)						
<b>PROGRAM DEGREE</b>	Ph.D. ( )	M.A. ( )	M.A.Sc. ( )	M.B.A. ( )	M. Eng. (x)	M.Sc. ( )	Diploma Program ( )	Other (Specify)
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>								
<b>CHANGE IN ADMISSION REQUIREMENTS</b>		<input type="checkbox"/>	<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>		<input type="checkbox"/>	<b>CHANGE IN COURSE REQUIREMENTS</b>		<input checked="" type="checkbox"/>
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>			<b>EXPLAIN:</b>					
<b>OTHER CHANGES</b>		<input checked="" type="checkbox"/>	<b>EXPLAIN:</b> Proposed crosslisting of courses from the School of Engineering Practice to allow students in ADMI to enroll					
<b>DESCRIBE THE <u>EXISTING</u> REQUIREMENT/PROCEDURE:</b>  The requirement for the M.Eng. in Design and Manufacturing is to complete ten module graduate courses (5 graduate half courses).								

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

Cross-listing of courses from the School of Engineering Practice so that students enrolled in the ADMI (proposed ADMI course numbers listed below) program may enrol. Courses for cross-listing will be SEP 701 (DM 801), 702 (DM 802), 703 (DM 804), 705 (DM 805), 706 (DM 806), 707 (DM 807), 708 (DM 808), 709 (DM 809), 710 (DM 810), 725 (DM 811), 728 (DM 812), 747 (DM 813), 750 (DM 814), 751 (DM 815), 752 (DM 816), 753 (DM 817), 754 (DM 818), 755 (DM 819), 756 (DM 821), 760 (DM 822), 761 (DM 823), 770 (DM 826), 773 (DM 829).

**RATIONALE FOR THE RECOMMENDED CHANGE:**

To allow ADMI students to enrol in courses within the School of Engineering Practice (SEP). The ADMI program is being discontinued and no new students are being taken into the program. Allowing this cross-listing of the aforementioned courses will provide the existing students with options to complete their degrees.

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

Effective September 2015 till all currently registered ADMI students have completed their degrees.

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

No.

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

No change in description.

**CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Gary Bone      Email: gary@mcmaster.ca      Extension: 27591      Date submitted: 2014-11-24

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, cbryce@mcmaster.ca





## SEP Course Descriptions of ADMI Cross-listing

### **SEP \*701 / Theory and Practice of Policy Analysis: Frameworks and Models**

Government structure and mandates for municipal, provincial and federal levels; procedures for legislation and policy setting; process of understanding societal values and preferences; establishment of policy goals and objectives; models and frameworks for the evaluation and analysis of public policy; application of frameworks and models to engineering and public policy problems.

### **SEP \*702 / Systems Engineering and Public Policy**

Application of linear programming, integer programming and dynamic programming to public policy applications; application of simulation modeling to evaluate scenarios; application of decision analysis approaches and software for micro- and macro-policy analysis problems; coupling of GIS-based approaches with conventional systems engineering tools; project planning and project management; soft systems techniques.

### **SEP \*703 / Applied Microeconomics and Environmental Economics**

Marginal benefit/cost analysis; willingness to pay and indifference curves; ecological economics; allocation of environmental services; estimation of externalities; measurement of environmental benefits; taxes, trading permits and other instruments; application of approaches to infrastructure renewal and environmental management problems.

### **SEP \*705 / Green Engineering, Sustainability and Public Policy**

Green engineering theory and guiding principles; sustainability at the regional and international levels; transportation and land-use interactions; new urbanism design; transit-oriented development; bicycle-friendly planning and design; building design to minimize energy, water and material resources; green building; green manufacturing and product design; sustainability indicators.

### **SEP \*706 / Energy and Public Policy**

Energy policy; energy planning and forecasting; energy conservation and demand side management; case studies in current topics: utility privatization, nuclear energy generation, air quality issues; renewable energy technologies.

**SEP \*707 / Communication Technology and Public Policy**

International trade and regulation; social issues relating to communication policy; research policy and funding; industrial/economic policy; relevant legislation; innovations in communication technology.

**SEP \*708 / Special Topics in Engineering and Public Policy**

Studies selected from specialized areas of research or representing special areas of expertise in areas of sustainability with regard to water resource management, transportation, energy, and related fields.

**SEP \*709 / Emerging Issues, Technology and Public Policy**

Environmental threats that emerge from engineering innovation will be examined from the perspective of public policy development. Institutional effectiveness and policy implications for new programs will address greater interoperability of the institutional framework in various geographic regions. The objective of this course is to engage students in seminars, discussion and debate on contemporary societal issues for which technology and policy can be integrated to generate sustainable solutions.

**SEP \*710 / International Governance and Environmental Sustainability**

In a world undergoing rapid environmental changes due to global warming, achieving sustainability is ever more difficult. International governance mechanisms, including the United Nations, NGOs and international treaties, play an increasingly important role. This course examines how policymaking at the international level relates to achieving sustainability, including affordable and sustainable technology and science-based solutions. It will introduce the students to the current debates in the international environmental governance realm, as well as the methods and structures that guide policy formulation.

**SEP \*725 / Practical Project Management for Today's Business Environment**

This course covers the basics of project management techniques and tools, as well as advanced, adaptive, and emerging approaches to improve project success. Students will learn how to apply effective project management to a variety of common business situations, including starting a company, bringing a product to market, doing primary research and development, constructing a physical facility, and developing a major piece of software, among others. Case studies, guest speakers, and hands-on exercises will be used to explore real-life examples of project management successes and failures.

**SEP \*728 / Legal Issues for the Technology-Based Enterprise**

This course provides students with an understanding of all of the relevant legal issues. In the case of IP, students will be provided with the basic tools that will allow them to identify intellectual property, protect that property by applying the necessary types of legal protection such as patents, trademarks and copyright registrations and to then transfer or permit the use of the IP by others. For enterprise formation, the course will provide practical legal tools for enterprise formation, incorporation, contracting and rules that affect its day-to-day business.

### **SEP \*747 / Energy Efficient Buildings**

The objective of the course is to provide students with a good understanding of (1) building energy sources, (2) energy efficient technologies for commercial and industrial-type buildings, and (3) energy efficient buildings. Topics covered: Building major energy sources and areas of end use including building envelope, HVAC, distribution system, lighting system, internal loads, etc.; building energy balance, energy audit of buildings, energy conservation measures, building simulation tools, design of integrated systems.

### **SEP \*750 / Model Predictive Control Design and Implementation**

Majority of advanced control designs employed in practice use the Internal Model Control (IMC) structure and Model Predictive Control (MPC) concepts. The course presents theory and best implementation practices for control model identification, controller design, testing, and implementation. Upon completion of this course, the engineer will be able to perform the following: identify linear models for control, design and implement MPC controllers for an integrated plant, and optimize the process using the MPC steady state features.

### **SEP \*751 / Process Design and Control for Operability**

Process design involves tradeoffs to achieve performance over a range of operations due to uncertainty, variability of inputs, and a range of production goals. A flexible design functions acceptably over the range and well at the typical conditions. Processes safety (seven layers, HAZOP, LOPA, quantitative analysis), effect of structure on reliability and plant dynamics. Classical supervisory control methods and typical applications to major equipment and systems.

### **SEP \*752 / Process Modeling and Optimization**

Architecture of simulation programs, solution algorithms, integration of simulation models from different simulators. Steady-state and dynamic simulation via sequential modular and equation-oriented algorithms. Optimization of steady-state and dynamic performance, sensitivity of the optimum, multi-objective optimization. Analysis of plant data, gross error detection, parameter estimation to match the plant performance. On-line monitoring and optimization of process performance.

### **SEP \*753 / Enterprise Opportunity Development**

This course follows on the introductory course SEP 6E03 and teaches the students how to develop a customer-centric startup by learning and applying the tools of primary market research, developing a proof of concept, learning the basics of managerial accounting, corporate finance and investor term-sheet negotiations, and finally developing a detailed 5-year financial plan.

### **SEP \*754 / Process Design and Integration for Minimal Environmental Impact**

The course focuses on integration of process units and on the design of Energy Utility Systems, Heat Exchanger Networks (HEN) and Water Distribution Systems and presents methodologies that lead to

energy efficient, water saving and economically attractive designs. Methods for heat integration (HEN, utility selection, heat engines, heat pumps, refrigeration cycles, and pinch analysis), cogeneration and integrations with industrial sites, water and cooling minimization and their applications.

#### **SEP \*755 / Business Launch and Development**

The course will address the skills and knowledge needed to launch and sustain new Businesses, Products, or Services. The module will first examine business model types, business strategies and business strategy selection in the context of the existing situation. Students will also gain an understanding of how to manage the new business opportunity for growth and sustainability; leveraging internal and external resources; the role of value-chain management and timing; and the critical factors that contribute to a business/product/service launch success.

#### **SEP \*756 / International Water Policy**

Water has been touted as ‘blue gold’, the ‘new oil’ and a potential catalyst for war in the 21st century. This seminar on international water policy addresses water law and policy at multiple scales from the community level to global governance regimes. This course will engage theories of property rights, policy change, and multi-level governance to examine different water policies and evaluate their design and performance in relation to major themes and debates associated with the global water crisis. The course will equip students with an interdisciplinary understanding of contemporary water problems, policies, and institutions, drawing from multiple approaches to institutional and policy analysis.

#### **SEP \*760 / Design Thinking**

This course will explore the creative design process, tools and methods that will enable students to discover, identify, and analyze opportunities and develop those opportunities into innovative design solutions. Based on a series of self-contained exercises and small projects, students will work to research a well-conceived design concept by the end of term.

#### **SEP \*761 / Design Innovation**

This course will explore the creative design process from concept to design. Students will learn processes, tools, and methods for prototyping, analyzing, visualizing, and validating a design with the goal of delivering innovative design solutions. Students will work in small teams to develop a specification by the end of the term, supported by scheduled gate reviews, in-class presentations, and peer review. The outcome of the course will be a final presentation where students will demonstrate their appearance model. The course is studio-based with a lecture component.

#### **SEP \*770 / Total Sustainability Management**

This course introduces sustainability within a unified framework of Total Sustainability Management that will teach the student how to deeply embed sustainability into the enterprise through the use of Design principles, Bill-of-Rights of the Planet and through public policy. This approach will apply to not only a company product but also to its business strategy and business model. Furthermore, the course

will teach the student a problem-solving approach that combines innovation, design and policy to emphasize the synergetic interplay between them. The student will learn how to think of sustainability as a “Way of Thinking.” The course will make liberal use of appropriate case studies, and call on several internal and external speakers who are recognized subject-matter experts.

### **SEP \*773 Leadership for Innovation**

This course will explore leadership in an innovation context with the objective of providing a conceptual understanding of role model leadership, and an approach used to assist the development of personal leadership capacity. The student will develop an understanding of personal, interpersonal, and group skills. Personal leadership development, leadership in teams, and leadership from an organizational and societal perspective will be a focus. Leadership in driving innovation will be emphasized and practiced by application during the School of Engineering Practice’s Innovation Studio.

**Subject:** Re: SEP-ADMI cross listed course  
**From:** Art Heidebrecht <heidebr@mcmaster.ca>  
**Date:** 08/01/2015 9:15 AM  
**To:** Christina Bryce <cbryce@mcmaster.ca>  
**CC:** "Associate Dean Grad Studies (Eng)" <adeangse@mcmaster.ca>

Christina

As per Mike's request, I'm happy to grant my permission for SEP courses to be crosslisted so that ADMI students can take them. I think this is a very positive approach to facilitating those students being able to complete their degrees.

Please let me know if you need anything else.

Best wishes.

