McMaster University | **SCHOOL OF GRADUATE STUDIES**

Gilmour Hall, Room 212
1280 Main Street West
Hamilton, ON L8S 4L8

(905) 525-9140 x 23679
gs.mcmaster.ca

To   :   Members of Graduate Council

From   :   Christina Bryce
                Assistant Graduate Secretary

_____

The next meeting of Graduate Council will be held on **Tuesday November 14th at 9:00 am in Council Chambers (GH 111)**

Listed below are the agenda items for discussion.

Please email *cbryce@mcmaster.ca* if you are unable to attend the meeting.

A G E N D A

I.   **Opening Remarks**

II.   **Minutes of the meeting of October 17th, 2023**

        Approval

III.   **Business arising**

IV.   **Report from the Associate Deans, Graduate Studies**

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

VI.   **New Program Proposal – M.A. in Indigenous Studies**

        Approval

VII.   **Faculty of Business Graduate Curriculum and Policy Committee Report**

        Approval

VIII.   **Faculty of Health Sciences Graduate Policy and Curriculum Committee Report**

        Approval

IX.   **Student Affairs Presentation: SAS – Academic Accommodations Review**

        Information

X.   **Faculty of Social Sciences Graduate Curriculum and Policy Committee Report**

        Information

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Tuesday October 17th at 9:00 am in Council Chambers (GH 111)

Present: S. Hranilovic (Chair), S. Hanna, M. Heath, M. Verma, B. Newbold, M. Horn, Y. Berson, R. Khan, N.Carter, Y. Berson, A. Prasad, D. Trigatti, X. Li, N. Santesso, L. Parker, C. di Maria, A. Ammar, C. Ching, B. Miliken, M. Gough, C. Biruk, T. Chamberlain, S. Baschiera (Associate Registrar and Graduate Secretary)

Regrets: P. Nyers, T. McDonald

I. Opening Remarks

Dr. Hranilovic reported on the following items:
- Reflected on the situation in the world and reiterated that the School of Graduate Studies, along with campus partners, is here to support our graduate students;
- The funding task force meets again in October and information will be coming forward to Graduate Council in the weeks to come;
- The status of the graduate residence, noting a reduction in rent had been negotiated as some parts of the building were still in progress and highlighting a forthcoming meeting with the operating committee, SGS and students;
- A new graduate fair in the Student Centre to support recruitment internally with undergraduate students.

Members discussed ongoing issues with rooms in the residence, the potential for additional rent reductions and the mechanism for students in residence to report their concerns with the building.

II. Minutes of the meeting of September 19th, 2023

It was duly moved and seconded, **'that Graduate Council approve the minutes of the September 19th, 2023 meeting, as circulated.**'

The motion was **carried**.

III. Business arising

There was no business arising.

IV. Report from the Associate Deans, Graduate Studies

Dr. Thompson (Faculty of Engineering) reported on the following items:
- Engineering Graduate Student events;
- A graduate fair tour across Canada targeting domestic students.

Dr. Verma (Faculty of Business) reported on the following items:

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- The election of a new executive team for the Ph.D. student society and, accordingly, new student members of Graduate Council;
- Admission trends within the Faculty;
- Equity, diversity, and inclusion training for all admissions committees.

Dr. Newbold (Faculty of Science) reported on the following items:
- Equity, diversity, and inclusion best practices document for graduate recruitment shared to faculty graduate chairs;
- A graduate student mentorship event;
- An upcoming Graduate Symposium in December, with awards for mentorship and teaching excellence in addition to poster and presentation awards.

Dr. Horn (Faculty of Humanities) reported on the following items:
- The status of SSHRC arrangements, noting allocations had been decided and technical issues seem to be resolved as well as noting a decline in applications;
- An upcoming funding meeting with students.

Dr. Heath (Faculty of Social Sciences) reported on the following items:
- A first year Ph.D. orientation at the end of September to highlight services available;
- Student elections and membership to Graduate Council and the graduate curriculum committee for the Faculty.

Dr. Hanna (Faculty of Health Sciences) reported on the following item:
- The new FHS member to Graduate Council, Dr. Nancy Santesso.

Members discussed trends in scholarship applications, the context at other institutions, students taking on other jobs, and potential barriers to student application, including the work to apply, the context of clawbacks, and the lack of increase to Tri-Council funding amounts. They also discussed how application rates can impact the places McMaster receives and the need to highlight the benefit of applying and winning, including more recognition at the Faculty and University level.

V.   Report from the Associate Registrar and Graduate Secretary

Ms. Baschiera reported on the following items:

- The status of two ongoing IT projects, regarding student records and payment;
- End of term activities ahead of November Convocation.

VI.   Fall 2023 Graduands

It was duly moved and seconded, **'that Graduate Council approve the list of the 2023 Fall Graduands, with amendments/corrections to be made as necessary by the Associate Graduate Registrar.'**

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The motion was **carried**.

VII.   New Award

It was duly moved and seconded, **'that Graduate Council approve the new award as described in the document.'**

The motion was **carried**.

VIII.   Generative AI Taskforce

Unfortunately Dr. Aspenlieder was unable to attend but the item would be moved forward to a future meeting.

Dr. Hranilovic noted that he planned to bring forward more items for information and discussion in a graduate-specific context, highlighting Student Affairs and student accommodations and noting that they would be coming to discuss plans for moving forward at the next meeting.

Members discussed the writing supports currently in place for graduate students and next steps for the program as well as the use of generative AI for a brief research proposal.

NEW PROGRAM PROPOSAL

MA in Indigenous Studies

February 2023

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COMPLETING THE NEW PROGRAM PROPOSAL DOCUMENT

This New Program Proposal template is structured to correspond with the evaluation criteria outlined in McMaster's Policies, Procedures and Guidelines: https://www.mcmaster.ca/policy/AdminAcad/AcadAdmin/AcademicProgramReview.pdf. For additional information, contacts or guidebooks, departments can visit the IQAP website https://mi.mcmaster.ca/iqap/ or email iqap@mcmaster.ca.

Please ensure that your department refers to the <u>New Program Proposal Guidebook</u> for clarification and further information on the types of evidence required and, where applicable, what resources are available to assist in retrieval or interpretation of the information required for this proposal.

CHECKLIST FOR NEW PROGRAM PROPOSALS

The following section indicates all the items that are required as part of a ***complete*** new program proposal package which includes all the necessary documents. Part I, II and III should be submitted as separate files to iqap@mcmaster.ca.

PART I: COMPLETE NEW PROGRAM PROPOSAL DOCUMENT

- ☐ **Complete New Program Proposal Template**
- ☐ **Faculty CVs** (can be submitted on CD or USB)
- ☐ **Memorandum(s) of Understanding (Letters of Support)** (if applicable)

PART II: RESOURCE IMPLICATIONS AND FINANCIAL VIABILITY TEMPLATE

- ☐ Completed
- ☐ Approved

PART III: FEES MEMO

- ☐ Completed
- ☐ Approved

Chair's Declaration of New Program Proposal Completeness:

I, Robert Innes, have reviewed the New Program Proposal for the MA in Indigenous Studies and agree that it is complete and satisfies all of the requirements of McMaster University's Policy on Academic Program Development and Review.

Signature:

Dean's Declaration of New Program Proposal Completeness:

I, Jeremiah Hurley, have reviewed the New Program Proposal for the MA in Indigenous Studies and agree that it is complete and satisfies all of the requirements of McMaster University's Policy on Academic Program Development and Review.

Signature:

1 PROGRAM

1.1 PROGRAM DESCRIPTION

Program

The new Master of Arts in Indigenous Studies is the result of thirty years of grassroots work by faculty, staff, and community members that responded to the critical demand for Indigenous research and innovation in post-secondary education and beyond. First established as an undergraduate program, the Indigenous Studies Department has witnessed a rise in student demand for Indigenous content, research, and graduate studies that has led the program to train a critical mass of undergraduate students in the discipline. However, once students completed their undergraduate degree, they had to move on to other graduate programs in the absence of an Indigenous Studies graduate option at McMaster University. The new graduate program seeks to fill a critical gap as students in Ontario are currently limited if they want to pursue graduate studies in the discipline despite an overwhelming demand for Indigenous Studies graduate program options.

The MA in Indigenous Studies intends to retain and attract top-tier domestic and international graduate students. With a particular focus on attracting both Indigenous and non-Indigenous leaders in Indigenous Studies research, creation, and policy (as well as other allied disciplines), the new graduate program intends to bring together cohorts of innovative graduate students who are interested in working within Indigenous knowledge systems. The objective of the MA in Indigenous Studies is to provide our students with an immersive multidisciplinary graduate experience that centres Indigenous Studies research methodologies and creation, theory, ways of knowing, and epistemologies while placing community-reciprocity at the fore. Focusing on regeneration and resurgence-based programming, students will be trained to be leaders in Indigenous-led community-based research, knowledge creation, and/or policy.

Timeline:

Major Research Paper: 12 months

Major Community-Based Research Project: 16 months

Program Requirements

Four compulsory core classes (9 units):

1. Indigenous Studies Methods
2. Indigenous Studies Theory
3. Experiential Learning Course
4. Professional Development (non-credit course)

Three additional elective courses (9 units):

Capstone Project (6 units): The capstone project will consist of a Major Research Paper or a Major Community-Based Research Project

The new graduate program in Indigenous Studies will have an impact on society and Indigenous communities. Importantly, this proposed program exposes and gives credit to the long history of research conducted by Indigenous communities and the articulation of Indigenous resurgence, rematriation, rights, ways of knowing, health, culture, ecology, history, literary arts, and futurisms. It will encourage the broader engagement of university students, policy makers, health experts, museum and archival practitioners, Indigenous communities, and the general public in Indigenous-focussed humanities and social science research that impact our intersected lives. This program will enrich conversations between Indigenous peoples and other parties in Canada and globally regarding our colonial past, conversations indispensable to rebuilding respectful relationships at the local, national, and international levels.

It is anticipated that students graduating from with the MA in the Indigenous Studies Department will pursue doctoral studies, find employment, and become leaders in the fields of Indigenous research, creation, policy, and governance working for Indigenous research centres, Indigenous and non-Indigenous community organizations and governments, archives and museums, post-secondary institutions, non-profit organizations, and cultural centres.

1.2   CONSISTENCY WITH MCMASTER'S MISSION AND ACADEMIC PLAN

Departments are asked to include a description of how the program aligns with McMaster's mission and academic plan. McMaster's Current Priorities and Strategic Mandate Agreement should be at the forefront of program design.

i.   McMaster's Strategic Mandate Agreement:

The Indigenous Studies Department at McMaster already occupies a distinct space at the university. It differs from traditional departments and programs in several ways. It is the only academic department on campus whose main purpose is to improve the social, political, emotional, and spiritual lives of Indigenous peoples. Indigenous Studies incorporates a multi-disciplinary and wholistic approach to knowledge, a focus on Indigenous knowledge holders as teachers, and pedagogy and research programs described as 'community-based.' Indeed, the Indigenous Studies Department at McMaster is exceptional for this last feature. The Indigenous Studies Department has a very close relationship with Six Nations, which inspires how we teach. Though Haudenosaunee philosophies, values, and principles formed our academic mission and continue to guide community-engaged practices, our faculty complement, staff, and students bring their diverse Indigenous knowledge systems to bear on knowledge formation and transmission.

The most recent Strategic Mandate Agreement (SMA3) for the University states the following with respect to the Indigenous Studies Program:

"McMaster's research enterprise advances the economic, social and cultural prosperity of our local, provincial, national and global communities. From combating disease and reducing environmental pollutants to informing public policy, McMaster's researchers are addressing society's most urgent needs" and further cites the Indigenous Studies Department as central to this continuing priority: "McMaster is a leader in Indigenous knowledge and research by and with Indigenous peoples through units such as the McMaster Indigenous Research Institute and the McMaster Indigenous Studies Program." (19). The SMA3 also notes that *Experiential Education* is a priority for McMaster's curricular endeavours: "Experiential learning is deeply embedded into McMaster University's renowned culture of teaching and learning. We strive to provide an innovative and enriching learning environment, which includes experiential, work-integrated, and self-directed learning, and which allows for interdisciplinary collaborations that promote multiple perspectives" (13).

Indeed, our attention to land-based learning is all the more enhanced by our commitment to meaningful relationship-building for over two decades. Our commitment to Indigenous ways of knowing as intellectually robust and rich forms of knowledge culminated in our successful proposal to transition the BA Program in 2XXX into a four-year Honours degree program. In tandem with the University's mandate, we continue to provide our students opportunities for knowledge transmission and acquisition via Indigenous, community-based approaches. Since its inception in 1992, Indigenous Studies has focused its academic programming on integrating theoretical and intellectual branches of Indigenous knowledge with its practical, inceptive counterparts. Indigenous knowledge systems rely on engaging with material places, thoughtful examination about the application of knowledge in society, and multiple forms of knowledge generation. As a comprehensive, interdisciplinary body of knowledge carried through oral history that has been derived from empirical observation and spiritual teachings, recent developments in scholarship in Indigenous knowledge can significantly transform and expand the pedagogical and research missions of the University.

McMaster University's commitment to creating a brighter world, specifically its research focus on the "health and well-being of all," promotes a generative space for the Indigenous Studies Department at the nexus of teaching and research. Globally, Indigenous knowledges are, paradoxically, greatly sought-after as concerns about food insecurity, health, and the environment grow, but are also under threat as languages and cultures are constrained under the pressures of assimilation and marginalization. At McMaster, recent Indigenous tenure-track appointments mean significant new faculty numbers to support new Indigenous educational programming. Our proposed graduate program not only builds on this increasing faculty expertise, but also on the expertise of community-based knowledge expertise, equipping us to respond to an increasing demand for graduate level programming. Our intellectual environment is bolstered by our longstanding commitments to interdisciplinary research, experiential learning, and community engagement. Indeed, our program learning foci are imperative to the health and well-being of Indigenous thought and societies.

ii. **McMaster's current priorities:**

As one of Canada's top ranked research-intensive University as determined by *Research Inforsource Inc.*, and one of only four Universities in Canada to rank in the Top 100 Universities worldwide, McMaster, has positioned itself as a world leader in Indigenous research, with a thirty-year history of scholarly excellence in this area. McMaster's Strategic Research Plan (2018-2023) identifies and prioritizes several interdisciplinary research areas that encompass investigation into culture, social welfare, health, well-being, digital society, community identity, and social policy. Of these areas, the plan cites Indigenous Research and Inquiry as an ongoing institutional strength, and Indigenous Knowledge and Research as an area of future growth. The Strategic Plan also prioritizes engaging Indigenous communities and reconfirms obligations arising from McMaster's commitment to respond to the recommendations of the Truth and Reconciliation Commission of Canada. As part of this response, McMaster worked with Indigenous faculty to develop an Indigenous Strategic Plan (2021-2025), entitled "Indigenous Strategic Directions," which outlined a commitment to hire Indigenous faculty over the next number of years. The Strategy emphasizes that to facilitate a "sustainable Indigenous research agenda" at the University, the Indigenous Studies Department with a graduate program, must be supported as part of their curricular and research programming (9). In doing so, an Indigenous Studies graduate program not only fosters Indigenous research as sustainable at McMaster and locally, but contributes to a national and international reputation of Indigenous research and curricular expertise at McMaster:
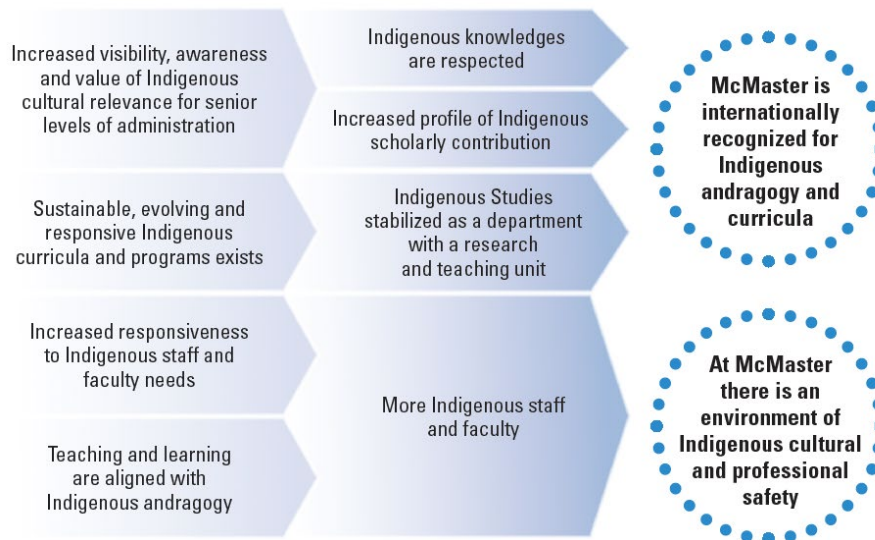

Figure 3, "Strategic Directions for Education", *Indigenous Strategic Directions* (2021)

Further, the Faculty of Social Sciences also recently inaugurated a new Strategic Plan (2021-2025) that prioritizes Indigenous strategies as part of local, interdisciplinary, and experiential learning foci.

Over the past three decades, McMaster University has made consistent and explicit

institutional commitments to becoming a leader in Indigenous research and studies. This includes supporting Indigenous administrative leadership, with an Associate Dean of Indigenous Health created in 2020, the Paul R. MacPherson Chair in Indigenous Studies, the McMaster Indigenous Research Institute (MIRI), the Indigenous Health Learning Lodge, and the creation of the Indigenous Studies Department. In terms of physical infrastructure, in 2016 McMaster completed construction on the state-of-the-art L.R. Wilson Building for the Social Sciences and Humanities, featuring 5,000 square-feet of space dedicated to McMaster's Indigenous Studies Department (ISD) and the McMaster Indigenous Research Institute (MIRI). ISD space also includes a ceremonial space, a teaching garden, an outdoor classroom, kitchen facilities for instruction in Indigenous cooking, and a small student library with hundreds of titles in the areas of Indigenous Studies and Knowledge in addition to books and resource materials available in the University's library system (See the attached "University Library Indigenous Studies Report" attached to see the extensive resources Indigenous Studies graduate student will have access at the University Library). In the next two years, in anticipation of an expansion of Indigenous research and educational programming at McMaster, including the University's commitment to an Indigenous cluster hire, ISD space will be significantly expanded as we move into a new space that will be able to accommodate additional faculty, staff, graduate-students, and research space.

1.3 PROGRAM LEARNING OUTCOMES

Students completing the MRP in the Indigenous Studies Department will hone and acquire several Program Learning Outcomes (PLOs). Students will:

1. demonstrate a critical understanding of the discipline of Indigenous Studies and its application to both academic and public spheres;
2. engage in and recognize the critical importance of community-based expertise as an elemental function of Indigenous Studies and the importance of community reciprocity;
3. apply Indigenous Studies theories to critically analyze various types of situations significant to Indigenous people;
4. conduct ethical Indigenous Studies research that accesses and conveys Indigenous cultural perspective(s) that benefits Indigenous communities and individuals; and
5. learn effective communication strategies using written, oral, or other means of conveying ideas.

1.4 CONSISTENCY WITH DEGREE LEVEL EXPECTATIONS

UNDERGRADUATE DLEs	GRADUATE DLEs
Depth and Breadth of Knowledge	Depth and Breadth of Knowledge
Knowledge of Methodologies	Research and Scholarship
Application of Knowledge	Application of Knowledge
Communication Skills	Communication Skills

Awareness of Limits of Knowledge Autonomy and Professional Capacity	Awareness of Limits of Knowledge Autonomy and Professional Capacity
1. **Depth and Breadth of Knowledge for Graduate Students**	Addressed by PLOs: 1, 2,3, 4, 5 • Students will be able to articulate and express the historical and contemporary narratives and realities of First Nations, Inuit, and Métis peoples from Indigenous perspectives • Students will be able to utilize theoretical foundations of the discipline of Indigenous Studies within the university and beyond, including but not limited to: Indigenous forms of governance, history, intellectual traditions, approaches to wellness, conflict resolution, culture, literary arts, and sustainable relationships to the natural world
2. **Research and Scholarship**	Addressed by PLOs: 1, 2, 3, 4, 5 • Students will design and create original research projects addressing specific needs of Indigenous communities and research partners that places reciprocity at the fore • Students will acquire knowledge of Indigenous Methodologies
3. **Application of Knowledge**	Addressed by PLOs 1, 2, 3, 4, 5 • Students will apply diverse theories of Indigenous ways of knowing, knowledge systems, and epistemologies and articulate those to both academic and non-academic audiences
4. **Communication Skills**	Addressed by PLOs 3, 4, 5 • Students will develop their communication skills by designing and presenting both oral and written reports of their research, methodologies, and community-engagement

5. **Awareness of Limits of Knowledge**	Addressed by PLOs 1, 3, 4, 5 • Students will gain a critical awareness to be able to recognize the limitations and depths of their knowledge and the need for new research questions and projects based in Indigenous knowledge
6. **Autonomy and Professional Capacity**	Addressed by PLOs 5 • Students will be given professional development training that will assist them in their future careers

1.5 DEMAND FOR PROGRAM

I. Evidence of Societal/Labour Market Need

The proposed establishment of the Department of Indigenous Studies Graduate Program is the result of over thirty years of grassroots work by faculty, staff, and local community members that recognized and responded to the need and critical demand for Indigenous research and innovation in post-secondary education and beyond. First established as an undergraduate program, Indigenous Studies has witnessed a substantial in student demand for Indigenous content, research, and graduate studies that has led the program to train a critical mass of undergraduate students in Indigenous Studies before they moved on to other graduate programs in the absence of a graduate option at McMaster University. The Graduate Program seeks to fill a need for graduate studies in Indigenous Studies locally, nationally, and internationally. Additionally, the new graduate program is a response by McMaster University to the publication of the Truth and Reconciliation Commission of Canada's "Calls to Action" and the acknowledgement that the university is a committed a leader in reconciliation efforts locally, nationally, and globally. A graduate degree in Indigenous Studies will prepare students to enter the workforce with the necessary skills needed in a variety of occupations that have average or above average employment outlook. The table below provides a glimpse of the kinds of occupations that successful students in our program could obtain:

Occupation	National Occupation Code (NOC)	**Occupation Outlook**
Government managers - health and social policy development and program administration	NOC 0411	Average
Government managers - education policy	NOC 0413	Average

development and program administration		
Human resources professionals	NOC 1121	Above Average
Library, archive, museum and art gallery managers	NOC 0511	Above Average
School principals and administrators of elementary and secondary education	NOC 0422	Above Average
Managers in health care	NOC 0311	Above Average

See: https://www.ontario.ca/page/labour-market

There are currently 9 graduate programs in Indigenous Studies in Canada. All but two of these programs are in western Canada. However, it should be noted that though Carleton and Trent do offer a MA in Canadian and Indigenous Studies, these programs are not housed in an Indigenous Studies department. As a result, there are currently no Indigenous Studies specific MA programs in Ontario. Furthermore, there are no Indigenous Studies graduate programs at all in southern Ontario.

Canadian Graduate Program in Indigenous Studies:

MA in Indigenous Studies
University of Manitoba
University of Saskatchewan
University of Alberta
University of Lethbridge
University of Northern British Columbia

MA in Canadian and Indigenous Studies
Trent University
Carleton University

MA in Indigenous Governance
University of Winnipeg
University of Victoria

PhD in Indigenous Studies
Trent University
University of Manitoba
University of Saskatchewan
University of Alberta

PhD in Canadian and Indigenous Studies
Carleton University

Though there are no Indigenous Studies graduate programs in southern Ontario, every university in southern Ontario offers an Indigenous Studies undergraduate program. The number of current undergraduate programs reflect the growth in demand for

Indigenous Studies in this region. McMaster's proposed graduate program fulfills a need for students to who want to pursue graduate studies in Indigenous Studies and remain closer to home in southern Ontario

Indigenous Studies Undergraduate programs in Southern Ontario
McMaster University – Major in Indigenous Studies
University of Toronto – Major in Indigenous Studies
Western University – Major in Indigenous Studies
Wilfrid Laurier University – Major in Indigenous Studies
York University – Major in Indigenous Studies
Brock University – Minor in Indigenous Studies
Ontario Tech University – Minor in Indigenous Studies
University of Waterloo – Minor in Indigenous Studies
University of Windsor – Minor in Indigenous Studies
University of Guelph – Major in Indigenous Environmental Science and Practice
OCAD University – Major in Indigenous Visual Culture
Toronto Metropolitan University – Certificate in Indigenous Knowledges and Experiences

In addition to these southern Ontario universities, the State University of New York at Buffalo has recently launched an Indigenous Studies department. Currently the department offers a minor but is developing a major and a full graduate program and will also fit into our regional recruitment strategy.

II. Evidence of Student Demand

There is much anecdotal evidence of the student demand for a graduate program in Indigenous Studies. Our committee met with several current McMaster Indigenous PhD and MA students. As undergraduates, these students had taken Indigenous Studies at McMaster or at other universities and all said they would have taken an Indigenous Studies graduate program if they had the opportunity. To ascertain how many of our current undergraduate students would like to pursue an Indigenous Studies graduate program, we gave our upper-level undergraduate students a short survey to complete. Students were asked the following questions:

If the Indigenous Studies Department were to offer a Master of Arts program starting in September 2023, would you be interested in applying for it?

What types of courses and/or topics would you like to see?

In terms of degree requirements, what option would you be most interested in:

1. **A Major Research Project (12-16 months)** – A community-engaged research project that could produce a paper and/or other creative output (e.g., a podcast, digital story, art exhibit, etc.). Students would be required to complete a 35-50-page written document, depending on the project, and 6 half courses.

2. **A Thesis (2 years)** – Students would be required to complete an 80-100-page document in addition to 4 half courses.

3. **Course Based (1 year)** – This option would require you to take 8 half courses.

4. **A Major Research Paper (1 year)** – Students would be required to complete a 40-page written document and 6 half courses

The Response

Although time constraints mean that our sample is relatively small, here are the results:

If the Indigenous Studies Department were to offer a Master of Arts program starting in September 2023, would you be interested in applying for it?

Yes – 40%
No – 60%

Courses Students would want to take:

·   Indigenous literature
·   Traditional Knowledge
·   Languages
·   Indigenous music, theatre and art
·   Indigenous governance
·   Indigenous feminism
·   Indigenous environmental science
·   Indigenous health & medicine, and traditional medicine
·   Indigenous History
·   Indigenous sport and recreation
·   Food Security and Food Sovereignty
·   Improving Indigenous and Settler Relations
·   Working toward Reconciliation/ Sovereignty

Our current faculty have expertise in all these topics.

The final project options students would be most interested in pursuing:

Major Research Project - 60%
Major Research Paper - 6.6%
Thesis – 6.6%
Course Based – 20%
No Response – 6.6%

The sample size is too small make reliable generalizations, however, with 40% of the respondents saying they are interested in taking an Indigenous MA degree, indicates a high level of interest. Students who had said they would not be interested in pursuing a MA in Indigenous Studies did, nonetheless, answer the other questions. The kinds of courses the students indicated they would like to take, not surprising, reflect the

expertise found in the department. In addition, that 60% of the students said they would do a Major Research Project and another 6.6% said they would do a thesis shows that many Indigenous Studies students want to be engaged with Indigenous communities while conducting a significant amount of research. Even though these options take longer to complete than a Major Research Paper, research that engages communities is a core principle of the discipline. However, we will continue to monitor student expectations.

