

September 8, 2017

TO: Members of Undergraduate Council

FROM: Ms Tamara Bates  
Governance Advisor and Assistant University Secretary

RE: **Notice of Meeting**

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The next meeting of Undergraduate Council will be held on **Tuesday, September 12, 2017 at 2:30 p.m., in the Council Room, Gilmour Hall (GH 111)**. The items of business to be discussed are outlined on the agenda provided with this meeting notice.

A copy of the schedule of meetings for Undergraduate Council and its standing committees is attached to the end of the meeting package.

Should you be unable to attend the meeting, please notify the University Secretariat at extension 24337 or e-mail [univsec@mcmaster.ca](mailto:univsec@mcmaster.ca)

**McMaster University  
UNDERGRADUATE COUNCIL**

**Tuesday, September 12, 2017 at 2:30 p.m.  
in the Council Room (GH 111)**

**A G E N D A**

- I MINUTES of the meeting of April 18, 2017 (attached – for approval)
- II BUSINESS ARISING
  - i. Credit/No Credit Course Option
  - ii. Exploration Units
- III CHAIR’S REMARKS
- IV ELECTION OF THE UNDERGRADUATE COUNCIL VICE-CHAIR
- V REPORT OF THE UNDERGRADUATE COUNCIL EXECUTIVE COMMITTEE  
(attached – for approval)
  - i. Terms of Reference for Ad Hoc Committee to Review Non-McMaster Credentials
  - ii. Undergraduate Council Committee Assignments
- VI REPORT FROM THE COMMITTEE ON PROGRAMMING IN THE ARTS AND  
SCIENCE FACUTLIES (PASF) (attached – for approval)
- VII PROPOSED AD HOC COMMITTEE ON A MAJOR AND TWO MINORS PATHWAY  
(attached – for approval)
- VIII OTHER BUSINESS



UNIVERSITY SECRETARIAT

- Board of Governors
- Senate

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## **RESULTS OF CREDIT/NO-CREDIT COURSE OPTION DECISIONS UNDERGRADUATE COUNCIL**

### **I Approval of a Credit/No-Credit Course Option**

At its meeting of April 18, 2017, Undergraduate Council received an oral update on the Discovery Course option. It was agreed that, following the meeting, a formal description of the option would be drafted and Undergraduate Council would be asked to vote by e-mail on the motion to approve the option for a 2 to 2 ½ year trial period. An e-mail vote was conducted on April 21-28, 2017 and the proposal, as attached, was approved. The motion included a condition that the precise name of the option was yet to be determined by Undergraduate Council.

In the report from Undergraduate Council to Senate, the option was given the generic name of Credit/No Credit Course Option. At its meeting of May 17, 2017, Senate approved the proposal, also on the understanding that the name was still to be decided by Undergraduate Council.

### **II Ratification of The Decision of The Undergraduate Council Executive Committee Re: Exploration Units**

On May 1-5, 2017, the Undergraduate Council Executive Committee took a vote, by e-mail to determine the precise name of the Credit/No-Credit Course Option. Names that had been suggested at the April 18, 2017 Undergraduate Council meeting, were brought forward for the vote and members of the Executive Committee were invited to rank the choices according to their preference. The Executive Committee voted in favour of the name Exploration Units.

Undergraduate Council Executive Committee now recommends,

**that Undergraduate Council ratify the decision of the Undergraduate Council Executive that the Credit/No-Credit Course option will be called Exploration Units.**



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## **FOR E-MAIL VOTE UNDERGRADUATE COUNCIL**

For Approval:

### Discovery Course Option

At its meeting of December 6, 2016, the Undergraduate Council approved, in principle, the concept of a Discovery Course (formerly Discovery Credit). On review of additional details about the Discovery Course option, that approval in principle was reaffirmed at the meeting on January 31, 2017. Undergraduate Council is now asked to approve the following details of the Discovery Course option.

McMaster University encourages interdisciplinary study and would like to create a pathway for students to explore courses outside of their academic comfort zone while minimizing any academic penalty. A Discovery Course option is designed to encourage students to explore interests outside of their program without affecting their GPA. The Discovery Course option will be established for a 2-2.5 year trial program, beginning no later than September 2018, after which period Undergraduate Council will review the outcome and determine whether to continue with the Discovery Course option, and if so, make any necessary changes to the process.