Art Heidebrecht

Associate Dean Grad Studies (Eng) wrote:

-----

Art,

Christina will need an email from you in regards to permission to crosslist SEP courses for ADMI students. Could you please contact her?

Thanks.

Mike

Dr. Michael Thompson  
Associate Dean Grad Studies (Eng)  
McMaster University

On Jan 7, 2015, at 11:47 AM, Christina Bryce <[cbryce@McMaster.ca](mailto:cbryce@McMaster.ca)>  
<<mailto:cbryce@McMaster.ca>> wrote:

Hi Mike,

I assume it's okay to include this on the agenda for our February meeting?

Thanks!  
Christina

----- Forwarded Message -----

Subject: BME cross listed course  
Date: Mon, 29 Dec 2014 15:08:56 -0500  
From: Natalie Illingworth <[illing@mcmaster.ca](mailto:illing@mcmaster.ca)>

To: [cbryce@mcmaster.ca](mailto:cbryce@mcmaster.ca), [adeangse@mcmaster.ca](mailto:adeangse@mcmaster.ca)  
CC: [westmayj@mcmaster.ca](mailto:westmayj@mcmaster.ca)

Hi Christina

I know that this is past the meetings but we have this additional course that was approved to be cross-listed for BME. I'm sending this over now as I will be finishing in BME as of January 9<sup>th</sup>. I just wanted to make sure it was in somewhere and doesn't get missed if possible. I have also attached the confirmation email from Nursing.

thanks

Kind regards,

Natalie

=====

Natalie Illingworth, CPA, CGA

McMaster University

Administrator, Graduate Schools

Faculty of Engineering

1280 Main Street West - ETB511

Hamilton, Ontario

L8S 4K1

(905) 525-9140 ext 23486

<MS709 cross list Curriculum Form - Courses.docx><ForwardedMessage.eml>

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

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2. An electronic version of this form (must be in MS WORD <b><u>not</u></b> PDF) should be emailed to the Assistant Secretary, School of Graduate Studies.								
3. A representative from the department is <b><u>required to attend</u></b> the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.								
<b>DEPARTMENT</b>		School of Engineering Practice						
<b>NAME OF PROGRAM</b>		Engineering Design, M. Eng. Design						
<b>PROGRAM DEGREE</b>	Ph.D. ( )	M.A. ( )	M.A.Sc. ( )	M.B.A. ( )	M. Eng. ( x )	M.Sc. ( )	Diploma Program ( )	Other (Specify)
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>								
<b>CHANGE IN ADMISSION REQUIREMENTS</b>		<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>		<b>CHANGE IN COURSE REQUIREMENTS</b>			x	
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>			x <b>EXPLAIN:</b> Addition of Leadership for Innovation SEP773* as a core required course, this course will replace SEP734. Addition of Innovation Studio, SEP772, as a core mandatory course.					
<b>OTHER CHANGES</b>		<b>EXPLAIN:</b>						



**DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:**

Current programs require SEP734 Leadership and Management Development as a core mandatory course. This course will be replaced by the new SEP773\* Leadership for Innovation course.

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

A new course, Leadership for Innovation, is being added to the School of Engineering Practice curriculum. A new studio-based course, Innovation Studio, SEP772, is being added as a mandatory core course

**RATIONALE FOR THE RECOMMENDED CHANGE:**

The new Leadership for Innovation Course will be a required course for all SEP students. The new Innovation Studio Course will be a required course for all SEP students.

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

September 2015

**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:**

SEP773\* Leadership for Innovation will replace SEP \*734 in all sections of the MED course listings.

Also, under all calendar descriptions of the program subcomponents (3 occurrences):

Leadership and Management

Candidates are required to take the following:

- SEP773 Leadership for Innovation
- SEP771 W Booth School Practitioner's Forum
- SEP772 Innovation Studio

**CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: N. Illingworth

Email: illing@mcmaster.ca

Extension: 23486

Date submitted: Oct 1/14

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, cbryce@mcmaster.ca

SGS/2013



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

<b>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</b>								
<p>1. This form must be completed for <b>ALL</b> changes involving degree program requirements/procedures. <b>All</b> sections of this form <b>must</b> be completed.</p> <p>2. An electronic version of this form (must be in MS WORD <b>not</b> PDF) should be emailed to the Assistant Secretary, School of Graduate Studies.</p> <p>3. A representative from the department is <b>required to attend</b> the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.</p>								
<b>DEPARTMENT</b>		School of Engineering Practice						
<b>NAME OF PROGRAM</b>		Engineering Entrepreneurship and Innovation, M.E.E.I.						
<b>PROGRAM DEGREE</b>	Ph.D. ( )	M.A. ( )	M.A.Sc. ( )	M.B.A. ( )	M. Eng. (x )	M.Sc. ( )	Diploma Program ( )	Other (Specify)
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>								
<b>CHANGE IN ADMISSION REQUIREMENTS</b>			<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>			<b>CHANGE IN COURSE REQUIREMENTS</b>		x
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>			x	<b>EXPLAIN:</b> Addition of Leadership for Innovation Course SEP773*, adjustment of required courses based on changes to other EEI modules (course changes have been submitted)				
<b>OTHER CHANGES</b>		<b>EXPLAIN:</b>						
<b>DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:</b>								
Each module is considered the equivalent of a half-course as defined by the School of Graduate Studies, but will contain elements of lecture, group work, presentation and other activities as defined in the course outline. The module courses will be delivered in an intensive format; and it is expected that students will take the module courses in sequenced numerical order. The module								

courses are:

- [SEP \\*6E03 / Entrepreneurial Processes and Skills](#)
- [SEP \\*6EE3 / Breakthrough Technology Venture Development](#)
- [SEP \\*722 / Positioning and Shaping an Enterprise \(Module 3\)](#)
- [SEP \\*723 / New Venture Business Strategy \(Module 4\)](#)
- [SEP \\*724 / Taking a New Venture to Market \(Module 5\)](#)
- All full-time candidates are required to successfully complete:
- [SEP 771 / Walter G. Booth School of Engineering Practice Seminar Series](#)

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

A new course, Leadership for Innovation SEP773\*, is being added to the School of Engineering Practice curriculum. SEP6EE3 and SEP722 are being eliminated. Curriculum from SEP6EE3 and SEP722 are being combined to create a new course. SEP723 and SEP724 are being eliminated, these are being combined to create a new course.

**RATIONALE FOR THE RECOMMENDED CHANGE:**

Add new core common course across all SEP programs, streamline the required modules. The core modules will be reduced from 5 to 4.

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

September 2015

**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:**

The module courses are:

- [SEP \\*6E03 / Entrepreneurial Opportunity Identification](#)
- [SEP \\*773/ Leadership for Innovation](#)

- 
- [SEP \\*753 / Enterprise Opportunity Development \(Module 3\)](#)
- [SEP \\*755 / Business Launch and Development \(Module 4\)](#)
- All full-time candidates are required to successfully complete:
- [SEP 771 / Walter G. Booth School of Engineering Practice Practitioner's Forum](#)
- [SEP 772 / Innovation Studio](#)

**CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: N. Illingworth      Email: [illing@mcmaster.ca](mailto:illing@mcmaster.ca)      Extension: 23486      Date submitted: Oct 1/14

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, [cbryce@mcmaster.ca](mailto:cbryce@mcmaster.ca)

SGS/2013



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

<b>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</b>								
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<b>DEPARTMENT</b>		School of Engineering Practice						
<b>NAME OF PROGRAM</b>		Technology Entrepreneurship and Innovation, M.T.E.I.						
<b>PROGRAM DEGREE</b>	Ph.D. ( )	M.A. ( )	M.A.Sc. ( )	M.B.A. ( )	M. Eng. ( x )	M.Sc. ( )	Diploma Program ( )	Other (Specify)
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>								
<b>CHANGE IN ADMISSION REQUIREMENTS</b>			<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>			<b>CHANGE IN COURSE REQUIREMENTS</b>		x
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>			x	<b>EXPLAIN:</b> Addition of Leadership for Innovation Course SEP773, adjustment of required courses based on changes to other TEI modules (course changes have been submitted)				
<b>OTHER CHANGES</b>		<b>EXPLAIN:</b>						
<b>DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:</b>								
Each module is considered the equivalent of a half-course as defined by the School of Graduate Studies, but will contain elements of lecture, group work, presentation and other activities as defined in the course outline. The module courses will be delivered in an intensive format; and it is expected that students will take the module courses in sequenced numerical order. The module								

courses are:

- [SEP \\*6E03 / Entrepreneurial Processes and Skills](#)
- [SEP \\*6EE3 / Breakthrough Technology Venture Development](#)
- [SEP \\*722 / Positioning and Shaping an Enterprise \(Module 3\)](#)
- [SEP \\*723 / New Venture Business Strategy \(Module 4\)](#)
- [SEP \\*724 / Taking a New Venture to Market \(Module 5\)](#)
- All full-time candidates are required to successfully complete:
- [SEP 771 / Walter G. Booth School of Engineering Practice Seminar Series](#)

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

A new course, Leadership for Innovation, is being added to the School of Engineering Practice curriculum. SEP6EE3 and SEP722 are being eliminated. Curriculum from SEP6EE3 and SEP722 are being combined to create a new course. SEP723 and SEP724 are being eliminated, these are being combined to create a new course.

**RATIONALE FOR THE RECOMMENDED CHANGE:**

Add new core common course across all SEP programs, streamline the required modules. The core modules will be reduced from 5 to 4.

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

September 2015

**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:**

The module courses are:

- [SEP \\*6E03 / Entrepreneurial Opportunity Identification](#)
- [SEP \\*773/ Leadership for Innovation](#)

- 
- [SEP \\*753 / Enterprise Opportunity Development \(Module 3\)](#)
- [SEP \\*755 / Business Launch and Development \(Module 4\)](#)
- All full-time candidates are required to successfully complete:
- [SEP 771 / Walter G. Booth School of Engineering Practice Practitioner's Forum](#)
- [SEP 772 / Innovation Studio](#)

**CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: N. Illingworth      Email: [illing@mcmaster.ca](mailto:illing@mcmaster.ca)      Extension: 23486      Date submitted: Oct 1/14

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, [cbryce@mcmaster.ca](mailto:cbryce@mcmaster.ca)

SGS/2013



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

<b><u>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</u></b>								
1. This form must be completed for <b><u>ALL</u></b> changes involving degree program requirements/procedures. <b><u>All</u></b> sections of this form <b><u>must</u></b> be completed.								
2. An electronic version of this form (must be in MS WORD <b><u>not</u></b> PDF) should be emailed to the Assistant Secretary, School of Graduate Studies.								
3. A representative from the department is <b><u>required to attend</u></b> the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.								
<b>DEPARTMENT</b>		School of Engineering Practice						
<b>NAME OF PROGRAM</b>		Engineering and Public Policy, M.E.P.P.						
<b>PROGRAM DEGREE</b>	Ph.D. ( )	M.A. ( )	M.A.Sc. ( )	M.B.A. ( )	M. Eng. ( x )	M.Sc. ( )	Diploma Program ( )	Other (Specify)
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>								
<b>CHANGE IN ADMISSION REQUIREMENTS</b>		<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>		<b>CHANGE IN COURSE REQUIREMENTS</b>		x		
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>			x <b>EXPLAIN:</b> Addition of Leadership for Innovation SEP773* as a core required course					
<b>OTHER CHANGES</b>		<b>EXPLAIN:</b>						

**DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:**

**Required Courses**

Four half-courses:

- [SEP \\*701 / Theory and Practice of Policy Analysis: Frameworks and Models](#)
- [SEP \\*702 / Systems Engineering and Public Policy](#)
- [SEP \\*703 / Applied Microeconomics and Environmental Economics](#)
- [SEP \\*709 / Emerging Issues, Technology and Public Policy](#)
- [SEP 771 / Walter G. Booth School of Engineering Practice Seminar Series](#) (Full-time students only)

**Focus Elective Courses**

Four half-courses are required for electives. Students may select from the following options:

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

A new course, Leadership for Innovation, is being added to the School of Engineering Practice curriculum. A new studio course, Innovation Studio is being added to the W Booth School of Engineering Practice curriculum.