Furthermore, for a number of years, students from our undergraduate program continue to apply for Mas at McMaster University in departments where our cross-appointed faculty are affiliated. This indicates that our graduates continuously wish to continue their graduate studies with Indigenous Studies faculty, and so apply to disciplines wherein this relationship can be structurally accommodated. We anticipate that an MA program in Indigenous Studies will more directly fulfill our students desire to continue their graduate studies in our discipline.

We reached out to Indigenous Studies graduate programs in Canada and to Indigenous Studies undergraduate programs in southern Ontario to obtain the current number of students in their programs to ascertain the sustainability of an Indigenous Studies Graduate program at McMaster. What we found is that there are over 120 graduate students in Indigenous Studies graduate programs in Canada. We also found out that the pool of potential graduate students is relatively large with over 600 majors in the programs we contacted. It is significant to note that we did not canvas the Indigenous Studies undergraduate programs outside of southern Ontario. In addition, as an interdisciplinary field of study, we could also accept non-Indigenous Studies majors if students have taken a significant number of Indigenous Studies content courses. Lastly, in recent years the number of students (primarily Indigenous, but not exclusively) from the United States, New Zealand, Australia, Asia, Latin America, and Scandinavia who have decided to pursue Indigenous Studies graduate degrees in Canada has increased considerably. The growth of participants from these countries in the international association for Indigenous Studies (Native American and Indigenous Studies Association), suggests that international students' interest in coming to Canada for a graduate degree in Indigenous studies will continue to grow well into the future.

Indigenous Studies with Graduate Programs in Canada
University of Alberta
Majors 200; MA 10; PhD 19

University of Lethbridge
Majors 125; MA 10

University of Manitoba
Majors 60; MA 10; PhD 20

University of Northern British Columbia
Majors 69; MA 13

University of Saskatchewan
Majors – 35; MA – 14; PhD – 17

Trent University
Majors – N/A PhD – 38

University of Winnipeg
Majors – 60; Minors – 50; MA – 12

Indigenous Studies with Undergrad Programs in Southern Ontario
McMaster University
Majors – 24

University of Toronto
Majors – 69

Western University
Majors – 56

Wilfrid Laurier University
Majors – 14

York University
Majors – 25; 10 Indigenous Studies Certificate

III. Justifiable Duplication
The proposed program is the first MA in Indigenous Studies in southern Ontario and the first Indigenous Studies specific MA program in the province. Though Carleton and Trent do offer an MA in Canadian Studies And Indigenous Studies neither of these programs are housed in Indigenous Studies. Trent's graduate program is housed in the Frost Centre For Canadian Studies And Indigenous Studies, while Carleton's program is in the School of Indigenous and Canadian Studies. We do not anticipate any negative impacts on any other program at McMaster and in fact the program will undoubtedly enhance many programs that have Indigenous content or directly affect Indigenous peoples and/or communities.

1.6 DEGREE NOMENCLATURE
Master of Arts (MA) in Indigenous Studies

ADMISSION & ENROLMENT

2 ADMISSIONS & ENROLMENT

2.1 ADMISSION REQUIREMENTS

Admission selections will be based on academic achievement as well as personal qualities and experiences that are evaluated during the Admissions Interview. The admissions criteria include:

1. Honours Bachelor's degree in Indigenous Studies or related field from a recognized university with at least a B+ average (equivalent to a McMaster 8.5 GPA out of 12) in the final year of study. This requirement is consistent with the Faculty of Graduate Studies' admissions requirements.
2. For applicants whose first language is not English and who did not attend an English-speaking University for their undergraduate degree, a test of English language proficiency is required. Minimal scores on the Test of English as a Foreign Language (TOEFL) are written score (600) or computer (250), or internet-based test (iBT = 92; reading = 22, speaking = 24, listening = 24 and writing = 22).
3. Applicants will also be asked to submit the following documents with their application:
   a. A curriculum vitae.
   b. A letter of application outlining their reasons they want to apply to the program, provide their research topic and the context on why they want to conduct this research, and list a potential faculty member who will supervise their research for applying to the program..
   c. Two letters of reference: one from an academic referee (i.e., professors or research supervisors), and one letter from a professional referee (i.e., employer who can provide a professional reference) or a second academic letter. In addition to these two letters, students may also submit a reference letter from a community member.
   d. Official transcripts from every post-secondary degree-granting institution attended.

The graduate committee will review every application to the program to ensure that prospective students have the necessary academic background, proficiency in English, and relevant experience to enroll in the program.

2.2 ENROLMENT PLANNING AND ALLOCATIONS

Academic Year	Cohort Year 1	Cohort Year 2	Total Enrolment	Maturity
2024/25	3 Paper 3 Project		3 Paper 3 Project	
2025/26	4 Paper 6 Project	- 3 Project	4 Paper 9 Project	

2026/27	5 Paper 7 Project	- 6 Project	5 Paper 13 Project	
2027/28	7 Paper 8 Project	- 7 Project	7 Paper 15 Project	
2028/29	7 Paper 8 Project	- 8 Project	7 Paper 16 Project	

2.3   ALTERNATIVE REQUIREMENTS

The program will incorporate facilitated admissions processes for Indigenous and Black applicants – the Facilitated Indigenous Application Process (FIAP) and Facilitated Black Admissions Process (FBAP) - to support an inclusive community and to reduce barriers to admission. Applicants will have the option to self-identify in their application and provide evidence of their Indigenous ancestry. This will prompt a personal one-to-one interview with a faculty member (all our faculty members are Indigenous) to connect with the applicant to assess suitability to the program and support community building. Applicants will submit standard admission requirements. The applications of individuals who opt into the FIAP or FBAP processes will be reviewed by Indigenous or Black assessors, respectively. Offers of admission will be made to top ranking candidates based on application materials, supplementary documentation, GPA, and interview scores.

For elder Indigenous applicants and applicants with demonstrated Indigenous community connections who have been out of formal education systems for some time, lived experience could be considered as an alternative admission qualification. Depending on context of individual applicants, a BA in Indigenous Studies may still be required.

3   STRUCTURE

3.1 ADMINISTRATIVE, GOVERNANCE AND COMMUNICATION

The MA in Indigenous Studies will be offered through the Indigenous Studies Department in the Faculty of Social Sciences. The Indigenous Studies Department will appoint a Graduate Studies Chair who will report to the Department Chair. The Graduate Chair will chair a Graduate Studies Committee made up of other faculty in ISD. The Grad Chair will be responsible for implementing its policies and decisions, especially with respect to recruiting, monitoring student progress, the implementing the graduate curriculum and student advising. The responsibilities of the grad committee could include:

❖ Vetting applications to the program
❖ Strategic planning for future directions for the program

- ❖ Formulating policies and procedures for the program
- ❖ Identifying changing community needs and expectations
- ❖ Identifying new course areas to meet student needs and assist in their development and evaluation
- ❖ Recommending faculty for open teaching roles
- ❖ Preparing publicity and calendar material when needed
- ❖ Developing and monitoring the use of course evaluation forms
- ❖ Recommending and evaluating changes to the program
- ❖ Conducting regular formal evaluations of the program
- ❖ Facilitating the matching of faculty advisors to program students
- ❖ Developing curriculum and ensure ongoing alignment of the courses
- ❖ Supporting special workshops/presentations for faculty professional development, students, and target agencies
- ❖ Supporting the development of a strong sense of community among the graduate students, faculty, and staff through academic and non-academic departmental activities
- ❖ Ensuring students have the necessary supports to guide them through their graduate experience towards a successful completion of their program

3.2 STRUCTURE AND REGULATION

Students in the Indigenous Studies MA Program will be required to complete six for-credit courses, including required courses in theory and research methods and an experiential course. In addition, students will be required to take one non-credit professional development course. Student will have to take at least four courses in the Indigenous Studies Department. Students will have a choice of whether they want to complete a Major Research Paper or a community-based Major Research Project. The research paper will be expected to be complete within 12 months and be approximately 40 pages in length. The research project will be expected to be complete within 16 months and the associated paper 35-50 pages in length.

3.3 GRADUATE PROGRAMS - PROGRAM LENGTH

The MA in Indigenous Studies will be a 12-16 month full-time program. The Major Research Paper stream will begin in September and the student will complete their paper by the following August 31. The Major Research Project will begin in September and the student will complete their project at the end of the fall term (December 31) of their second year.

4 CURRICULUM AND TEACHING

4.1 PROGRAM CONTENT

We are proposing an MA in Indigenous Studies that will comprise of two streams: a Major Research Paper and a Community-Based Research Project. Students. Students in both streams will complete 6 for credit courses and 1 non-credit course over two

terms. In addition to the coursework, students who choose to do the major research paper stream will have to write a major paper. Students in the research project stream will be required to complete a community-based research project and write a report. The major research paper stream will take approximately 12 months to complete while the community-based research project is expected to take up to 16 months. Students will need to declare which stream they will take by December of the first year. Students taking the research project will complete their ethics application as part of their second term methods course. They will submit their ethics applications once it is approved by their supervisor by the end of the term.

	Term 1	Term 2	Term 3	Term 4
	September-December	January-April	May-August	September-December
Courses	3 Courses including: Required Indigenous Studies Theory	3 Courses including: Required Indigenous Studies Methods Community-Based Research Project Students Prepare Ethics Application	Major Research Paper: 40 pages	Community-Based Research Project: 35 - 50 pages

Descriptions of Potential Courses

Core Courses

Theories in Indigenous Studies

This course critically examines theoretical developments in Indigenous Studies and answers the following questions: What kinds of theories do Indigenous Studies scholars deploy to help interpret research data, Indigenous cultures, histories, contemporary lives, etc? Can western theories assist Indigenous Studies scholars? How can Indigenous Studies scholars utilize Indigenous ways of knowing as theories?

Indigenous Studies Research Methods

This course emphasizes the development of skills and methods to conduct research and obtain data for and with Indigenous Peoples that ethically accesses and conveys Indigenous perspectives in ways that benefit Indigenous communities.

Experiential Learning Class

Students will be required to take an experiential course that will focus on land-based and/or service learning. The content of the course will differ each year depending on

the faculty member who teaches it. Students will gain experience working with, for, and in Indigenous communities.

Professional Development

Students will be required to complete this non-credit course. Students will meet once a month during the fall and winter terms and will learn various skills that will enhance their professional and career development. Skills that will be discussed in the course include grant-writing, creating paper/conference abstracts, learning how to present papers, CV writing, job search preparation among others. As part of the course, all students will give a public presentation either to the department or a conference. The course will be coordinated by the Graduate Chair with instruction shared by various faculty with expertise in their subject areas. Students will be assessed on a Pass/Fail basis.

Electives

Indigenous Food Policy and Sovereignty

This course will explore the many aspects of food sovereignty, as it relates to Indigenous sovereignty, and how Indigenous peoples in Canada, New Zealand and other global Indigenous communities, are working to revitalize traditional and healthy food systems and address the impacts of colonization on our health and well-being. In addition, to the expertise of the faculty instructor, throughout the term, students will hear from a number of guest speakers who are actively working in the field of Indigenous food sovereignty and discuss: the impact of colonization on our communities' ability to access traditional foods as well as how it has contributed to the many health disparities we experience; and how we can use traditional knowledge, policy, activism, and research to secure our food systems and support a healthier future.

Red Power and its Discontents: Matriarchs to the Rescue

This course will survey the North American Indigenous movements of resistance and Red Power from the late 20th Century to today across Turtle Island. Course materials will span literature and film, guest lectures, and possible participation in solidarity movements. Topics will intersect with historical events of resistance, on the establishment of early journalism as resistance, the development of Indigenous Studies in the U.S. during the decade of Power, Indigenous Masculinities, Indigenous Women, and matriarchs who continually work to restore peace and continue resisting. We may also take a comparative look at global Indigenous activism in Aotearoa.

Indigenous Genocide

That the literature on Indigenous genocide is relatively sparse reflects the degree in which non-Indigenous North Americans have constructed their national histories that erases the Indigenous historical presence in Canada and the United States and promotes a benevolent national character. As a result, in both countries there is a

refusal to take seriously any claims of Indigenous genocide. The course readings provide a counter-narrative to explore the various ways in which genocide has been enacted upon Indigenous peoples, how discussion about Indigenous genocide has shifted in recent years, and the multitude of long-term implications genocide has created for Indigenous people.

New Writings in Indigenous Studies

In recent years, the number of published Indigenous scholars has grown substantially. In this course, we will examine the approaches Indigenous Studies researchers use in their research. Specifically, we will play close attention to the types of methods and theories employed to ascertain to what degree an Indigenous Studies approach to research has materialized.

Comparative Indigenous Masculinities

Though the literature on masculinity has increased dramatically in the last 15 years, researchers have recently begun to explore the notion of Indigenous masculinities. Most of the research has emerged in the pacific islands and Africa and has garnered sparse attention in North America. Through course readings of articles and book and written assignments, this reading intensive course will introduce students to the issues of masculinity from a global Indigenous perspective and provide students with an introduction to masculinity literature.

20th Century Indigenous Excellence

This course will be an examination of both notable and lesser-known Indigenous people in Canada and the US who have made significant contributions in their respective fields of politics, sports, music, entertainment, health, engineering, and academics over the past century, despite the many barriers they faced.

Indigenous Ontario

This class will provide a study of the 10,000 years of Indigenous presence in what is now known as Ontario, Canada. It will also examine the "hidden" histories of Indigenous place names, travel routes, and local histories that are so often erased in the colonial narrative of Indigenous displacement and makes the issue of "land acknowledgment" such a difficult task.

Urban Indigenous History

This course is designed to examine specific themes in urban Indigenous history.

Potential Cross-listed Courses

HIST 777 Decolonizing Indigenous History

Drawing upon and introducing the burgeoning field of Indigenous history, this course seeks to assess, comparatively, the Indigenous histories of Canada and the United States and to do so around the theories and methodologies of 'decolonization'.

HIST 779 History of Indigenous Manifestos

This course is designed to examine the historical context behind several pivotal Indigenous manifestos- produced over the past two centuries. The goal is for students to gain an advanced understanding of the ways in which Indigenous peoples have activated their continued self-determination, nationhood, and sovereignty while exposing the structures of settler-colonialism through various political discourses including declarations, organizations, court cases, film, and novels.

POLSCI 733 Indigenous State Relations

This course will examine various Indigenous responses to the ways in which colonial nation-states have attempted to subjugate Indigenous leadership and usurp Indigenous sovereignty as a means of accessing, controlling, and benefiting from Indigenous lands and resources. Through course readings, class discussions, student presentations, and research papers this course will explore issues such as treaty making, Indian Act, citizenship, identity, land claims, United Nations, systemic racism, criminal justice system, gender issues, self-government initiatives, and various policy developments. All the materials presented in the class will be by Indigenous scholars allowing students an opportunity to critically and thoroughly engage with Indigenous perspectives of Indigenous-State relations.

Anthro 734 Indigenous Ways of Knowing - Health, Wellness & Environment

Indigenous Knowledge (IK) is invested in reclaiming, restoring and rebuilding Indigenous ways of knowing with and for community. *Decolonization* refers to the processes of dismantling structures that perpetuate the status quo, problematizing dominant discourses, and addressing unbalanced power dynamics. Highlighting both gender and traditional knowledge inequities in research practices. Indigenous knowledge and methodologies are concepts that will be explored in the context of ecocentric worldviews and well-being. Indigenous knowledge research pedagogy shifts focus to ethical practices of applied research that braids both western and Indigenous conceptualizations advancing self-determination. Learners are required to be active participants in decolonization while learning how to work with and for community metrics of excellence.

ENG English and Cultural Studies 752: Trans-Atlantic Indigeneity: Indigenous Literary Presence in Europe

Active Indigenous presence across the pond from Turtle Island has been depicted in novels, short stories, film, autobiography, and literary criticism by contemporary Indigenous authors and filmmakers. This class will focus on diasporic Indigenous characters who travel to Europe or live there, while still upholding their distinct Indigenous languages and lifeways of/from their Turtle Island home communities and kin, amid disparate historical and cultural contexts. This course will examine how the authors mediate the conversations on cosmopolitan Indigeneity and colonization through Indigenous epistemes and aesthetics. Students will analyze the ways that Indigenous authors, protagonists, and story challenge and reframe Indigeneity, home, and kin/relationality/relationships.

ENG and CST XXX (NEW COURSE): Seed Stories of Indigenous and Black Survivance

This course synthesizes seed stories of survivance by Indigenous and Black women writers whose novels interweave homelands, histories, and temporalities, and embrace futurities of normalized Indigenous and Black presence. Students will analyse the ways that Indigenous and Black authors, protagonists, and stories restore and uplift Indigenous and Black thrivance by challenging anti-Indigenous and anti-Black racism.

4.2 PROGRAM INNOVATION

There are several unique, innovative, and outstanding features about our proposed Indigenous Studies graduate program. It stands out because a McMaster MA in Indigenous Studies will provide students in southern Ontario the opportunity to pursue a graduate degree in Indigenous Studies. The McMaster Indigenous Studies department has the largest number of Indigenous faculty in any Indigenous Studies department in the country offering a graduate program. In addition to the number of Indigenous faculty in the department, the department has 3 research chairs, including two (2) Canada Research Chairs and the Paul R. MacPherson Chair in Indigenous Studies. The faculty have strong research programs and are all currently part of Tri-Council funded research projects. The high number of research chairs and large amount of research conducted by the faculty overall makes the department a leader in Indigenous Studies research locally, nationally, and internationally. In addition, the program streams offer students a choice of obtaining their degree by completing a research paper stream within 12 months or community-based research project stream within 16 months. These options to degree completion are not offered by any other Indigenous Studies graduate program in North America. In addition, the program will require students take an experiential learning course.

4.3 MODE(S) OF DELIVERY

The MA in Indigenous Studies in-person core and elective courses will offer students a variety of learning opportunities and activities, including:

- Developing research questions

- Conducting primary research

- Writing article critiques, reflection papers, and policy briefs

- Analyzing data

- Learning from specialists through lectures, seminars, and experiential methods

- Leading class discussions on selected topics

- Learning to give lectures and community and scholarly presentations

4.4 EXPERIENTIAL LEARNING

Providing students with practical, hands-on land-based or service-based experiential learning opportunities in Indigenous communities is a core principle of Indigenous Studies. As part of our commitment to an in-community learning experience, the department will require students to complete an experiential learning course. This course will be offered each year (though it will differ from year to year depending on the instructor) giving students a land-based or service-learning experience allowing them to obtain different kind of skillsets they get from the classroom while learning first-hand about Indigenous peoples, cultures and about the historical and/or contemporary issues they face.

4.5 ACCESSIBILITY & INCLUSION

The proposed program prioritizes inclusion and accessibility in multiple ways:

Admissions – The program will offer facilitated admissions processes for Indigenous and Black applicants to reduce barriers to participation (described in more detail in Section 2.3) and to support compositional diversity in the student body.

Building – The program is housed in a fully accessible building for students with mobility issues.

Curriculum – Indigenous Studies as a discipline was developed for Indigenous students to work towards making Indigenous peoples' lives better. In addition, it also encourages non-Indigenous students to think about ways to work collaboratively with Indigenous students and community members. It is this inclusiveness that guides the Indigenous Studies curriculum.

Compliance with AODA - The proposed program will aim to maintain the highest standard of accessibility for students and staff by complying with the objectives set-out by the *Accessibility for Ontarians with Disabilities Act (AODA)* and the *McMaster University Accessibility Plan 2011-2025.* Program staff and faculty involved in the provision of educational and non-educational services to members of the public will

complete mandatory training provided by McMaster University regarding accessibility policies and practices.

4.6 RESEARCH REQUIREMENTS (IF APPLICABLE)

Students in the Major Research Paper stream will have to conduct research on the existing secondary academic literature that exists on their topic. Students in the Major Research Project stream will also conduct research into the secondary literature and conduct community-based research, which produces the results of original research and mature scholarship.

5 ASSESSMENT OF LEARNING

5.1 METHODS FOR ASSESSING STUDENTS

Each course will incorporate a diverse set of learning objectives and activities to teach the course content, which directly align with Indigenous Studies disciplinary goals and provide instructors with several opportunities for the assessment of learning. The students will be evaluated using a variety of methods, including demonstrating the skills taught, writing essays on topics covered, participating in class discussions, and giving/listening to class presentations. Students will be encouraged to develop other materials as a means of making the dissemination of information more accessible to community members.

5.2 CURRICULUM MAP

Program Learning Outcomes (PLOs)		Program Requirements		
By the end of the program the student graduating with a MA in Indigenous Studies will be able to:	Master's Degree Level Expectations (DLE's)	Teaching Activities & Learning Opportunities	Assessments and Evidence
	For each PLO, identify which DLE(s) it aligns with below	For 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 students as evidence that they can/have achieved the PLO before they graduate?
1. Demonstrate a critical understanding of the discipline of Indigenous Studies and its application to both academic and public spheres	1, 2, 3, 5	**All courses** (in class lecture, course readings, class discussion)	- Graded assessments of course requirements: written assignments, projects, final papers
		Completion of MRP (completing of literature review, preparation/integration of knowledge, writing of final assignment)	- Feedback on drafts of paper - Evaluation of final assignment
2. Engage in and recognize the critical importance of	1, 2, 3	**All courses** (in class lectures, course readings, class discussion, and the	- Graded assessments of course requirements: written assignments, projects, final papers

		experiential learning course)	
community-based expertise as an elemental function of Indigenous Studies and the importance of community reciprocity		**Professional Develop** (group work, communication skills)	
		Completion of MRP (completing of literature review, preparation/integration of knowledge, writing of final assignment)	- Feedback on drafts of paper - Evaluation of final assignment - Oral presentations
3. Apply Indigenous Studies theories to critically analyze various types of situations significant to Indigenous people	1, 2, 3, 4, 5	**All courses** (in class lecture, course readings, class discussion)	- Graded assessments of course requirements: written assignments, projects, final papers - Assessment of quality of participation in class discussions
		Completion of MRP (completing of literature review, preparation/integration of knowledge, writing of final assignment)	- Feedback on drafts of paper - Evaluation of final assignment
4. Be trained to conduct ethical Indigenous Studies research that accesses and conveys Indigenous cultural perspective(s)that benefits Indigenous communities and individuals.	1, 2, 3, 4, 5	**All courses** (in class lecture, course readings, class discussion)	- Graded assessments of course requirements: written assignments, projects, final papers - Assessment of quality of participation in class discussions
		Completion of MRP (completing of literature review, preparation/integration of knowledge, writing of final assignment)	- Feedback on drafts of paper - Evaluation of final assignment
5. Learn effective communication strategies using written, oral, or other means of conveying ideas.	1, 2, 3, 4, 5, 6	**All courses** (in class lecture, course readings, class discussion)	- Graded assessments of course requirements: written assignments, projects, final papers - Assessment of quality of participation in class discussions
		Professional Develop (group work, communication skills)	- written assignments - Oral presentations
		Completion of MRP (completing of literature review, preparation/integration of knowledge, writing of final assignment)	- Oral presentations - Feedback on drafts of paper - Evaluation of final assignment

5.3 DEMONSTRATING STUDENT ACHIEVEMENT

Students' achievements will be demonstrated by performances (i) in credit and non-credit coursework, (ii) as teaching assistants, (iii) the completion of their Major Research Paper or Major Research Project. The Grad Chair will be responsible for monitoring the overall progress of students to ensure they are meeting their milestones at an accepted level. The Grad Chair will meet individually with instructors and students after each term to discuss their performances and any issue that limited student experience and achievement. Based on classroom experiences of instructors and students, student grades, student achievement (in various roles as student or TAs, at academic conferences, success in obtaining employment, etc.) each year the Grad Chair will make any necessary recommendations to the department to improve the program delivery.

6 RESOURCES

Note: Please be sure to complete the appropriate section based on whether you are proposing a New Undergraduate or Graduate Program.

Please note that departments should have already completed their New Undergraduate or Graduate Program Resource Implications and Financial Viability template. Ensure that this template is complete and ready to be submitted. Departments may find it helpful to refer to their budget proposal when addressing the sections below. For additional information, contact Susan Mitchell, Acting Associate Vice-President Finance and Administration (Academic): mitchell@mcmaster.ca. Please provide evidence that there are adequate resources to sustain the quality of scholarship produced by undergraduate/graduate students' scholarship and research activities.

3.1 GRADUATE PROGRAMS

6.1.1 ADMINISTRATIVE, P HYSICAL AND FINANCIAL RESOURCES

Administrative. We will require a Graduate Chair and a full time Administrative Assistant. The Graduate Chair will be a current member of the department and will be appointed by the summer of 2023.The Administrative Assistant will provide dedicated administrative support for the Department and will work with faculty and students to plan and coordinate Department courses, events and activities.

Physical Resources. The department is currently housed in L.R. Wilson 1811, which has sufficient space for the graduate program. However, the department will be relocating to an expanding space in LRW 1806. There will be dedicated space for graduate students in this new space and will accommodate long-term sustainable growth for the graduate program and the department. The projected date for the department to move into this space is September 2024, which coincides with the projected start date for the first MA cohort.

Financial Resources. The program will be funded through student tuition.

6.1.2 LIBRARY, TECHNOLOGY, AND LABORATORY RESOURCES

The library and information technology support available from McMaster University will be adequate to sustain and support students' learning and scholarship, including access to journal subscriptions, online databases, and books. See the attached "University Library Indigenous Studies Report" attached to see the extensive resources Indigenous Studies graduate student will have access at the University Library.

6.1.3 FACULTY

The faculty of the Indigenous Studies Department have a longstanding history of excellence in the field of scholarship and research, with over $16 million in research revenue over the last 7 years. Our faculty members have been recipients of several prestigious academic awards and scholarships, including: Canada-US Fulbright Program, SSHRC, CIHR, IHRDP, Ontario Graduate Scholarship (OGS), and the Indspire (formerly the National Aboriginal Achievement Foundation). Three of the faculty hold research chairs. Indigenous Studies Department faculty have also published numerous works within the field of Indigenous Studies and are often sought out to speak with media regarding emergent Indigenous issues. Our full-time faculty have also been nominated for MSU teaching awards on four occasions in the last five years, and one has won a President's Award for Outstanding Contribution to Teaching and Learning, indicating not only their excellence in research, but in their pedagogical approaches to teaching and learning.

The department has 11 faculty members, some of whom hold joint appointments in other departments at McMaster, for a total of 7.0 FTEs. All the faculty have ongoing research projects, and most have supervised graduate or undergraduate students in other departments or at other universities. Faculty with less experience will develop their supervisory skills by first sitting on committees and/or from the mentorship of more experienced faculty supervisors. Faculty members will contribute to course development and will teach in the program. The faculty have extensive connections with Indigenous Studies faculty provincially, nationally, and globally.

Though several Indigenous Studies units outside of Ontario are currently hiring Indigenous faculty (University of Manitoba, First Nations University of Canada, University of Winnipeg, and University of Alberta for example), as the table below shows, the Indigenous Studies Department at McMaster University has more Indigenous faculty than the other long-standing graduate programs.

Number of Indigenous faculty in the departments that offer graduate programs in Indigenous Studies:
McMaster University - 11
University of Saskatchewan - 8
University of Manitoba - 7

Trent University - 6
University of Northern British Columbia - 4
University of Winnipeg – 4
University of Victoria – 4
University of Lethbridge – 3

The University of Alberta has a Faculty of Native Studies (it should be noted that this unit is a Faculty and not a department) with seventeen (17) total faculty members, twelve (12) of whom are Indigenous. Carleton University has the School of Canadian and Indigenous Studies with 36 core and affiliate faculty members, four (4) of whom are Indigenous.