The Discovery Course option is proposed as follows:

- Students must be registered in a participating degree program, above Level I, and have a GPA of 3.5 or higher
- Discovery Course option is not available to students who
  - are enrolled in the School of Medicine, or
  - are enrolled in a Program/Faculty which is not participating in the Discovery Course option (see Faculty Academic Regulations), or
  - have graduated and are in a second degree or a non-degree program, e.g., continuing, etc.
- Discovery Course option is available to Engineering students only for complementary studies electives
- Exchange students may be eligible to participate in the Discovery Course option
- Discovery Courses are assessed on a Credit or No Credit (CR/NC) grading scale
- Credit will be given to a student who earn a final mark of 50% or higher
- Earned units will be counted toward the student's degree
- The grade achieved will not be calculated toward the student's GPA or other averages
- Maximum of 3 units of Discovery Courses per term to a maximum of 12 units per four- or five-level degree or a maximum of 9 units per three-level degree
- Maximum of 6 units of Discovery Courses may be used to satisfy requirements toward a Minor
- Discovery Course option is not available for any course that is on the list of required courses for the student's degree program, nor for independent study, thesis, field study or placement courses
- Students cannot use the Discovery Credit option for courses in which they have been charged with academic dishonesty

- Students must declare a course as a Discovery Course on Mosaic by the Last Day for Enrollment and Changes date
- If the student would rather keep the numeric grade, they must indicate the course is no longer a Discovery Course on Mosaic by the last day for cancelling courses without failure by default and the numeric grade will be the recorded grade
- Once declared as a Discovery Course, the course counts toward the maximum unit limits regardless of whether or not the course is graded as a Discovery Course.
- If the student changes their program of study and a course taken as a Discovery Course becomes a required course, the new Faculty office may accept the course grade of CR or NC or have the grade converted back into a numeric grade. If a grade is converted back into a numeric grade, there will be no retroactive reconsideration of aid and award
- It is the student's responsibility to ensure that they do not use the Discovery Course option for courses for which numeric grades may be required for future applications to graduate or professional school
- It is the student's responsibility to carefully review any government (e.g., OSAP) and University aid and award eligibility rules which may be affected by the use of the Discovery Course option

It is now recommended

**that Undergraduate Council approve a Discovery Credit option pending further discussion of the precise name of the option, for a two- to 2-and-a-half-year trial, beginning no later than September 2018, as set out above.**

For Information:

The following administrative processes will support the Discovery Course option:

1. Students enroll in classes.
2. By the Last Day for Enrollment and Changes date each term, a student can indicate up to 3 units as a Discovery Course. Mosaic will confirm the following:
  - a) The student is eligible to participate in the Discovery Course option (not in Level I).
  - b) The Program/Faculty the student is registered in is participating in the Discovery Course option.
  - c) The course is not a required course and is an eligible course as a Discovery Course.
  - d) The student has not exceeded the 3-unit limit for the term.
  - e) The student has not reached the maximum 12-unit limit for Discovery Courses.

If the student's eligibility to select this course as Discovery Course is confirmed, the course will be identified as Discovery Course, visible to the student and administrators but not the instructor.

3. The area in Mosaic where students indicate a course is a Discovery Course will include a statement saying Discovery Courses can only be used for elective courses and if a student selects a required course, the course will not be graded as a Discovery Course.
4. The Program/Faculty Offices will use the Discovery Course query to identify those students with a Discovery Course in the term. Communications will be sent to students with reminders students can switch the course back to the normal grading scheme for the course.

5. The deadline by which students can remove the Discovery Course option will normally be set as the last day for cancelling courses without failure by default. Students selecting this option will have the course graded using the normal grading scale for the course. However the course will be counted as a Discovery Course in the Discovery Course tally.
6. The Registrar's Office will query Mosaic to identify those students who continue to want their grading scale changed to the Discovery Course grading scale. The Registrar's Office will verify there is no charge of academic dishonesty against the student in the Discovery Courses.
7. The numeric grade submitted by the instructor will be captured in case it becomes necessary for later use.
8. If appropriate, at a later point, the Faculty Office has the authority to approve the return of the original grade.



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## REPORT TO UNDERGRADUATE COUNCIL FROM THE UNDERGRADUATE COUNCIL EXECUTIVE COMMITTEE

### I Ad Hoc Committee to Review Non-McMaster Credentials (Attachment I)

At its meeting of April 18, 2017, Undergraduate Council approved a recommendation from the Certificates and Diplomas Committee to struck an ad hoc committee to review the non-McMaster Credentials. The Ad Hoc Committee to Review the Certificates and Diplomas Policy found such a review to be necessary, but beyond the scope of its mandate. By e-mail vote, conducted June 16-23, 2017, the Undergraduate Council Executive Committee approved the terms of reference and composition of an Ad Hoc Committee to Review Non-McMaster Credentials, as set out in Attachment I.

The Undergraduate Council Executive Committee now recommends,

**that Undergraduate Council ratifies the decision to approve the terms of reference and composition of the Ad Hoc Committee to Review Non-McMaster Credentials, as set out in Attachment I.**

### II Undergraduate Council Committee Memberships (Attachment II)

On June 16-23, 2017, the Undergraduate Council Executive Committee approved, by e-mail vote, the 2017-2018 Undergraduate Council Committee Assignments. Some minor adjustments were made after the assignments were approved to ensure balance on each of the Committees and for members.