**RATIONALE FOR THE RECOMMENDED CHANGE:**

The new Leadership for Innovation Course and the new Innovation Studio course will be a required course for all SEP students.

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

September 2015

**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:**

### **Required Courses**

Five half-courses:

- [SEP \\*701 / Theory and Practice of Policy Analysis: Frameworks and Models](#)
- [SEP \\*702 / Systems Engineering and Public Policy](#)
- [SEP \\*703 / Applied Microeconomics and Environmental Economics](#)
- [SEP \\*709 / Emerging Issues, Technology and Public Policy](#)
- [SEP 773 /Leadership for Innovation](#)
- [SEP 771 / Walter G. Booth School of Engineering Practice Practitioner's Forum](#) (Full-time students only)
- SEP 772 / Innovation Studio

### **Focus Elective Courses**

Three half-courses are required for electives. Students may select from the following options:

### **CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

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Email: [illing@mcmaster.ca](mailto:illing@mcmaster.ca)

Extension: 23486

Date submitted: Oct 1/14

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SGS/2013







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

<b>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</b>								
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<b>DEPARTMENT</b>		School of Engineering Practice						
<b>NAME OF PROGRAM</b>		Engineering Entrepreneurship and Innovation, M.E.E.I. Technology Entrepreneurship and Innovation, M.T.E.I.						
<b>PROGRAM DEGREE</b>	Ph.D. ( )	M.A. ( )	M.A.Sc. ( )	M.B.A. ( )	M. Eng. (x )	M.Sc. ( )	Diploma Program ( )	Other (Specify)
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>								
<b>CHANGE IN ADMISSION REQUIREMENTS</b>		<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>		<b>CHANGE IN COURSE REQUIREMENTS</b>		x		
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>			<b>EXPLAIN:</b> x Provide additional details in peer evaluation and enterprise project section on individual and team learning assessment					
<b>OTHER CHANGES</b>		<b>EXPLAIN:</b>						
<b>DESCRIBE THE <u>EXISTING</u> REQUIREMENT/PROCEDURE:</b>								
<p><b>Peer Evaluation and the Enterprise Project</b></p> <p>The ability to effectively work in a team environment is an important learning outcome of team-based project work on the Enterprise project. Candidates will be mentored on their progress in this aspect by their enterprise advisor based on input from their peers in the project team and</p>								

from the observations of the enterprise advisor. Team member evaluations will be collected in confidence from team members by the enterprise advisor, or their designate, on a six-month basis. Every six months the Enterprise Advisor will review the performance of the individual candidate in the team with the candidate. The enterprise advisor will generate an assessment of performance. To successfully complete the program, the candidate must maintain an average rating of “Good” over the span of the enterprise project.

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

Provide further clarification to include team and individual learning outcomes and assessment.

**RATIONALE FOR THE RECOMMENDED CHANGE:**

Learning evaluation will be based on both team and individual assessments.

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

September 2015

**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:**

**CHANGES ARE HIGHLIGHTED**

The ability to effectively work in a team environment is an important learning outcome of team-based project work on the Enterprise project, as is individual learning outcomes developed in a team environment. Candidates will be mentored on their progress in this aspect by their enterprise advisor based on input from their peers in the project team and from assessment by the observations of the enterprise advisor. Team member evaluations will be collected in confidence from team members by the enterprise advisor, or their designate, on a six-month basis. Every six months the Enterprise Advisor will review the performance of the individual candidate in the team with the candidate. The enterprise advisor will generate an assessment of performance. To

successfully complete the program, the candidate must maintain an average rating of “Good” over the span of the enterprise project in team assessment, and demonstrate individual achievement in team experienced learning outcomes.

**CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: N. Illingworth

Email: illing@mcmaster.ca

Extension: 23486

Date submitted: Oct 1/14

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SGS/2013





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

<b>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</b>								
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<b>DEPARTMENT</b>		School of Engineering Practice						
<b>NAME OF PROGRAM</b>		All programs Engineering Entrepreneurship and Innovation, M.E.E.I. Technology Entrepreneurship and Innovation, M.T.E.I. Engineering and Public Policy, M.E.P.P. Engineering Design, M. Eng. Design						
<b>PROGRAM DEGREE</b>	<b>Ph.D. ( )</b>	<b>M.A. ( )</b>	<b>M.A.Sc. ( )</b>	<b>M.B.A. ( )</b>	<b>M. Eng. (x )</b>	<b>M.Sc. ( )</b>	<b>Diploma Program ( )</b>	<b>Other (Specify)</b>
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>								
<b>CHANGE IN ADMISSION REQUIREMENTS</b>		<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>		<b>CHANGE IN COURSE REQUIREMENTS</b>			x	
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>			x	<b>EXPLAIN:</b> Provide advanced standing to undergraduate students or graduate students from programs external to SEP who register for the SEP programs will be given advanced standing in 2 of the required courses.				
<b>OTHER CHANGES</b>		<b>EXPLAIN:</b>						

**DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:**

Undergraduate students, usually in Engineering and Management can take 5EE3 and 5EO3. These are the same as the SEP 6 level courses. Currently they are not given automatic advanced standing.

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

To give undergraduate students who take SEP5E03 and/or the new Leadership for Innovation Courses (SEP6EL3, SEP4 or 5EL3, EngMgmt 5EL3, numbers to be confirmed) will be given advanced standing for these courses towards a degree from School of Engineering Practice once they register in a SEP program.

**RATIONALE FOR THE RECOMMENDED CHANGE:**

To avoid students being required to take the same courses twice.

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

September 2015

**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:**

In Admission Section:

Students who take Leading Innovation and/or Entrepreneurial Opportunity Identification may be granted advanced standing for these required courses upon registration in SEP programs

**CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

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Extension: 23486

Date submitted: Oct 1/14

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SGS/2013



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

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<b>DEPARTMENT</b>		School of Engineering Practice						
<b>NAME OF PROGRAM</b>		All programs in School of Engineering Practice						
<b>PROGRAM DEGREE</b>	Ph.D. ( )	M.A. ( )	M.A.Sc. ( )	M.B.A. ( )	M. Eng. (x )	M.Sc. ( )	Diploma Program ( )	Other (Specify)
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>								
<b>CHANGE IN ADMISSION REQUIREMENTS</b>			<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>			<b>CHANGE IN COURSE REQUIREMENTS</b>		x
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>			x	<b>EXPLAIN:</b> Removal of higher average required for B-Tech students (B+) compared to engineering or science graduates (B-).				
<b>OTHER CHANGES</b>		<b>EXPLAIN:</b>						
<b>DESCRIBE THE <u>EXISTING</u> REQUIREMENT/PROCEDURE:</b>								
Existing wording differs between programs, this is an example: In addition to the general requirements for entry into a graduate program in Engineering, students must hold a 4-year engineering or science undergraduate degree, with at least a B- average (equivalent to a McMaster 7.0 GPA out of 12) or a B+ average (equivalent to a McMaster 9.0 GPA out of 12) for B.Tech. students in the final year in all courses in the discipline, or relating to the discipline, in which the applicant proposes to do graduate work.								

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

Removed of higher average required for B-Tech graduates applying for any of the programs.

**RATIONALE FOR THE RECOMMENDED CHANGE:**

This will make all applicants have the same entrance requirements. The B-Tech program closely resembles the Gen-Tech portion of their program and is similar to the experiential learning model in the school.

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

September 2015

**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:**

Remove: or a B+ average (equivalent to a McMaster 9.0 GPA out of 12) for B.Tech. students

**CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: N. Illingworth      Email: illing@mcmaster.ca      Extension: 23486      Date submitted: Oct 1/14

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, [cbryce@mcmaster.ca](mailto:cbryce@mcmaster.ca)





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

<b>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</b>								
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<b>DEPARTMENT</b>		Engineering Physics						
<b>NAME OF PROGRAM</b>		UNENE Diploma						
<b>PROGRAM DEGREE</b>	<b>Ph.D.</b> ( )	<b>M.A.</b> ( )	<b>M.A.Sc.</b> ( )	<b>M.B.A.</b> ( )	<b>M. Eng.</b> ( )	<b>M.Sc.</b> ( )	<b>Diploma Program</b> ( X )	<b>Other (Specify)</b>
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>								
<b>CHANGE IN ADMISSION REQUIREMENTS</b>		<input type="checkbox"/>		<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>		<input type="checkbox"/>		<b>CHANGE IN COURSE REQUIREMENTS</b>
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>		<input type="checkbox"/>		<b>EXPLAIN:</b>				
<b>OTHER CHANGES</b>	<input checked="" type="checkbox"/>	<b>EXPLAIN:</b> New Program						
<b>DESCRIBE THE <u>EXISTING</u> REQUIREMENT/PROCEDURE:</b>								
UNENE currently offers a part-time M.Eng. degree program in nuclear engineering which requires the completion of 10 (half) courses or 8 (half) courses plus an engineering project.								

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

The UNENE Board of Directors requested UNENE to broaden its offerings through a new Diploma program. This will allow students to broaden their knowledge base and enhance their existing skills in a disciplined academic environment without the commitment of a full UNENE M.Eng. degree. The diploma will be offered jointly with UOIT – i.e. students can register with either University. The program has been fully approved by both Universities.

As with the M.Eng., the diploma is aimed at students already working in the nuclear industry.

Courses are common with the M.Eng. (same place / time / standards / lecturer).

**RATIONALE FOR THE RECOMMENDED CHANGE:**

The UNENE Diploma will allow students who wish to specialize or who do not have the resources / time for the M.Eng. to take a Diploma program.

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

September 1, 2015

**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:**

UNENE Diploma Program

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The Department of Engineering Physics offers a part-time UNENE Diploma in conjunction with the University of Ontario Institute of Technology (UOIT). The Diploma program is course-based and allows students who currently work in the nuclear industry to broaden and deepen their nuclear knowledge and capability. Courses are presented off campus in four alternate weekend sessions. Courses are given live, usually with synchronous distance education.

Admission

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Applicants must hold a baccalaureate degree in the fields of engineering, science or mathematics with an acceptable grade point average, similar to that for entry into the UNENE M.Eng. degree program. Consideration will be given to relevant work experience. In addition, applicants must be deemed to have satisfactory preparation, as a result of university education and work experience, to succeed in the program. The Department Chair, upon the recommendation of the departmental Graduate Admissions Committee, will make admission recommendations to the School of Graduate Studies.



## Requirements

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The student will be granted a graduate UNENE Diploma upon successful completion of four half courses. Courses will be chosen from those offered in the UNENE M.Eng. program and will consist of a minimum of two of the four core courses offered. Courses are to be completed within a three year period with a minimum passing grade of B- for each course.

## Courses

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The courses listed below are also listed in the UNENE M.Eng. section of the Graduate Calendar. Usually these courses are offered using distance education synchronous with the live class..