6.1.4 STUDENT FINANCIAL SUPPORT

Financial support for students will come from multiple sources, including OSAP, university graduate scholarships, teaching assistantships, research assistantships funded by faculty research grants, and external scholarships. The department will also be able to hire at least five teaching assistant each year (a number that will increase as program enrolment grows) that will offer students not only practical skills but addition funding options. In addition, qualified Status Indian students are eligible for funding through Indigenous Services Canada to cover in whole or in part costs associated with tuition, books, and living allowance.

6.1.5 FACULTY RESEARCH FUNDING
The Table provided below is intended to show the amount of funding available to support faculty research and potentially available to support students' work, either through the provision of stipends or materials for conducting research.

Operating Research Funding by Source and Year				
	Source			
Year[1]	Granting Councils[2]	Other Peer Adjudicate[3]	Contracts	Others[4]
2022	878,521			
2021	1,361,326			
2020	3,875,982			
2019	7,381,053			
2018	2,020,746			
2017	530,286			
Totals	16,047,914			

1. Year may be academic year or calendar year, as appropriate for the institution [specify].
2. Source: SSHRC and CIHR.

6.1.6 SUPERVISION
There are two different tables that must be completed as part of this section

Faculty Name & Rank	Home Unit [1]	Supervisory Privileges [2]
Dr. Savage Bear - Assistant	Indigenous Studies	Master's
Dr. Robert Innes - Associate	Indigenous Studies	Master's
Dr. Adrianne Lickers Xavier Assistant	Indigenous Studies	Master's
Dr. Renae Watchman - Associate	Indigenous Studies	Master's
Dr. Ki'en Debicki - Assistant	English & Cultural Studies & Indigenous Studies	Master's
Dr. Allan Downey - Associate	History & Indigenous Studies	Master's
Dr. Bonnie Freeman - Associate	Social Work & Indigenous Studies	Master's
Dr. Chelsea Gabel – Associate	Health Aging, & Society & Indigenous Studies	Master's
Dr. Dawn Martin – Associate	Anthropology & Indigenous Studies	Master's
Dr. Rick Monture – Associate	English & Cultural Studies & Indigenous Studies	Master's
Dr. Vanessa Watts – Associate	Sociology & Indigenous Studies	Master's

Completed and Current Numbers of Thesis[1] Supervisions by Faculty Member						
	Completed			Current		
Member	Master's	PhD	PDF	Master's	PhD	PDF

Dr. Savage Bear - Assistant	2			1	3	
Dr. Ki'en Debicki - Assistant	2				3	
Dr. Allan Downey - Associate	4					
Dr. Bonnie Freeman - Associate	10	1		1	2	
Dr. Chelsea Gabel – Associate	10	2			4	
Dr. Robert Innes - Associate	5				5	
Dr. Dawn Martin-Hill – Associate	5	1		1	1	
Dr. Rick Monture – Associate	3	1			1	
Dr. Renae Watchman – Associate	1					
Dr. Vanessa Watts – Associate	9			1	1	

1. *If desired, columns (or an additional table) may be added to reflect the supervision of major research papers at the master's level. Do not include supervisory committee activity in this table.*

2. *Indicate the current number of students being supervised by the faculty members and, in parentheses, the total number of past students that the faculty member has supervised.*

7   QUALITY AND OTHER INDICATORS

7.1 ACADEMIC QUALITY OF THE PROGRAM

The Indigenous Studies graduate program will seek feedback on a regular basis to assess the academic quality of the program. Students in the program will evaluate courses in the following areas: a) the quality of the instruction (i.e., knowledge and teaching ability of instructors), and b) the usefulness of the course materials to their post-graduate goals. Courses will be evaluated on objectives, content, format, resources used, group composition and overall ratings. To maintain and protect students' confidentiality, feedback will only be shared with faculty once a sufficient number of have been received (i.e., 5 or more) and the information gathered will be anonymous. If any concerns are raised in the evaluations, the Graduate Chair will meet with the instructor to discuss the concerns and to help resolve any issues that arise. In addition, following completion of their degree, students will be asked to complete a survey to provide their assessment of the program.

Assessment and quality of student success during the program will be evaluated based of factors including: time to completion data; grades and averages; retention rates; and employment.

As noted in Section 5.3 based on classroom experiences of instructors and students, student grades, student achievement (in various roles as student or TAs, at academic conferences, success in obtaining employment, etc.) each year the Grad Chair will make any necessary recommendations to the department to improve the program delivery, ensuring the ongoing quality of the program itself.

Department meetings will be held each semester, which will provide opportunities for faculty to exchange information on how the courses are progressing and areas for improvement. These meetings will also offer faculty the opportunity to exchange ideas or innovations that have worked well in one course or part of the program, and which could be adopted in other courses.

7.2   INTELLECTUAL QUALITY OF THE STUDENT EXPERIENCE

The critical mass of highly active and engaged Indigenous faculty in the Indigenous Studies Department will provide a rich learning environment for students. This will be supplemented with additional research and learning opportunities for our grad students through the McMaster Indigenous Research Institute, the McMaster Health Learning Lodge, and other Indigenous-focused initiatives at McMaster. The faculty will provide plenty of mentorship opportunities for the grad students, many of whom will be first generation graduate students. The student experience in the department is facilitated by quality of our faculty, who are all engaged in millions of dollars of Tri-Council funded research. The department has three research chairs including Dr. Chelsea Gabel, who holds a Canada Research Chair in Indigenous Well-Being, Community-Engagement and Innovation, Dr. Allan Downey who holds a CRC in Indigenous history, and Dr Vanessa Watts is the Paul R. MacPherson Chair in Indigenous Studies. The faculty are involved in innovated teachings, such as Dr. Savage Bear's (who is the Director of the McMaster Indigenous Research Institute) Walls to Bridges course that have McMaster students take courses with women inmates at the Grand Valley Institution for Women. As well as Dr. Bonnie Freeman's 2-week land/river-based course in which students will paddle canoes nearly 100KM from Cambridge, Ontario to Lake Erie.

As noted in our required course descriptions, the graduate program will offer a mandatory professional development workshop that will include topics on submitting SSHRC grants, writing conference abstracts, preparing conference papers, and applying to PhD programs, among other topics. In addition, the program will sponsor an Indigenous Studies graduate student symposium and brown bag lunch talks.

Please note that if the program is approved, some additional information will be requested:

- Brief program description which can be posted on the Quality Council website (1-2 paragraphs)
- Program details for OSAP eligibility purposes

TRACKING THE APPROVALS PROCESS FOR NEW GRADUATE PROGRAMS

PLEASE NOTE: This table must be appended to the New Program Proposal Document and updated as each step in the approvals process is completed.

STEP IN THE NEW PROGRAM APPROVALS PROCESS	NAME OF COMMITTEE/ INDIVIDUAL PROVIDING CONSULTATION	DATE OF DOCUMENT APPROVAL
Preparation of the Resource Implications & Financial Viability Template (Budget)	**Susan Mitchell, Acting Associate Vice-President, Finance & Planning (Academic)**	
University Students Fees Committee Approval of Budget		
Departmental & Faculty Approvals of Proposal		

Please note that approvals from the following internal committees is also required before the New Program Proposal can be sent to Quality Council & MTCU: *Graduate Council, University Planning Committee* and *Senate.*

EXTERNAL REVIEWERS' GUIDEBOOK FOR NEW PROGRAM PROPOSAL REPORT

CONTACT INFORMATION

If you have any questions regarding the program's IQAP, inquires can be directed to **iqap@mcmaster.ca**.

UNDERGRADUATE PROGRAMS

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GRADUATE PROGRAMS

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Christina Bryce
Assistant Graduate Secretary
cbryce@mcmaster.ca

Steve Hranilovic
Vice-Provost and Dean of Graduate Studies
deangrad@mcmaster.ca

MEETING INFORMATION

It is required that all reviewers visit at the same time, normally for two days. As appropriate, the review team shall meet with the following:

- Chair or Director;
- Full-time faculty members (in groups);
- Part-time faculty members (in groups);
- Program students
- Associate Dean;
- Dean;
- Associate Vice-President (Faculty);
- Provost and Vice-President (Academic), if available;
- Additional meetings may be scheduled at the request of the external review team, Chair of the department or individuals.

REVIEWERS' REPORT

The review team will submit, to the Office of the Vice-Provost (Faculty), a joint report, including an Executive Summary, for the program(s) under review, normally within four weeks of the visit. The review team's report should address the substance of both the Program Proposal and the evaluation criteria set out in the Program Proposal. The intent of these reports is to be formative and constructive. The reports are intended to provide counsel rather than prescriptive courses of action. The Office of the Vice-Provost (Faculty) will circulate the report to the appropriate Chair(s) and Dean(s).

Based on information gained from the on-site review, the Program Proposal, consultation with members of the program and the University, independent assessments and all material submitted as part of the program review, the review team is expected to provide feedback on the following evaluation criteria and list any recommendations relevant to that section. However, the review team is not restricted to the following issues/questions.

We have provided a template for the reviewers' report below, which is in line with the requirements outlined within the Quality Assurance Framework.

EXTERNAL REVIEWERS'
REPORT ON PROPOSED MA IN INDIGENOUS STUDIES

SEPTEMBER 18-19TH 2023

Reviewer 1

Name: Dr Paul McKenzie-Jones

University Address: University of Lethbridge, 4401 University Drive, Lethbridge, AB T1K 3MH

Reviewer 2

Name: Dr. Shailesh Shukla

University Address: University of Winnipeg, 515, Portage Ave, Winnipeg, MB, R3B 2E9

Internal Reviewer

Name: Dr. Marie Elliot

Department: Biology

Outline of the Visit

Was the site visit: In person: √   Virtual site visit: ☐   [Desk Review](): ☐

If the review was conducted either virtually or via desk review, was this format agreed to by both external reviewers? Yes   ☐   No   ☐

Was sufficient rationale provided by the Provost/Provost's delegate for an off-site visit?

Yes   ☐   No   ☐

For those reviews that included an in-person or virtual visit, please indicate the following (or insert the site visit schedule below):

- **Who was interviewed?**
  - *Administrators: Deputy Provost; Vice-Provost and Dean, Graduate Studies; Dean, Social Sciences; Associate Dean, Graduate Studies (Social Sciences)*
  - *Indigenous Studies Graduate Committee members (3)*
  - *Indigenous Studies Department Chair and faculty members (4)*
  - *Members of McMaster's Indigenous Research Institute*
  - *Indigenous Studies administrative staff (2)*
  - *Students (one undergraduate and prospective MA student)*

- **What facilities were seen?**
  - *Indigenous Studies Department and neighboring amenities in LR Wilson building*

In order to continuously improve the effectiveness and efficiency of site visits/virtual site visits, please comment on the following:

- **How effective was the proposal brief in preparing you for the visit/virtual site visit?**

  o *The brief was comprehensive in detail and planning.*

- **How could the logistics of the visit/virtual site visit be improved?**

  o *Please consider either choosing dates later in week for the visit, as the hotel restaurant is permanently closed on Monday and Tuesdays, or provide alternatives for breakfasts on these days.*

  o *It would be helpful to start the visit by providing the reviewers with information relating to the IQAP process itself, and the role/expectation of the different review team members.*

PROGRAM

- Comment on if the program's objectives clearly described
- Comment on the appropriateness of the degree nomenclature, given the program's objectives
- Comment on the consistency of the program with McMaster's mission and academic plan; whether the program learning outcomes are clear, appropriate and aligned with the undergraduate or graduate Degree Level Expectations.
- McMaster's Current Priorities and Strategic Mandate Agreement should be at the forefront of program design. This information can be found in the links provided below:

  i.   McMaster's Strategic Mandate Agreement: https://ira.mcmaster.ca/app/uploads/2020/11/McMaster-SMA3-Agreement-August-31-2020-SIGNED-FINAL.pdf

  ii. McMaster's current priorities: https://president.mcmaster.ca/app/uploads/2021/05/Institutional-Priorities-and-Strategic-Framework_FINAL_5May21.pdf

Comments:
The program's objectives are clearly stated and there are no issues with the planned degree nomenclature. The program appears to be consistent with McMaster's current priorities and its Strategic Mandate Agreement.

Specific Recommendations:
Faculty recruitment will be necessary to ensure there is sufficient capacity to deliver the proposed program as it grows, as it is expected that this program will be in high demand.

ADMISSION & ENROLMENT

- Comment on whether the admission requirements (including any alternative requirements) are appropriately aligned with the program learning outcomes (and/or Degree Level Expectations) established for completion of the program.

- Are there any applicable alternative admission requirements, including how the program recognizes prior work or learning experience, and if so, are they appropriate?

Comments:
Current academic entry requirements are appropriate.

Specific Recommendations:
For elder Indigenous applicants and applicants with demonstrated Indigenous community connections who have been out of formal education systems for some time, lived experience could be considered as an alternative admission qualification. Applicants/students could also be asked to submit a one-page statement outlining a major research project proposal that they are interested in undertaking, alongside their other application material.

STRUCTURE

- Comment on how the program's structure and regulations meet the specified program learning outcomes.

NOTE: The Quality Assurance Framework requires a clear distinction between program objectives, program-level learning outcomes, and Degree Level Expectations. See the Guidance on Program Objectives and Program-level Learning Outcomes for details on the distinction.

- Is the program's structure and the requirements to meet the program objectives and program-level learning outcomes appropriate?

- Do the program's structure, requirements and program-level learning outcomes ensure students meet the institution's Undergraduate or Graduate Degree Level Expectations?

- Does the (proposed) mode of delivery facilitate students' successful completion of the program-level learning outcomes?

- Does the curriculum address the current state of the discipline or area of study?

Comments:
The proposed structure and learning outcomes for the program are appropriate to meet the program objectives and to facilitate students' successful completion of the degree program. The requirements further ensure that students will meet the institution's graduate level degree expectations. The curriculum offers a variety of elective courses which collectively reflect the current state of Indigenous Studies with a balance of Indigenous content from

within Canada and globally. The inclusion of a major research paper OR community-based research project with an experiential learning emphasis may require two-tier ethics approvals (community and university) within the 12-16 month program. Respecting Indigenous protocols would make the program unique in Southern Ontario; however, this can also be a time-consuming process and it will be important to monitor whether program lengths need to be adjusted in order to ensure that students can complete their degree requirements within the recommended time frame.

Specific Recommendations:
It will be helpful to communicate/plan the regularity of elective offerings to ensure that students are aware of the options available to them.

After one or two intake cycles of the program, it is recommended to revisit and, if necessary, revise the proposed program length based on completion rates of the first cohort of students.

CURRICULUM AND TEACHING

- Comment on how the curriculum reflects the current state of the discipline or area of study; evidence of significant innovation or creativity in the content and/or delivery of the program; the appropriateness and effectiveness of the modes of delivery at meeting program learning outcomes; and how teaching in the program prioritizes areas of accessibility and removes barriers to learning.

Comments:
Two areas of innovation in this program are the land-based learning and the community-based research project/experiential learning approaches that fit well within Indigenous ways of knowing and pedagogies. While it is unusual to not see a thesis option being offered, the community-based project offers an alternative route to deep-level engagement in a more holistic, Indigenous-centered, project requiring intellectual engagement that would be equivalent to the work required for a thesis.

Specific Recommendations:
As the program evolves and if there is interest in developing a PhD-level program, it may be beneficial to consider introducing a thesis option at the Masters level.

ASSESSMENT OF LEARNING

- Comment on the appropriateness and effectiveness of the proposed methods of assessment in demonstrating achievement of the program learning outcomes, as well as the extent to which the program(s) assess graduating student achievement of the program learning outcomes.

- Are the plans in place to monitor and assess the following, both appropriate and effective?

    i.   The overall quality of the program;
    ii.   Whether the program is achieving in practice its proposed objectives;
    iii.   Whether its students are achieving the program-level learning outcomes; and
    iv.   How the resulting information will be documented and subsequently used to inform continuous program improvement.

NOTE: Programs should ensure that the plans for monitoring and assessing student achievement provide an assessment of students currently enrolled as well as post-graduation metrics. Please see [Guidance on Assessment of Teaching and Learning](#) for further details and examples of measures for assessing teaching and learning that meet the requirements of the Quality Assurance Framework.

Comments:
The plans for monitoring and assessing student progress and achievement show clear alignment with the program learning outcomes. The broad experience that all current faculty members associated with the department have in supervising graduate students was deemed to be additionally beneficial to ensuring student success in this new program.

RESOURCES TO MEET PROGRAM REQUIREMENTS

- Comment on evidence that there are adequate human, physical and financial resources to sustain the quality of scholarship produced by undergraduate students.

- Given the program's class sizes and cohorts as well as its program-level learning outcomes:

a) Is the number and quality of core faculty who are competent to teach and/or supervise sufficient to achieve the goals of the program and foster the appropriate academic environment?

b) When adjunct/sessional faculty play a large role in the delivery of the program, is their role appropriate? Are plans in place to ensure the sustainability of the program and the quality of student experience and if so, are these suitable?

c) Is the provision of supervision of experiential learning opportunities adequate, if applicable?

d) Taking into consideration implications for other existing programs at the university, is the administrative unit's planned use of existing human, physical and financial resources appropriate?

e) Are there adequate resources available to sustain the quality of scholarship and research activities produced by students, including library support, information technology support, and laboratory access?

NOTE: External Reviewers are not expected to assess the financial viability of a program, and internal budgets are not under the purview of the External Review of a New Program Proposal. Provide a general assessment of the administrative unit's planned use of existing financial resources.

Comments:

The resources needed to launch this new program appear to be suitable for managing a small initial intake. The review committee did, however, feel that more human resources support will be needed to successfully manage the growth and sustainability of the program moving forward. Specific needs include a dedicated program manager and a cluster hire of faculty whose home is within the Indigenous Studies department rather than faculty being cross-appointed in from department. There was stated support for these initiatives from the University administrators, and we recommend that this support be actualized.

Specific Recommendations:

An Indigenous cluster hire centred in the Indigenous Studies Department will be important to enable the MA program to grow and attract more students (a minimum of three new Indigenous faculty hires are estimated to be required to support the anticipated program growth). A dedicated administrator position is also needed to ensure the smooth running of the program.

QUALITY AND OTHER INDICATORS

- Please provide commentary on the indicators the department will use over the first five years to document and to demonstrate the quality of the program.

- Comment on the quality of the faculty (e.g., qualifications, funding, honours, awards, research, innovation and scholarly record, appropriateness of collective faculty expertise to contribute substantively to the program and commitment to student mentoring).

- Comment on any other evidence that the program and faculty will ensure the intellectual quality of the student experience.

- Comment on any evidence of how faculty members will ensure the intellectual quality of the student experience.

Comments:

This is an area in which the department excels. There are currently two CRC within the department, alongside other nationally and internationally renowned Indigenous scholars. Collectively, the Indigenous faculty members have demonstrated success in securing research funding. The existing faculty cohort provides both outstanding depth and breadth in their respective areas of expertise. The exceptional research that the faculty members

produce is indicative of the quality of research and intellectual training they will provide to the students in the proposed program.

The committee did note capacity concerns that may arise due to teaching release associated with CRC positions and administrative roles, in addition to the need to manage sabbaticals on an annual basis.

CONFIDENTIAL SECTION
Provide any commentary or recommendations on confidential areas.

Comments: n/a

Specific Recommendations: n/a

SUMMARY & RECOMMENDATIONS

Provide a brief summary of the review. Please include commentary on any clearly innovative aspects of the proposed program together with recommendations on any essential or otherwise desirable modifications to it, as applicable.

Recommendations that are clear, concise, and actionable are the most helpful for universities as they prepare to launch new programs. Include specific steps to be taken on any essential or otherwise desirable modifications to the proposed program.

NOTE: The responsibility for arriving at a recommendation on the final classification of the program belongs to the Appraisal Committee. Individual reviewers are asked to refrain from making recommendations in this respect.

Summary - *The plan for the introduction of an Indigenous Studies MA at MacMaster University has been meticulously researched and developed. The proposed degree program is clear, exciting, and each targeted goal is ultimately achievable. The proposal effectively demonstrates that this is a timely and necessary vision for an MA program at McMaster. Highlights of the proposed program include: (i) the fact that it will the ONLY MA in Ontario focused exclusively on Indigenous Studies; (ii) the inclusion of courses that reflect the present and future direction of Indigenous Studies as a discipline, including land-based and globally focused courses; and (iii) the presence of exceptional scholars (each of whom is well-respected in their fields) in the department, coupled with the unique attribute of being an all-Indigenous faculty. Collectively, these factors give confidence that this MA program will be a resounding success. A concern is that the program will prove too popular, too fast, and the department will be inundated with more applicants than they can accept. Program interest was obvious from the stated interest from current and former undergraduate students who indicated that they intend to begin their MA studies as soon as this program is implemented. The flip side of this concern is that there is tremendous growth potential for this program, and a real opportunity for this to become a flagship program within Ontario, and Canada-wide.*

Primary concerns are not with the program, curriculum, or schedule, but centre on the institutional support needed by the department to sustain and grow the program, especially with a view to implementing a future PhD program. The program must be provided with institutional support in funding, staffing, and faculty recruitment. Discussions with the Deans of Social Science and Graduate Studies, as well as the Deputy Provost, suggest that there is a willingness to provide the necessary supports. On that note, the greatest urgency is in the need for a cluster hire of Indigenous Studies faculty, and the need to fill the position of program administrator to ensure that the undergraduate administrator is not overloaded (and the undergraduate program adversely affected).

There are several innovative aspects of the program curriculum that the review committee members were particularly excited about. These included the experiential learning course and the community-based research project, both of which reflect the commitment of the

faculty to community and to strengthening the department's claim of offering a unique degree relative to other universities. We offer several suggestions for future additions/alterations to the program - once it has been firmly established - including the possibility of offering a thesis and/or practicum alternative to the research paper or community project, to accommodate distinct modes of student learning and intellectual engagement, and to ensure that graduating students are prepared for maximally diverse ranges of employment/careers/future educational opportunities.

Recommendation 1: *Faculty recruitment will be necessary to ensure there is sufficient capacity to deliver the proposed program as it grows, as it is expected that there will be significant interest and demand in this offering. We estimate that a minimum of three new Indigenous faculty hires within the Indigenous Studies Department will be needed for the MA (and future PhD?) program to grow and attract more students.*

Recommendation 2: *For elder Indigenous applicants and applicants with demonstrated Indigenous community connections who have been out of formal education systems for some time, lived experience could be considered as an alternative admission qualification. Applicants/ students could also be asked to submit a one page statement outlining a major research project proposal that they are interested in undertaking, alongside their other application material.*

Recommendation 3: *If necessary, the graduate school develops or modifies policies to enable Indigenous elders/knowledge keepers to sit as graduate students committee members/co-supervisors.*

Recommendation 4: *The university implements an elder/knowledge keeper honorarium for all levels of service, including those not attached to the MA program such as: elder in residence, classroom visits, community outreach, student supervision, ceremony (when/if appropriate).*

Recommendation 5: *It is recommended to plan a regular/consistent offering of elective courses and ensure that these offerings be communicated to those interested in enrolling in the program. Mohawk, Anishinaabemowin, Cayuga or other Indigenous languages focused courses should also be considered as potential electives.*

Recommendation 6: *The university is encouraged to continue to build and invest in Indigenous community engagement strategies (community trips, land-based learning courses, etc) to ensure there is sufficient support for the program considering the major research project or Indigenous community focused research and engagement components of the program.*

Recommendation 7: *We strongly recommend that the program be supported by a dedicated*

graduate administrator to ensure the smooth running of the program.

Recommendation 8: *As the program evolves and if there is interest in developing a PhD-level program, it may be beneficial to consider introducing a thesis/practicum option at the master's level.*

Recommendation 9: *In considering some of the barriers that Indigenous students may face in pursuing a graduate education, the university and department are encouraged to consider having a funding support for Indigenous MA students beyond a traditional graduate stipend, or to consider alternative course delivery options. These could include providing affordable child-care (or child-care bursaries), stipends to support housing and/or transportation services, offering classes in off-campus locations (e.g. on reserve), etc.*

Recommendation 11: *It is strongly recommended that there be course-release provided for faculty members who step up to manage the MA program (e.g. as Associate Chair).*

Recommendation 12: *Given that the community research projects are an integral component of the proposed graduate program, it will be important to have dedicated funding available to support these projects, and scholarships for land/place-based projects to ensure that students pursuing this option are not disadvantaged relative to classroom/lab-based students in other disciplines.*

Recommendation 13: *We encourage the department to take advantage of future opportunities presented by the Strategic Alignment Fund to support projects aimed at piloting new initiatives within the MA program.*

Signature: Paul McKenzie-Jones

Signature: Shailesh Shukla

Signature: Marie Elliot

Date: Oct 21, 2023

Program Response and Implementation Plan Institutional Quality Assurance Program (IQAP) Review [INgDIGENOUS STUDIES GRADUATE PROGRAM]

Date of Review: September 18ᵗʰ-19ᵗʰ, 2023 Review Team Members:

External: Dr Paul McKenzie-Jones (University of Lethbridge), Dr. Shailesh Shukla (University of Winnipeg)

Internal: Dr. Marie Elliot, Department of Biology
Program Response and Implementation Plan prepared by:

Dr. Rob Innes, Chair, Indigenous Studies Department and ISD Graduate Committee

Program Response and Implementation Plan date prepared: October 2023

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Overall Commentary

In accordance with the University Institutional Quality Assurance Process (IQAP), this final assessment report provides a synthesis of the external evaluation and the internal response and assessments of the undergraduate program delivered by the Indigenous Studies Program. This report identifies the significant strengths of the program, together with opportunities for program improvement and enhancement, and it sets out and prioritizes the recommendations that have been selected for implementation.

The report includes an Implementation Plan that identifies who will be responsible for approving the recommendations set out in the Final Assessment Report; who will be responsible for providing any resources entailed by those recommendations; any changes in organization, policy or governance that will be necessary to meet the recommendations and who will be responsible for acting on those recommendations; and timelines for acting on and monitoring the implementation of those recommendations.

Executive Summary of the Proposed New Graduate Program in Indigenous Studies

The Indigenous Studies Department submitted a proposal for a new graduate program in August 2023 to the Associate Vice- President, Faculty, to initiate a graduate program review. The proposal outlined program descriptions, learning outcomes, and analyses of data provided by the Office of Institutional Research and Analysis.

Two arm's-length external reviewers and one internal reviewer were endorsed by the Dean, Faculty of Social Sciences, and selected by the Associate Vice- President, Faculty and Associate Vice-President and Dean of Graduate Studies. Drs. McKenzie-Jones, Shukla, and Elliot reviewed the self-study documentation and then conducted a site visit to McMaster University on September 19, 2023. The visit included meetings with Indigenous Studies faculty, alumni, and members of the pertinent administrative units.

The external assessment of the proposed MA program in Indigenous Studies was generally positive. The reviewers state: "The plan for the introduction of an Indigenous Studies MA at MacMaster University has been meticulously researched and developed. The proposed degree program is clear, exciting, and each targeted goal is ultimately achievable. The proposal effectively demonstrates that this is a timely and necessary vision for an MA program at McMaster." The reviewers noted that they have "confidence that this MA

program will be a resounding success." Nonetheless, the reviewers did identify some concerns, not so much with the program itself but those that "centre on the institutional support needed by the department to sustain and grow the program, especially with a view to implementing a future PhD program."

In the table below are their 11 recommendations and the department response and plans.