The Undergraduate Council Executive Committee now recommends,

**That Undergraduate Council ratifies the decision to approve the 2017-2018 Undergraduate Council Committee Assignments, as set out in Attachment II.**

**Undergraduate Council: FOR APPROVAL  
September 12, 2017**

## Undergraduate Council Ad Hoc Committee on Non-McMaster Credentials

### Proposed Terms of Reference

While carrying out its mandate, the Undergraduate Council Ad Hoc Committee to Review the Certificates and Diplomas Policy determined that there are a number of examples of programs or courses offered through and/or developed by McMaster University that lead to a non-McMaster credential. In some cases, the courses are degree courses that are recognised by an external institution and in other cases the courses are developed to be unique to the credential. Of particular concern are programs offered by organisations such as Coursera. These programs are massive open online courses (MOOCs) and although the parchment issued to students who complete the program requirements does not indicate that the program is a McMaster program, the programs themselves are heavily marketed as created and offered by McMaster University. Following the Ad Hoc Committee's recommendations regarding oversight of this type of programming should be developed, Undergraduate Council struck an Ad Hoc Committee on Non-McMaster Credentials.

The Ad Hoc Committee on Non-McMaster Credentials is asked to review the programming currently offered through or developed by McMaster University that leads to a credential from an external organisation or institution and to develop a policy appropriate for such programs. The Ad Hoc Committee should give consideration to:

- setting criteria for the appropriate level of approval for the various types of programming at McMaster leading to an external credential;
- providing advice on the need for guidelines for contracts or agreements entered into with external organisation or institution related to programming developed through or offered at McMaster;
- developing guidelines for appropriate parameters for marketing and advertising of these credentials, keeping in mind the McMaster brand, the requirements of the *Senate Policy on Diplomas and Certificates*, etc.

### Proposed Membership

Voting Members: (minimum 5 members, a majority of members must be members of Undergraduate Council)

Dr. Emad Mohammad (Chair)	An elected faculty representative (to Undergraduate Council), an Associate Dean, or a knowledgeable faculty member of the University
Dr. Susan Searls Giroux	Chair of Undergraduate Council (Ex Officio)
One-two faculty members	
One undergraduate student	

Ms Tamara Bates	Governance Advisor and Assistant University Secretary (non-voting)
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Proposed Consultants: Consultation can be carried out by adding one member from each group as a consultant to the Ad Hoc Committee, or the Ad Hoc Committee can invite one or more individuals from each group to specific meetings for consultation

TBD	McPherson Institute
Ms Lynn Giordano	Assistant Dean (Studies), Faculty of Social Sciences
Mr. Greg Rombough	Manager, Academic, Faculty of Business
Dr. Lorraine Carter	Director, Centre for Continuing Education
TBD	Education Services/Continuing Health Sciences Education



## Undergraduate Council Committee Memberships 2017-2018

### Executive Committee

COMMITTEE MEMBERS		Quorum is 3 members
<b>Dr. Susan Searls Giroux (Chair)</b>	<b>Vice-Provost (Faculty)</b>	
<b>TBD</b>	<b>Vice-Chair</b>	
Dr. Ruth Chen	Chair of the Awards Committee	
Dr. Lori Campbell	Chair of the Certificates and Diplomas Committee	
Dr. Ken Coley	Chair of the Curriculum and Admissions Committee	
CONSULTANT		
Ms Melissa Pool	University Registrar	

### Awards Committee

COMMITTEE MEMBERS		Quorum is 3 members
<b>Dr. Ruth Chen (Chair)</b>	<b>Elected Faculty Member</b>	<b>Faculty of Health Sciences</b>
Dr. Susan Searls Giroux	Vice-Provost (Faculty)	
Mr. Sean Van Koughnett	Associate Vice-President (Students and Learning) and Dean of Students	
Dr. Cameron Churchill	Elected Faculty Member	Faculty of Engineering
Ms Melissa Paglialunga	Undergraduate Student Representative	Arts & Science Program
CONSULTANTS		
Ms Nancy Solano	Student Loans & Awards Officer	Student Financial Aid & Scholarships
Ms Tracie Long	Associate Registrar	Student Financial Aid & Scholarships
Ms Claudia Russell	Senior Development Officer	University Advancement

### Certificates and Diplomas Committee

COMMITTEE MEMBERS		Quorum is 4 members
<b>Dr. Lori Campbell (Chair)</b>	<b>Associate Dean (Academic)</b>	<b>Faculty of Social Sciences</b>
Dr. Susan Searls Giroux	Vice-Provost (Faculty)	
Ms Melissa Pool	University Registrar	Registrar's Office
Ms Vivian Lewis	University Librarian	
Dr. Jaeyoon Song	Elected Faculty Member	Faculty of Humanities
Ms Amy Nouanesengsy	Undergraduate Student Representative	Faculty of Health Sciences
CONSULTANTS		
Dr. Lorraine Carter	Director	Centre for Continuing Education
Mr. Dan Piedra	Assistant Director	Centre for Continuing Education
Mr. Brad Coburn	Calendar & Convocation Coordinator	Registrar's Office
Ms Trish Sullivan	Associate Registrar, Records & Systems	Registrar's Office