- UN0501 Fuel Management
- UN0502 Nuclear Power Plant Systems and Operations *Core Course*
- UN0503 Nuclear Energy in Society: Regulation and Our Energy Future
- UN0601 Control, Instrumentation and Electrical Systems in CANDU based Nuclear Power Plants
- UN0602 Nuclear Fuel Waste Management
- UN0603 Project Management for Nuclear Engineers
- UN0701 Engineering Risk and Reliability
- UN0802 Nuclear Reactor Physics *Core Course*
- UN0803 Nuclear Reactor Safety Design *Core Course*
- UN0804 Nuclear Reactor Heat Transport System Design *Core Course*
- UN0805 Introduction to Operational Health Physics
- UN0806 Nuclear Fuel Engineering
- UN0807 Power Plant Thermodynamics
- UN0808 Reactor Chemistry and Corrosion
- UN0901 Nuclear Materials

**CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

**Name:** Victor Snell

**Email:** snellv@mcmaster.ca

**Ext:** 20168

**Date submitted:** March 9, 2015

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies,  
cbryce@mcmaster.ca

SGS/2013



**School of Graduate Studies** 1280 Main Street West Phone 905.525.9140  
Hamilton, Ontario, Canada Ext. 23679  
L8S 4L8 <http://graduate.mcmaster.ca>

To : Graduate Council

From : Christina Bryce  
Assistant Graduate Secretary

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At its meeting on March 3<sup>rd</sup>, the Faculty of Health Sciences Graduate Policy and Curriculum Committee approved the following graduate curriculum recommendations.

Please note that these recommendations were forwarded for approval to the March 25<sup>th</sup>, 2015 meeting of the Faculty of Health Sciences Executive Meeting.

**FOR APPROVAL OF GRADUATE COUNCIL:**

**-Global Health**

-Change to Course Requirements

**-Health Research Methodology**

-GDCE Calendar Copy  
-Change to Calendar Copy  
-Change to Attendance Policy

**-Master of Public Health**

-Calendar Copy

**-Nursing**

-Change to Course Requirements

**FOR INFORMATION OF GRADUATE COUNCIL:**

**-Clinical Behavioural Sciences**

-New Courses

- \*706 Clinical Supervision
- \*708 Mindfulness Applications for Health Care
- \*709 Understanding Organizations I, Building Leadership from Within
- 717 Supervision in Applied Behavioural Analysis and Therapy
- \*718 Introduction to Acceptance and Commitment Therapy
- \*720 Introduction to Cognitive Behaviour Therapy
- \*721 Advanced Cognitive Behaviour Therapy
- \*723 Introduction to CBT For Chronic Pain
- \*724 Advanced CBT for Chronic Pain
- \*727 Advanced Post Traumatic Stress Disorder
- 728 Supervision of Post Traumatic Stress Disorder
- \*740 Introduction to Seniors Mental Health

- \*741 Advanced Seniors Mental Health
- \*770 Introduction to Psychodynamic Psychotherapy
- \*771 Advanced Psychodynamic Psychotherapy
- 773 Supervision of Interpersonal Psychotherapy for Depression

-Update to Prerequisites

**-Health Research Methodology**

-New Course

- 777 Methods of Diagnostic and Prognostic Research

-Update to Prerequisites

- General Prerequisites
- 771 Fundamentals of Health Research and Evaluation Methods
- 772 Introduction to Research Method for Randomized Controlled Trials
- 773 Systematic Review Methods
- 774 Introduction to Biostatistics

-Change to Course Descriptions

- 702 Introduction to Biostatistics
- 733 Statistical and Methodological Issues in Randomized Clinical Trials
- 740 Advanced Decision Analysis in Health Technology Assessment
- 743 Systematic Review Methods

**-Health Science Education**

-Course Title and Description Changes

- 705 eLearning
- 706 Leadership



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

<b>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</b>								
<p>1. This form must be completed for <b>ALL</b> changes involving degree program requirements/procedures. <b>All</b> sections of this form <b>must</b> be completed.</p> <p>2. An electronic version of this form (must be in MS WORD <b>not</b> PDF) should be emailed to the Assistant Secretary, School of Graduate Studies.</p> <p>3. A representative from the department is <b>required to attend</b> the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.</p>								
<b>DEPARTMENT</b>		Clinical Epidemiology and Biostatistics / Health Research Methodology						
<b>NAME OF PROGRAM</b>		Health Research Methodology: Graduate Diploma in Clinical Epidemiology						
<b>PROGRAM DEGREE</b>	Ph.D. ( )	M.A. ( )	M.A.Sc. ( )	M.B.A. ( )	M. Eng. ( )	M.Sc. ( )	<b>Diploma Program</b> (X)	<b>Other (Specify)</b>
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>								
<b>CHANGE IN ADMISSION REQUIREMENTS</b>		<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>		<b>CHANGE IN COURSE REQUIREMENTS</b>				
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>			X	<b>EXPLAIN:</b> New Program within HRM				
<b>OTHER CHANGES</b>		<b>EXPLAIN:</b>						
<b>DESCRIBE THE <u>EXISTING</u> REQUIREMENT/PROCEDURE:</b>								

<p><b>PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE</b> <i>(Attach additional pages if space is not sufficient.)</i></p> <p>New diploma program is approved for May 1 2015 start and is listed as a new program offering within the HRM graduate programs.</p>
<p><b>RATIONALE FOR THE RECOMMENDED CHANGE:</b></p>
<p><b>PROVIDE IMPLEMENTATION DATE:</b> <i>(Implementation date should be at the beginning of the academic year)</i></p> <p>1 May 2015</p>
<p><b>ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.</b></p>
<p><b>PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR:</b></p> <p>See Attached</p>
<p><b>CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:</b></p> <p>Name: Steven Hanna      Email: hannas@mcmaster.ca      Extension: 27851      Date submitted: 15 Feb 2015</p>

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, [cbryce@mcmaster.ca](mailto:cbryce@mcmaster.ca)



## **Health Research Methodology Programs**

### **Graduate Diploma in Clinical Epidemiology**

The Graduate Diploma in Clinical Epidemiology (GDCE) trains physicians, health policy makers, research staff, and graduate students in allied disciplines who need to understand, appraise, and use health research evidence. The four courses of the diploma provide graduate level training in the fundamental concepts and methods of clinical epidemiology but without the research intensive focus of a complete MSc degree. The diploma is completely online, offering maximum flexibility for working professionals, students or post-graduate trainees already enrolled in another program, from anywhere in the world.

The GDCE builds on the strengths of the internationally respected Health Research Methods Graduate Programs at McMaster University. Like the HRM program, the courses are taught by faculty in the Department of Clinical Epidemiology and Biostatistics, a premier destination for graduate study and research in clinical epidemiology. The four online courses comprising the program are recognized as equivalent to the core HRM courses, and are ideal for applicants with an interest in HRM training without the commitment of an entire MSc degree completed on site.

GDCE students complete coursework in Fundamentals of Health Research and Evaluation Methods (HRM\*771), Introduction to Biostatistics (HRM \*774), Introduction to Research Methods for Randomized Controlled Trials (HRM \*772), and Systematic Review Methods (HRM \*773). Students learn to critically appraise the healthcare literature, apply the fundamentals of health-research designs, including randomized controlled trials, conduct and use research syntheses, and understand the application of biostatistics. Graduates attain foundational knowledge in the tenets of evidence-based medicine and a skill set applicable in clinical, policy, management, and research settings. The graduate diploma is also an opportunity for qualified students to demonstrate their aptitude for training in the HRM MSc program. The GDCE courses are normally accepted for credit toward the requirements of the HRM MSc for students who successfully apply to HRM after completing the GDCE.

#### **Enquiries:**

Kristina Vukelic, Program Manager, HRM  
Phone: 905-525-9140 ext 22218  
email: carrl@mcmaster.ca

#### **Admission:**

The GDCE's admission requirements are the same as the HRM MSc program, including:

- Completion of a four-year honours undergraduate university (Bachelor's) degree (any discipline) or the equivalent
- B+ average (75-79%, equivalent to a McMaster 8.5 grade point average) in the final year of undergraduate study



- Additional evidence attesting to suitability for GDCE study as reflected in work experience, research experience, relevance of academic background, and letters of recommendation.

Meeting the minimum admissions requirements does not guarantee admission into the GDCE. The admissions process is competitive.

Applicants whose native language is not English must provide evidence of proficiency in the use of the English language. An official copy of your TOEFL score, or other evidence of competency in English is required. A minimum TOEFL (iBT) score of 92 (580 on the paper-based TOEFL test or 237 on the computer-based TOEFL test) is required.

Details of the admission requirements and procedure are available at:  
<http://fhs.mcmaster.ca/hrm>

### **Requirements**

GDCE students complete the diploma online on a part-time basis. There is no requirement for students to be available on the McMaster campus. Students must have suitable access to internet and computing, and may be required to participate in some online sessions during business hours on Eastern Standard Time. To be awarded the GDCE, students are required to complete the following four 3.0-unit online courses with minimum B- standing (70%).

1. HRM \*771: Fundamentals of Health Research and Evaluation
2. HRM \*774: Introduction to Biostatistics
3. HRM \*772: Introduction to Randomized Controlled Trials
4. HRM \*773: Systematic Review Methods

Program duration is normally 12 to 24 months. Except by permission of the program director students may take no more than one course concurrently and must complete the courses in the order listed above. Specific policies and procedures governing the GDCE are provided on the website: <http://fhs.mcmaster.ca/hrm>.



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

<b>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</b>								
<p>1. This form must be completed for <b><u>ALL</u></b> changes involving degree program requirements/procedures. <b><u>All</u></b> sections of this form <b><u>must</u></b> be completed.</p> <p>2. An electronic version of this form (must be in MS WORD <b><u>not</u></b> PDF) should be emailed to the Assistant Secretary, School of Graduate Studies.</p> <p>3. A representative from the department is <b><u>required to attend</u></b> the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.</p>								
<b>DEPARTMENT</b>		Clinical Epidemiology & Biostatistics						
<b>NAME OF PROGRAM</b>		Health Research Methodology						
<b>PROGRAM DEGREE</b>	<b>Ph.D. ( X )</b>	<b>M.A. ( )</b>	<b>M.A.Sc. ( )</b>	<b>M.B.A. ( )</b>	<b>M. Eng. ( )</b>	<b>M.Sc. ( X )</b>	<b>Diploma Program ( )</b>	<b>Other (Specify)</b>
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>								
<b>CHANGE IN ADMISSION REQUIREMENTS</b>		<input type="checkbox"/>	<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>		<input type="checkbox"/>	<b>CHANGE IN COURSE REQUIREMENTS</b>		<input type="checkbox"/>
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>			<input checked="" type="checkbox"/>	<b>EXPLAIN:</b> Introduction, Fields of Specialization, MSc Degree, PhD Degree, Courses				
<b>OTHER CHANGES</b>		<input type="checkbox"/>	<b>EXPLAIN:</b>					
<b>DESCRIBE THE <u>EXISTING</u> REQUIREMENT/PROCEDURE:</b>								

<p><b>PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE</b> (<i>Attach additional pages if space is not sufficient.</i>)</p> <p>Introduction: removal of reference to the diploma in Health Services and Policy Research.</p> <p>Fields of Specialization: removal of field leader names and note in Clin Epi field</p> <p>MSc Degree: add note re: admissions criteria</p> <p>PhD Degree - Admission: add note re: admissions criteria</p> <p>Courses: note to refer to HRM website for updated schedule of course offerings</p>
<p><b>RATIONALE FOR THE RECOMMENDED CHANGE:</b></p> <p>Introduction: diploma no longer available</p> <p>Fields of Specialization: updates available on the website and inclusion of updated Clin Epi info from approved manuals</p> <p>MSc Degree: criteria not previously mentioned in HRM section of calendar.</p> <p>PhD Degree: criteria not previously mentioned in HRM section of calendar.</p> <p>Courses: Not all approved HRM courses offered every academic year.</p>
<p><b>PROVIDE IMPLEMENTATION DATE:</b> (<i>Implementation date should be at the beginning of the academic year</i>)</p> <p>Sept 2015</p>
<p><b>ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.</b></p> <p>None.</p>
<p><b>PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR:</b></p> <p>See attached</p>
<p><b>CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:</b></p> <p>Name: Steve Hanna      Email: hannas@mcmaster.ca      Extension: 27851      Date submitted: Feb 2015</p>