Recommendation	Proposed Follow-up	Responsibility for Leading Follow-Up	Timeline for Addressing Recommendation
1: *Faculty recruitment will be necessary to ensure there is sufficient capacity to deliver the proposed program as it grows, as it is expected that there will be significant interest and demand in this offering. We estimate that a minimum of three new Indigenous faculty hires within the Indigenous Studies Department will be needed for the MA (and future PhD?) program to grow and attract more students.*	To meet the expected demand for the graduate program, capacity will become an issue. The department will lobby for 3 hires that will assist in growing the graduate and undergraduate programs.	Chair	1-3 years
2: *For elder Indigenous applicants and applicants with demonstrated Indigenous community connections who have been out of formal education systems for some time, lived experience could be considered as an alternative admission qualification. Applicants/ students could also be asked to submit a one page statement outlining a major research project proposal that they are interested in undertaking, alongside their other application material.*	We adjusted the application to include alternative admission qualifications that consider life experience. We also asked students to provide their research topic and the context on why they want to conduct this research. Students must list a potential faculty member who will supervise their research.	Chair	Immediately
3: *If necessary, the graduate school develops or modifies policies to enable Indigenous elders/knowledge keepers to sit as graduate students committee members/co-supervisors.*	The department will consult with the IEC, FSS, and the School of Graduate Studies.	Chair working with the IEC	1-2 year

4: *The university implements an elder/knowledge keeper honorarium for all levels of service, including those not attached to the MA program such as: elder in residence, classroom visits, community outreach, student supervision, ceremony (when/if appropriate).*	The department supports this recommendation. We will work with the other Indigenous units, the IEC, JAICG, FSS, and the university to develop strategies for this initiative.	IEC will need to spearhead this initiative.	1-2 years
5: *It is recommended to plan a regular/consistent offering of elective courses and ensure that these offerings be communicated to those interested in enrolling in the program. Mohawk, Anishinaabemowin, Cayuga or other Indigenous languages focused courses should also be considered as potential electives.*	One of the recommendations from the 2019 ISP IQAP review was that more courses should be offered for students to have greater choice of upper-year electives. The program lists many courses, but the number offered is limited. The response was to add more faculty members to the Indigenous Studies Program. Since 2019, ISD has added 4 more faculty members. With more faculty, ISD is now better positioned to offer regular and consistent elective courses. However, to ensure sustainability and capacity, more faculty will be required.	Chair	July 1, 2024
6: *The university is encouraged to continue to build and invest in Indigenous community engagement strategies (community trips, land-based learning courses, etc) to ensure there is sufficient support for the program considering the major research project or Indigenous community focused research and engagement components of the program.*	The department will work with the IEC and other Indigenous units to lobby the FSS, other faculties, and the university for sufficient resources to be made available to the department for land-based courses, field schools, and other experiential learning opportunities.	Chair	Ongoing

7: *We strongly recommend that the program be supported by a dedicated graduate administrator to ensure the smooth running of the program.*	The ISD has been given approval to hire a full-time graduate administrator as soon as the IQAP review has been approved.	N/A	Immediately
8: *As the program evolves and if there is interest in developing a PhD-level program, it may be beneficial to consider introducing a thesis/practicum option at the master's level.*	We plan to evaluate the program in 2-3 years to consider what kinds of changes, if any, are necessary. This will include assessing student demand for a doctoral program.	The new Graduate Chair and the grad committee.	An evaluation of the grad program will be done within 2-3 years.
9: *In considering some of the barriers that Indigenous students may face in pursuing a graduate education, the university and department are encouraged to consider having a funding support for Indigenous MA students beyond a traditional graduate stipend, or to consider alternative course delivery options. These could include providing affordable child-care (or child-care bursaries), stipends to support housing and/or transportation services, offering classes in off-campus locations (e.g. on reserve), etc.*	Pending core funding, the ISD will consider offering childcare stipends, housing, food, and clothing allowances, as well as transportation support (bus passes, parking passes, car shares, ride shares, etc.). We will also offer alternative class modes (Zoom / asynchronous, for example). While this recommendation assumes all graduate students have challenges, we will also strive to support and recognize Indigenous graduate students who demonstrate excellence in their work.	The department, along with the IEC, FSS, and SGS.	
10: *It is strongly recommended that there be course-release provided for faculty members who step up to manage the MA program (e.g. as Associate Chair).*	The new Grad Chair will receive a 3-unit course release.		

11: *Given that the community research projects are an integral component of the proposed graduate program, it will be important to have dedicated funding available to support these projects, and scholarships for land/place-based projects to ensure that students pursuing this option are not disadvantaged relative to classroom/lab-based students in other disciplines.*	The department will advocate for research funding to be made available to those students who demonstrate need. Students may have opportunities for CER through their supervisor's research program, however, if a student wishes to pursue a community engaged MRP rather than a paper only, they need to take a leadership role in this.	The new Graduate Chair and the grad committee.	

McMaster University

From: Jeremiah Hurley, Dean, Faculty of Social Sciences

Re: IQAP review Proposed MA Program in Indigenous Studies

Date: November 1, 2023

The IQAP review team consisting of external members Dr. Paul McKenzie-Jones (University of Lethbridge) and Dr. Shailesh Shukla (University of Winnipeg), and internal member Dr. Marie Elliott (Department of Biology), conducted its review of the proposed MA program in Indigenous Studies on September 18-19, 2023. I thank the reviewers for their review and recommendations regarding the proposed MA program in Indigenous Studies. The recommendations will be helpful to both the department, the Faculty of Social Sciences, and the University in the coming years as we launch this important, innovative program. Herein I provide my response to the report.

The reviewers' overall assessment of the proposed MA in Indigenous Studies is highly positive. They emphasize critical design features of the program that distinguish it from other programs, the critical-mass and "high-quality" (e.g., active scholarship) of its faculty, and the need for such a program in southern Ontario to fill a gap in graduate training opportunities in Indigenous Studies. Importantly, they provide insightful recommendations that will help ensure its success while meeting the needs of Indigenous learners, and stress the need for continued investment by McMaster in this vital area of scholarship and training.

The Department of Indigenous Studies (ISD) has already responded to a number of the reviewers' recommendations (see its response) for which it can act unilaterally, and provided a timeline for responding to others, some of which can happen only after the program is operational. Other recommendations, of course, require action by either the Faculty, the University or both. I focus my response on those recommendations.

1. Faculty recruitment (#1). The ISD is undertaking the recruitment of a new junior Indigenous faculty member this year, with an expected start date of July 1, 2024. The University has further committed to an Indigenous cluster hire across all Faculties at McMaster (including Social Sciences) over the next few years, with an expectation of 10-12 additional Indigenous faculty at McMaster. Even when the primary appointment is in another Faculty, many of

these new hires will seek to participate in and contribute to a graduate program in Indigenous Studies. The commitment of the University to this cluster hire, therefore, will address this critical recommendation and ensure sufficient staffing to mount a high-quality graduate program without detracting from the ISD's undergraduate program, which is also growing at this time.

2. Participation of Indigenous Elders/Knowledge Keepers serve as graduate committee members (#3).   The Faculty of Social Science is happy to support this recommendation and will work with the ISD to advance this recommendation with the School of Graduate Studies.

3. Elder/Knowledge Keeper Honorariums (#4). The University, through the Joint Indigenous and Administrative Consultative Group (JIACG), has already begun a project involving research finance, central university finance, and other stakeholders to clarify the processes pertaining to reimbursing Indigenous community members who contribute to educational, research, and other types of activities. This project includes the development of guidelines for compensation of Elders/Knowledge Keepers.

4. Alternative Forms of Student Support and Program Delivery (#9). Many students in this program will be at different life stages and circumstances than is typical for graduate programs. This recommendation highlights the need to think creatively about how to support the full engagement and participation of all students. Some approaches, such as alternative course delivery options, are relatively straightforward; other, such as childcare and transportation will require more creativity and coordination with other units on campus (e.g., the McMaster Children's Centre, which provides on-campus day care). Many of these needs are not unique to graduate students; they are also present for undergraduate Indigenous students; this may present opportunities for joint efforts that can advance both groups of learners. The Faculty, University, and units such as Indigenous Student Services already work to address these types of challenges for Indigenous learners and will extend this work to issues unique to Indigenous graduate students.

5. Invest in Indigenous Community Engagement Activities to Ensure Support for Projects (#6) and Funding to Support Community Research Projects (#11).   These recommendations address both sides of what will be necessary to ensure the success of the community-engaged focus of the program: community organizations and settings willing and eager to work with program faculty and students, and support for students to be able to undertake such work. This will require coordinated efforts by ISD faculty, the Faculty of Social Sciences, the School of Graduate Studies, and University Advancement. ISD faculty bring community relationships and expertise in community-engaged research and teaching and research funding that can support students in their projects; the Faculty of Social Science

and the School of Graduate Studies are the primary funders of graduate education that can support innovative approaches to marshalling necessary resources; and University Advancement can secure external funding to support such community-engaged training. The ISD can also learn from other graduate programs in Social Sciences, such as Anthropology and Social Work, that have successfully integrated community-based learning and field schools into their training.

McMaster University | SCHOOL OF GRADUATE STUDIES

Gilmour Hall, Room 212
1280 Main Street West
Hamilton, ON L8S 4L8

(905) 525-9140 x 23679
gs.mcmaster.ca

To   :   Graduate Council

From   :   Christina Bryce
               Assistant Graduate Secretary
_____

At its meeting on October 16th the Faculty of Business Graduate Curriculum and Policy Committee approved the following graduate curriculum recommendations.

Please note that these recommendations were approved by the Faculty of Business.

For Approval of Graduate Council:

    a. **EMBA**
        i. **Change to Course Requirements**

    b. **MBA**
        i. **Year 1 Redesign**
        ii. **Change to Admission Requirements**

    c. **Business Ph.D. – Management Sciences**
        i. **Change to Course Requirements and Comprehensive Examination Requirements**

For Information of Graduate Council:

    d. **EMBA**
        i. **New Courses**
            1. T715 Accounting for Decision Making
            2. T724 Finance for Decision Making
        ii. **Course Cancellation**
            1. T714 Accounting/Finance for Decision Making

    e. **Business Ph.D. – Management Sciences**
        i. **Change to Requisites**
            1. Q771 Stochastic Processes with Business Applications
            2. Q772 Networks and Graphs in Operations Research
            3. Q773 Mathematical Programming: Theory and Algorithm
            4. Q774 Combinatorial Optimization: Complexity and Heuristics
            5. Q775 Optimization and Machine Learning with Big Data
            6. Q778 Selected Topics in Management Science/Systems

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7. Q782 Dynamic Programming and Optimal Control
8. Q783 Game Theory and Decision Analysis
9. Q784 Supply Chain Design and Coordination
10. Q786 Network Design Issues in Freight Transportation
11. Q787 Optimization Under Uncertainty
12. Q793 Sequencing and Scheduling
13. Q794 Inventory Theory

   ii. **Change to Requisite and Course Description**
       1. Q785 Queuing Theory and Computer Simulation
  iii. **Change to Course Description**
       1. Q780 Management Science Research Issues I
   iv. **Course Cancellation**
       1. Q781 Management Science Research Issues II

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Recommendation for Change in Graduate Curriculum – For Change(s) Involving Degree Program Requirements / Procedures / Milestones

<table>
<tr><td colspan="2" align="center">**Please read the following notes before completing this form:**</td></tr>
<tr><td colspan="2">

1. This form must be completed for all changes involving degree program requirements/procedures. All sections of this form must be completed.

2. An electronic version of this form (must be in MS WORD not PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca).

3. A representative from the department is **required to attend** the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.
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DEPARTMENT	DeGroote School of Business
NAME OF PROGRAM and PLAN	EMBA, plan to split the 6-unit T714 course into two 3-unit courses.

DEGREE	EMBA

NATURE OF RECOMMENDATION *(PLEASE CHECK APPROPRIATE BOX)*
Is this change a result of an IQAP review? ☐ Yes ☒ No
Creation of a New Milestone ☒

Change in Admission Requirements	no	Change in Comprehensive Examination Procedure	no	Change in Course/Program Requirements	
Change in the Description of a section of the Graduate Calendar	yes	**EXPLAIN:** Currently T714 is a 6-unit course where Accounting and Finance are taught together. Students find the workload too heavy as a joint offering, and faculty require more time in-residence to cover content, which will be provided by separating the 2 courses. The plan is to have Accounting taught in Module (Semester) 1 and Finance taught in Module (Semester) 2.			
Other Changes:					

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Describe the existing requirement/procedure:

EMBA program requirements include course coverage of both accounting and finance in a 6-unit course called Accounting/Finance for Decision Making (Business T714). This requirement is being maintained with the current proposal, which is simply to separate the courses, such that Accounting for Decision Making is offered in module (semester) 1 and Finance for Decision Making is offered in module (semester) 2. Each remains three-credit courses.

Provide a detailed description of the Recommended Change *(Attach additional pages if space is not sufficient.)*

Please see above.

Rationale for the Recommended Change (How does the requirement fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review?):

By separating Accounting from Finance, this will enable broader and deeper coverage of the content of each course, thereby strengthening and enriching their contributions to achievement of program learning outcomes.

Provide implementation date: *(Implementation date should be at the beginning of the academic year)*

Implementation is proposed for July 2024, EMBA cohort #9.

Are there any other details of the recommended change that the curriculum and policy committee should be aware of? If yes, please explain:

No further details.

Provide a description of the recommended change to be included in the calendar (please include a tracked changes version of the calendar section affected if applicable): Proposed calendar descriptions.

Accounting for Decision Making T715: This course provides an in-depth understanding of financial accounting fundamentals to guide decision making. The course is preceded by pre-work through a self-study module (from HBR) to provide students with the requisite knowledge of bookkeeping (i.e., debits/credits/balance sheet/income statement/cash flow statement preparation). The HBR module is supplemented with a series of on-line interactive sessions to address the more difficult concepts and to dig deeper into the application of

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accounting to real-life business scenarios. By the end of the in-class residency, students will have understood the process of preparing and interpreting financial statements, applied this knowledge to several in-class cases, and built the requisite knowledge/experience to work effectively with the accounting/finance personnel in their daily work environments.

Finance for Decision Making T724: You will learn several conceptual frameworks that support critical decisions in finance in today's digital information context. You will also learn how financial statements and financial markets function as well as how firm value is created and destroyed. We also take a close look at the multi-dimensional nature of risk management and evaluate the limits of using debt. Pre-work through the Coursera's MOOC "Finance for Everyone" provides you with a foundation for learning during pre-residency and in-class sessions as well as a focus on foundational topics.

These two courses replace Accounting/Finance for Decision Making T714: This course presents a conceptual framework to guide critical decisions in accounting and finance. Core concepts are applied through the extensive use of problems and cases. This course is preceded by pre-work through self-study modules in accounting (from HBR) and in finance (McMaster developed Open Online Course). Highlights will be reviewed in class through discussion and analysis of integrated accounting/finance cases. By the end of the course, students will have understood the process of preparing and interpreting financial statements; learned to price equities, fixed income securities, and derivatives and how these impact financial markets; assess investment opportunities; recognize the multi-dimensional nature of risk-management; evaluate financing decisions including capital structure and cash distribution strategies and grasp how firm value is created and destroyed.

Contact information for the recommended change:

Name: Rick Hackett Email: hackett@mcmaster.ca Date submitted: October 6, 2023

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, cbryce@mcmaster.ca

DeGroote MBA Redesign – Year 1 Curriculum Proposal
Fall 2023

Background & Rationale

The DeGroote School of Business offers a suite of MBA program offerings – (1) MBA with Co-op; (2) Full Time MBA; (3) Accelerated MBA; (4) Blended Learning Part-Time MBA; and (5) Executive MBA. This proposal is making recommendations for Year 1 curriculum changes of the first two offerings only (MBA with Co-op and Full Time MBA)[1]. The MBA with Co-op program is Canada's largest Co-op MBA, allowing students to gain work experience by alternating 4-month academic and 4-month co-op employment. It is a 28-month program that allows recent graduates with minimal work experience to gain professional experience and offset costs while completing the MBA. The Full Time MBA is a 20-month program that combines 16 months of full-time study with a summer break between first and second year where students can pursue a summer internship. The program is intended for students that have a minimum of one year of full-time continuous work experience.

The first year of the MBA program (Co-op and Full Time) was redesigned in 2016 to provide a more integrated, interdisciplinary and experiential learning experience for students. Although this 2016 redesign brought the opportunity for greater integration across disciplines, this integration has not worked as well as was hoped. The 2019 Institutional Quality Assurance Process (IQAP) Reviewers' Report highlighted that the integrated courses must be re-evaluated.   As noted in their report: "The integrated curriculum not entirely successful. The original intention was probably good, but implementation is weak. Integrated courses are not really integrated or designed specifically for the program, and as currently designed they place undue stress on faculty and students. There may be too much material offered back to back in an inflexible environment offering too little time for reflection and preparation". Further, the report recognizes the differences among students in the Co-op offering and the Full Time offering and that consideration should be given to having appropriate separate core courses for these programs.

Multiple points of evidence (student town halls; course and program evaluations; faculty and staff forums; employer feedback; alumni feedback; etc) have confirmed the findings of the 2019 IQAP Reviewers' Report with the following conclusions: (1) the condensed nature of the current Year 1 MBA courses is highly stressful for both students and instructors; (2) core content is not being effectively absorbed and applied; (3) intended integration across disciplines is sporadic, at best; (4) students do not feel prepared for their work terms (Co-op stream) and post-graduate job placement success (Full Time stream); and (5) there is a need to further develop critical core skills (communication, critical thinking, leadership, etc.). Additionally, Full Time students feel less valued than Co-op students due to many additional resources being allocated to the latter group to facilitate their finding of employment positions every four months (which Co-op students pay for through their additional fees). Further, Full Time students share courses with Co-op students despite having more work experience upon admission (>3 years on average). These courses are

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[1] Reference to "MBA program" in the remainder of this document only refers to MBA with Co-op and Full Time MBA. It excludes the Accelerated MBA, Blended Learning Part-Time MBA and Executive MBA

oriented towards the less experienced Co-op students, which furthers the marginalized second choice perception of our Full Time students.

Coupled with the above concerns of the current first year MBA curriculum, the MBA education landscape is shifting to meet evolving stakeholder expectations. MBA programs should provide content, develop skills and nurture mindsets to meet changing needs of organizations and higher-order needs of global challenges. These include creativity, empathy, leadership, crisis management, strategic thinking, understanding technological progress and disruption and dynamic decision making[2]. These shifting expectations and needs necessitate periodic re-evaluation of our curriculum offerings to ensure our graduates are able to provide value, inspiration and influence in this evolving business landscape.

This proposal calls for an overhaul of the first year curriculum of our MBA program. This redesign will address student and instructor concerns of the current curriculum and will better prepare our students to meet current and future business and societal needs. The proposed curriculum will also align with the new DSB Strategic Plan (2023 – 2028) and with the University's student-centered, evidence-based approach.

Process
Stemming from the 2019 IQAP Reviewers' Report and extensive comments and feedback from students, alumni, faculty, staff and employers, the Dean's Office initiated an MBA redesign process. A consulting company (The Strategic Council) was engaged to provide an internal and external MBA review (2021-2022). Following this review, an ad hoc MBA Redesign Committee was struck (June 2022) that had faculty representation from each Area of the School as well as staff representation. The composition and mandate of the MBA Redesign Committee is provided in Appendix A.

The MBA Redesign Committee worked in a highly consultative and collaborate way over the next year. Consultations included the following stakeholder groups: (1) current DSB MBA students; (2) DSB MBA alumni; (3) DSB faculty; (4) DSB staff; (5) DSB Advisory Council; (6) DSB current employers; (7) aspirational employers; (8) industry representatives; (9) external business school faculty; and (10) external business school students. In sum, consultations included:
- 18 interviews with DSB faculty and staff
- 34 interviews with current students and alumni
- 15 interviews with employers and industry representatives
- 260 online surveys completed to gather current state impressions
- 8 comparator programs analyzed
- 3 design thinking workshops
- 4 town hall events with DSB faculty and staff
- 55 online surveys completed by DSB faculty and staff on various proposed redesign models
- 140 surveys completed by hiring managers on various proposed redesign models
- 9 meetings with Area and staff groups to review proposed redesign models

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[2] https://hbr.org/2021/11/mba-programs-need-an-update-for-the-digital-era

The proposal outlined in this document culminated from the extensive evidence gathered through the above consultations. This proposal was presented at the May 25th, 2023, Faculty of Business (FOB) meeting for information and feedback. Members of this FOB meeting initiated a vote to approve the proposal in principle as an indicator of confidence in this redesign. The vote was unanimously in support of this proposed redesign.

Description of Program Requirements Changes

The scope of this proposal is the first year curriculum of the Co-op and Full Time MBA program. The MBA Redesign Committee recommends the second year of the MBA program be revisited in a future proposal so that it better aligns with the goals outlined in the DSB Strategic Plan.

The Accelerated MBA program will remain unchanged where students with prior business experience who have met our admission requirements will continue to be accepted into Year 2 of the program.

Any changes to admission requirements or consideration of granting transfer credits and waivers will be presented for appropriate approvals in separate proposals.

Description of Current and Proposed Year 1 Curriculum

The **current MBA year 1 curriculum** begins with Foundations 1 (L611) that focuses on the development of critical thinking, teamwork, and communication skills. L611 spans 2 weeks at the beginning of the first academic term (AT 1) and continues part way though the term for a mandatory live case competition. Following the first two weeks of L611, AT 1 has five required core courses that were constructed to integrate content and concept across disciplines (I-courses). These I-courses have 4 contact hours per week (2 x 2-hour classes) for 10 weeks and are co-taught by instructors from two different Areas (typically, each teaching 5 consecutive weeks). The second academic term (AT 2) begins with Foundations 2 (L624/L625), which continues the professional skills development from L611. Following Foundations 2, each student completes 2 required courses (A650 Accounting and F650 Corporate Finance) and 3 out of 5 core electives. AT 2 ends with an Integrated Project course (L626) where students complete a consulting project that aims to synthesize the skills learned throughout the first year.

The **proposed MBA year 1 curriculum** will have 5 full term (12 or 13 weeks, depending on the calendar year) courses with 3 contact hours per week (1 x 3-hour class) in each of AT 1 and AT 2. These courses will be taught by instructors that have been carefully selected by the MBA Director, Area Chairs, AD Faculty Affairs & Accreditation, and AD Graduate Studies. These instructors will work closely together as a team to develop highly integrated components across courses (e.g. common cases, assignments and other assessments). To better prepare Co-op students for their first work term, they will have some flexibility in the sequencing of their core courses between AT 1 and AT 2. To better prepare Full Time students for job placement success and to leverage their prior work experiences, a 2-term industry consulting project will be introduced in AT 1 and AT 2. Alongside the core courses (for both Co-op and Full Time steams), student will take a 1.5 unit Core Skills 1 course (focused on teaming, communication and case analysis skills) in AT 1 and a 1.5 unit Core Skills 2 course (focused on strategy tools) in AT 2. The table below compares the current and proposed year 1 curriculum for Co-op and Full Time MBA students.

Co-op MBA Stream		
	Current Year 1 Curriculum **36 Units (33 Graded; 3 P/F)**	**Proposed Year 1 Curriculum[3]** **33 Units (33 Graded)**
AT 1	L611 Foundations 1 [3] I601 Managing Financial Resources [3] I602 Economics & Business Statistics [3] I603 Digital Transformation & Analytics [3] I604 Creating Customer Value [3] I605 Managing Organizations [3]	Core Skills 1 [1.5] Economics/Finance [3] Business Analytics [3] Accounting [3] Organizational Behaviour [3] One of the following: Marketing [3] Digital Transformation [3] Health and Society [3]
AT 2	L624/625 Foundations 2 [1.5 P/F] A650 Accounting for Decision Makers [3] F650 Firms and Markets [3] L626 Integrated Project [1.5 P/F] Three from the following: M650 Strategic Marketing Management [3] B650 Managing People in Organizations [3] C650 Intro to Health Services Mgmt. [3] K650 Info. Systems in Business [3] O650 Operations Management [3]	Core Skills 2 [1.5] Corporate Finance [3] Operations Management [3] Remaining 2 from the following: Marketing [3] Digital Transformation [3] Health and Society [3] One of the following (project based): Entrepreneurship / Innovation [3] Sustainability Management [3]
Full Time MBA Stream		
	Current Year 1 Curriculum **36 Units (33 Graded; 3 P/F)**	**Proposed Year 1 Curriculum[3]** **33 Units (33 Graded)**
AT 1	L611 Foundations 1 [3] I601 Managing Financial Resources [3] I602 Economics & Business Statistics [3] I603 Digital Transformation & Analytics [3] I604 Creating Customer Value [3] I605 Managing Organizations [3]	Core Skills 1 [1.5] Economics/Finance [3] Business Analytics [3] Accounting [3] Organizational Behaviour [3] Industry Consulting Project A [3]
AT 2	L624/625 Foundations 2 [1.5 P/F] A650 Accounting for Decision Makers [3] F650 Firms and Markets [3] L626 Integrated Project [1.5 P/F] Three from the following: M650 Strategic Marketing Management [3] B650 Managing People in Organizations [3] C650 Intro to Health Services Mgmt. [3] K650 Info. Systems in Business [3] O650 Operations Management [3]	Core Skills 2 [1.5] Corporate Finance [3] Operations Management [3] Marketing [3] Digital Transformation [3] Industry Consulting Project B [3]

[3] Course names to be finalized and content to be developed by respective Areas for approval

Addressing Current Issues/Concerns

The proposed changes to the first year curriculum of the MBA program will address the aforementioned concerns as follows:

	Concern	How addressed in this proposal
1	The condensed nature of the current Year 1 MBA courses is highly stressful for both students and instructors	Full-term courses will allow students and instructors to more effectively engage with and deliver content with experiential application.
2	Core content is not being effectively absorbed and applied	Full-term courses and fewer hours of classes per week (3 hours per week for proposed core courses versus 4 hours per week for current I-courses) will allow for more white space to reflect, prepare and absorb material. There is also more time to effectively integrate applied experiential activities and deliverables.
3	Intended integration across disciplines is sporadic, at best	Instructors of core courses will be carefully selected by the MBA Director and Area Chairs. These instructors will work closely together as a team to develop highly integrated components across courses (e.g. common cases, assignments and other assessments).
4	Students do not feel prepared for their work terms (Co-op stream) and post-graduate job placement success (Full Time stream)	Tailored offerings (flexibility among core courses in AT 1) for Co-op students before their first work term will enhance their preparedness. Full time students will be better prepared for job placement success through the 2-term industry consulting project. Additional white space allows for more time in the schedule to support job placement.
5	There is a need to further develop critical core skills	Core skills running throughout the term (rather than being highly concentrated at the beginning of term) will allow for more effective development, application and practice of these skills.
6	Marginalized second choice perception of our Full Time students	The 2-term industry consulting project will distinguish Full Time students from Co-op students by supporting their job-placement goals and leveraging their prior work experience. This unique offering for Full Time students will help to diminish current negative comparative perceptions.

What will Remain the Same

The learning goals of the MBA program (provided in Appendix B) will remain the same. The proposed changes will help to strengthen the achievement of these goals through the integration of core business knowledge with a collaborative core instructor team.

The one-week pre-MBA for international students and the onboarding/transition week for incoming MBA students will remain similar to the current format (offered during the last week of August and the first week of September). However new topics may be covered during these orientation sessions to align with goals outlined in the new DSB Strategic Plan.