### **Curriculum and Admissions Committee**

COMMITTEE MEMBERS		Quorum is 8 members
<b>Dr. Ken Coley (Chair)</b>	<b>Associate Dean (Academic)</b>	<b>Faculty of Engineering</b>
Dr. Susan Searls Giroux	Vice-Provost (Faculty)	
Ms Melissa Pool	University Registrar	Registrar's Office
Dr. Gary Warner	Acting Director	Arts and Science Program
Dr. Sue McCracken	Associate Dean (Academic)	Faculty of Business
Dr. Del Harnish	Associate Dean (Undergraduate Education)	Faculty of Health Sciences
Dr. Anna Moro	Associate Dean (Academic)	Faculty of Humanities
Dr. Michael Farquharson	Associate Dean (Academic)	Faculty of Science
Dr. Lori Campbell	Associate Dean (Academic)	Faculty of Social Sciences
Dr. Emad Mohammad	Elected Faculty Member	Faculty of Business
Dr. Robin Cameron	Elected Faculty Member	Faculty of Science
Mr. Parker McColl	Undergraduate Student Representative	Faculty of Business
Ms Lacey Wice	Undergraduate Student Representative	Faculty of Engineering
CONSULTANTS		
Mr. Greg Rombough	Manager, Academic Programs Office	Faculty of Business
Ms Maria White	Assistant Dean (Studies)	Faculty of Engineering
Ms Teresa Basilio	Program Administrator, B.H.Sc. (Hons) Program	Faculty of Health Sciences
Ms Jackie Osterman	Assistant Dean (Studies)	Faculty of Humanities
Ms Joanne Smith	Assistant Dean (Studies)	Faculty of Science
Ms Lynn Giordano	Assistant Dean (Studies)	Faculty of Social Sciences
Ms Shelley Anderson	Program Administrator	Arts & Science Program
Mr. Brad Coburn	Calendar & Convocation Coordinator	Registrar's Office
Ms Trish Sullivan	Associate Registrar, Records & Systems	Registrar's Office
Ms Rebecca Hamilton	Associate Director	Enrolment Services

### **Quality Assurance Committee**

MEMBERS APPOINTED BY UNDEGRADUATE COUNCIL		July 1 to June 30
Dr. Robin Cameron		Faculty of Science
Dr. Jaeyoon Song		Faculty of Humanities
Dr. Todd Alway		Faculty of Social Sciences

### **Ad Hoc Committee to Review the Undergraduate Awards Policy**

*(Expected to complete its mandate in early fall.)*

COMMITTEE MEMBERS		
<b>Dr. Ruth Chen (Chair)</b>	<b>Elected Faculty Member</b>	<b>Faculty of Health Sciences</b>
Dr. Susan Searls Giroux	Vice-Provost (Faculty)	
Dr. Cameron Churchill	Elected Faculty Member	Faculty of Engineering
Mr. Richard Pierakarczyk-Vacca	Undergraduate Student Representative	Faculty of Social Sciences
Dr. Karen Balcom†	Faculty Member	Faculty of Humanities
Mr. Rodrigo Narro-Perez†	Graduate Student	Faculty of Science
CONSULTANTS		
Ms Nancy Solano	Student Loans & Award Officer	Student Financial Aid & Scholarships
Ms Tracie Long	Associate Registrar	Student Financial Aid & Scholarships
Mr. James Knibb-Lamouche		Indigenous Education Council
Ms Jordan Carrier	Aboriginal Recruitment and Liaison Officer	Aboriginal Students, Health Sciences
Ms Meaghan Ross		Equity & Inclusion Office
<b>TBD</b>		<b>PACBIC</b>
Ms Antonella Masciantonio		School of Graduate Studies
Ms Sally Ramsammy	Director of Finance	School of Graduate Studies
Dr. Alison Sills	(Associate Dean, Graduate Studies)	Faculty of Science
Ms Stephanie Baschiera	Associate Registrar and Graduate Secretary	School of Graduate Studies

### **Ad Hoc Committee on Academic Structures for Student Success\***

*(Expected to submit its report in early fall.)*

COMMITTEE MEMBERS		
<b>Dr. David Wilkinson (Chair)</b>	<b>Provost and Vice-President, Academic</b>	
Dr. Susan Searls Giroux	Vice-Provost (Faculty)	
Dr. Lori Campbell	Associate Dean (Academic)	Faculty of Social Sciences
Dr. Joe McDermid†	Acting Associate Dean (Academic)	Faculty of Engineering
Ms Melissa Pool	University Registrar	
Ms Adina Silver	Undergraduate Student Representative	Faculty of Science
TBD	Undergraduate Student Representative	Faculty of Humanities
<b>TBD†</b>	Faculty Member	Faculty of Business
Dr. Michelle Macdonald†	Faculty Member	Faculty of Health Sciences
Dr. Nancy Bouchier†	Faculty Member	Faculty of Humanities
Dr. Bhagwati Gupta†	Faculty Member	Faculty of Science
Dr. Doug Welch†	Vice-Provost & Dean, Graduate Studies	School of Graduate Studies
Dr. Michael Thompson†	Associate Dean, Engineering	School of Graduate Studies
CONSULTANTS/PROJECT MANAGEMENT		
Ms Andrea Thyret-Kidd	Project Manager	Office of the Provost
Ms Joanne Smith	Assistant Dean (Studies)	Faculty of Science
Ms Elizabeth Williams	Academic Advisor	Faculty of Humanities
Ms Trish Sullivan	Associate Registrar, Records & Systems	Registrar's Office
Ms Stephanie Baschiera	Associate Registrar, Graduate Studies	School of Graduate Studies
Ms Sophia Holness	Senior Manager, Mosaic Sustainment Organization	UTS
Ms Amanda Baldwin		UTS