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, [cbryce@mcmaster.ca](mailto:cbryce@mcmaster.ca)

SGS/2013

	2014-2015 Calendar	2015-2016 Proposal
<b>Health Research Methodology</b> <b>Introduction:</b> <a href="http://academiccalendars.romcmaster.ca/preview_entity.php?catoid=4&amp;entoid=224&amp;returnto=206">http://academiccalendars.romcmaster.ca/preview_entity.php?catoid=4&amp;entoid=224&amp;returnto=206</a>	<p>The Graduate Program in Health Research Methodology provides exciting new opportunities for advanced training in research methodology. The program is offered at the M.Sc. and Ph.D. level. Students are encouraged to enroll in full-time study, although requests for part-time studies will be considered at both the M.Sc. and Ph.D. level.</p> <p>Through coursework and involvement in research projects students are exposed to evaluative frameworks and research methods derived from clinical epidemiology, biostatistics, epidemiology, health economics, health services research, health policy analysis, psychology, sociology, geography, political science, history, bioethics and education.</p> <p>Trainees are challenged to integrate theory and methods from these alternative disciplinary perspectives to create innovative research and evaluation methods that can contribute to an improved understanding of health and disease (in individuals and populations) and strengthened health services and systems.</p> <p>Students may choose to specialize in one of the following fields: Clinical Epidemiology, Biostatistics (Ph.D. level), Health Services Research, Population and Public Health and Health Technology Assessment.</p> <p><del>For those students wishing to pursue a graduate level diploma in Health Services and Policy Research in addition to their degree, please refer to the Graduate Diploma Programs section at the back of this Calendar.</del></p>	<p>The Graduate Program in Health Research Methodology provides exciting new opportunities for advanced training in research methodology. The program is offered at the M.Sc. and Ph.D. level. Students are encouraged to enroll in full-time study, although requests for part-time studies will be considered at both the M.Sc. and Ph.D. level.</p> <p>Through coursework and involvement in research projects students are exposed to evaluative frameworks and research methods derived from clinical epidemiology, biostatistics, epidemiology, health economics, health services research, health policy analysis, psychology, sociology, geography, political science, history, bioethics and education.</p> <p>Trainees are challenged to integrate theory and methods from these alternative disciplinary perspectives to create innovative research and evaluation methods that can contribute to an improved understanding of health and disease (in individuals and populations) and strengthened health services and systems.</p> <p>Students may choose to specialize in one of the following fields: Clinical Epidemiology, Biostatistics (Ph.D. level), Health Services Research, Population and Public Health and Health Technology Assessment.</p>

<p><b>Program Information - Fields of Specialization:</b>  <a href="http://academiccalendars.romcmaster.ca/preview_entity.php?catoid=4&amp;entoid=224&amp;returnto=206#Program_Information">http://academiccalendars.romcmaster.ca/preview_entity.php?catoid=4&amp;entoid=224&amp;returnto=206#Program_Information</a></p>	<p><b>Fields of Specialization</b></p> <p>In addition to our regular offerings, the HRM program provides students with the opportunity to <b>specialize</b> 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. All five fields are offered at the MSc and PhD level except for Biostatistics, which is offered at the PhD level only. The original HRM program, wherein students opt not to declare a field of specialization will continue to be available as <b>“HRM Classic”</b>.</p> <p>Students in HRM classic pursue a general methods degree, or explore other areas such as medical education research, health informatics or health ethics, to name but a few.</p> <p><b>Clinical Epidemiology: P.J. Devereaux, Field Leader</b></p> <p>Clinical epidemiology employs sound research principles, tempered with practicality, to find the best answers to “real world” questions about clinical practice and health care. Individuals training in this field (who usually have a clinical background) acquire the skills required to undertake research that addresses fundamental questions about the effectiveness of clinical therapies, usefulness of screening and diagnostic tools, prognosis and disease causation. Issues related to research synthesis and knowledge translation may also be a focus. Individuals training in clinical epidemiology work alongside world leading clinical epidemiologists who are conducting their research in multiple sites around the world and changing the way medicine is practiced globally. The field of clinical epidemiology in the Health Research Methodology Program offers a unique opportunity to learn and work with the best clinical epidemiologists in the world, thus enabling graduates to make profound</p>	<p><b>Fields of Specialization</b></p> <p>In addition to our regular offerings, the HRM program provides students with the opportunity to <b>specialize</b> 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. All five fields are offered at the MSc and PhD level except for Biostatistics, which is offered at the PhD level only. The original HRM program, wherein students opt not to declare a field of specialization will continue to be available as <b>“HRM Classic”</b>.</p> <p>Students in HRM classic pursue a general methods degree, or explore other areas such as medical education research, health informatics or health ethics, to name but a few.</p> <p><b>Clinical Epidemiology:</b></p> <p>Clinical epidemiology employs sound research principles, tempered with practicality, to find the best answers to “real world” questions about clinical practice and health care. Individuals training in this field (who usually have a clinical background) acquire the skills required to undertake research that addresses fundamental questions about the effectiveness of clinical therapies, usefulness of screening and diagnostic tools, prognosis and disease causation. Issues related to research synthesis and knowledge translation may also be a focus. Individuals training in clinical epidemiology work alongside world leading clinical epidemiologists who are conducting their research in</p>
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	<p>contributions to the practice of clinical medicine through research.</p> <p><b>Biostatistics (Ph.D. level): Joseph Beyene, Field Leader</b></p> <p>The HRM Biostatistics PhD field is specially designed for applicants with an MSc in Mathematics and/or Statistics who wish to pursue doctoral work in Biostatistics. The program aims to provide trainees with the skills they need to conduct independent research into biostatistical topics, provide leadership as biostatistical collaborators in clinical, health systems and population health investigations and effectively teach biostatistics from introductory through to advanced levels. Graduates will possess the following skills: ability to apply biostatistical concepts, techniques and data-analytic strategies across the full spectrum of research questions and study designs; ability to contribute to grant proposals in the areas of research design, data analysis and interpretation; ability to teach biostatistical concepts to research colleagues who are not biostatisticians; and ability to adapt existing statistical techniques or to develop new techniques to solve research design and analytical programs. Graduates may pursue career opportunities in academia, government or private industry.</p> <p>In addition to coursework related to research design, all students participate in a course on Biostatistical Collaboration. The aim is to develop the skills needed for successful collaborative research in the role of biostatistical consultant. These include communication of biostatistical concepts and the provision of leadership with respect to research design, analysis and reporting.</p> <p><b>Health Services Research: Marko Simunovic, Field Leader</b></p> <p>Health services research focuses on questions about the most effective ways</p>	<p>multiple sites around the world and changing the way medicine is practiced globally. The field of clinical epidemiology in the Health Research Methodology Program offers a unique opportunity to learn and work with the best clinical epidemiologists in the world, thus enabling graduates to make profound contributions to the practice of clinical medicine through research.</p> <p><b>Students can enter the clinical epidemiology stream if they fulfill the following criteria:</b></p> <ol style="list-style-type: none"> <li><b>1. They have a designation of a health care provider based upon a degree or diploma (e.g., doctors, physiotherapists, nutritionists).</b></li> <li><b>2. Their HRM degree research primarily focuses on studies directly relevant to patients (e.g., randomized controlled trials, observational studies, or systematic reviews of health related questions).</b></li> </ol> <p><b>If a student is not a designated health care provider and wants to appeal these criteria then towards the end of their HRM training they can submit a summary of the research (eg., course papers, studies and research) they have undertaken to the Clinical Epidemiology Stream Committee. The committee will review the student's request to determine if it merits the designation of the clinical epidemiology stream.</b></p> <p><b>Biostatistics (Ph.D. level):</b></p> <p>The HRM Biostatistics PhD field is specially designed for applicants with an MSc in Mathematics</p>
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	<p>to organize, manage, finance, and deliver high quality clinical and health care, reduce medical errors and improve patient safety. The research domains utilized by health services researchers may include individuals, families, organizations, institutions, communities, and populations. Graduates acquire a broad range of skills in research synthesis, research design, data analysis and writing for publication that enable them to conduct rigorous research in numerous areas including: patterns of care/process of care, small area practice variation studies, appropriateness of care, knowledge translation, economic analysis of health care, service and system organization, patient experience, theoretical underpinnings of health services organization, management, and financing and delivery. The curriculum emphasizes mixed methods approaches that utilize skills in both quantitative and qualitative research.</p> <p><b>Public and Population Health: Steve Hanna, Field Leader</b></p> <p>Canada faces many public health challenges, including emerging and existing infectious diseases and alarming increases in many chronic diseases. Research to address the determinants of these health problems is of paramount importance to maintaining a healthy population. The field of population and public health provides students with the methodological expertise needed to conduct cutting edge research, including investigations into the biological, economic, and social factors that protect, precipitate or perpetuate disability and disease, and to improve public health. Graduates will acquire the following skills: ability to critically appraise and interpret research evidence, formulate research questions, justify research and analysis methods and understand ethical issues involved in research in this field; ability to conduct research into biological, social, cultural, and environmental determinants of health; ability to conduct</p>	<p>and/or Statistics who wish to pursue doctoral work in Biostatistics. The program aims to provide trainees with the skills they need to conduct independent research into biostatistical topics, provide leadership as biostatistical collaborators in clinical, health systems and population health investigations and effectively teach biostatistics from introductory through to advanced levels. Graduates will possess the following skills: ability to apply biostatistical concepts, techniques and data-analytic strategies across the full spectrum of research questions and study designs; ability to contribute to grant proposals in the areas of research design, data analysis and interpretation; ability to teach biostatistical concepts to research colleagues who are not biostatisticians; and ability to adapt existing statistical techniques or to develop new techniques to solve research design and analytical programs. Graduates may pursue career opportunities in academia, government or private industry.</p> <p>In addition to coursework related to research design, all students participate in a course on Biostatistical Collaboration. The aim is to develop the skills needed for successful collaborative research in the role of biostatistical consultant. These include communication of biostatistical concepts and the provision of leadership with respect to research design, analysis and reporting.</p> <p><b>Health Services Research:</b></p> <p>Health services research focuses on questions about the most effective ways to organize,</p>
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	<p>basic or applied research in public health aimed at improving the health of individuals, communities and populations; and ability to apply population and public health methods across a range of disease conditions.</p> <p><b>Health Technology Assessment: Ren Goeree, Field Leader</b></p> <p>Health Technology Assessment (HTA) is defined as the evaluation of the clinical effectiveness, cost-effectiveness, and broader impact of drugs, medical technologies, and health systems, both on patient health and the health care system. HTA has gained increasing importance in health care decision making locally and around the world and over the last decade there have been numerous important methodological advances in the techniques of HTA. As a result there is a growing gap between the need for HTA and the availability of skilled researchers to conduct HTAs. The goal of the HTA field specialization is to train individuals who, upon graduation, will have the necessary skills to be actively involved in independent and collaborative research in the field of HTA. Graduates will possess the following skills: a strong foundation in the basic principles of HTA; advanced decision analysis; ability to apply research methods derived from health economics; understand and use basic and advanced biostatistics; and utilize health services research and health policy analysis concepts and methods.</p> <p>Students will be expected to collaborate with one of the many research groups conducting HTA at McMaster University.</p>	<p>manage, finance, and deliver high quality clinical and health care, reduce medical errors and improve patient safety. The research domains utilized by health services researchers may include individuals, families, organizations, institutions, communities, and populations. Graduates acquire a broad range of skills in research synthesis, research design, data analysis and writing for publication that enable them to conduct rigorous research in numerous areas including: patterns of care/process of care, small area practice variation studies, appropriateness of care, knowledge translation, economic analysis of health care, service and system organization, patient experience, theoretical underpinnings of health services organization, management, and financing and delivery. The curriculum emphasizes mixed methods approaches that utilize skills in both quantitative and qualitative research.</p> <p><b>Public and Population Health:</b></p> <p>Canada faces many public health challenges, including emerging and existing infectious diseases and alarming increases in many chronic diseases. Research to address the determinants of these health problems is of paramount importance to maintaining a healthy population. The field of population and public health provides students with the methodological expertise needed to conduct cutting edge research, including investigations into the biological, economic, and social factors that protect, precipitate or perpetuate disability and disease, and to improve public health. Graduates will acquire the following skills: ability to critically</p>
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		<p>appraise and interpret research evidence, formulate research questions, justify research and analysis methods and understand ethical issues involved in research in this field; ability to conduct research into biological, social, cultural, and environmental determinants of health; ability to conduct basic or applied research in public health aimed at improving the health of individuals, communities and populations; and ability to apply population and public health methods across a range of disease conditions.</p> <p><b>Health Technology Assessment:</b></p> <p>Health Technology Assessment (HTA) is defined as the evaluation of the clinical effectiveness, cost-effectiveness, and broader impact of drugs, medical technologies, and health systems, both on patient health and the health care system. HTA has gained increasing importance in health care decision making locally and around the world and over the last decade there have been numerous important methodological advances in the techniques of HTA. As a result there is a growing gap between the need for HTA and the availability of skilled researchers to conduct HTAs. The goal of the HTA field specialization is to train individuals who, upon graduation, will have the necessary skills to be actively involved in independent and collaborative research in the field of HTA. Graduates will possess the following skills: a strong foundation in the basic principles of HTA; advanced decision analysis; ability to apply research methods derived from health economics; understand and use basic and advanced biostatistics;</p>
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		<p>and utilize health services research and health policy analysis concepts and methods.</p> <p>Students will be expected to collaborate with one of the many research groups conducting HTA at McMaster University.</p>
<p><b>MSc Degree</b>  <a href="http://academiccalendars.romcmaster.ca/preview_program.php?catoid=4&amp;poid=1213&amp;returnto=206">http://academiccalendars.romcmaster.ca/preview_program.php?catoid=4&amp;poid=1213&amp;returnto=206</a></p>	<p>The general requirements for the M.Sc. Degree appear under the Regulations for the Master's degrees near the beginning of this Calendar.</p>	<p>The <b>minimum admissions and general requirements</b> for the M.Sc. Degree appear under the Regulations for the Master's degrees near the beginning of this Calendar. <b>Meeting the minimum admissions criteria does not guarantee admission to the program.</b></p> <p><b>Detailed information re: the application requirements are outlined on the HRM website at:</b>  <a href="http://fhs.mcmaster.ca/hrm/msc_application.html">http://fhs.mcmaster.ca/hrm/msc_application.html</a></p>
<p><b>PhD Degree – Admission:</b>  <a href="http://academiccalendars.romcmaster.ca/preview_program.php?catoid=4&amp;poid=1214&amp;returnto=206">http://academiccalendars.romcmaster.ca/preview_program.php?catoid=4&amp;poid=1214&amp;returnto=206</a></p>	<p><b>Admission</b></p> <p>While the field of focus is Health Research Methodology, the faculty is a diverse interactive group of researchers specializing in the evaluative and decision sciences in biostatistics/clinical trials; epidemiology/population health/health services; health economics/health policy analysis; and health measurement. Common to these diverse disciplinary interests is a central focus on the development and testing of theory and methods related to health problems. Thus, the program seeks candidates who show high scholarly promise from both clinical and non-clinical backgrounds: clinicians, in virtually all health-related disciplines, and non-clinicians, usually from backgrounds in the social and behavioural sciences. A candidate for the Ph.D. degree must comply with the School of Graduate Studies Regulations for the Degree Doctor of Philosophy, including completion of the equivalent of 1.5 full 700-level courses, as the</p>	<p><b>Admission</b></p> <p>While the field of focus is Health Research Methodology, the faculty is a diverse interactive group of researchers specializing in the evaluative and decision sciences in biostatistics/clinical trials; epidemiology/population health/health services; health economics/health policy analysis; and health measurement. Common to these diverse disciplinary interests is a central focus on the development and testing of theory and methods related to health problems. Thus, the program seeks candidates who show high scholarly promise from both clinical and non-clinical backgrounds: clinicians, in virtually all health-related disciplines, and non-clinicians, usually from backgrounds in the social and behavioural sciences. A candidate for the Ph.D. degree must comply with the School of Graduate</p>