As outlined above, the second year of the MBA program will remain unchanged at this time, but the MBA Redesign Committee recommends revisiting the second year in a future proposal so that it better aligns with the goals outlined in the DSB Strategic Plan. In particular, the MBA Redesign Committee recommends redesigning the second year for the Full Time program to create a unique and distinct program from the Co-op stream that focuses on the priorities of the new Strategic Plan (digital transformation, entrepreneurship, health innovation, sustainability).

Transitional Arrangement for Current Students

Pending finalization of approvals, we anticipate the new curriculum will be in place for Fall 2024 incoming MBA students. Given that there are no part-time students taking the current curriculum (for Co-op and Full Time streams), there is no need to grandfather this curriculum to allow current students to complete current program requirement. If there are any current students that require a remaining first year MBA course (due to having to repeat a course or any other exceptional circumstances), they will be dealt with on a case-by-case basis to ensure they can meet program requirements.

Conclusion

In conclusion, the proposed curriculum changes to the first year of the MBA program will address many of the concerns raised by the IQAP reviewers and key stakeholders. The proposal will allow for more effective content delivery, time to reflect and better absorb material, integrate applied experiential activities and deliverables, and better prepare students for success in their work terms and job placement. It will also better serve the expectations and needs of Full Time students by supporting their job-placement goals and leveraging their prior work experience. The development of a meaningful experiential and integrated curriculum depends on the core instructors working closely together as a team and empowering the MBA Program Director to ensure success (as strongly recommended in the two previous IQAP Reviewers' Reports). With these changes, DeGroote MBA graduates will be better empowered to contribute to positive change in business and society.

The Program Development Committee adds the following note to this proposal:
The lack of a dedicated Health offering in Term 1 and Term 2 of the Full Time model will impact Full Time program enrollment in the Health Electives. The scope of the impact is unknown at this time. Should the Co-op student enrollment not provide adequate enrollment in the Health-area electives, we recognize that Health-area electives may need to run at less than optimum enrollment levels to meet our commitment to students.

Appendix A
MBA Redesign Committee

The MBA Redesign Team was comprised of faculty and staff members, including:

One faculty member representing each Area:
- Milena Head, Chair (IS)*
- Aadil Merali Juma (AFMS)
- Will Huggins (FBE)
- Manaf Zargoush (HPM)
- Vishwanath Baba (HRM)
- Mandeep Malik (M)
- Manish Verma (OM)
- Candice Chow (SM)

Staff member (voting):
- Chris Longtin (Manager, MBA Programs)

Project strategist (non-voting):
- Karleen Dudeck (Manager, Strategic Initiatives)

* Milena Head was elected as Chair by and from the members of the MBA Redesign Committee through a silent vote following the first meeting.

The mandate for the Committee was to reimagine an MBA flagship program for the DeGroote School of Business that (1) delivers a transformative, personalized experience for students; (2) is a source of pride for the School and its stakeholders; (3) is an exemplar of the values and vision of DSB and McMaster; and (4) is sustainable.

Appendix B
MBA Learning Goals

Learning Goal 1: Students will be critical thinkers & evidenced-based decision-makers.

Learning Goal 2: Students will be able to apply an ethical framework in managerial decision making.

Learning Goal 3: Students will work collaboratively in team projects.

Learning Goal 4: Students will integrate knowledge across multiple business disciplines.

Learning Goal 5: Students will seek to create shared values for various stakeholders.

Learning Goal 6*: Students will acquire foundational knowledge in the major fields of Business

* Learning goal 6 was added by committee approval in the spring of 2021.

Appendix C

The following document outlines IQAP program learning outcomes, as well as AACSB Assurance of Learning goals. The changes to the first year of the MBA program <u>do not</u> change these goals or outcomes. The MBA program still evaluates itself against these goals and outcomes.

Introduction to AACSB & Assurance of Learning

The Association to Advance Collegiate Schools of Business (AACSB) is an external accreditation that sets rigorous accreditation standards for business education programs, demanding a commitment to quality and continuous improvement. Assurance of Learning (APL) is the process by which institutions, guided by AACSB standards, systematically assess and enhance their programs by defining specific learning outcomes, creating assessment plans, gathering and analyzing data, and using these insights to make informed improvements. Key expectations of the AOL process include the clear definition of learning objectives, the establishment of robust assessment methods, the collection of performance data, and the ongoing cycle of evaluation and refinement to ensure the delivery of high-quality education.

History of DeGroote Assurance of Learning

The history of DeGroote's Assurance of Learning (AOL) program has been an ongoing process of continuous improvement and adaptation since its accreditation by AACSB in 2006. Initially, Program Learning Outcomes/ AOL Learning Goals were established in 2005. Since then, regular reviews have taken place to ensure that the program learning outcomes/goals align with the skills and competencies relevant for graduate success. DeGroote has consistently refined these objectives to keep them current with the evolving business landscape, program changes, DeGroote's commitment to experiential learning, and evidence-based teaching methods, and alignment with DeGroote's strategic plans.

Systematic reviews of Program Learning Outcomes for all DeGroote's programs occurred in 2007-08, 2014-15, and 2019-20, with the most recent review beginning in 2022. Program directors, program Teams, faculty, and DeGroote program Committees for Quality Improvement (CQI) have been actively involved in these reviews, ensuring that learning outcomes remain relevant. In 2019, the learning outcomes were further enhanced by adding the assessment of "direct" and "indirect" student learning, consistent with the expectations required for AACSB Accreditation.

"Direct" assessment focuses on evaluating student learning in the classroom, while "indirect" assessment involves methods like surveys, focus groups, individual conversations, and external testing. DeGroote's 2019 review encompassed a more comprehensive AOL process, including the revision of learning outcomes and the creation of assessment rubrics to measure in-course learning. Faculty and instructors conduct annual assessments of in-class student learning, with feedback from faculty used to refine learning outcomes and address any overlap/gaps in assessment rubrics.

While the descriptions of the learning outcomes were updated in 2019-20, the core objectives of the program have remained consistent, reflecting a commitment to continuous improvement and alignment with evolving educational standards and practices.

PLO	2018-19 MBA IQAP Report Program Learning Outcomes	AACSB Assurance of Learning (AOL) Program Goals	AOL Assessment Metrics (from Program Goal Rubrics) for in-class Assessment	Courses Identified for In-Course Assessment (Assessed W2022/F2022)
1.	*Upon graduation, our students will have a comprehensive and integrated understanding of the various business disciplines*			
	• Competence and understanding of business disciplines and concepts is assessed in exams, assignments, cases, case competitions, and group projects • Ability to integrate various business disciplines to provide professional quality advice on current business issues is assessed through case competitions, Pitching in for Charity, the Integrating Project, and course-based projects	**Learning Goal 4: Students will integrate knowledge across multiple business disciplines.** Learning Objective: Students will be able to reconcile and integrate the perspectives of different stakeholders when making business decisions.	A. Student articulates challenges from the perspectives of stakeholders from diverse business disciplines. B. Student understands the potential contributions of stakeholders from diverse business disciplines toward resolving challenges. C. Student resolves challenges integrating the perspective of stakeholders from diverse business disciplines.	P720
	• Students' understanding of how business theories are applied in a business context is demonstrated through cases, case competitions, and group projects, notably Pitching in for Charity and the Integrating Project, as well as in Co-op Placements and Internships	**Learning Goal 5: Students will seek to create shared value for stakeholders.** Learning Objective: Students will be able to balance social, ethical, and environmental concerns with organizational objectives to create shared value for all stakeholders.	A. Student articulates the social, financial, and environmental impacts and initiatives of organizations and their initiatives. B. Student identifies activities through which organizations can improve contributions to society and the environment while creating business value. C. Student evaluates possible consequences of each activity. D. Student articulates why a chosen activity is preferred.	P700
		Learning Goal 1: Students will be critical thinkers & evidenced-based decision makers. Learning Objective: Students will demonstrate ability to approach problems in a critical and thoughtful way, extracting appropriate conclusions and making appropriate decisions.	A. Student accurately identifies and articulates business questions or problems. B. Student appropriately applies quantitative and qualitative analytic tools. C. Student effectively identifies the validity and relevance of data. D. Student identifies and defends appropriate course of action based on evidence. E. Student develops integrated and comprehensive business solutions that create value.	F701

			F. Student identifies possible risks and contingencies for business solutions.	
2.	*Upon graduation, our students will be effective communicators*			
	• Communication skills (written and oral) are carefully examined for all MBA applicants as they are critical for success in the program and beyond - all applicants must write a GMAT and achieve a minimum verbal score of 28 and, in addition, international applicants must achieve a score of 7 or higher on IELTS or 100 or greater on TOEFL	**Learning Goal 1: Students will be critical thinkers & evidenced-based decision makers.**	D. Student identifies and defends appropriate course of action based on evidence. **MBA Graduating Student Survey** DeGroote annually surveys graduating MBA students to solicit feedback in a number of areas. Graduating students provide feedback on their confidence in specific skills and competencies. They also provide feedback on the impact of the program on developing these competencies, including **Oral and Written Communication**. This feedback is then shared with the Program Director and the MBA team and used in subsequent program discussions regarding curriculum.	
	• As part of the application process, all students are required to submit a written essay, which is assessed by the MBA admissions team. Students must also submit 2 letters of reference where the referees are directly asked to assess the applicant's oral and written communication skills			
	• Students' written skills are assessed in the program through written assignments, essays, and reports	**Learning Goal 3: Students will work collaboratively in team projects**	A. Student communicates clearly and effectively with other team members.	K731
	• Students' verbal skills are evaluated in individual and group presentations as well as in presentation skills workshops during Foundations 1 and 2			
3.	*Upon graduation, our students will have a global perspective*			
		Learning Goal 4: Students will integrate knowledge across multiple business disciplines	A. Student articulates challenges from the perspectives of stakeholders from diverse business disciplines.	P720

		Learning Objective: Students will be able to reconcile and integrate the perspectives of different stakeholders when making business decisions.	B. Student understands the potential contributions of stakeholders from diverse business disciplines toward resolving challenges. C. Student resolves challenges integrating the perspective of stakeholders from diverse business disciplines.	
	• The proportion of international students in our MBA programs has increased 22% in 2015 to 46% in 2018. In 2015, 51% of international students came from China, 36% came from India, and 13% came from elsewhere. In 2018, 65% of international students came from India, 31% came from China, and 4% came from elsewhere (see Appendix 7). We are making efforts to recruit more broadly (beyond India and China) to increase the diversity of our student body.		**MBA Graduating Student Survey** DeGroote annually surveys graduating MBA students to solicit feedback in a number of areas. Graduating students provide feedback on their confidence in specific skills and competencies. They also provide feedback on the impact of the program on developing these competencies, including **Global Understanding**. This feedback is then shared with the Program Director and the MBA team and used in subsequent program discussions regarding curriculum.	
	• International student target numbers are set annually to enhance global diversity in the classrooms - international students bring a diversity of backgrounds and experiences to class discussions			
	• Ability to work effectively in multicultural teams is assessed and developed in a workshop in Foundations 2	**Learning Goal 3: Students will work collaboratively in team projects**	B. Student works with team members to help identify members' strengths and to effectively allocate roles and tasks.	K731
	• Students' understanding of current global business practices are assessed in exams and assignments in various courses that include global dynamics and perspectives, including the course "Business, Government and the Global Environment" where a considerable component of the course is devoted to business in a global environment.	**Learning Goal 5: Students will seek to create shared value for stakeholders**	A. Student articulates the social, financial, and environmental impacts and initiatives of organizations and their initiatives. B. Student identifies activities through which organizations can improve contributions to society and the environment while creating business value. C. Student evaluates possible consequences of each activity.	P700

			D. Student articulates why a chosen activity is preferred	
4.	*Upon graduation, our students will understand the importance of behaving ethically in their professional lives*			
	• At the point of admission to the program, referees are directly asked to assess the applicant's integrity			
	• Co-op applicants must also pass an interview for admissions where ethical understanding and behavior are assessed			
	• All MBA students attend ethics workshops in Foundations 1 and 2			
	• Ethical issues are discussed in various classes and relevant questions included in examinations or considered in assignments	**Learning Goal 2: Students will be able to apply an ethical framework in managerial decision making.** Learning Objective: Students will be able to identify ethical dilemmas and apply them to ethical decision making in managerial decisions.	A. Student accurately identifies and frames ethical dilemmas and tensions in business decisions. B. Student identifies possible actions or responses to ethical dilemmas. C. Student evaluates possible consequences of each decision or response. D. Student articulates why a chosen approach or response is preferred.	B712
	• Students are required to identify and resolve ethical issues in cases and case competitions			
	• Students' ethical behaviour is a component of their evaluation in classes and in Co-op placements or Internships			
5.	*Upon graduation, our students will demonstrate leadership and team skills*			
	• Co-op applicants must pass a behavior-based admission interview where leadership and team skills are assessed			
	• Non Co-op applicants require a minimum of one year of full time,			

	continuous professional, managerial or technical work experience. This work experience is carefully assessed by the admissions team to evaluate leadership, teamwork, accountability, project management and people skills			
	• Leadership skills are assessed and developed in workshops during Foundations 1 and 2 and further assessed in team projects and case competitions as well as involvement in MBA student activities, clubs, and government		**MBA Graduating Student Survey** DeGroote annually surveys graduating MBA students to solicit feedback in a number of areas. Graduating students provide feedback on their confidence in specific skills and competencies. They also provide feedback on the impact of the program on developing these competencies, including **Collaboration/Teamwork and Leadership**. This feedback is then shared with the Program Director and the MBA team and used in subsequent program discussions regarding curriculum	
	• Team skills are assessed and developed in workshops during Foundations 1 and 2, as well as in team assignments and projects, case competitions, and in the Integrating Project	**Learning Goal 3: Students will work collaboratively in team projects.** Learning Objective: Students will be able to work effectively with team members to satisfactorily accomplish team projects.	A. Student works with team members to plan objectives and deliverables as well as timelines and benchmarks. B. Student works with team members to help identify members' strengths and to effectively allocate roles and tasks. C. Student communicates clearly and effectively with other team members. D. Student understands how to effectively resolve disagreements and conflicts in the team.	K731
6.	*Upon graduation, our students will be able to build networks to enhance their learning and professional opportunities*			
	• Networking skills are not directly assessed. However, all MBA students must attend a networking workshop and several networking events		**The MBA Graduating Student Survey** • The Survey solicits student feedback on importance of and satisfaction with Career and Professional Development Programming, including networking events (external networking	
	• Industry speakers are invited to make presentations or lead case discussions in class. These speakers provide students with an applied perspective as			

	well as an opportunity to build their professional networks.		• Solicits feedback on strength of peer-to-peer and faculty-student relationships (internal networking)
	• Effectiveness in networking is indirectly evident in invitations for employment interviews and job search success among our students		• Students also provide feedback on the impact of the program on developing these competencies, including **Building Networks**. This information is reviewed by Student Experience and the MBA Program team annually and changes are made to improve the student learning experience.	

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Recommendation for Change in Graduate Curriculum – For Change(s) Involving Degree Program Requirements / Procedures / Milestones

Please read the following notes before completing this form:
1. This form must be completed for all changes involving degree program requirements/procedures. All sections of this form must be completed.
2. An electronic version of this form (must be in MS WORD not PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca).
3. A representative from the department is **required to attend** the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

DEPARTMENT	DeGroote School of Business
NAME OF PROGRAM and PLAN	Business Administration, Accelerated MBA
DEGREE	

NATURE OF RECOMMENDATION *(PLEASE CHECK APPROPRIATE BOX)*					
Is this change a result of an IQAP review? ☐ Yes ☒ No					
Creation of a New Milestone ☐					
Change in Admission Requirements	X	**Change in Comprehensive Examination Procedure**		**Change in Course/Program Requirements**	
Change in the Description of a section of the Graduate Calendar		X	**Incorporation of the McMaster Bachelor of Technology Program (B.Tech) as an accepted degree for admissions to the Accelerated MBA program.**		
Other Changes:		**Explain:**			

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Describe the existing requirement/procedure:

Admission Requirements

- **Degree**: Completion within the last 10 years of a Bachelor of Commerce or Bachelor of Business Administration from a recognized Canadian or American University. Candidates that have completed the following degrees may also apply:
    - McMaster University:
        - Bachelor of Engineering Management
        - Bachelor of Commerce, Integrated Business and Humanities (IBH)
    - Western University
        - Bachelor of Management and Organizational Studies
- **GPA**: Recommended B average (equivalent to a McMaster 8.0 GPA out of 12) or higher. GPA will be calculated using the two most recent years of undergraduate or graduate study, 20 courses, or the equivalent of 60 academic credits. A combination may be used and is determined on a case-by-case basis.
- **GMAT**: Not required. Candidates who fail to meet the above GPA criteria or who wish to strengthen their academic application may wish to submit a GMAT.
- **Proof of English Language Proficiency**: Required for applicants:
    - Whose previous degree was not completed with the language of instruction of English.
    - Who have been resident in an English-speaking country for less than four years.
    - Who have completed less than three years of full-time post-secondary education with English as the primary language of instruction, excluding ESL courses.
- **Acceptable English Language Proficiency Tests**:
    - Academic IELTS
    - TOEFL
- **Work Experience**:
    - Recommended minimum of 1 year work experience for McMaster Bachelor of Commerce, Bachelor of Engineering and Management, Bachelor of Commerce, IBH Graduates (undergraduate co-op or internship placements adding up to 12 months of work or more from these degrees will be considered if they are noted on official transcripts).
    - 2 years post-graduate work experience for all other programs.
- **References**: Applicants are encouraged to seek two professional (current or former direct supervisor or manger) references. Academic reference can be submitted if two professional are not available.
- **Interview**: Applicants are required to complete an online interview prior to submission of their application.

Please note: meeting minimum admission requirements does not guarantee acceptance into the program.

Provide a detailed description of the Recommended Change *(Attach additional pages if space is not sufficient.)*

The McMaster Bachelor of Technology Program has worked to amend their curriculum to provide graduates with a greater understanding of the foundational areas of business. This work has allowed the degree to reach a point where students are able to be assessed for entry into the Accelerated MBA program.

This will only be applicable to the following streams within the BTech Program: Automation Systems Engineering Technology Program (Co-op), Automotive and Vehicle Engineering Technology (Co-op) and Biotechnology (Co-op). These programs are ACBSP Accredited.

The recommended change to the Calendar will allow these students to apply to the Accelerated program for

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September, 2024 admissions.

We are putting forward the following changes (highlighted in yellow):

Admission Requirements

- **Degree**: Completion within the last 10 years of a Bachelor of Commerce or Bachelor of Business Administration from a recognized Canadian or American University. Candidates that have completed the following degrees may also apply:
    - McMaster University:
        - Bachelor of Engineering Management
        - Bachelor of Technology (B.Tech.), specifically the Automation Engineering Technology, Automotive and Vehicle Engineering and Biotechnology streams
            - Graduates from this program will also be required to complete the following 2 courses from McMaster: COMMERCE 2AB3 – Managerial Accounting and COMMERCE 2FB3 – Managerial Finance with a minimum of a B grade.
        - Bachelor of Commerce, Integrated Business and Humanities (IBH)
- **Work Experience**:
    - Recommended minimum of 1 year work experience for McMaster Bachelor of Commerce, Bachelor of Engineering and Management, Bachelor of Technology (B.Tech. – Automation, Automotive and Biotechnology streams as noted above), Bachelor of Commerce, IBH Graduates (undergraduate co-op or internship placements adding up to 12 months of work or more from these degrees will be considered if they are noted on official transcripts).
    - 2 years post-graduate work experience for all other programs.

Please note: meeting minimum admission requirements does not guarantee acceptance into the program.

Rationale for the Recommended Change (How does the requirement fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review?):

The revised wording allows for graduates from the BTech program to apply for the Accelerated stream of the MBA program and recognizes that overlap exists between the BTech curriculum and first year MBA curriculum.

Provide implementation date: *(Implementation date should be at the beginning of the academic year)*

September, 2024

Are there any other details of the recommended change that the curriculum and policy committee should be aware of? If yes, please explain:

Please note that while these graduates are now able to apply for the Accelerated MBA program, their admission will be conditional on the completion of an Accounting and Finance bridge courses. Conditionally accepted applicants will need to complete COMMERCE 2AB3 – Managerial Accounting and COMMERCE 2FB3 – Managerial Finance with a minimum of a B grade.

Provide a description of the recommended change to be included in the calendar (please include a tracked changes version of the calendar section affected if applicable):

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If approved, new calendar verbiage will be as follows (changes highlighted in yellow):

Admission Requirements

- **Degree**: Completion within the last 10 years of a Bachelor of Commerce or Bachelor of Business Administration from a recognized Canadian or American University. Candidates that have completed the following degrees may also apply:
  - McMaster University:
    - Bachelor of Engineering Management
    - Bachelor of Technology (B.Tech.), specifically the Automation Engineering Technology, Automotive and Vehicle Engineering and Biotechnology streams
      - Graduates from this program will also be required to complete the following 2 courses from McMaster: COMMERCE 2AB3 – Managerial Accounting and COMMERCE 2FB3 – Managerial Finance with a minimum of a B grade.
    - Bachelor of Commerce, Integrated Business and Humanities (IBH)
- **GPA**: Recommended B average (equivalent to a McMaster 8.0 GPA out of 12) or higher. GPA will be calculated using the two most recent years of undergraduate or graduate study, 20 courses, or the equivalent of 60 academic credits. A combination may be used and is determined on a case-by-case basis.
- **GMAT**: Not required. Candidates who fail to meet the above GPA criteria or who wish to strengthen their academic application may wish to submit a GMAT.
- **Proof of English Language Proficiency**: Required for applicants:
  - Whose previous degree was not completed with the language of instruction of English.
  - Who have been resident in an English-speaking country for less than four years.
  - Who have completed less than three years of full-time post-secondary education with English as the primary language of instruction, excluding ESL courses.
- **Acceptable English Language Proficiency Tests**:
  - Academic IELTS
  - TOEFL
- **Work Experience**:
  - Recommended minimum of 1 year work experience for McMaster Bachelor of Commerce, Bachelor of Engineering and Management, Bachelor of Technology (B.Tech. – Automation, Automotive and Biotechnology streams as noted above), Bachelor of Commerce, IBH Graduates (undergraduate co-op or internship placements adding up to 12 months of work or more from these degrees will be considered if they are noted on official transcripts).
  - 2 years post-graduate work experience for all other programs.
- **References**: Applicants are encouraged to seek two professional (current or former direct supervisor or manger) references. Academic reference can be submitted if two professional are not available.
- **Interview**: Applicants are required to complete an online interview prior to submission of their application.

Please note: meeting minimum admission requirements does not guarantee acceptance into the program.

Contact information for the recommended change:

Name: Goran Calic   Email: calicg@mcmaster.ca   Date submitted: 9/19/2023

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, cbryce@mcmaster.ca

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Recommendation for Change in Program Requirements/Procedures

Please note the following:

- This form must be completed for all changes involving degree program requirements and procedures. Sections of this form pertaining to your requested change must be completed.
- An electronic version of this form should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). Questions about the form can also be directed to this address.
- 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.

Department: Operations Management
Name of Program and Plan: Business Administration (Management Science Field)
Degree: Ph.D

Nature of Recommendation (Please complete appropriate field(s))
Is this change the result of an IQAP Review: Yes ☐ No ☒
Creation of New Milestone ☐
Change in Admission Requirements ☐
Change in Comprehensive Examination Procedure ☒
Change in Course Requirements ☒
Change in the Description of a Section of the Graduate Calendar ☐   **Please explain:**
Other Changes ☐   **Please explain:**

Describe the existing requirement/procedure:

Courses: five required courses (two one-one one seminar courses (Q780 and Q781), Q771, Q773, and Q790) and four elective courses from a list of 13 courses.

Comprehensive Exam: A five hour sit-in exam and a one-week take home exam.

Provided a detailed description of the recommended change:

Courses: Four required courses Q780, Q771, Q773 and Q790 (no one-on-one seminar courses).

Comprehensive Exam: The Comprehensive Exam will be a take home followed by an oral examination which is designed to test the student's breadth of knowledge and understanding of management science. The Management Science PhD Field examination committee determines the research topic and question(s).

Rationale for the recommended change (How does the requirement fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review?):

The new format of the comprehensive exam is devised subsequent to a change in the course requirements of the Management Science PhD field. The expectation is that all graduate courses will have sit-in written examinations.

Provide Implementation Date: (Implementation date should be at the beginning of the academic year)

September 2024

Are there any other details of the recommended change that the curriculum and policy committee should be aware of? If yes, please explain:

Provide a description of the recommended change to be included in the calendar (please include a tracked-changes version of the calendar section affected):

MS Field

MS Ph.D. Courses

~~Five~~ Four MS Ph.D. courses must be taken.

BUSINESS Q771 / Stochastic Processes with Business Applications

BUSINESS Q773 / Mathematical Programming: Theory and Algorithms

BUSINESS Q780 / ~~Management Science Research Issues I~~Mathematical Modelling in Management Scinece

~~BUSINESS Q781 / Management Science Research Issues II~~

BUSINESS Q790 / Advanced Operations Management I

Four MS Ph.D. courses must be taken, chosen from:

BUSINESS Q772 / Networks and Graphs in Operations Research

BUSINESS Q774 / Combinatorial Optimization: Complexity and Heuristics

BUSINESS Q775 / Optimization and Machine Learning with Big Data

BUSINESS Q778 / Selected Topics in Management Science/Systems

BUSINESS Q782 / Dynamic Programming and Optimal Control

BUSINESS Q783 / Game Theory and Decision Analysis

BUSINESS Q784 / Supply Chain Design and Coordination

BUSINESS Q785 / Queuing Theory and Computer Simulation

BUSINESS Q786 / Network Design Issues in Freight Transportation

BUSINESS Q787 / Optimization Under Uncertainty

BUSINESS Q791 / Advanced Operations Management II

BUSINESS Q793 / Sequencing and Scheduling

BUSINESS Q794 / Inventory Theory

Comprehensive Examination

All doctoral candidates must pass a comprehensive examination in their chosen field of study to demonstrate knowledge of the field and preparation for research. The comprehensive examination will test each student's knowledge of core material, familiarity with the relevant literature and knowledge of methodology required to do research in the field. The comprehensive examinations in the Accounting, MOBHR, Management Science and Marketing fields include a written examination followed by an oral examination. The comprehensive exam in Finance consists of a written exam (in two parts) and a research paper proposal. The comprehensive examination in all other fields includes only a written examination.

In addition to the comprehensive examination, students must pass an oral defence of their dissertation proposals before they can proceed to the final oral defence of their dissertation. The dissertation examination will take place in accordance with the regulations of the School of Graduate Studies.

Contact Information for the recommended change:
Name: Kai Huang
Email: khuang@mcmaster.ca
Date Submitted: August 29, 2023

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Recommendation for Change in Graduate Curriculum:
For Change(s) Involving Courses

Please read the following notes before completing this form:
1. This form must be completed for ALL course changes. 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 Graduate Secretary (cbryce@mcmaster.ca).

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. |

DEPARTMENT	Accounting
COURSE TITLE	Accounting for Decision Making (proposed new 3-unit course).