\* Formerly the (Ad Hoc) Academic Regulations Committee

### **Ad Hoc Committee to Review Non-McMaster Credentials**

COMMITTEE MEMBERS		
<b>Dr Emad Mohammad (Chair)</b>	<b>Elected Faculty Member</b>	<b>Faculty of Business</b>
Dr. Susan Searls Giroux	Vice-Provost (Faculty)	
Dr. Jaeyoon Song	Elected Faculty Member	Faculty of Humanities
Dr. Michelle Macdonald†	Faculty Member	Faculty of Health Sciences
Mr. Richard Piekarczyk-Vacca	Undergraduate Student Representative	Faculty of Social Sciences
CONSULTANTS		
Dr. Lorraine Carter	Director	Centre for Continuing Education
Ms Lynn Giordano	Assistant Dean (Studies)	Faculty of Social Sciences
Mr. Greg Rombough	Manager, Academic	Faculty of Business
Ms Melissa Pool	University Registrar	Registrar's Office
<b>TBD</b>	Education Services/Continuing Health Sciences Education	Faculty of Health Sciences

† Members external to Undergraduate Council

**REPORT TO UNDERGRADUATE COUNCIL  
FROM THE  
PROGRAMMING IN THE ARTS AND SCIENCE FACULTIES COMMITTEE**

In the summer of 2016 the Joint Arts and Science Council (JASC) struck the Programming in the Arts and Science Faculties Committee (PASF) to continue the work of the Warner Report. The terms of reference directed the PASF committee to consider a focus on a set of core competencies, consider mechanisms that encourage students to take courses outside of their home Faculty, remove barriers that prevent from students from being able to explore their interests, and, consideration of opportunities for interdisciplinary study for humanities, social sciences and science students. The committee was chaired by Susan Giroux, Vice-Provost Faculty, and committee membership included the three Associate Deans (Academic), three undergraduate Chairs, three undergraduate students, and as consultants, one Assistant Dean (Studies), Dr. Del Harnish and Dr. Jean Wilson. The committee mandate was focussed on the undergraduate experience for students in three Faculties but had overlapping terms of reference with the Undergraduate Council Ad Hoc Committee on Academic Structures for Students Success (CASS). Andrea Thyret-Kidd served as the project manager for both committees to avoid duplication of work and to assist the committees to coordinate their work and recommendations.

The PASF report was received by JASC in March of 2017 and made public on the Provost's website. Consideration was given to presenting the report at the April UGC meeting, however the Deans wanted to first consult within their Faculties. The Deans held conversations with their Chairs and Directors in the spring of 2017.

The recommendations are clustered into three topics; removing barriers, interdisciplinary study and core competencies. The Committee understood they could make recommendations only for their 3 Faculties however in some instances, particularly around removing barriers, the problems were found to be universal. A number of the recommendations were forwarded to the CASS committee for consideration as CASS has representation from all 6 Faculties. The CASS committee discussed the PASF recommendations through the spring and summer and largely agreed with the report. CASS made adjustments to a number of the PASF recommendations and it is expected that UGC will receive the CASS report and those recommendations in October.

**Undergraduate Council is requested to endorse the direction of the PASF Report and asked to approve recommendations 3, 5, 7 & 8.**

Recommendations 1, 2, 4, 6, 9 & 10 were taken up by the CASS Committee and will be part of their forthcoming report. Recommendations 11 & 12 are recommendations to the three Faculties. A Tri-Faculty Ad Hoc Committee on Writing and Numeracy has been struck to work out the details and any resulting changes will be presented through the normal curriculum approval processes.

# **PROGRAMMING IN THE ARTS & SCIENCE FACULTIES (PASF) REPORT**

**Dr. Susan Searls Giroux (Chair)**

**Dr. Anna Moro**

**Dr. Mic Farquharson**

**Dr. Lori Campbell**

**Dr. Greg Hooks**

**Dr. Sean Corner**

**Dr. Maureen MacDonald**

**Ms. Chantelle Wardak**

**Ms. Bhavya Singh**

**Ms. Kaitlyn Zarcone-Beam**

**Dr. Del Harnish**

**Dr. Jean Wilson**

**Ms. Lynn Giordano**

**Ms. Andrea Thyret-Kidd**

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## Background:

In May 2015 the Deans of the Humanities, Social Sciences and Science Faculties penned a joint letter to the members of their communities. The letter discussed current opportunities and challenges for universities and how the three faculties could best position themselves to be responsive to the educational and research challenges of the twenty-first century. They subsequently created a task force whose work culminated in the 2016 “Report by the Task Force on Future Directions for the Faculties of Humanities, Social Sciences and Science”, commonly referred to as the Warner Report. The task force considered whether the three Faculties should be merged and how to promote the acquisition of core competencies and broad, interdisciplinary learning by undergraduate students from across the faculties. The task force identified a series of impediments to such learning and outlined some possible solutions. In response to the Warner Report, the Joint Arts and Science Council (JASC) was created and in the summer of 2016 JASC struck the Programming in the Arts & Science Faculties (PASF) committee to continue the work of the Warner Report.