	<p>minimum course requirement.</p>	<p>Studies Regulations for the Degree Doctor of Philosophy, including completion of the equivalent of 1.5 full 700-level courses, as the minimum course requirement.</p> <p><b>The admission requirement into the Program is a Master's degree with an academic standing equivalent to <u>at least</u> a McMaster B+ in previous academic work.</b></p> <p><b>All applicants are expected to have advanced preparation in the form of a Master's degree or equivalent, or the combination of a course-based Master's degree and strong supporting evidence of their potential as independent investigators. Examples of strong supporting evidence include, but are not limited to:</b></p> <ul style="list-style-type: none"> <li>• Published or unpublished examples of scholarly work</li> <li>• Substantive involvement in research</li> <li>• Reference letters that speak explicitly to this issue</li> </ul> <p><b>For some students, this would likely be the existing Master's program (formerly in HRM) or a Master's in Public Health professional degree. This prerequisite is to ensure that applicants have the appropriate level of mastery in research methods and biostatistics as preparation for advanced training.</b></p> <p><b>For other students, (e.g. biostatistics, health economics), a disciplinary base such as statistics, or economics at the Master's level would be appropriate and advantageous, since the emphasis of the Ph.D. program is on advancing existing</b></p>
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		<b>disciplinary knowledge to solve methodological problems in health care research.</b>
<b>Health Research Methodology Courses</b> <a href="http://academiccalendars.romcmaster.ca/preview_program.php?catoid=4&amp;poid=1309&amp;returnto=206">http://academiccalendars.romcmaster.ca/preview_program.php?catoid=4&amp;poid=1309&amp;returnto=206</a>	<p>Courses marked with an asterisk (*) are half courses; courses marked with a plus sign (+) may be taken more than once at the M.Sc. level or Ph.D. level but only one of the two courses can be counted towards the minimum course requirements of the program at each level. Students taking <a href="#">HTH RS M 722</a> cannot also receive credit for any subsequent regular course offering on the same topic. HRM courses are available to students registered in other programs, although all courses are not offered every year. Some courses have limited enrolment and prerequisites.</p> <p>Approved courses from other graduate programs may be taken for credit when appropriate and with permission of the supervisor.</p>	<p>Courses marked with an asterisk (*) are half courses; courses marked with a plus sign (+) may be taken more than once at the M.Sc. level or Ph.D. level but only one of the two courses can be counted towards the minimum course requirements of the program at each level. Students taking <a href="#">HTH RS M 722</a> cannot also receive credit for any subsequent regular course offering on the same topic. HRM courses are available to students registered in other programs, although all courses are not offered every year. Some courses have limited enrolment and prerequisites. <b>Refer to the HRM Timetable for the updated schedule of course offerings:</b> <a href="http://fhs.mcmaster.ca/hrm/">http://fhs.mcmaster.ca/hrm/</a></p> <p>Approved courses from other graduate programs may be taken for credit when appropriate and with permission of the supervisor.</p>

HRM Attendance Policy – proposed changes for GPCC  
February 19, 2015

Previous HRM Attendance Policy:	Proposed Changes for GPCC Feb 19, 2015
<p>The HRM Program Attendance Policy includes the following:</p> <ul style="list-style-type: none"> <li>• Any absence must be due to a reasonable excuse that is exceptional and out of the control to some extent of the student (illness, death in family, special exams etc).</li> <li>• One absence from a tutorial with a legitimate excuse is reasonable, 2 may be acceptable, but if you miss 3 tutorials you will NOT obtain credit for the course.</li> <li>• If you are absent you will get 0 for participation on that day.</li> <li><del>• In the event of greater than 2 absences you will be required to meet with the Assistant Dean - HRM. If not 'acceptable' (and the prior expectation is that most would not be), you will be asked to withdraw from the course. If you know that you will be unable to attend a session, please request permission from the course coordinator in advance of the tutorial.</del></li> </ul> <p><del>Please note that student's should consult the course material for the specific attendance policy as this is the minimum requirement and each course may have additional requirements for attendance and participation.</del></p>	<p>The HRM Program Attendance Policy includes the following:</p> <ul style="list-style-type: none"> <li>• Any absence must be due to a reasonable excuse that is exceptional and out of the control to some extent of the student (illness, death in family, special exams etc).</li> <li>• One absence from a tutorial with a legitimate excuse is reasonable, 2 may be acceptable <b>at the discretion of the instructor</b>, but if you miss 3 or more tutorials you will not obtain credit for the course. <b>You will be required to withdraw from the course before the last drop deadline or you will receive an 'F' in the course.</b></li> <li>• Attendance is considered in the assignment of participation grades. In cases where participation is credited for each session, you will <b>normally receive 0</b> for participation for <b>any day you are absent.</b></li> </ul>



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

<b>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</b>								
<p>1. This form must be completed for <b><u>ALL</u></b> changes involving degree program requirements/procedures. <b><u>All</u></b> sections of this form <b><u>must</u></b> be completed.</p> <p>2. An electronic version of this form (must be in MS WORD <b><u>not</u></b> PDF) should be emailed to the Assistant Secretary, School of Graduate Studies.</p> <p>3. A representative from the department is <b><u>required to attend</u></b> the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.</p>								
<b>DEPARTMENT</b>		Department of Clinical Epidemiology and Biostatistics						
<b>NAME OF PROGRAM</b>		Master of Public Health						
<b>PROGRAM DEGREE</b>	Ph.D. ( )	M.A. ( )	M.A.Sc. ( )	M.B.A. ( )	M. Eng. ( )	M.Sc. ( )	Diploma Program ( )	Other (Specify) X MPH
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>								
CHANGE IN ADMISSION REQUIREMENTS		<input type="checkbox"/>	CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE		<input type="checkbox"/>	CHANGE IN COURSE REQUIREMENTS		<input type="checkbox"/>
CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR			<input checked="" type="checkbox"/>	EXPLAIN: New program				
OTHER CHANGES		EXPLAIN:						

**DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:**

N/A

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

New program

**RATIONALE FOR THE RECOMMENDED CHANGE:**

New program

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

The MPH is expected to start Sept 2015, pending MTCU approval expected by March 3 2015

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

Five new mandatory MPH courses for 2015-2016 will presented to be reviewed by GPCC at the same meeting as this Calendar information. The sixth mandatory course for the MPH students for 2015-2016 is HRM 702 ~~which will be brought forward for cross listing~~. The seventh mandatory course is a second year course which will be brought forward for GPCC review for 2016-2017.

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

The Master of Public Health teaches students skills and knowledge in population and public health research and practice.

MPH students will learn to:

- analyze and interpret health and other relevant data and information from a number of sources relevant to policy, planning, evaluation and research in population and public health;
- investigate issues of population and public health concern;
- evaluate and utilize evidence to identify options, make decisions and defend their

position and

- consult regarding public health research methods, planning and evaluation, policy development and implementation, and public health program management.