COURSE NUMBER	T715	**COURSE CREDIT**		
		6 Unit Course ( )	**3 Unit Course (X)**	**1.5 Unit Course ( )**
REQUISITE(S) (Pre/Co/Anti or program enrollment requirement)		No pre-requisites as this course is offered within our EMBA program for experienced managers in the public and private sector.		

| **Nature of Recommendation (Please Check Appropriate Box)**

Is this change a result of an IQAP review? ☐ Yes ☐ No			
NEW COURSE	T715	DATE TO BE OFFERED (FOR NEW COURSES ONLY): JULY – NOVEMBER (MODULE 1, EMBA)	WAS THE PROPOSED COURSE OFFERED ON DEAN'S APPROVAL? NO

IF YES, PROVIDE THE DATE: |
| Will the Course be <u>Cross-listed (combined sections)</u> with another department? No   If Yes, please note which department:

 Attach to this Form Any Relevant Correspondence with the other department(s).   No<u>te</u>: 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. | | | |
| **CHANGE IN COURSE TITLE** | | **Provide the new Course Title:** Accounting for Decision Making | |

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CHANGE IN COURSE DESCRIPTION		600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form	
COURSE CANCELLATION		**Provide the Reason for Course Cancellation:** Please note: cross-listed (combined sections) courses can only be cancelled by the department who owns the course.	
OTHER CHANGES		EXPLAIN: THIS PROPOSED 3-UNIT COURSE DOES NOT ADD TO THE OVERALL COURSE UNITS REQUIRED FOR THE EMBA PROGRAM, THOUGH TECHNICALLY ADDS ONE COURSE.	

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

This course provides an in-depth understanding of financial accounting fundamentals to guide decision making. The course is preceded by pre-work through a self-study module (from HBR) to provide students with the requisite knowledge of bookkeeping (i.e. debits/credits/balance sheet/income statement/cash flow statement preparation). The HBR module is supplemented with a series of on-line interactive sessions to address the more difficult concepts and to dig deeper into the application of accounting to real-life business scenarios. By the end of the in-class residency, students will have understood the process of preparing and interpreting financial statements, applied this knowledge to several in-class cases, and built the requisite knowledge/experience to work effectively with the accounting/finance personnel in their daily work environments.

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

Topics include financial statement basics: recognition, measurement, classification, disclosure; cash flow statement preparation and interpretation; analysis and interpretation of financial statements; residual income method approach to firm valuation; IFRS GAAP rules for revenue recognition, long-term assets/liabilities, financial instruments, leases, etc. The principal text to be used is Financial Accounting using IFRS, Third Edition, Wong, Dyckman, Hanlon, Magee & Pfeiffer.

1. **STATEMENT OF PURPOSE (How does the course fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review (if applicable)?)**
Accounting is the fundamental language of business and as such, is a critical component of any MBA program.

2. **EXPECTED ENROLMENT: 18-22**

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18-22

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

For the pre-residency portion of the course (approximately two months in duration), students will attend five synchronous 2-hour lectures in addition to completing the HBS on-line self-paced module. These lectures will be held over Zoom. For the residency portion of the course (approximately four days in duration), students will attend in-person classes which will be a blend of traditional lecture style teaching and several breakout group exercises.

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4.   DESCRIBE IN DETAIL THE METHOD OF EVALUATION (<u>percentage breakdown, if possible</u>): (For 600-level course, indicate the <u>Extra Work</u> to be required of graduate students, i.e., exams, essays, etc. Please also note if a lab or tutorial will be included.)
There will be five components to the evaluation: 1) pre-residency HBS module – 15%; 2) in-class participation – 25%; 3) postcard – 10%; 4) stock pitch in-class exercise – 20%; and 5) final exam – 30%.

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5.   To prevent overlap, is a course in the same or related area offered in another department? If YES please note below and/or attach to this form any relevant correspondence with the other department(s).

This newly proposed course is to be offered only to students registered in the EMBA program.

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6.   If the course is intended primarily for students outside of your department, do you have the support of the department/program concerned?

N/A

PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Rick Hackett   Email: hackett@mcmaster.ca   Date submitted: October 6, 2023

If you have any questions regarding this form, please contact the Assistant Graduate Secretary, School of Graduate Studies, cbryce@mcmaster.ca.

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Recommendation for Change in Graduate Curriculum:
For Change(s) Involving Courses

Please read the following notes before completing this form:	

1. This form must be completed for ALL course changes. 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 Graduate Secretary (cbryce@mcmaster.ca).

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.

DEPARTMENT	Finance
COURSE TITLE	Finance for Decision Making (proposed new 3-unit course).

COURSE NUMBER	T724	**COURSE CREDIT**		
		6 Unit Course ( )	3 Unit Course (X)	1.5 Unit Course ( )

REQUISITE(S) (Pre/Co/Anti or program enrollment requirement)	No pre-requisites as this course is offered within our EMBA program for experienced managers in the public and private sector.

Nature of Recommendation (Please Check Appropriate Box)
Is this change a result of an IQAP review? ☐ Yes ☒ No

NEW COURSE	T724	**DATE TO BE OFFERED (FOR NEW COURSES ONLY):** Module 2 of EMBA (December – March).	**WAS THE PROPOSED COURSE OFFERED ON DEAN'S APPROVAL? NO** **IF YES, PROVIDE THE DATE:**

Will the Course be Cross-listed (combined sections) with another department? No   If Yes, please note which department:

 Attach to this Form Any Relevant Correspondence with the other department(s). Note: Cross-listing of courses requires written approval from each department and faculty concerned. If you would like to remove a cross-listing, you must include a written explanation agreed upon by both departments affected.

CHANGE IN COURSE TITLE		**Provide the new Course Title:** Finance for Decision Making

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CHANGE IN COURSE DESCRIPTION		600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form	
COURSE CANCELLATION		**Provide the Reason for Course Cancellation:** Please note: cross-listed (combined sections) courses can only be cancelled by the department who owns the course.	
OTHER CHANGES		**EXPLAIN:** THIS PROPOSED 3-UNIT COURSE DOES NOT ADD TO THE OVERALL COURSE UNITS REQUIRED FOR THE EMBA PROGRAM, THOUGH TECHNICALLY ADDS ONE COURSE.	

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

You will learn several conceptual frameworks that support critical decisions in finance in today's digital information context. You will also learn how financial statements and financial markets function as well as how firm value is created and destroyed. We also take a close look at the multi-dimensional nature of risk management and evaluate the limits of using debt. Pre-work through the Coursera's MOOC "Finance for Everyone" provides you with a foundation for learning during pre-residency and in-class sessions as well as a focus on foundational topics.

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

Major topics include the following:

- Interpreting key aspects of financial statements.
- Identify, analyze and thinking critically about financial information and issues.
- Simulate how markets create value, price equity and fixed income securities.
- Formulate cash flows to make strategic investment decisions.
- Identify trade-offs between financial risk and return.
- Evaluate factors that determine the firm's debt capacity and it's cost of capital.

Required course readings and materials include the following:

- Fundamentals of Corporate Finance, Eleventh Edition. Ross, Westerfield & Jordan
- Coursera MOOC: Finance for Everyone Specialization

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1.   **STATEMENT OF PURPOSE (How does the course fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review (if applicable)?)**
The course provides knowledge of fundamentals of financial management for decision making to support critical decisions in finance in today's digital information context.

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2.   EXPECTED ENROLMENT:

18-22

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

Topics will be presented using lectures, case discussion and presentations in the following order:
- Introduction, financial goals, motivations, and key takeaways
- Interest Rates, Inflation and Rates of Return
- Time Value of Money, Cash Flows, Bonds, and Stocks
- Capital Investment Decisions; Investment Techniques and Detailed Cash Flows
- Case Study
- Market efficiency; Measuring and Managing Risk and Return
- Case Study
- Determining the firm's Cost of Capital
- Limits to Debt: The firm's Optimal Capital Structure and Real-World Factors

4.   **DESCRIBE IN DETAIL THE METHOD OF EVALUATION (<u>percentage breakdown, if possible</u>): (For 600-level course, indicate the <u>Extra Work</u> to be required of graduate students, i.e., exams, essays, etc. Please also note if a lab or tutorial will be included.)**

-	Pre-Residency Modules & 3 Quizzes	15%
-	In-class participation	25
-	Post Card Presentation	10
-	Case Study	15
-	Final Exam	<u>35</u>
		100%

5.   To prevent overlap, is a course in the same or related area offered in another department? If YES please note below and/or attach to this form any relevant correspondence with the other department(s).

This newly proposed course is to be offered only to students registered in the EMBA program.

6.   If the course is intended primarily for students outside of your department, do you have the support of the department/program concerned?

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PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Rick Hackett   Email: hackett@mcmaster.ca   Date submitted: October 6, 2023

If you have any questions regarding this form, please contact the Assistant Graduate Secretary, School of Graduate Studies, cbryce@mcmaster.ca.

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Recommendation for Change in Graduate Curriculum:
For Change(s) Involving Courses

Please read the following notes before completing this form:
1. This form must be completed for ALL course changes. 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 Graduate Secretary (cbryce@mcmaster.ca).
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.

DEPARTMENT	Executive MBA, Accounting & Finance Areas, DeGroote School of Business
COURSE TITLE	Accounting/Finance for Decision Making

COURSE NUMBER	T714	**COURSE CREDIT**		
		6 Unit Course (X)	3 Unit Course ( )	1.5 Unit Course ( )

REQUISITE(S) (Pre/Co/Anti or program enrollment requirement)	

Nature of Recommendation (Please Check Appropriate Box)
Is this change a result of an IQAP review? ☐ Yes ☐ No

NEW COURSE		Dᴀᴛᴇ ᴛᴏ ʙᴇ Oꜰꜰᴇʀᴇᴅ (ꜰᴏʀ **ɴᴇᴡ** ᴄᴏᴜʀꜱᴇꜱ ᴏɴʟʏ):	Wᴀꜱ ᴛʜᴇ Pʀᴏᴘᴏꜱᴇᴅ Cᴏᴜʀꜱᴇ Oꜰꜰᴇʀᴇᴅ ᴏɴ Dᴇᴀɴ'ꜱ Aᴘᴘʀᴏᴠᴀʟ? Iꜰ Yᴇꜱ, Pʀᴏᴠɪᴅᴇ ᴛʜᴇ Dᴀᴛᴇ:

Will the Course be **Cross-listed (combined sections)** with another department? If Yes, please note which department: Attach to this Form Any Relevant Correspondence with the other department(s). No**te**: Cross-listing of courses requires written approval from **each** 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.

CHANGE IN COURSE TITLE		Provide the new Course Title:

McMaster University | SCHOOL OF GRADUATE STUDIES

Gilmour Hall, Room 212
1280 Main Street West
Hamilton, ON L8S 4L8

(905) 525-9140 x 23679
gs.mcmaster.ca

CHANGE IN COURSE DESCRIPTION		600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form	
COURSE CANCELLATION	X	**Provide the Reason for Course Cancellation:** This six-unit course is being cancelled and in its place two separate 3-unit courses will be added to the EMBA program. The two three-unit courses will enable the content of T714 to be covered in more depth and breadth.	
OTHER CHANGES		**EXPLAIN:**	

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

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

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1. **STATEMENT OF PURPOSE (How does the course fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review (if applicable)?)**

2. **EXPECTED ENROLMENT:**

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

4. **DESCRIBE IN DETAIL THE METHOD OF EVALUATION (underline percentage breakdown, if possible): (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc. Please also note if a lab or tutorial will be included.)**

5. To prevent overlap, is a course in the same or related area offered in another department? If YES please note below and/or attach to this form any relevant correspondence with the other department(s).
6. If the course is intended primarily for students outside of your department, do you have the support of the department/program concerned?
PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE: Name: Rick Hackett   Email: hackett@mcmaster.ca Date submitted: October 11, 2023

If you have any questions regarding this form, please contact the Assistant Graduate Secretary, School of Graduate Studies, cbryce@mcmaster.ca.

Recommendation for Change in Graduate Courses

Please note the following:

- This form must be completed for all course changes. Sections of this form pertaining to your requested change must be completed.
- An electronic version of this form should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). Questions about the form can also be directed to this address.
- 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.

Department: Operations Management
Course Title: Stochastic Processes with Business Applications
Course Number (if existing course): **BUSINESS Q771**
Course Unit Count (normally 6, 3, 1.5 or 0): **3**
Requisites (Pre/Co/Anti or program enrollment requirement): Enrolment in the PhD Program or permission of the instructor

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Nature of Recommendation (Please complete appropriate field(s))

Is this change the result of an IQAP Review: Yes ☐ No ☒

New Course ☐
Date to be offered (new courses only):
Will the course be cross-listed (combined sections) with another course:
Provide a brief description to be included in the Graduate Calendar:

Course Cancellation ☐
Please provide the rationale for the course cancellation:

Change in Course Title ☐

 Provide the new course title:

Change in Course Description ☒

Provide a tracked-changes version of the course description changes:

 Prerequisite(s): ~~BUSINESS Q780~~ <ins>Enrolment in the PhD Program</ins> or permission of the instructor.

 Stochastic processes and their applications in modeling the business environment. Emphasis is on understanding and applying the concepts in modeling, rather than on a strictly mathematical approach. Markov chains, Poisson processes, "birth" and "death" processes, queuing systems, elementary renewal theory, and diffusion processes are discussed. Individual student participation is also required in selecting, researching and presenting topics on stochastic process applications.

Rationale

Provide the following:
     1) a brief description that explains how the new course or changes to an existing course are related to the program learning outcomes
     2) list of tentative topics to be covered
     3) A statement of how the course fits into the department's program
 	
 1) As part of a redesign of the Management Science PhD Field, BUS Q780 will be a required foundational course. It will equip students with the necessary background to conduct research in that field.
 2) and 3) BUS Q771 is an existing required course in the MS Field.

Enrolment, Method of Presentation and Evaluation
Expected Enrolment:
Describe in detail the method of presentation of course material:
Method of Evaluation: Describe in detail the method of evaluation. This should include a percentage breakdown and, for 600-level courses, a detailed description (including percentages) of the extra work required of graduate students. Please also note if a lab or tutorial will be included.

Interdepartmental Considerations
To prevent overlap, is a course in the same or related area offered in another department? If yes, please submit any relevant correspondence with the other department(s). **No**
If the course is intended primarily for students outside your department, do you have the support of the department/program concerned? **NA**

Contact Information for the recommended change **Name: Kai Huang** **Email: khuang@mcmaster.ca** **Date Submitted: August 29, 2023**

Recommendation for Change in Graduate Courses

Please note the following:

- This form must be completed for all course changes. Sections of this form pertaining to your requested change must be completed.
- An electronic version of this form should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). Questions about the form can also be directed to this address.
- 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.

Department: Operations Management
Course Title: Networks and Graphs in Operations Research
Course Number (if existing course): **BUSINESS Q772**
Course Unit Count (normally 6, 3, 1.5 or 0): **3**
Requisites (Pre/Co/Anti or program enrollment requirement): Enrolment in the PhD Program or permission of the instructor

---

Nature of Recommendation (Please complete appropriate field(s))

Is this change the result of an IQAP Review: Yes ☐ No ☒

New Course ☐
Date to be offered (new courses only):
Will the course be cross-listed (combined sections) with another course:
Provide a brief description to be included in the Graduate Calendar:

Course Cancellation ☐
Please provide the rationale for the course cancellation:

Change in Course Title ☐
Provide the new course title:

Change in Course Description ☒
Provide a tracked-changes version of the course description changes:

Prerequisite(s): BUSINESS Q780 or permission of the instructor.

An advanced course dealing with the optimization of network and graph models as well as their application to problems in transportation, location, inventory control, and distribution. Prerequisite: Enrolment in the PhD Program or permission of the instructor.

Rationale

Provide the following:
1) a brief description that explains how the new course or changes to an existing course are related to the program learning outcomes
2) list of tentative topics to be covered
3) A statement of how the course fits into the department's program

1) As part of a redesign of the Management Science PhD Field, BUS Q780 will be a required foundational course. It will equip students with the necessary background to conduct research in that field.
2) and 3) BUS Q772 is an existing elective course in the MS Field.

Enrolment, Method of Presentation and Evaluation

Expected Enrolment:

Describe in detail the method of presentation of course material:

Method of Evaluation:
Describe in detail the method of evaluation. This should include a percentage breakdown and, for 600-level courses, a detailed description (including percentages) of the extra work required of graduate students. Please also note if a lab or tutorial will be included.

Interdepartmental Considerations
To prevent overlap, is a course in the same or related area offered in another department? If yes, please submit any relevant correspondence with the other department(s). **No**
If the course is intended primarily for students outside your department, do you have the support of the department/program concerned? **NA**

Contact Information for the recommended change **Name: Kai Huang** **Email: khuang@mcmaster.ca** **Date Submitted: August 29, 2023**

Recommendation for Change in Graduate Courses

Please note the following:

- This form must be completed for all course changes. Sections of this form pertaining to your requested change must be completed.
- An electronic version of this form should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). Questions about the form can also be directed to this address.
- 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.

Department: Operations Management
Course Title: Mathematical Programming: Theory and Algorithm
Course Number (if existing course): **BUSINESS Q773**
Course Unit Count (normally 6, 3, 1.5 or 0): **3**
Requisites (Pre/Co/Anti or program enrollment requirement): Enrolment in the PhD Program or permission of the instructor

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Nature of Recommendation (Please complete appropriate field(s))

Is this change the result of an IQAP Review: Yes ☐ No ☒

New Course ☐
Date to be offered (new courses only):
Will the course be cross-listed (combined sections) with another course:
Provide a brief description to be included in the Graduate Calendar:

Course Cancellation ☐
Please provide the rationale for the course cancellation:

Change in Course Title☐

Provide the new course title:

Change in Course Description☒

Provide a tracked-changes version of the course description changes:

(Cross-listed as [CSE 776] and [CHEM ENG 756])

Prerequisite(s): BUSINESS Q780 ~~Enrolment in the PhD Program~~ or permission of the instructor.

The course will cover topics in linear, integer and nonlinear programming. Concepts to be covered include convexity, duality, Karush-Kuhn-Tucker conditions, non-differentiable optimization, Branch and cut, and decomposition methods (Lagrangian, Bender's and Dantzig-Wolf). Software implementation issues will be highlighted via GAMS and its solvers.

Rationale

Provide the following:
1) a brief description that explains how the new course or changes to an existing course are related to the program learning outcomes
2) list of tentative topics to be covered
3) A statement of how the course fits into the department's program

1) As part of a redesign of the Management Science PhD Field, BUS Q780 will be a required foundational course. It will equip students with the necessary background to conduct research in that field.
2) and 3) BUS Q773 is an existing required course in the MS Field.

Enrolment, Method of Presentation and Evaluation

Expected Enrolment:

Describe in detail the method of presentation of course material:

Method of Evaluation:
Describe in detail the method of evaluation. This should include a percentage breakdown and, for 600-level courses, a detailed description (including percentages) of the extra work required of graduate students. Please also note if a lab or tutorial will be included.

Interdepartmental Considerations
To prevent overlap, is a course in the same or related area offered in another department? If yes, please submit any relevant correspondence with the other department(s). **No**
If the course is intended primarily for students outside your department, do you have the support of the department/program concerned? **NA**

Contact Information for the recommended change
Name: Kai Huang
Email: khuang@mcmaster.ca
Date Submitted: August 29, 2023

Recommendation for Change in Graduate Courses

Please note the following:

- This form must be completed for all course changes. Sections of this form pertaining to your requested change must be completed.
- An electronic version of this form should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). Questions about the form can also be directed to this address.
- 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.

Department: Operations Management
Course Title: Combinatorial Optimization: Complexity and Heuristics
Course Number (if existing course): **BUSINESS Q774**
Course Unit Count (normally 6, 3, 1.5 or 0): **3**
Requisites (Pre/Co/Anti or program enrollment requirement): Enrolment in the PhD Program or permission of the instructor

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Nature of Recommendation (Please complete appropriate field(s))

Is this change the result of an IQAP Review: Yes ☐ No ☒

New Course ☐
Date to be offered (new courses only):
Will the course be cross-listed (combined sections) with another course:
Provide a brief description to be included in the Graduate Calendar:

Course Cancellation ☐
Please provide the rationale for the course cancellation:

Change in Course Title ☐

Provide the new course title:

Change in Course Description ☒

Provide a tracked-changes version of the course description changes:

Prerequisite(s): <u>BUSINESS Q780 and </u>BUSINESS Q773, or permission of the instructor.

The first part of the course will focus on solvable network flow problems such as assignment, transportation, transshipment, shortest path, max flow and minimum spanning tree problems. Well known algorithms (such as Dijkstra, Bellman-Ford and Augmenting path algorithm) will be discussed as well as general methodology such as lifting procedures polyhedral theory (strong valid inequalities). The second part will focus on complexity theory and heuristic methods and covers NP-Completeness, Approximation algorithms, local and random search, and metaheuristics (such as Ant colony, genetic algorithms, simulated annealing and tabu search). GAMS and a general purpose programming language (e.g., C, Matlab or Python) will be used in a computational project.

Rationale

Provide the following:
1) a brief description that explains how the new course or changes to an existing course are related to the program learning outcomes
2) list of tentative topics to be covered
3) A statement of how the course fits into the department's program

1) As part of a redesign of the Management Science PhD Field, BUS Q780 will be a required foundational course. It will equip students with the necessary background to conduct research in that field.
2) and 3) BUS Q774 is an existing elective course in the MS Field.

Enrolment, Method of Presentation and Evaluation

Expected Enrolment:

Describe in detail the method of presentation of course material:

Method of Evaluation:
Describe in detail the method of evaluation. This should include a percentage breakdown and, for 600-level courses, a detailed description (including percentages) of the extra work required of graduate students. Please also note if a lab or tutorial will be included.

Interdepartmental Considerations
To prevent overlap, is a course in the same or related area offered in another department? If yes, please submit any relevant correspondence with the other department(s). **No**
If the course is intended primarily for students outside your department, do you have the support of the department/program concerned? **NA**

Contact Information for the recommended change **Name: Kai Huang** **Email: khuang@mcmaster.ca** **Date Submitted: August 29, 2023**

Recommendation for Change in Graduate Courses

Please note the following:

- This form must be completed for all course changes. Sections of this form pertaining to your requested change must be completed.
- An electronic version of this form should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). Questions about the form can also be directed to this address.
- 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.

Department: Operations Management
Course Title: Optimization and Machine Learning with Big Data
Course Number (if existing course): **BUSINESS Q775**
Course Unit Count (normally 6, 3, 1.5 or 0): **3**
Requisites (Pre/Co/Anti or program enrollment requirement): Enrolment in the PhD Program or permission of the instructor

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Nature of Recommendation (Please complete appropriate field(s))

Is this change the result of an IQAP Review: Yes ☐ No ☒

New Course ☐
Date to be offered (new courses only):
Will the course be cross-listed (combined sections) with another course:
Provide a brief description to be included in the Graduate Calendar:

Course Cancellation ☐
Please provide the rationale for the course cancellation:

Change in Course Title ☐

Provide the new course title:

Change in Course Description ☒

Provide a tracked-changes version of the course description changes:

Prerequisite(s): <u>BUSINESS Q780</u> ~~Enrolment in the PhD Program~~ or the permission of the instructor

Since its early inception, machine learning has made use of optimization algorithms and modelling. Likewise, machine learning has benefited the field of optimization by providing opportunities for developing new solution approaches. With the wide availability of big data, current machine learning optimization algorithms have reached their performance limits, a serious handicap for real-time and streaming applications. On the other hand, big data has also offered challenges to existing optimization solvers such as Cplex. The course will cover foundational material on mathematical optimization and machine learning as well as hand on applications with big data using state of the art computing platforms.

Rationale

Provide the following:
1) a brief description that explains how the new course or changes to an existing course are related to the program learning outcomes
2) list of tentative topics to be covered
3) A statement of how the course fits into the department's program

1) As part of a redesign of the Management Science PhD Field, BUS Q780 will be a required foundational course. It will equip students with the necessary background to conduct research in that field.
2) and 3) BUS Q775 is an existing elective course in the MS Field.

Enrolment, Method of Presentation and Evaluation

Expected Enrolment:

Describe in detail the method of presentation of course material:

Method of Evaluation:
Describe in detail the method of evaluation. This should include a percentage breakdown and, for 600-level courses, a detailed description (including percentages) of the extra work required of graduate students. Please also note if a lab or tutorial will be included.

Interdepartmental Considerations
To prevent overlap, is a course in the same or related area offered in another department? If yes, please submit any relevant correspondence with the other department(s). **No**
If the course is intended primarily for students outside your department, do you have the support of the department/program concerned? **NA**

Contact Information for the recommended change
Name: Kai Huang
Email: khuang@mcmaster.ca
Date Submitted: August 29, 2023

Recommendation for Change in Graduate Courses

Please note the following:

- This form must be completed for all course changes. Sections of this form pertaining to your requested change must be completed.
- An electronic version of this form should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). Questions about the form can also be directed to this address.
- 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.

Department: Operations Management
Course Title: Selected Topics in Management Science/Systems
Course Number (if existing course): **BUSINESS Q778**
Course Unit Count (normally 6, 3, 1.5 or 0): **3**
Requisites (Pre/Co/Anti or program enrollment requirement): Enrolment in the PhD Program or permission of the instructor

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Nature of Recommendation (Please complete appropriate field(s))

Is this change the result of an IQAP Review: Yes ☐ No ☒

New Course ☐
Date to be offered (new courses only):
Will the course be cross-listed (combined sections) with another course:
Provide a brief description to be included in the Graduate Calendar:

Course Cancellation ☐
Please provide the rationale for the course cancellation:

Change in Course Title ⊠

Provide the new course title: Selected Topics in Management Science

---

Change in Course Description ⊠

Provide a tracked-changes version of the course description changes:

Prerequisite(s): BUSIENSS Q780 ~~Enrolment in the PhD Program~~ or permission of the instructor.

From time to time selected topics courses may be offered to take advantage of the research experience of a faculty member or a visiting scholar, where a similar course is not available on this topic area elsewhere at the University. Topics will be announced for the session they are offered.

Rationale

Provide the following:
1) a brief description that explains how the new course or changes to an existing course are related to the program learning outcomes
2) list of tentative topics to be covered
3) A statement of how the course fits into the department's program

1) As part of a redesign of the Management Science PhD Field, BUS Q780 will be a required foundational course. It will equip students with the necessary background to conduct research in that field.
2) and 3) BUS Q778 is an existing elective course in the MS Field.

Enrolment, Method of Presentation and Evaluation

Expected Enrolment:

Describe in detail the method of presentation of course material:

Method of Evaluation:
Describe in detail the method of evaluation. This should include a percentage breakdown and, for 600-level courses, a detailed description (including percentages) of the extra work required of graduate students. Please also note if a lab or tutorial will be included.

Interdepartmental Considerations
To prevent overlap, is a course in the same or related area offered in another department? If yes, please submit any relevant correspondence with the other department(s). **No**
If the course is intended primarily for students outside your department, do you have the support of the department/program concerned? **NA**

Contact Information for the recommended change
Name: Kai Huang
Email: khuang@mcmaster.ca
Date Submitted: August 29, 2023

Recommendation for Change in Graduate Courses

Please note the following:

- This form must be completed for all course changes. Sections of this form pertaining to your requested change must be completed.
- An electronic version of this form should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). Questions about the form can also be directed to this address.
- 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.

Department: Operations Management
Course Title: Dynamic Programming and Optimal Control
Course Number (if existing course): **BUSINESS Q782**
Course Unit Count (normally 6, 3, 1.5 or 0): **3**
Requisites (Pre/Co/Anti or program enrollment requirement): Enrolment in the PhD Program or permission of the instructor

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Nature of Recommendation (Please complete appropriate field(s))

Is this change the result of an IQAP Review: Yes ☐ No ☒

New Course ☐
Date to be offered (new courses only):
Will the course be cross-listed (combined sections) with another course:
Provide a brief description to be included in the Graduate Calendar:

Course Cancellation ☐
Please provide the rationale for the course cancellation:

Change in Course Title ☐

 Provide the new course title:

Change in Course Description ☒

Provide a tracked-changes version of the course description changes:

Prerequisite(s): BUSIENSS Q780 or permission of the instructor.