## Terms of Reference:

The committee will continue the work of the Warner Report. The committee is asked to review previous and current McMaster interdisciplinary successes and the efforts of competing universities. The committee is asked to consider what type of student the Warner report wanted to graduate and possible ways to achieve this goal in ways that maximize student flexibility and minimize administrative burden.

### Specifically:

- Consider a re-focus on a set of core competencies for all humanities, social science and science students
- Consider mechanisms which encourage students to take courses outside of their home Faculty
- Consider a series of interdisciplinary courses that span Faculty interests and do not have specific prerequisites
- Consider allowing students to create a ‘personalized’ interdisciplinary program, with appropriate approvals from faculty members and student advisors
- Consider requiring departments to significantly reduce the number of required discipline-specific undergraduate courses students must take for their degree
- Consider removing barriers which impede students from being able to explore their interests
- Consider and make recommendations which require reasonable resources for record keeping, business processes, and student advising



The committee is further asked to make specific recommendations and set timelines for how to implement the ideas the committee recommends.

The committee is asked to complete their report by February 1, 2017. The report and recommendations will be sent to the Provost & three Faculty Deans.

### **Composition of Committee:**

#### Chair

- Associate Vice-President, Faculty
  - Susan Searls-Giroux

#### Committee Members

- 3 Associate Deans
  - Anna Moro, Humanities
  - Lori Campbell, Social Sciences
  - Mic Farquharson, Science
- 3 Faculty members, one from each of Humanities, Social Sciences and Science
  - Maureen MacDonald (Science)
  - Greg Hooks, (Social Sciences)
  - Sean Corner (Humanities)
- 3 undergraduate students
  - Chantelle Wardak (Social Sciences)
  - Bhavya Singh (Science)
  - Kaitlyn Zarcone-Beam (Humanities)
- 1 Assistant Dean (Studies)
  - Lynn Giordano (Social Sciences)

#### Observers & Consultants

- Director, Arts & Science program
  - Jean Wilson
- 1 faculty member representing the other Faculties
  - Del Harnish, Health Sciences

#### Project Manager

- Andrea Thyret-Kidd, Provost's Office

## Introduction

McMaster is in a competitive enrolment environment, and while the university has experienced significant growth for over a decade, this growth should not be taken for granted. Shifting provincial demographics indicate post-secondary education in Ontario is entering a period of decline in enrolments. At the same time, there is increased competition for students, particularly greater Toronto area students, with new university campuses planned for Brampton and Milton. We need to ensure that we retain our competitive edge and continue to be a top choice for students in this changing environment, while continuing to assess the quality and impact of the academic programming we offer.

McMaster should recognize and be attentive to the ongoing transformation of the labor market and the challenges our graduates will confront over the course of their careers. The majority of Ontario's university graduates report a close match between the subject matter studied and the job they hold: 72% at six months after graduation and 79% two years after graduation according to a 2015 survey.<sup>1</sup> Boudarbat and Chernoff<sup>2</sup> found that 64.9% of university graduates in Canada reported five years after graduation that their current job was "closely related" to their education. They employed quantitative methods (specifically logistic regression) to control for a number of factors that might influence this match. These methods reveal a good deal of variation in outcomes according to field of study. Compared to the base field of 'social sciences and law', those with a degree in a more vocational field—education, business, mathematics/computer science, engineering, and health sciences—were, all else being equal, significantly *more likely* to obtain a job closely related to their field of education. Those with a degree in the arts or the humanities were significantly *less likely* to do so, and there was *no statistically significant difference* between physical and life science and social sciences.<sup>3</sup> Thus a significant number of McMaster graduates, especially from the arts and sciences faculties, will pursue jobs and careers that are only indirectly tied to their university majors. Given these trends, we believe that allowing and encouraging our students to explore a number of disciplines and building breadth into degree requirements will serve them well over the course of their careers. Achieving this will require the removal of significant barriers that currently exist at McMaster.

The recommendations in this report are expected to generate questions and conversations with a goal of improving the undergraduate experience for humanities, social sciences and science students at McMaster. The suggested recommendations will take time to develop and implement. They will also require the involvement of departments, faculty offices and central offices. The recommendations revolve around

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<sup>1</sup> Council of Ontario Universities. 2016. "Grad Survey, 2015." Available online at: <http://cou.on.ca/wp-content/uploads/2016/12/COU-Grad-Survey-2016.pdf>.