The MPH is completed as a generalist degree or in one of these areas of focus:

- policy/management,
- environmental health and
- public health research methods.

### **Admissions**

Applications are encouraged from public health and health care professionals, physicians in post graduate residency programs, and undergraduates from health related programs

Applicants need to meet the admission requirements for entry into Graduate Studies at McMaster University, including completion (or expected completion) of a 4 year undergraduate program in Sciences (or equivalent, including Medicine). Applicants must also have completed a statistics or mathematics undergraduate course with B+ standing.

Applicants are required to submit their CV, a personal letter of interest in the program (750 words) and ensure that two letters of reference are submitted to the program (one must be an academic reference; health professional applicants can include one from employer).

### **Curriculum**

The MPH includes completion of either a practicum or thesis option.

The MPH takes 16-24 months for thesis students, who must enrol full time. The MPH takes ~~and~~ 16 months to complete for full time practicum students, up to 4 years for part time practicum students.

All MPH students complete seven mandatory courses, which are scheduled as follows:

#### *First Year Fall Term:*

- Foundations of Population and Public Health Practice,
- Public Health Epidemiology,
- Biostatistics,
- Public Health Seminar

#### *First Year Winter Term:*

- Public Health Research Methods
- Public Health Policy



- Electives (2)

*First Year Summer Term:*

- Practicum or Thesis

*Second Year Fall Term*

- Public Health Seminar
- Electives (2 for practicum students)
- Thesis and capstone

Thesis students are required to complete two electives to support their thesis work. Practicum students are required to complete four electives and a capstone paper on the practicum project.

MPH students are required to achieve at least B- standing in all mandatory and elective courses and pass the practicum or thesis to complete the MPH degree.

### **Career Opportunities**

Graduates of the MPH will be prepared to compete for positions in public health and health care organizations and apply for doctoral studies in population and public health related fields.

Enquiries: 905 525-9140 Ext. 22356

Fax: 905 546-1129

E-mail: [info@McMasterPublicHealth.ca](mailto:info@McMasterPublicHealth.ca)

Website: <http://www.fhs.mcmaster.ca/ceb/mph>

### **CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Fran Scott

Email: [fscott@mcmaster.ca](mailto:fscott@mcmaster.ca)

Extension: 22180

Date submitted: Feb. 18 2015

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, [cbryce@mcmaster.ca](mailto:cbryce@mcmaster.ca)

SGS/2013





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

<b>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</b>								
<p>1. This form must be completed for <b><u>ALL</u></b> changes involving degree program requirements/procedures. <b><u>All</u></b> sections of this form <b><u>must</u></b> be completed.</p> <p>2. An electronic version of this form (must be in MS WORD <b><u>not</u></b> PDF) should be emailed to the Assistant Secretary, School of Graduate Studies.</p> <p>3. A representative from the department is <b><u>required to attend</u></b> the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.</p>								
<b>DEPARTMENT</b>		Nursing						
<b>NAME OF PROGRAM</b>		MSc course based program -						
<b>PROGRAM DEGREE</b>	Ph.D. ( )	M.A. ( )	M.A.Sc. ( )	M.B.A. ( )	M. Eng. ( )	M.Sc. CB ( )	Diploma Program ( )	Other (Specify)
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>								
<b>CHANGE IN ADMISSION REQUIREMENTS</b>		<input type="checkbox"/>	<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>		<input type="checkbox"/>	<b>CHANGE IN COURSE REQUIREMENTS</b>		<input checked="" type="checkbox"/>
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>			<input checked="" type="checkbox"/>	<b>EXPLAIN:</b> Providing clarification to existing graduate calendar				
<b>OTHER CHANGES</b>		<b>EXPLAIN:</b>						
<b>DESCRIBE THE <u>EXISTING</u> REQUIREMENT/PROCEDURE:</b>								

<p><b>PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE</b> (<i>Attach additional pages if space is not sufficient.</i>)</p>
<p><b>RATIONALE FOR THE RECOMMENDED CHANGE:</b> <i>Clarification</i></p>
<p><b>PROVIDE IMPLEMENTATION DATE:</b> (<i>Implementation date should be at the beginning of the academic year</i>)</p> <p>September 2015</p>
<p><b>ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.</b></p> <p>NO</p>
<p><b>PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR:</b></p> <p><b>B. M.Sc. by Course Work</b></p> <p><b>Program Requirements</b></p> <p>A course-based M.Sc. degree option in Nursing is offered on a full-time or part-time basis. The admission requirements are the same as for the M.Sc. thesis option 1-4 (see above). Each student will have a Faculty Advisor assigned by the Assistant Dean. Each student will be required to complete a minimum of seven graduate half courses which must include the <del>four</del> <b>five</b> required courses below. The remaining courses will be chosen by the student with the approval of his/her faculty advisor and usually center around a theme. With the permission of the course instructor and faculty advisor, a student's minimum course requirements may include up to two 600-level graduate half courses.</p> <p>NURSING *701 / Theoretical Basis of Nursing Practice  NURSING *711 / Advanced Practicum in Nursing  NURSING *745 / Qualitative Research Methods  HTH RS M *721 / Fundamentals of Health Research and Evaluation Methods  <b>Nursing * 714 / Scholarly Paper</b></p>
<p><b>CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:</b></p> <p>Name: Jennifer Skelly      Email: skelly@mcmaster.ca      Extension: 22259      Date submitted: 02/03/15</p>

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies,  
[cbryce@mcmaster.ca](mailto:cbryce@mcmaster.ca)

SGS/2013



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

<b>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</b>								
<p>1. This form must be completed for <b>ALL</b> changes involving degree program requirements/procedures. <b>All</b> sections of this form <b>must</b> be completed.</p> <p>2. An electronic version of this form (must be in MS WORD <b>not</b> PDF) should be emailed to the Assistant Secretary, School of Graduate Studies.</p> <p>3. A representative from the department is <b>required to attend</b> the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.</p>								
<b>DEPARTMENT</b>		Nursing						
<b>NAME OF PROGRAM</b>		MSc/NP						
<b>PROGRAM DEGREE</b>	<b>Ph.D. ( )</b>	<b>M.A. ( )</b>	<b>M.A.Sc. ( )</b>	<b>M.B.A. ( )</b>	<b>M. Eng. ( )</b>	<b>M.Sc. (NP )</b>	<b>Diploma Program ( )</b>	<b>Other (Specify)</b>
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>								
<b>CHANGE IN ADMISSION REQUIREMENTS</b>		<input type="checkbox"/>	<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>		<input type="checkbox"/>	<b>CHANGE IN COURSE REQUIREMENTS</b>		<input checked="" type="checkbox"/>
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>			<input checked="" type="checkbox"/>	<b>EXPLAIN:</b> Change in required courses NUR 701 (seminar) will now become HRM 771 and NUR 786 will now become NUR 745				
<b>OTHER CHANGES</b>		<input type="checkbox"/>	<b>EXPLAIN:</b>					
<b>DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:</b>  Students currently complete NUR 701 Theoretical Basis of Nursing Practice (seminar only) and NUR 768 Building a Repertoire of Decision Making Skills as two of the 4 required courses in their first year before starting the NP diploma in their second year.								

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

**RATIONALE FOR THE RECOMMENDED CHANGE:**

Changing these 2 required courses will strengthen the student's research knowledge in both quantitative and qualitative methodology. This should help them in NUR 714 (Scholarly Paper) which they complete at the end of their first year. It will also help them to have these courses should they choose to apply to PhD programs in the future.

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

September 2015

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

NO

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

**3. MSc/Primary Health Care Nurse Practitioner Certificate**

For those wishing to obtain a Primary Health Care Nurse Practitioner certificate and a course-based M.Sc. degree, admission requirements are the same as for other course-based M.Sc. students with the additional requirement of two years' full-time nursing practice within the past five years. Students complete four core courses and complete the seven courses offered through the NP Consortium. Since the seven PHCNP courses are offered every year, they can be completed in 12 months of full-time study. The program typically requires 3 years to complete. Once the PHCNP courses have been completed successfully, students are eligible to write their RN (Extended Class) exams.

**Course Requirements**

~~NURSING \*701 / Theoretical Basis of Nursing Practice (seminar only)~~ HRM 771 Fundamentals of Health Research and Evaluation Methods

NURSING \*712 / Evidence-Based Health Care

~~NURSING \*768 / Building a Repertoire of Decision-Making Skills~~ Nursing 745 Qualitative Research Methods

NURSING \*714 / Scholarly Paper

NURSING \*761 / Pathophysiology for NPs

NURSING \*762 / Advanced Health Assessment and Diagnosis I

NURSING \*763 / Advanced Health Assessment and Diagnosis II

NURSING \*764 / Therapeutics in Primary Health Care I

NURSING \*765 / Therapeutics in Primary Health Care II

NURSING \*766 / Roles and Responsibilities

NURSING \*767 / Integrative Practicum

**CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Jennifer Skelly      Email: skelly@mcmaster.ca      Extension: 22259      Date submitted: 02/03/15

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, [cbryce@mcmaster.ca](mailto:cbryce@mcmaster.ca)

SGS/2013



**Skelly, Jennifer**

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**From:** Hanna, Steven  
**Sent:** March-02-15 10:44 AM  
**To:** Skelly, Jennifer  
**Cc:** Baumann, Andrea; Gombay, Christy (gombayc); Vukelic, Kristina (kvukel)  
**Subject:** Re: HRM 771

Yes, if you can work with GH to arrange for appropriate tutoring and course coordination, then I am happy for the MSc/NP students enrol in the fall 2015 offering of HRM 771.

~Steve

*Steven Hanna, PhD  
Professor, Department of Clinical Epidemiology and Biostatistics  
Assistant Dean, HRM Graduate Programs  
McMaster University*

On Feb 27, 2015, at 3:44 PM, Skelly, Jennifer <[skelly@mcmaster.ca](mailto:skelly@mcmaster.ca)> wrote:

Hi Steve

I have spoken with Dr. Baumann and Christy Gombay from Global Health and they are willing to have the MSc/NP students join in with their students in taking HRM 771 on Fridays this fall ( Sept 2015). Global Health and Nursing will work together to coordinate this course in the fall.

Can you please respond to this email if you are in agreement with this arrangement? I would include your email in my GPCC course changes for the MSc/NP required courses.

Thanks for your support

Regards

Jennifer

Jennifer Skelly RN, PhD  
Assistant Dean, Nursing Graduate Studies  
Associate Professor, School of Nursing  
McMaster University  
1280 Main Street West, HSC-3H48C  
Hamilton, ON L8S 4K1

**Skelly, Jennifer**

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**From:** Christy Gombay <gombayc@mcmaster.ca>  
**Sent:** February-27-15 3:49 PM  
**To:** Skelly, Jennifer  
**Cc:** Baumann, Andrea  
**Subject:** Re: FW: HRM 771

Hi Jennifer,

Yes. I am in agreement with combining MSC & NP students in HRM 771 for September 2015. Let us hope it is a fruitful collaboration.

Kind Regards,

Christy Gombay, Ph.D.  
Assistant Professor & Academic Coordinator  
MSc. in Global Health Program  
Faculty of Health Sciences, McMaster University.  
1280 Main Street West, MDCL 3500. Hamilton, Ontario, Canada L8S 4K1  
Tel: 905-525-9140 , Ext. 22281  
<http://fhs.mcmaster.ca/globalhealthprogram/>

On Fri, Feb 27, 2015 at 3:47 PM, Skelly, Jennifer <[skelly@mcmaster.ca](mailto:skelly@mcmaster.ca)> wrote:

Hi Andrea and Christy

If you could please respond to this email indicating that you are in agreement with the MSc/NP students joining in with the Global Health Student in HRM 771 this fall (2015).