Many realistic business problems in operations, finance and marketing and problems in economics involve control of dynamic systems which evolve over time. This course will provide a rigorous foundation for dynamic optimization of such systems by covering dynamic programming and optimal control. The basic discrete-time dynamic programming algorithm will be illustrated with applications in inventory control, dynamic portfolio analysis and linear quadratic systems. Optimal control of continuous-time systems will be covered using maximum principle with applications in operations, finance, marketing and economics.

Rationale

Provide the following:
1) a brief description that explains how the new course or changes to an existing course are related to the program learning outcomes
2) list of tentative topics to be covered
3) A statement of how the course fits into the department's program

1) As part of a redesign of the Management Science PhD Field, BUS Q780 will be a required foundational course. It will equip students with the necessary background to conduct research in that field.
2) and 3) BUS Q782 is an existing elective course in the MS Field.

Enrolment, Method of Presentation and Evaluation

Expected Enrolment:

Describe in detail the method of presentation of course material:

Method of Evaluation:
Describe in detail the method of evaluation. This should include a percentage breakdown and, for 600-level courses, a detailed description (including percentages) of the extra work required of graduate students. Please also note if a lab or tutorial will be included.

Interdepartmental Considerations
To prevent overlap, is a course in the same or related area offered in another department? If yes, please submit any relevant correspondence with the other department(s). **No**
If the course is intended primarily for students outside your department, do you have the support of the department/program concerned? **NA**

Contact Information for the recommended change **Name: Kai Huang** **Email: khuang@mcmaster.ca** **Date Submitted: August 29, 2023**

McMaster University | SCHOOL OF GRADUATE STUDIES

Recommendation for Change in Graduate Courses

Please note the following:

- This form must be completed for all course changes. Sections of this form pertaining to your requested change must be completed.
- An electronic version of this form should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). Questions about the form can also be directed to this address.
- 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.

Department: Operations Management
Course Title: Game Theory and Decision Analysis
Course Number (if existing course): **BUSINESS Q783**
Course Unit Count (normally 6, 3, 1.5 or 0): **3**
Requisites (Pre/Co/Anti or program enrollment requirement): Enrolment in the PhD Program or permission of the instructor

---

Nature of Recommendation (Please complete appropriate field(s))

Is this change the result of an IQAP Review: Yes ☐ No ☒

New Course ☐
Date to be offered (new courses only):
Will the course be cross-listed (combined sections) with another course:
Provide a brief description to be included in the Graduate Calendar:

Course Cancellation ☐
Please provide the rationale for the course cancellation:

Change in Course Title ☒

Provide the new course title: Selected Topics in Management Science

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Change in Course Description ☒

Provide a tracked-changes version of the course description changes:

Prerequisite(s): BUSIENSS Q780 or permission of the instructor.

Game theory is concerned with the analysis of situations involving conflict and cooperation. This course will introduce the business students to the important game-theoretic solution concepts which have become indispensable research tools in supply chain and operations management. The course will cover static and dynamic complete information games for which Nash and subgame perfect equilibria are the solution concepts. The static incomplete information games will be analyzed using Bayesian Nash equilibrium. Cooperative games will be examined by using the Shapley value and nucleolus. The course will also cover incentive mechanism design and include a discussion of adverse selection and moral hazard. The final material to be covered is Bayesian decision analysis including, value of information, single- and multi-attribute utility theory and decision trees.

Rationale

Provide the following:
1) a brief description that explains how the new course or changes to an existing course are related to the program learning outcomes
2) list of tentative topics to be covered
3) A statement of how the course fits into the department's program

1) As part of a redesign of the Management Science PhD Field, BUS Q780 will be a required foundational course. It will equip students with the necessary background to conduct research in that field.
2) and 3) BUS Q783 is an existing elective course in the MS Field.

Enrolment, Method of Presentation and Evaluation

Expected Enrolment:

Describe in detail the method of presentation of course material:

Method of Evaluation:
Describe in detail the method of evaluation. This should include a percentage breakdown and, for 600-level courses, a detailed description (including percentages) of the extra work required of graduate students. Please also note if a lab or tutorial will be included.

Interdepartmental Considerations
To prevent overlap, is a course in the same or related area offered in another department? If yes, please submit any relevant correspondence with the other department(s). **No**
If the course is intended primarily for students outside your department, do you have the support of the department/program concerned? **NA**

Contact Information for the recommended change **Name: Kai Huang** **Email: khuang@mcmaster.ca** **Date Submitted: August 29, 2023**

Recommendation for Change in Graduate Courses

Please note the following:

- This form must be completed for all course changes. Sections of this form pertaining to your requested change must be completed.
- An electronic version of this form should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). Questions about the form can also be directed to this address.
- 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.

Department: Operations Management
Course Title: Supply Chain Design and Coordination
Course Number (if existing course): **BUSINESS Q784**
Course Unit Count (normally 6, 3, 1.5 or 0): **3**
Requisites (Pre/Co/Anti or program enrollment requirement): Enrolment in the PhD Program or permission of the instructor

Nature of Recommendation (Please complete appropriate field(s))
Is this change the result of an IQAP Review: Yes ☐ No ☒
New Course ☐ Date to be offered (new courses only): Will the course be cross-listed (combined sections) with another course: Provide a brief description to be included in the Graduate Calendar:
Course Cancellation ☐ Please provide the rationale for the course cancellation:

Change in Course Title ☐

Provide the new course title:

Change in Course Description ☒

Provide a tracked-changes version of the course description changes:

Prerequisite(s): BUSIENSS Q780 or permission of the instructor.

Supply chain network design is an important strategic decision; some experts claim that 80% of the supply chain costs are a consequence of the supply chain network design. In addition, to manage a supply chain competitively, managers have to make decisions on resources that are not all under their control and consequently have to strategically design coordination mechanisms to optimize their supply chain operations. To address these issues the course will cover location analysis and coordination mechanisms.

Rationale

1) a brief description that explains how the new course or changes to an existing course are related to the program learning outcomes
2) list of tentative topics to be covered
3) A statement of how the course fits into the department's program

1) As part of a redesign of the Management Science PhD Field, BUS Q780 will be a required foundational course. It will equip students with the necessary background to conduct research in that field.
2) and 3) BUS Q784 is an existing elective course in the MS Field.

Enrolment, Method of Presentation and Evaluation

Expected Enrolment:

Describe in detail the method of presentation of course material:

Method of Evaluation:
Describe in detail the method of evaluation. This should include a percentage breakdown and, for 600-level courses, a detailed description (including percentages) of the extra work required of graduate students. Please also note if a lab or tutorial will be included.

Interdepartmental Considerations
To prevent overlap, is a course in the same or related area offered in another department? If yes, please submit any relevant correspondence with the other department(s). **No**
If the course is intended primarily for students outside your department, do you have the support of the department/program concerned? **NA**

Contact Information for the recommended change **Name: Kai Huang** **Email: khuang@mcmaster.ca** **Date Submitted: August 29, 2023**

Recommendation for Change in Graduate Courses

Please note the following:

- This form must be completed for all course changes. Sections of this form pertaining to your requested change must be completed.
- An electronic version of this form should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). Questions about the form can also be directed to this address.
- 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.

Department: Operations Management
Course Title: Network Design Issues in Freight Transportation
Course Number (if existing course): **BUSINESS Q786**
Course Unit Count (normally 6, 3, 1.5 or 0): **3**
Requisites (Pre/Co/Anti or program enrollment requirement): Enrolment in the PhD Program or permission of the instructor

Nature of Recommendation (Please complete appropriate field(s))
Is this change the result of an IQAP Review: Yes ☐ No ☒
New Course ☐ Date to be offered (new courses only): Will the course be cross-listed (combined sections) with another course: Provide a brief description to be included in the Graduate Calendar:
Course Cancellation ☐ Please provide the rationale for the course cancellation:

Change in Course Title ☐

Provide the new course title:

Change in Course Description ☒

Provide a tracked-changes version of the course description changes:

~~Manish Verma~~

Prerequisite(s): <u>BUSINESS Q780</u> ~~Enrolment in the PhD program~~ or the permission of the instructor.

Freight transportation, a vital component of the economy, supports a variety of activities by ensuring the efficient movement and timely availability of raw materials and finished goods. This course will investigate the strategic, tactical and operational issues associated with designing freight transportation networks. To that end, the strategic framework would focus on classical models in location theory. Most of the discussion surrounding the tactical and operational issues will be focused on railroad, marine and intermodal transportation of freight. Finally, additional consideration for handling hazardous materials such as crude oil or refined petroleum products will be discussed.

Rationale

Provide the following:
1) a brief description that explains how the new course or changes to an existing course are related to the program learning outcomes
2) list of tentative topics to be covered
3) A statement of how the course fits into the department's program

1) As part of a redesign of the Management Science PhD Field, BUS Q780 will be a required foundational course. It will equip students with the necessary background to conduct research in that field.
2) and 3) BUS Q786 is an existing elective course in the MS Field.

Enrolment, Method of Presentation and Evaluation

Expected Enrolment:

Describe in detail the method of presentation of course material:

Method of Evaluation:
Describe in detail the method of evaluation. This should include a percentage breakdown and, for 600-level courses, a detailed description (including percentages) of the extra work required of graduate students. Please also note if a lab or tutorial will be included.

Interdepartmental Considerations
To prevent overlap, is a course in the same or related area offered in another department? If yes, please submit any relevant correspondence with the other department(s). **No**
If the course is intended primarily for students outside your department, do you have the support of the department/program concerned? **NA**

Contact Information for the recommended change
Name: Kai Huang
Email: khuang@mcmaster.ca
Date Submitted: August 29, 2023

Recommendation for Change in Graduate Courses

Please note the following:

- This form must be completed for all course changes. Sections of this form pertaining to your requested change must be completed.
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- 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.

Department: Operations Management
Course Title: Optimization Under Uncertainty
Course Number (if existing course): **BUSINESS Q787**
Course Unit Count (normally 6, 3, 1.5 or 0): **3**
Requisites (Pre/Co/Anti or program enrollment requirement): Enrolment in the PhD Program or permission of the instructor

---

Nature of Recommendation (Please complete appropriate field(s))

Is this change the result of an IQAP Review: Yes ☐ No ☒

New Course ☐
Date to be offered (new courses only):
Will the course be cross-listed (combined sections) with another course:
Provide a brief description to be included in the Graduate Calendar:

Course Cancellation ☐
Please provide the rationale for the course cancellation:

Change in Course Title ☐

Provide the new course title:

Change in Course Description ☒

Provide a tracked-changes version of the course description changes:

(Cross-listed as CHEM ENG 757 and CSE 762)

Prerequisite(s): BUSINESS Q780 or the permission of the instructor.

In the first six weeks, we will discuss the stochastic programming methodology. We will cover two-stage models, L-shaped method, multi-stage models, decomposition methods, and chance-constrained models. In the next three weeks, we will discuss stochastic dynamic programming methodology. We will cover finite horizon models, backward induction and monotone optimal policy. In the last three weeks, we will discuss the robust optimization methodology. We will cover uncertainty sets, two-stage models and multi-stage models.

Rationale

Provide the following:
1) a brief description that explains how the new course or changes to an existing course are related to the program learning outcomes
2) list of tentative topics to be covered
3) A statement of how the course fits into the department's program

1) As part of a redesign of the Management Science PhD Field, BUS Q780 will be a required foundational course. It will equip students with the necessary background to conduct research in that field.
2) and 3) BUS Q787 is an existing elective course in the MS Field.

Enrolment, Method of Presentation and Evaluation

Expected Enrolment:

Describe in detail the method of presentation of course material:

Method of Evaluation:
Describe in detail the method of evaluation. This should include a percentage breakdown and, for 600-level courses, a detailed description (including percentages) of the extra work required of graduate students. Please also note if a lab or tutorial will be included.

Interdepartmental Considerations
To prevent overlap, is a course in the same or related area offered in another department? If yes, please submit any relevant correspondence with the other department(s). **No**
If the course is intended primarily for students outside your department, do you have the support of the department/program concerned? **NA**

Contact Information for the recommended change **Name: Kai Huang** **Email: khuang@mcmaster.ca** **Date Submitted: August 29, 2023**

Recommendation for Change in Graduate Courses

Please note the following:

- This form must be completed for all course changes. Sections of this form pertaining to your requested change must be completed.
- An electronic version of this form should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). Questions about the form can also be directed to this address.
- 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.

Department: Operations Management
Course Title: Sequencing and Scheduling
Course Number (if existing course): **BUSINESS Q793**
Course Unit Count (normally 6, 3, 1.5 or 0): **3**
Requisites (Pre/Co/Anti or program enrollment requirement): Enrolment in the PhD Program or permission of the instructor

---

Nature of Recommendation (Please complete appropriate field(s))

Is this change the result of an IQAP Review: Yes ☐ No ☒

New Course ☐
Date to be offered (new courses only):
Will the course be cross-listed (combined sections) with another course:
Provide a brief description to be included in the Graduate Calendar:

Course Cancellation ☐
Please provide the rationale for the course cancellation:

Change in Course Title☐

Provide the new course title:

Change in Course Description☒

Provide a tracked-changes version of the course description changes:

Prerequisite(s): BUSINESS ~~Q600~~ Q780 or permission of the instructor.

This course deals with topics arising in operations management and control, typically in situations where scarce resources have to be allocated to activities over time. It concentrates on deterministic scheduling models. Main topics include complexity results and optimization and approximation algorithms for problems on single machines, parallel machines, open shops, flow shops, job shops, and resource-constrained project scheduling.

Rationale

Provide the following:
1) a brief description that explains how the new course or changes to an existing course are related to the program learning outcomes
2) list of tentative topics to be covered
3) A statement of how the course fits into the department's program

1) As part of a redesign of the Management Science PhD Field, BUS Q780 will be a required foundational course. It will equip students with the necessary background to conduct research in that field.
2) and 3) BUS Q793 is an existing elective course in the MS Field.

Enrolment, Method of Presentation and Evaluation

Expected Enrolment:

Describe in detail the method of presentation of course material:

Method of Evaluation:
Describe in detail the method of evaluation. This should include a percentage breakdown and, for 600-level courses, a detailed description (including percentages) of the extra work required of graduate students. Please also note if a lab or tutorial will be included.

Interdepartmental Considerations
To prevent overlap, is a course in the same or related area offered in another department? If yes, please submit any relevant correspondence with the other department(s). **No**
If the course is intended primarily for students outside your department, do you have the support of the department/program concerned? **NA**

Contact Information for the recommended change
Name: Kai Huang
Email: khuang@mcmaster.ca
Date Submitted: August 29, 2023

Recommendation for Change in Graduate Courses

Please note the following:

- This form must be completed for all course changes. Sections of this form pertaining to your requested change must be completed.
- An electronic version of this form should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). Questions about the form can also be directed to this address.
- 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.

Department: Operations Management
Course Title: Inventory Theory
Course Number (if existing course): **BUSINESS Q794**
Course Unit Count (normally 6, 3, 1.5 or 0): **3**
Requisites (Pre/Co/Anti or program enrollment requirement): Enrolment in the PhD Program or permission of the instructor

---

Nature of Recommendation (Please complete appropriate field(s))

Is this change the result of an IQAP Review: Yes ☐ No ☒

New Course ☐
Date to be offered (new courses only):
Will the course be cross-listed (combined sections) with another course:
Provide a brief description to be included in the Graduate Calendar:

Course Cancellation ☐
Please provide the rationale for the course cancellation:

Change in Course Title☐

Provide the new course title:

Change in Course Description☒

Provide a tracked-changes version of the course description changes:

Prerequisite(s): BUSINESS ~~O701 and BUSINESS O711~~Q780 or permission of the instructor.

In-depth reviews are conducted on a number of important inventory models. These include models with: known and constant demand; known and time varying demand; continuous review with stochastic demand; periodic review with stochastic demand; single period models; and dynamic inventory models with stochastic demand.

Rationale

Provide the following:
1) a brief description that explains how the new course or changes to an existing course are related to the program learning outcomes
2) list of tentative topics to be covered
3) A statement of how the course fits into the department's program

1) As part of a redesign of the Management Science PhD Field, BUS Q780 will be a required foundational course. It will equip students with the necessary background to conduct research in that field.
2) and 3) BUS Q794 is an existing elective course in the MS Field.

Enrolment, Method of Presentation and Evaluation

Expected Enrolment:

Describe in detail the method of presentation of course material:

Method of Evaluation:
Describe in detail the method of evaluation. This should include a percentage breakdown and, for 600-level courses, a detailed description (including percentages) of the extra work required of graduate students. Please also note if a lab or tutorial will be included.

Interdepartmental Considerations
To prevent overlap, is a course in the same or related area offered in another department? If yes, please submit any relevant correspondence with the other department(s). **No**
If the course is intended primarily for students outside your department, do you have the support of the department/program concerned? **NA**

Contact Information for the recommended change
Name: Kai Huang
Email: khuang@mcmaster.ca
Date Submitted: August 29, 2023

Recommendation for Change in Graduate Courses

Please note the following:

- This form must be completed for all course changes. Sections of this form pertaining to your requested change must be completed.
- An electronic version of this form should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). Questions about the form can also be directed to this address.
- 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.

Department: Operations Management
Course Title: Queuing Theory and Computer Simulation
Course Number (if existing course): **BUSINESS Q785**
Course Unit Count (normally 6, 3, 1.5 or 0): **3**
Requisites (Pre/Co/Anti or program enrollment requirement): Enrolment in the PhD Program or permission of the instructor

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Nature of Recommendation (Please complete appropriate field(s))

Is this change the result of an IQAP Review: Yes ☐ No ☒

New Course ☐
Date to be offered (new courses only):
Will the course be cross-listed (combined sections) with another course:
Provide a brief description to be included in the Graduate Calendar:

Course Cancellation ☐
Please provide the rationale for the course cancellation:

Change in Course Title ☐

Provide the new course title:

Change in Course Description ☒

Provide a tracked-changes version of the course description changes:

Prerequisite(s): BUSIENSS Q780 or permission of the instructor.

Queuing theory is concerned with the analysis and design of waiting lines arising in a wide variety of service, manufacturing, and communications systems. This course will start with a brief review of stochastic processes used in modeling queuing phenomena. This will be followed with a discussion of Markovian queues. The imbedded Markov chain models and the extended Markov models will be covered. The general queue G/G/1 and approximations and the queuing network models will be discussed. Statistical inference for queuing models, queuing economics and an analysis of decision problems in queuing theory will also be included. Coverage includes a brief review of probability and statistics, discrete event simulation, and statistical aspects of simulation. The process and methodology of using simulation for problem solving in manufacturing and service environments are emphasized. ~~A simulation package, e.g., Arena, is used as a tool for model and decision making.~~

Rationale

Provide the following:
1) a brief description that explains how the new course or changes to an existing course are related to the program learning outcomes
2) list of tentative topics to be covered
3) A statement of how the course fits into the department's program

1) As part of a redesign of the Management Science PhD Field, BUS Q780 will be a required foundational course. It will equip students with the necessary background to conduct research in that field.
2) and 3) BUS Q785 is an existing elective course in the MS Field.

Enrolment, Method of Presentation and Evaluation

Expected Enrolment:

Describe in detail the method of presentation of course material:

Method of Evaluation:
Describe in detail the method of evaluation. This should include a percentage breakdown and, for 600-level courses, a

detailed description (including percentages) of the extra work required of graduate students. Please also note if a lab or tutorial will be included.

Interdepartmental Considerations
To prevent overlap, is a course in the same or related area offered in another department? If yes, please submit any relevant correspondence with the other department(s). **No**
If the course is intended primarily for students outside your department, do you have the support of the department/program concerned? **NA**

Contact Information for the recommended change **Name: Kai Huang** **Email: khuang@mcmaster.ca** **Date Submitted: August 29, 2023**

Recommendation for Change in Graduate Courses

Please note the following:

- This form must be completed for all course changes. Sections of this form pertaining to your requested change must be completed.
- An electronic version of this form should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). Questions about the form can also be directed to this address.
- 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.

Department: Operations Management
Course Title: Management Science Research Issues I
Course Number (if existing course): **BUSINESS Q780**
Course Unit Count (normally 6, 3, 1.5 or 0): **3**
Requisites (Pre/Co/Anti or program enrollment requirement): Enrolment in the PhD Program or permission of the instructor

Nature of Recommendation (Please complete appropriate field(s))
Is this change the result of an IQAP Review: Yes ☐ No ☒
New Course ☐ Date to be offered (new courses only): Will the course be cross-listed (combined sections) with another course: Provide a brief description to be included in the Graduate Calendar:
Course Cancellation ☐ Please provide the rationale for the course cancellation:

Change in Course Title ☒

Provide the new course title: Mathematical Modelling in Management Science

---

Change in Course Description ☒

Provide a tracked-changes version of the course description changes: Prerequisite(s): Enrolment in the PhD Program or permission of the instructor.

This course provides an exposure to the core ~~mathematical modelling and analysis foundations~~ readings and emerging issues in that are necessary to conduct research in the management science field. It will cover the following main topics: Philosophy of modelling in the areas of management science and operations research, mathematical proofs, selected topics from real analysis, probability and statistics It is intended to bring Ph.D. students to the frontiers of knowledge in important topics in the management science field. In addition to the core readings, specific technical topics (e.g., discrete optimization, dynamic programming, game theory and scheduling) and new application areas (e.g., supply chain management and revenue management) that coincide with the research interests of the students will be discussed.

Rationale

Provide the following:
1) a brief description that explains how the new course or changes to an existing course are related to the program learning outcomes
2) list of tentative topics to be covered
3) A statement of how the course fits into the department's program

1) As part of a redesign of the Management Science PhD Field, BUS Q780 will equip students with the necessary background to conduct research in that field.

2) List of tentative topics:
- **Introduction and Historical Background**
- **Philosophy of Management Science and Operations Research Modelling**
- **How to Model a Real-life Decision Problem**
- **Software: Maple and R-commander**
- **Mathematical Foundations: Real analysis, linear algebra, differential equations (ODE and PDEs), transform techniques, proof techniques,**
- **Probability theory**
- **Theory of Statistics**
- **Data Science**

3) This course will replace the one-one-one seminar courses and is necessary to bring our diverse body of students to a level of background knowledge that will better prepare them for finishing the field course requirements.

Enrolment, Method of Presentation and Evaluation
Expected Enrolment: **5**
Describe in detail the method of presentation of course material: **Lectures, readings and software demos**

Method of Evaluation:
Describe in detail the method of evaluation. This should include a percentage breakdown and, for 600-level courses, a detailed description (including percentages) of the extra work required of graduate students. Please also note if a lab or tutorial will be included.
 	
   Assignments 30%
 	
   Midterm Exam 30%
 	
   Final Exam 40%

Interdepartmental Considerations
To prevent overlap, is a course in the same or related area offered in another department? If yes, please submit any relevant correspondence with the other department(s). **No**
If the course is intended primarily for students outside your department, do you have the support of the department/program concerned? **NA**

Contact Information for the recommended change
Name: Kai Huang
Email: khuang@mcmaster.ca
Date Submitted: August 29, 2023

Contents of Bus Q780 : Mathematical Modelling in Operations Research/Management Science (Draft)

M. Parlar

DSB

August 21, 2023

Contents

Abstract

This file gives a nice bird's-eye-view of the contents of the new Bus Q780.

(More to come)

1 Introduction and Historical Background

2 Philosophy of OR Modelling

Decision maker, decision variables, objective function, constraints
Ackoff [1, p. 32]

3 How to Model a Real-life Decision Problem

- My papers

- parking

- elevator

- free ship

- bagel

- EOQ RRT

4 Software

- Maple and R/Rcmdr

- My book Parlar [5]

5 Mathematical Foundations

Quick calculus review

- Derivatives

- Integrals

5.1   Real analysis

Garrity book [2]

Leibnitz's rule

Bolzano-Weirstrass and Weirstrass; examples

Taylor approx

Bit of Peressini [6]

Convexity Peressini [6]

gradient

Hessian

Jacobian

Bit of complex analysis

5.2   Linear algebra

Homogeneous system

Linear independence

Matrices,

Det

Basis

Vector space

Rank

Eigenvalues

- powers of matrices

- positive definiteness Peressini [6] p. 30

5.3   Differential Equations

5.3.1   ODE

Savings acct

Poisson process ODE

systems

Optimal control

Wronskian

5.3.2   PDEs

Population model (Gerchak/Parlar)

5.4   Transform techniques

Laplace
    Generating functions

5.5   Proof techniques

Snyder Shen
    Polya [7]

6   Probability Theory

Nature of risk/uncertainty
    Functions of r.v.'s Mendenhall [8]
    Heyman and Sobel [3, Appendix A] appendix
    Newsboy
    Ramakanth [4]
    Joint distr r.v.'s Jacobian

7   Theory of Statistics

Use Mendenhall.
    Do inference tests
    Do regression with vector/matrix. I have form MFin notes
    Simulation and CI results. Use a.O715-SLAM-II note

References

[1] R. L. Ackoff. *Scientific Method: Optimizing Applied Research Decisions.* John Wiley, New York, 1962.

[2] T. A. Garrity. *All the Mathematics You Missed: [But need to know for graduate school].* Cambridge University Press, Cambridge, UK, 2002.

[3] D. P. Heyman and M. J. Sobel. *Stochastic Models in Operations Research, Volume I: Stochastic Processes and Operating Characteristics.* McGraw-Hill, New York, 1982.

[4] R. Khazanie. *Basic Probability Theory and Applications.* Goodyear Publishing, Pacific Palisades, California, 1976.

[5] M. Parlar. *Interactive Operations Research with Maple: Methods and Models.* Birkhäuser, Boston, 2000.

[6] A. L. Peressini, F. E. Sullivan, and J. J. Uhl. *The Mathematics of Nonlinear Programming.* Springer-Verlag, New York, 1988.

[7] G. Polya. *How to solve it: A new aspect of mathematical method.* Princeton University Press, 2nd edition, 1985. First published in 1944.

[8] D. Wackerly, W. Mendenhall, and R. Scheaffer. *Mathematical statistics with applications.* PWS Publishers, Boston, 2nd edition, 1981.

Recommendation for Change in Graduate Courses

Please note the following:

- This form must be completed for all course changes. Sections of this form pertaining to your requested change must be completed.
- An electronic version of this form should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca). Questions about the form can also be directed to this address.
- 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.

Department: Operations Management
Course Title: Management Science Research Issues II
Course Number (if existing course): **BUSINESS Q781**
Course Unit Count (normally 6, 3, 1.5 or 0): **3**
Requisites (Pre/Co/Anti or program enrollment requirement): Enrolment in the PhD Program or permission of the instructor

---

Nature of Recommendation (Please complete appropriate field(s))

Is this change the result of an IQAP Review: Yes ☐ No ☒

New Course ☐
Date to be offered (new courses only):
Will the course be cross-listed (combined sections) with another course:
Provide a brief description to be included in the Graduate Calendar:

Course Cancellation ☒
Please provide the rationale for the course cancellation: Following a redesign of the Management Science Field, the one-on-one seminar courses are no longer required.