<sup>2</sup> Boudarbat, Brahim and Victor Chernoff. 2012. "Education–Job Match among Recent Canadian University Graduates." *Applied Economics Letters* 19:1923–1926. Available online at: <http://www.tandfonline.com/doi/pdf/10.1080/13504851.2012.676730>.

<sup>3</sup> Ibid., page 1925.

three themes: removing barriers, encouraging interdisciplinary study and being deliberate in the delivery of core competencies.

## REMOVING BARRIERS

The Warner Report expressed concern regarding barriers that potentially hinder students from exploring courses outside of their majors. The PASF Committee shares these concerns. Specifically, the committee is concerned about the use of prerequisites, the perceived graduation guarantee, the growing use of reserve capacities, the use of a student's program and level in the reserve capacity process, and the lack of available data regarding which courses students want to take. Processes have been built over time in response to the University's growth, old and new budget models, classroom shortages, and the difficulties of scheduling classes and exams imposed by the lack of space. Some unintended consequences of these processes include barriers to student exploration across and within faculties and areas of study. The committee believes that these processes, which are all related to how the University enrolls students in classes need to be altered. The following recommendations are designed to work as an ensemble to enable students to explore courses more broadly.

### Prerequisites:

The committee recognizes that departments across the six Faculties are currently using prerequisites to accomplish two tasks: to support student success in the course (by ensuring sufficient preparation and scaffolding of skills) and to control seats (i.e., which students have access to a seat in a particular course). The task of controlling seats has, in some cases, become the driving force behind prerequisites. The PASF committee does not believe that prerequisites are the appropriate tool to accomplish the task of controlling seats (which can be accomplished by other, administrative means).

The committee identified two prerequisite policies at other universities that are worth noting (see Appendix A). The policy at University of Minnesota states:

Prerequisites inform students that, in order to be successful in a particular course, they must enter the course already having attained specific knowledge as a necessary background. Prerequisites provide a process for directing students to courses for which the students are adequately prepared.

The University of the Fraser Valley's policy states that prerequisites exist "to ensure that students have a reasonable chance of success in achieving the learning outcomes of a given course." The committee strongly believes that prerequisites should be employed only to support student preparedness for and success in a course. It may be necessary, academically, that students take certain courses in a particular sequence or have specific background knowledge for a course. However, in other cases it is possible to teach a course that it does not require prior preparation (e.g., by providing salutary review for students who have more preparation and at the same time

introducing the material to students who have less). Or courses could be open to students with a certain amount of general but not specific preparation, or to students who have taken certain courses (or a certain number of courses) in the area. The committee believes that many prerequisites currently in place may not, in fact, be necessary for student success.

#### RECOMMENDATION 1:

Undergraduate Council creates guidelines for prerequisites to be employed in the annual curriculum process and in the IQAP curricular review. The guidelines should be established and in place for the 2018-19 academic year.

Departments review their course prerequisites against the guidelines and implement a prerequisite structure which enables student success. The stated goal should be to minimize the number of prerequisites and to remove unnecessary prerequisites. Prerequisites that serve purposes other than student success, such as controlling seats, should be removed.

The undergraduate IQAP process be modified to include a review of all prerequisites.

#### Graduation Guarantee:

McMaster has serious issues with classroom space and a significant amount of administrative effort is required to schedule and enrol students in courses. A number of issues makes the process for putting students into classrooms very complex.

McMaster has a policy on Access to Undergraduate Courses. It reads:

McMaster's policy on access to Undergraduate courses is designed to ensure that resources are properly managed while enabling students to enrol in required courses so that their program admission requirements and course requisites can be met, and that their program of study is not extended.

This policy has come to be interpreted as a 'graduation guarantee' and represented as such for the purposes of recruitment. The PASF committee agrees students should be able to graduate on time but is concerned about some assumptions and unintended consequences that have arisen in the application of this policy.

As the committee reads the policy, it is not a graduation guarantee, but rather a guarantee that students will have access to required courses for timely graduation. The committee discussed the proviso that a student's program of study not be extended due to administrative short comings. There are many reasons why students may choose to extend their study, whether by virtue of changing programs, going on exchange, reducing course load, or simply choosing to delay graduation. Students should have

the freedom to change or extend their course of study. The important point is that a student's time to graduation should not be extended due to the University's failure to provide access to required courses in a timely manner.

The committee would like to draw attention to a section of the Academic Regulations that is an important complement to the Policy on Access to Undergraduate Courses. The policy states:

Students must assume certain responsibilities. They include: ... selecting courses that meet the program requirements, completing courses in an order that meets prerequisite requirements ....