Thanks

Jennifer

Jennifer Skelly RN, PhD

Assistant Dean, Nursing Graduate Studies

Associate Professor, School of Nursing

McMaster University

1280 Main Street West, HSC-3H48C

Hamilton, ON L8S 4K1



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

<b>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</b>								
<p>1. This form must be completed for <b>ALL</b> changes involving degree program requirements/procedures. <b>All</b> sections of this form <b>must</b> be completed.</p> <p>2. An electronic version of this form (must be in MS WORD <b>not</b> PDF) should be emailed to the Assistant Secretary, School of Graduate Studies.</p> <p>3. A representative from the department is <b>required to attend</b> the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.</p>								
<b>DEPARTMENT</b>								
<b>NAME OF PROGRAM</b>		Global health						
<b>PROGRAM DEGREE</b>	Ph.D. ( )	M.A. ( )	M.A.Sc. ( )	M.B.A. ( )	M. Eng. ( )	M.Sc. ( x )	Diploma Program ( )	Other (Specify)
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>								
<b>CHANGE IN ADMISSION REQUIREMENTS</b>			<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>			<b>CHANGE IN COURSE REQUIREMENTS</b>		x
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>			x	<b>EXPLAIN:</b> Changes to courses offered in stream specializations in winter term.				
<b>OTHER CHANGES</b>		<b>EXPLAIN:</b> As an interdisciplinary program, course offerings in the Faculties of Social Science and Business have changed since the program was launched and the proposed adjustments reflect the changing course offerings in the other two collaborating faculties. The proposed core course offerings are consistent with the learning objectives and core competencies the program seeks to impart to our students.						

**DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:**

In the winter term, students who choose to do a course-based MSc. must choose: “two courses from the selected field of interest and an additional course from the elective offerings.”

We propose to remove the core course offerings from the following which are no longer offered by these faculties:

**Global Health Management**

- [BUSINESS \\*I731 / International Business](#) – NO LONGER OFFERED

**Globalization and Development**

- [GLOBALST \\*712 / International Trade and Economic Development](#) – NO LONGER OFFERED

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

- [BUSINESS \\*C715 / HEALTH CARE FUNDING AND RESOURCE ALLOCATION](#)

**Globalization and Development**

- GLOBALST \*718 / Global Actors Beyond the State
- POLSCI \*782 — Development Theory & Administration

**RATIONALE FOR THE RECOMMENDED CHANGE:**

The Global Health program is a one year, interdisciplinary program that has a core curriculum in the first semester and then students are required to focus on Global Health Management (Faculty of Business courses); Globalization and Development (Faculty of Social Sciences); or Global Diseases (Faculty of Health Sciences). The changes proposed are the result of the Program Curriculum Committee recommendations to update the course offerings in the Winter term to reflect new state of the art course offerings in the other faculties relevant to global health students.

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

September 2015

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

No.

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

The recommended changes to the calendar are as follows:

In the section on winter term curriculum, we propose **to remove** the core course offerings from the following which are no longer offered by these faculties:

**Global Health Management**

[BUSINESS \\*I731 / International Business](#) – NO LONGER OFFERED

**Globalization and Development**

[GLOBALST \\*712 / International Trade and Economic Development](#) – NO LONGER OFFERED

We propose **to insert instead of the courses above those below:**

**Global Health Management**

[BUSINESS \\*C715 / HEALTH CARE FUNDING AND RESOURCE ALLOCATION](#)

**Globalization and Development**

GLOBALST \*718 / Global Actors Beyond the State

POLSCI \*782 — Development Theory & Administration

**CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: Christy Gombay   Email: gombayc@mcmaster.ca   Extension: 22281   Date submitted:  
05/03/2015

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies,  
cbryce@mcmaster.ca

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**School of Graduate Studies** 1280 Main Street West Phone 905.525.9140  
Hamilton, Ontario, Canada Ext. 23679  
L8S 4L8 <http://graduate.mcmaster.ca>

To : Graduate Council

From : Christina Bryce  
Assistant Graduate Secretary

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Via e-ballot on February 26th, the Faculty of Science Graduate Curriculum, Policy, Admissions and Study Committee approved the following graduate curriculum recommendations.

Please note that these recommendations were approved at the March 25<sup>th</sup>, 2015 meeting of the Faculty of Science.

**FOR APPROVAL OF GRADUATE COUNCIL:**

Mathematics and Statistics  
-Change in Program Requirements

**FOR INFORMATION OF GRADUATE COUNCIL:**

Mathematics and Statistics  
-New Course  
-721 Statistical Modelling in Practice



# SCHOOL OF GRADUATE STUDIES

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

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

1. This form must be completed for ALL course changes. Sections of this form pertaining to your requested change must be completed.
2. An electronic version of this form (must be MS WORD not PDF) should be emailed to the Assistant Secretary, School of Graduate Studies.
3. A representative from the department/program is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

<b>DEPARTMENT/PROGRAM</b>		Mathematics & Statistics		
<b>COURSE TITLE</b>		Statistical Modelling in Practice		
<b>COURSE NUMBER</b>	721	<b>COURSE CREDIT</b>		
		<b>FULL COURSE ( )</b>	<b>HALF COURSE ( X )</b>	<b>QUARTER (MODULE) ( )</b>
<b>INSTRUCTOR(S)</b>				
<b>PREREQUISITE(S)</b>				
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>				
<b>NEW COURSE</b>	<input checked="" type="checkbox"/>	<b>DATE TO BE OFFERED (FOR <u>NEW</u> COURSES ONLY):</b>	<b>WAS THE PROPOSED COURSE OFFERED ON DEAN'S APPROVAL?</b>	
		Fall 2015		
<b>WILL THE COURSE BE <u>CROSS-LISTED</u> WITH ANOTHER DEPARTMENT?</b> No    If YES, PLEASE NOTE WHICH DEPARTMENT:				
ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S). <b>NOTE:</b> CROSS-LISTING OF COURSES REQUIRES WRITTEN APPROVAL FROM <u>EACH</u> DEPARTMENT AND FACULTY CONCERNED. IF YOU WOULD LIKE TO REMOVE A CROSS-LISTING YOU MUST INCLUDE A WRITTEN EXPLANATION AGREED UPON BY BOTH DEPARTMENTS AFFECTED.				
*FOR ALL NEW CROSS-LISTINGS PLEASE NOTE WHICH DEPARTMENT OWNS THE COURSE:				
<b>CHANGE IN COURSE TITLE</b>		PROVIDE THE <u>NEW</u> COURSE TITLE:		
<b>CHANGE IN COURSE DESCRIPTION</b>		600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form		
<b>CHANGE TO FULL COURSE</b>		<b>CHANGE TO HALF COURSE</b>		<b>CHANGE TO QUARTER COURSE</b>

<b>COURSE CANCELLATION</b>		<b>PROVIDE THE REASON FOR COURSE CANCELLATION:</b>  <b>PLEASE NOTE: CROSS-LISTED COURSES CAN ONLY BE CANCELLED BY THE DEPARTMENT WHO OWNS THE COURSE.</b>
	<b>OTHER CHANGES</b>	<b>EXPLAIN:</b>
<b>BRIEF DESCRIPTION FOR CALENDAR - Provide a brief description (<i>maximum 6 lines</i>) to be included in the Graduate Calendar.</b>  Sampling distributions, point estimation, interval estimation, linear regression, time series, model fitting and validity, multivariate models and dependence structures. Statistics 743 is an anti-requisite to this course.		
<b>CONTENT/RATIONALE - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.</b>  The course will not be offered in a 400 level version. As such, the course numbering should not be a 600, but a 700 level course. The proposed change restores the original course label to the course.		

<b>1. STATEMENT OF PURPOSE (How does the course fit into the department's program?)</b>  Replaces Stats 6K03
<b>2. EXPECTED ENROLMENT:</b>  20
<b>3. DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):</b>  Lectures
<b>4. DESCRIBE IN DETAIL THE METHOD OF EVALUATION (percentage breakdown, if possible): (For 600-level course, indicate the <u>Extra Work</u> to be required of graduate students, i.e., exams, essays, etc.)</b>  Assignments, two midterms, a written final exam



<p><b>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).</b></p> <p>No</p>
<p><b>6. IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?</b></p> <p>N/A</p>
<p><b>PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:</b></p> <p>Name:                      Email:                      Extension:                      Date submitted:</p>

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, [cbryce@mcmaster.ca](mailto:cbryce@mcmaster.ca).



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

<b>IMPORTANT: PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:</b>								
<p>1. This form must be completed for <b>ALL</b> changes involving degree program requirements/procedures. <b>All</b> sections of this form <b>must</b> be completed.</p> <p>2. An electronic version of this form (must be in MS WORD <b>not</b> PDF) should be emailed to the Assistant Secretary, School of Graduate Studies.</p> <p>3. A representative from the department is <b>required to attend</b> the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.</p>								
<b>DEPARTMENT</b>		Mathematics and Statistics						
<b>NAME OF PROGRAM</b>		Masters of Science in Mathematics – Financial Mathematics Option (M-Phimac)						
<b>PROGRAM DEGREE</b>	Ph.D. ( )	M.A. ( )	M.A.Sc. ( )	M.B.A. ( )	M. Eng. ( )	M.Sc. ( X)	Diploma Program ( )	Other (Specify)
<b>NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)</b>								
<b>CHANGE IN ADMISSION REQUIREMENTS</b>		<input type="checkbox"/>		<b>CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE</b>		<input type="checkbox"/>		<b>CHANGE IN COURSE REQUIREMENTS</b>
<b>CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR</b>			<input checked="" type="checkbox"/>		<b>EXPLAIN:</b> Course renumbering to better reflect nature of the courses			
<b>OTHER CHANGES</b>		<b>EXPLAIN:</b>						

**DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE:**

**C. Financial Mathematics Option (M-Phimac)** The duration of this option is normally 12 months. complete the following graduate courses:

MATH \*771 / Mathematics of Finance

MATH + \*772 / Topics in Financial Mathematics

MATH \*778 / Applied Computational Finance I

MATH \*779 / Applied Computational Finance II

MATH \*774 / The Mathematics of Credit Risk

MATH \*775 / Portfolio Theory and Incomplete Markets

MATH \*776 / Financial Markets

MATH \*790 / Major Research Project

Statistics \*721 (or an alternate statistics course approved by the department)

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

The only change is in the second-to-last requirement:

Math 790 / Major Research Project is to be replaced with Math 797 / Industrial Project

**RATIONALE FOR THE RECOMMENDED CHANGE:**

A version of Math 790 called Math 797 was created specifically for the students in the Financial Mathematics option in order to identify the differences in term of offering, as well as the difference in style, where the Financial Math project is more industrial in nature. Math 797 is completed during the summer term, from the beginning of May to

the end of August.

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

As soon as practical

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

No

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

## **C. Financial Mathematics Option (M- )**

The duration of this option is normally 12 months.

The candidate must complete the following graduate courses:

MATH \*771 / Mathematics of Finance

MATH + \*772 / Topics in Financial Mathematics

MATH \*778 / Applied Computational Finance I

MATH \*779 / Applied Computational Finance II

MATH \*774 / The Mathematics of Credit Risk

MATH \*775 / Portfolio Theory and Incomplete Markets

MATH \*776 / Financial Markets

MATH \*797 / Industrial Project

Statistics \*721 (or an alternate statistics course approved by the department)

**CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:**

Name: David Lozinski Email: lozinski@math.mcmaster.ca Extension: 23409

Date submitted: Jan 29, 2015

Name:

Email:

Extension:

Date submitted:

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies,  
cbryce@mcmaster.ca

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