Change in Course Title☐

 Provide the new course title:

Change in Course Description☐

Provide a tracked-changes version of the course description changes:

Rationale

Provide the following:
1) a brief description that explains how the new course or changes to an existing course are related to the program learning outcomes
2) list of tentative topics to be covered
3) A statement of how the course fits into the department's program

Enrolment, Method of Presentation and Evaluation

Expected Enrolment:

Describe in detail the method of presentation of course material:

Method of Evaluation:

Describe in detail the method of evaluation. This should include a percentage breakdown and, for 600-level courses, a detailed description (including percentages) of the extra work required of graduate students. Please also note if a lab or tutorial will be included.

Interdepartmental Considerations
To prevent overlap, is a course in the same or related area offered in another department? If yes, please submit any relevant correspondence with the other department(s).
If the course is intended primarily for students outside your department, do you have the support of the department/program concerned?

Contact Information for the recommended change
Name: Kai Huang
Email: khuang@mcmaster.ca
Date Submitted: August 29, 2023

McMaster University | SCHOOL OF GRADUATE STUDIES

Gilmour Hall, Room 212
1280 Main Street West
Hamilton, ON L8S 4L8

☎ (905) 525-9140 x 23679
🌐 gs.mcmaster.ca

To   :   Graduate Council

From   :   Christina Bryce
               Assistant Graduate Secretary

_____

At its meeting on October 18th the Faculty of Health Sciences Graduate Policy and Curriculum Committee approved the following graduate curriculum recommendations.

Please note that these recommendations were approved by the Faculty of Health Sciences.

For Approval of Graduate Council:

      a. **Graduate Diploma in Community and Public Health**
          i. **Change to Admission Requirements**

      b. **Rehabilitation Sciences**
          i. **Cancellation of Course-Based Option**

For Information of Graduate Council:

      a. **Biomedical Innovation**
          ii. **New Courses**
               1. 702: Project Course II
               2. 703: Project Course III
               3. 708: Regulation & Reimbursement
               4. 709: Business Model Development
               5. 710: Funding & Venture Creation
               6. 711: Business Basics

      b. **Health Research Methodology**
          iii. **New Course**
               1. 760 Applied epidemiological methods in secondary data analysis

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Recommendation for Change in Graduate Curriculum – For Change(s) Involving Degree Program Requirements / Procedures / Milestones

Please read the following notes before completing this form:	

1. This form must be completed for all changes involving degree program requirements/procedures. All sections of this form must be completed.

2. An electronic version of this form (must be in MS WORD not PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca).

3. A representative from the department is **required to attend** the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

DEPARTMENT	Department of Health Research Methods, Evidence, and Impact
NAME OF PROGRAM and PLAN	Graduate Diploma in Community and Public Health
DEGREE	**Graduate Diploma**

NATURE OF RECOMMENDATION *(PLEASE CHECK APPROPRIATE BOX)*

Is this change a result of an IQAP review? ☐ Yes ☒ No

Creation of a New Milestone ☐

Change in Admission Requirements	x	Change in Comprehensive Examination Procedure		Change in Course/Program Requirements	
Change in the Description of a section of the Graduate Calendar		**EXPLAIN:**			
Other Changes:		**Explain:**			

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Describe the existing requirement/procedure:

Admission requirement:

Completion of a statistics or mathematics undergraduate course with B+ standing.

Provide a detailed description of the Recommended Change *(Attach additional pages if space is not sufficient.)*

Remove requirement for a statistics or mathematics undergraduate course and replace with wording:

An undergraduate course in Mathematics (statistics, probability, data analysis, quantitative methods, mathematics, calculus or algebra) is **strongly recommended** *to ensure appropriate quantitative ability for the epidemiology and quantitative courses.*

Rationale for the Recommended Change (How does the requirement fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review?):

A statistics or mathematics course was initially required to mirror requirements in the MPH program, but after the first admissions cycle the admissions committee have a better idea of the profile of our prospective students. MPH uses the requirement as an additional way to identify exceptional students from a much larger pool of applicants than we have in GDCPH so far. The admissions committee does not want the stats requirement to dissuade otherwise qualified candidates from applying, especially those already working in Public Health.

The Graduate Diploma in Clinical Epidemiology (GDCE) program does not have this requirement and we wish to bring our requirements in line with this program at the same level.

Provide implementation date: *(Implementation date should be at the beginning of the academic year)*

September 1, 2024 (application cycle opens January 2024)

Are there any other details of the recommended change that the curriculum and policy committee should be aware of? If yes, please explain:

no

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Provide a description of the recommended change to be included in the calendar (please include a tracked changes version of the calendar section affected if applicable):

Admission

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 any discipline.
- B+ average (75-79%, equivalent to a McMaster 8.5 grade point average) in the final year of undergraduate study.
- ~~Completion of a statistics or mathematics undergraduate course with B+ standing.~~
- Additional evidence (CV and Letter of Interest) attesting to suitability for GDCPH study as reflected in work experience, relevance of academic background, and letters of recommendation.
- Two confidential academic letters of recommendation from instructors or research supervisors most familiar with your academic work are required.
- 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. Students taking the IELTS test are required to achieve a minimum score of 6.5 with a minimum score of 5.5 in each category.

Meeting the minimum admissions requirements does not guarantee admission into the GDCPH. The admissions process is competitive.

Further details of the admission requirements and procedure are available at:
https://gdcph.healthsci.mcmaster.ca/

Contact information for the recommended change:

Name: Emma Apatu and Laura Anderson

Email: apatue@mcmaster.ca; ln.anderson@mcmaster.ca

Date submitted: 11/10/2023

If you have any questions regarding this form, please contact the Assistant Secretary, School of Graduate Studies, cbryce@mcmaster.ca

![McMaster University logo]

Recommendation for change in graduate curriculum – for change(s) involving degree program requirements/procedures/milestones

Important: Please read the following notes before completing this form
1. This form must be completed for **all** changes involving degree program requirements/procedures. **All** sections of this form **must** be completed.
2. An electronic version of this form (must be in MS Word **not** PDF) should be emailed to the Assistant Secretary, School of Graduate Studies (cbryce@mcmaster.ca)
3. A representative from the department is **required to attend** the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.

Department	**School of Rehabilitation Science**
Name of Program and Plan	**RS MSc Course-Based (Academic plans: RESCONLMSC, RHABCROMSC)**
Degree	**MSc (GHSMS)**

Nature of Recommendation (please check appropriate box)	
Is this change a result of an IQAP review? ○ Yes ⊙ No	
○ **Creation of new milestone**	
○ **Change in admission requirements**	
○ **Change in comprehensive**	
○ **Change in course requirements**	
○ **Change in the description of a section in the graduate calendar**	**Explain:**
⊙ **Other changes**	**Explain: Phasing-Out the Rehabilitation Science Course-Based program.**

Describe the existing requirement/procedure	Please see attached document.
Provide a detailed description of the recommended change (Attach additional pages if space is not sufficient.)	Please see attached document.
Rationale for the recommended change (How does the requirement fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review?):	Please see attached document.
Provide implementation date: (implementation date should be at the beginning of the academic year)	Please see attached document
Are there any other details of the recommended change that the curriculum and policy committee should be aware of? If yes, explain.	Please see attached document
Provide a description of the recommended change to be included in the calendar (please include a tracked changes version of the calendar section affected if applicable):	Please see attached document

Contact information for the recommended change:
Name: Ada Tang   Email: atang@mcmaster.ca

Extension: Date submitted:

Rehabilitation Science
GPCC – Curriculum Changes – Program

<mark>Describe the existing requirement/procedure</mark>

The Rehabilitation Science Course-Based Master of Science Program is a part-time program, delivered entirely online. The program admits ~20-25 students per academic year, every September (Fall). Students are required to complete the equivalent of eight 3-credit courses, typically completed in 3-4 years which reflects reasonable progress based on other commitments. Most courses are 13 weeks in duration and includes both asynchronous and synchronous components, with a different topic addressed each week. Asynchronous components (hosted on Avenue to Learn (A2L)) involve readings, learning activities, and contributions to discussion posts that summarize learning. Synchronous sessions (held on Microsoft Teams) include activities such as student presentations, discussion of course content, or Q&A sessions for upcoming assignments.

Assignments and self-assessments of participation are submitted through A2L. Students also engage in group work both synchronously and asynchronously for formative and summative evaluation of learning in all courses.

Information in the Graduate Calendar:

Below is the description of the Rehabilitation Science (RS) programs in the Graduate Calendar. *Text below in blue is the description related to the RS Course-Based program:*

"The School of Rehabilitation Science offers a M.Sc. and Ph.D. in Rehabilitation Sciences for individuals who have a prerequisite degree in Occupational Therapy, Physiotherapy, Speech-Language Pathology or other health-relevant program; and wish to pursue graduate training in Rehabilitation Science.

There are two options within the Rehabilitation Science Master's program:

1. The thesis option, which may be undertaken on a full or part-time basis on campus; and

2. The course-based option, which is offered on a part-time basis and can be completed entirely through online education, or include on-campus course options.

The M.Sc. course-based option provides training to physiotherapists, occupational therapists and other health professionals who want to obtain a master's degree relevant to their clinical practice or employment. The program provides flexibility for working clinicians at a distance to complete the program entirely online and on a part-time basis. However, students also have the option to take an on-campus course. Courses emphasize evidence-based practice, clinical measurement/evaluation, critical thinking, qualitative and quantitative methods, and application of knowledge to practice.

The M.Sc. thesis option provides training that will develop knowledge, appraisal, and evaluation skills in Rehabilitation Science. Students study and apply theory, research design and analysis methods both qualitative and quantitative, to a Rehabilitation Science research thesis.

The Ph.D. in Rehabilitation Science provides training to develop rehabilitation scientists who will advance rehabilitation research and transfer new knowledge into practice and policy. This competency-based program educates students in rehabilitation theory, research design and methods, grantsmanship, scientific writing, knowledge exchange and translation, and teaching/learning strategies. This option includes coursework, a comprehensive portfolio and a thesis. Graduates will be prepared to take on academic, leadership or research roles.

The McMaster Rehabilitation Science Dual Degree option allows students to obtain the established Master of Science in Occupational Therapy (OT) and Doctor of Philosophy in Rehabilitation Science (RS) OR the Master of Science in Physiotherapy (PT) and Doctor of Philosophy in Rehabilitation Science (RS) offered within the School of Rehabilitation Science (SRS) in 5 years. The Dual Degree option provides students with advantages through integrated scholarship training and professional development and stream-lined time efficiency. Completing the two degrees, an OT or PT professional degree and Ph.D., concurrently rather than sequentially develops clinician scientists who have an understanding of the issues facing the professions, the potential contributions they can make and research expertise to undertake these roles.

Research in Rehabilitation Science

The focus of the research in Rehabilitation Science includes the following areas of specialization:

1. **Best practice and knowledge translation**: Developing, evaluating and applying skills in evidence-based practice and strategies to implement best practices.

2. **Childhood Disability (and Participation)**: CanChild Centre for Childhood Disability Research is a research and educational centre whose research is focused on improving the lives of children and youth with disabilities and their families. Founded in 1989, CanChild is a world leader in the field of childhood disability.

3. **Functional health with aging or chronic disease**: Research that focuses on keeping people healthy and functionally independent despite increasing age or chronic disease.

4. **Neuromusculoskeletal function and mobility**: Research that focuses on understanding and optimizing neuromusculoskeletal function and mobility as a vital aspect of overall health.

5. **Work Ability and Participation**: Research that focuses on creating and maintaining safe, healthy, productive work, and participation in valued life roles.

6. **Orthopaedic Musculoskeletal-Manipulative Physical Therapy (OMPT)**: Specialty training that advances knowledge, clinical reasoning, manual therapy skills, evidence-based practice and research experience in keeping with national and international standards for clinical specialization."

Provide a detailed description of the recommended change (Attach additional pages if space is not sufficient)

Recommended change: The School of Rehabilitation Science intends to phase out the Rehabilitation Science Course-Based program and encourage prospective applicants to consider the Masters of Health Management (MHM) Program, offered by both the School of Rehabilitation Science and the DeGroote School of Business, which provides many similar opportunities.

Background: The Rehabilitation Science Course-Based program was intended to run for a limited time. It was established in 2004 to fill the educational gap for Occupational Therapists and Physiotherapists with undergraduate entry-to-practice degrees (the educational standard prior to 2002 at McMaster University) to upgrade with a Master's degree. The online and part-time format allowed learners to access the educational program from geographically dispersed living situations while carrying multiple roles and responsibilities including the workplace.

The Course-based program evolved since inception. The Orthopedic Manual and Manipulative Physical Therapy (OMPT) specialization (intake ~1-2 students per year) and co-enrolled option with prosthetics and orthotics programs (BCIT, George Brown College; intake <5 students per year) were added. The student demographic has changed over time, starting initially with only occupational therapists and physiotherapists, to now other types of clinicians and non-clinicians such as athletic therapists, kinesiologists, chiropractors, autism specialists, dieticians, prosthetists, and orthotists.

In 2023, we undertook a review of the Course-Based Masters program to consider its current status, the role and future of online learning, and implications for the School of Rehabilitation Science at large. In our review, we collected and reviewed the following information:

1. Survey data from alumni and students who withdrew from the RS Course-Based program
2. Survey data and instructor retreat discussion with instructors teaching in the RS Course-Based Program
3. Data on Program and course enrollment numbers, and the professional background of students
4. Comparison with the Masters of Health Management Program (offered through SRS and Degroote School of Business)
5. Finances
6. Consultation with FHS Associate Dean (Graduate Studies)
7. Discussion with staff and faculty in SRS Council meetings

==Rationale for the recommended change (How does the requirement fit into the department's program and/or tie to existing Program Learning Outcomes from the program's IQAP cyclical review)?==

Key considerations factored into the recommendation to phase out the Rehabilitation Science Course-Based program

1. The original intention of the program, which was to offer Bachelor-trained occupational therapists and physiotherapists an opportunity to upgrade to a Masters' degree, is no longer relevant as the School of Rehabilitation Science has now been providing entry-level Masters programs in occupational therapy and physiotherapy for 22 years

2. Application and admission numbers have remained largely unchanged or declining in recent years due to the pandemic and online fatigue. To provide a state-of-the-art online program, as the course-based program was in 2004, there would need to be a significant investment of resources.

3. With the changing demographics of the student body, there is not always the expertise in the School of Rehabilitation Science to supervise scholarly papers and research projects in specific professions (e.g., athletic therapy, prosthetics and orthotics, etc.)

4. There is an increasing number of students from undergraduate health-related programs that are not professional programs (e.g., BHSc) who struggle with program content focused on clinical practice.

5. Currently, the operating costs significantly exceed the revenue generated. Again, significant resources would be needed to consider ways in which the program could be profitable.

Phasing out the RS Course-Based Masters program to the MHM program The Master of Health Management (MHM) Program is a partnership between the School of Rehabilitation Science and DeGroote School of Business. The goal of the program is to produce graduates who emerge as leaders in innovative health services, design, and delivery. The MHM program is also a part-time program that is delivered primarily online and asynchronously, although there are 2 short, mandatory residencies (2-3 days in length; one virtual and one in-person).

There are many similarities between the MSc RS Course-Based and the MHM programs, which will meet the needs of most applicants to the Course-Based program:

- **Similarity in Program Goals**. The Course-Based Masters provides training to health professionals interested in obtaining a master's degree relevant to their clinical practice or employment. We anticipate that the MHM program may be of interest to prospective students who are looking to advance into leadership and/or health management roles. Survey data supports this, where students reported that they chose the program for career advancement or alignment with career goals (33/40, 83%) and that the program facilitated access to different opportunities such as management, leadership, research (25/40, 63%).

- **Similarity in Program Structure.** Similar to RS Course-Based Program, the MHM Program is also offered online and on a part-time basis only, however there is a one-time residency for MHM. Both programs offer flexibility for learning given the professional roles of their students.

- **Similarity in Program Courses**. A number of RS courses are similar to MHM courses:

RS Course	Similar course in MHM Program
REHAB 705 / Evaluating Sources of Evidence	HLTH MGT 705 / Evaluating Sources of Evidence for Management and Evaluation
REHAB 730 / Scholarly Paper	HLTH MGT 730 / Scholarly Paper (*see* NOTE *below*)
REHAB 770 / Leadership in Rehabilitation	HLTH MGT 770 / Leadership in Health Organizations
REHAB 773 / Knowledge Translation in Rehabilitation Practice	HLTH MGT 733 / Knowledge Translation in Healthcare Practice and Management

NOTE: In 2022, we harmonized REHAB 730 and HLTH MGT 730, given the similarities in course structures and expectations. There is now a single course coordinator, which has allowed us to streamline our processes and find efficiencies with instructor resources.

- **Shared faculty and staff** We have several faculty, instructors and staff involved in both the Course-Based Program and MHM Program who can help support Rehabilitation Science Course-Based students and future applicants with the transition to the MHM Program:
  - o Vanessa Killinger (Program Manager RS & MHM)
  - o Shaminder Dhillon (Instructor for REHAB/MHM 730)
  - o Mary Clark (Instructor for REHAB 710 & HLTHMGT 732)
  - o Kathryn Wise (Instructor for REHAB 775 & HLTHMGT 708, HLTHMGT 735)
- **Additionally**
  - o HLTH MGT 732 / Strategic Writing for Health Professionals is cross-listed with the RS Course-Based Program (~1 RS students enrolled each year)
  - o REHAB 771 / Work Organization and Health (~30% enrollment from MHM students)

==Provide implementation date (implementation date should be at the beginning of the academic year):==

The Rehabilitation Science program plans to have September (Fall) 2023 be the final intake for the Course-Based program.

We have developed a 3-year plan to phase out the RS Course-Based Program offerings to enable the last cohorts of students to finish their degree requirements (**Appendix A**). This plan considers historical enrollment numbers and instructor resources. Students in the RS Course-Based program are expected to complete the program in 3-4 years. Students still enrolled in the Course-Based program beyond 2026 will transition to MHM course offerings; students will be notified of the equivalent courses in the MHM program to facilitate the process.

==Are there any other details of the recommended change that the curriculum and policy committee should be aware of? If yes, explain.==

The RS program is developing a communication plan to keep students and instructors informed of the changes in the Rehabilitation Science Course-Based program.

In scenarios where students take a leave of absence and are anticipated to complete the program after it is officially phased-out, the RS program will provide support to identify courses that can be substituted for courses in the MHM Program.

The RS Course-Based Program team has considered courses currently offered that provide unique learning opportunities. For example, REHAB 771 / Work Organization and Health is often taken by MHM students; we are considering how this course could become a permanent offering of the MHM program.

Changes to the Graduate Calendar would be removing all information related to the RS Course-Based Masters program, as follows (tracked changes):

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Graduate Calendar

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There are two options within the Rehabilitation Science Master's programs:

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2. The course-based option, which is offered on a part-time basis and can be completed entirely through online education, or include on-campus course options.

The M.Sc. course-based option provides training to physiotherapists, occupational therapists and other health professionals who want to obtain a master's degree relevant to their clinical practice or employment. The program provides flexibility for working clinicians at a distance to complete the program entirely online and on a part-time basis. However, students also have the option to take an on-campus course. Courses emphasize evidence-based practice, clinical measurement/evaluation, critical thinking, qualitative and quantitative methods, and application of knowledge to practice.

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3. **Functional health with aging or chronic disease**: Research that focuses on keeping people healthy and functionally independent despite increasing age or chronic disease.

4. **Neuromusculoskeletal function and mobility**: Research that focuses on understanding and optimizing neuromusculoskeletal function and mobility as a vital aspect of overall health.

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6. ~~**Orthopaedic Musculoskeletal Manipulative Physical Therapy (OMPT)**: Specialty training that advances knowledge, clinical reasoning, manual therapy skills, evidence-based practice and research experience in keeping with national and international standards for clinical specialization.~~

Graduate Calendar: General Regulations for Admission

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The general regulations for the M.Sc. and Ph.D. degrees appear under the Regulations for Master's and Ph.D. Degrees near the beginning of this Calendar.

For foreign applicants whose native language is not English, evidence of proficiency in the use of the English language is required. The most common evidence is the Test of English. The minimum university requirements are outlined in the **General Regulations of the Graduate School**; preferred standards for admission into the SRS degrees are:

- Paper Based TOEFL: Minimum score of 600 with a minimum speaking score of 45 and minimum of 50 in the other areas.
- Computer Based TOEFL: Minimum score of 250 with a minimum oral score of 45.
- Internet Based (iBT) TOEFL: Minimum total score of 92 with a minimum writing score of 22.

M. Sc. Degree

M.Sc. Course-based Option

Admission Requirements

The admission requirements for the M.Sc. course-based option are:

- Graduation from a Physical or Occupational Therapy Entry Level Degree Program; or a four-year health relevant degree program with a minimum of a B+ average in the final year of the program.
- Two (2) academic references. In addition, applicants have the option of providing one (1) work-related reference.
- Written statement outlining clinical interests and experience, learning expectations and goals.
- Applications should include official transcripts, a CV, evidence of professional affiliations and official TOEFL documentation if required.

Course Requirements

The following are the course requirements of the online Masters of Rehabilitation Science program. Students must complete, with at least a B- standing, a minimum of three (3) required graduate half courses and five (5) electives. The elective components of the program are customized to the learners needs and may consist of a course-based only option, or a scholarly/research paper option.

Mandatory Courses

The following are the core mandatory (online) courses:

- REHAB 705 / Evaluating Sources of Evidence
- REHAB 706 / Measurement in Rehabilitation
- REHAB 772 / Introduction to Qualitative Research OR
- REHAB 774 / Quantitative Research Methods

Course-based Only Option
Course-based Only Option- Five (5) elective courses are selected in addition to the (3) core mandatory courses. These typically are selected from the RS online course offerings, but may include face-to-face courses on campus where students are able to attend these.
M.Sc. Thesis Option

Scholarly/Research Paper Option

Scholarly/Research Paper Option- Three (3) elective courses are selected in addition to the three (3) core mandatory courses. In addition, two (2) credits are obtained by completion of a mentored scholarly work. The two (2) choices for this work are: REHAB 730, a scholarly paper that demonstrates integrative thinking while addressing an issue in rehabilitation; or REHAB 735, a supervised research project that provides experiential learning in rehabilitation research and writing of a research paper.

~~Students who select REHAB 735 as the degree completion course may choose to take REHAB 730 towards elective credits (6 credits). Thus, students who select this option will complete: the three (3) core mandatory courses, one (1) 3-unit elective course and REHAB 730 (6 units) for elective credits, and REHAB 735. When selecting this option, students are required to complete and submit the REHAB 730 Elective Form for approval from the Program Coordinator and Assistant Dean at least 4 months in advance of the planned start of REHAB 730.~~

~~Online Modules~~

~~Online modules taken by all graduate students:~~

- ~~SGS 101 / Academic Research Integrity and Ethics~~
- ~~SGS 201 / Accessibility for Ontarians with Disabilities Act (AODA)~~

M.Sc. Thesis Option

Admissions Requirements

The admission requirements for the M.Sc. thesis option are:

1. Graduation from a Physical or Occupational Therapy Entry Level Degree Program; or a four-year health relevant degree program with a minimum of a B+ average in the final year of the program.
2. Two (2) academic references. In addition, applicants have the option of providing one work-related reference.
3. A letter (maximum (2) two pages) outlining the proposed training plan (supervisor and research area), research interests and experience; and long term career goals.
4. Applications should include official transcripts, a CV, evidence of professional affiliations and official TOEFL documentation if required

Course Requirements

Complete, with at least a B- standing, a minimum of four graduate half courses:
- An approved Research Methods Course (e.g. REHAB *707);
- An approved Data Analysis course (e.g. REHAB *714)
- REHAB *700; and
- An additional approved course (e.g. REHAB *702, REHAB *703, REHAB *704, REHAB *711, REHAB *712)
- SGS #101
- - Academic Research Integrity and Ethics and
- SGS and #201
- Accessibility for Ontarians with Disabilities Act (AODA) Training (online modules taken by all graduate students)
- The School of Rehabilitation Science has a series of research rounds, workshops, and seminars given by rehabilitation scientists. Regular attendance at these seminars is required.
- The student's Supervisory Committee may require students to take additional courses

- Students may choose additional courses, which may be taken once approved by the student's Supervisory Committee

2.Complete a research thesis on an approved rehabilitation science issue and defend the thesis at a final oral examination.

Transfer Process

(from a M.Sc. to Ph.D. program)

Students enrolled in a Master's program in the Rehabilitation Science Program can apply to transfer to the Ph.D. after completing three (3) courses with a minimum A- average (must include a Research Methods or Statistics Course), acquiring a PhD Supervisor and defending their training plan at a Transfer Committee Meeting.

Appendix A. 3-year plan for course offerings as the RS Course-based Masters Program is phased out. Brief statements of rationale also provided. HLTMGT 732 / Strategic Writing for Health Care Professionals is not included here since this is already an MHM course and will continue.

	FALL	WINTER	SPRING / SUMMER
2023-2024	**RS705** Evaluating Sources of Evidence *Rationale: Required course. Must complete before proceeding*	**RS706** Measurement in Rehabilitation *Rationale: Required course. Typically taken earlier in program*	**RS702** Participation & Community Living *Rationale: Typically, lower enrollment*
2024-2025	**RS715** Advanced Orthopaedic Musculoskeletal Physiotherapy Specialization *Rationale: 2-term course. For OMPT students only, and typically offered alternating years. This would be the last year on-cycle.* **RS770** Leadership in Rehabilitation *Rationale: Equivalent course available in MHM* **RS775** Technological Innovation and Rehabilitation *Rationale: Typically lower enrollment. Not offered in 2023-2024*	**RS773** Knowledge Translation *Rationale: Equivalent course available in MHM* **RS771** Work Organization & Health *Rationale: Plan to transition this course to MHM*	**RS703** Special Topics in Clinical Sciences *Rationale: Primarily taken by OMPT students, though other students may enroll. Last year on-cycle for OMPT students.* **RS708** Clinical Reasoning in Rehabilitation *Rationale: Mediocre enrolment* **RS774** Quantitative Research Methods *Rationale: One of two required research courses. Typically taken earlier in program but course is often full. May also run one additional year*
2025-2026	**RS710** Facilitating learning in Rehabilitation Contexts *Rationale: Mediocre enrolment. Course instructor suggested this course could be modified for MHM to focus on "coaching" if there is interest* **RS735** Rehabilitation Research Project *Rationale: 3-term course will run until end of program*	**RS730** Scholarly Paper *Rationale: 2-term course will run until end of program but can continue as MHM beyond this term*	**RS704** Independent Study *Rationale: Rarely taken but may provide students an opportunity to customize their learning as they finish their degree* **RS772** Introduction to Qualitative Research *Rationale: One of two required research courses. Course is always full because of thesis-based students. This course could transition to thesis-based program.*

McMaster University | SCHOOL OF GRADUATE STUDIES

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gs.mcmaster.ca

To : Graduate Council

From : Christina Bryce
Assistant Graduate Secretary

_____

At its meeting on September 20th the Faculty of Social Sciences Graduate Curriculum and Policy Committee approved the following graduate curriculum recommendations.

Please note that these recommendations were approved by the Faculty of Social Science.

For Information of Graduate Council:

    i.   Public Policy
        i. Change to Course Description
            1. 750 Data Analysis I
            2. 753 Working with Code I
        ii. Change to Course Description and Requisites
            1. 751 Data Analysis II
            2. 752 Data Analysis III
            3. 754 Working With Code II
            4. 755 Working With Code III