There exist anecdotal reports of students who, during the enrolment windows in June, fill their schedule with elective courses, knowing that departments hold seats in required courses long past those enrolment windows. Departments thus allow students to enrol in their required courses as late as September. Holding seats in courses in this manner prevents other students from gaining access to the course as an elective. Departments should discontinue these practices and should hold seats for students requiring the course only for a reasonable amount of time, and then release the seats (see Opening Seats in Courses recommendation below). As per the statement of Student Academic Responsibility, cited above, students must take responsibility for enrolling in the correct courses and for assuming the consequences when they fail to do so. Department and Faculty offices may want to develop a communication strategy to help students understand what is expected of them.

#### RECOMMENDATION 2:

The University not interpret the Policy on Access to Undergraduate Courses as a "graduation guarantee", but rather interpret it as a "required course guarantee".

The policy on Access to Undergraduate Courses should be modified to read:

McMaster's policy on Access to Undergraduate courses is designed to ensure that ~~that resources are properly managed while enabling~~ students are able to enrol in required courses so that their program admission requirements and course requisites can be met in a timely manner, ~~and that their program of study is not extended~~

#### Opening Seats in Courses:

Departments currently use reserve capacities (in addition to prerequisites) to control seats. Reserve capacity is an administrative tool in Mosaic (and previously SOLAR) that allows departments to dedicate seats in classes to specific types of students based on program and/or level of study. It is important to ensure that seats are saved for students who require the course. It is additionally appropriate to protect 4<sup>th</sup>-year

seminars, field-trip classes, and thesis, capstone, laboratory, performance courses, etc. As McMaster has grown, classroom space has become a significant issue and the use of reserve capacities has increased. Originally, reserve capacities were used for large courses which were difficult to schedule but the use has spread to other courses and reserve capacities are now used in this way more than ever before. In some courses the vast majority of seats are reserved for students who require the course or who are program students, leaving little to no seats for students wanting to take the course as an elective.

The previous budget model did not reward faculties for teaching students from other faculties but this has now changed. In the current budget model, faculties benefit financially from providing seats to students from other faculties. However, it is not clear that seats are being made available in significant numbers, in a diversity of courses, or equitably across faculties. The incentive, though, is not only budgetary. In the view of the committee it is of intellectual and pedagogical value to have students from different programs and faculties, who bring different perspectives, learning together in the same class. These financial and educational incentives should encourage departments to review what courses they offer and what blend of students is desirable in those courses.

The committee compared 2016-17 course requirements for three departments - Sociology, Biology and English - at McMaster University, Queen's University, the University of Toronto (St. George) and Western University. The review looked at how many courses were available for each level of study, how many courses had no prerequisite, and what types of requirements were in place. Each university has a unique way of setting requisites for courses but what is common is that each department has a group of courses that are relatively open. Often these courses simply require successful completion of a first-year course and/or a second-year course. Beyond these 'open courses' the departments start restricting access to courses through program and/or level requirements and/or required permissions. The review looked at what percentage of each department's courses were open. What is immediately apparent is that McMaster, in these three departments, has the fewest open courses compared to the other universities.

Percentage of Open Courses\*

	Sociology	Biology	English
McMaster	31.4%	2.4%	33.8%
Queen's	52.9%	7.2%	33.9%
Western	46.9%	16.8%	99.1%
Toronto St. George	55.8%	23.2% (Cell & Systems Biology only)	78.2%

\*See Appendix B for more details.

It is striking to see such high percentages of open courses in some departments at these other institutions. For example:

- In U of T's Sociology department 62 of 111 courses either have no prerequisite, require 6 units of Level I sociology, or require 3 units at the 200+ level (meaning a total of 9 units of sociology)
- Toronto's Biology department's most onerous requirement in the open courses is 12 units of chemistry and biology
- Western's English department has 20 courses with no prerequisite, 52 courses which require 6 units of Level I english with a minimum grade of 60%, and 48 courses that require 12 units of english

McMaster's percentages are lower due to our use of program and level requirements; we are much quicker to close the door on students coming from other programs and levels.

Student members on the committee gave examples of the impact these requirements have on their university experience. One of the student members is in her fourth year of the Health, Aging and Society program. When she was in second year, she was interested in taking Sociology 3G03 (Sociology of Health Care) as an elective course. She felt the course complimented her studies and she had the prerequisite, but she was denied access because she was not in third year. In her third year she was denied access because she was in the wrong program. When she was unable to enrol in the course in fourth year, she contacted the Sociology Department and the instructor and was told she would have to keep watching the course on Mosaic to see if a seat came available. Happily, she 'got lucky' and was able to enrol in the course when a seat did open, presumably when another student dropped it. Another student committee member is in the Linguistics and Languages program. Students who wish to apply to a



graduate speech language pathology program are required to have taken 6 units of anatomy. However, there are no seats in the first year anatomy course reserved for humanities students and students have to earn their anatomy units at another university through a letter of permission. This is a source of enormous frustration and consternation among the dozens and dozens of students caught in this untenable position. Arts and Science students who wish to apply to dentistry programs have the same issue and are also forced to take anatomy classes at another university.

Many of McMaster's reserve capacities are based on the student's program and/or level of study. The committee questions why there is an effort to move students through programs in this lockstep way. Holding seats for students based on level has meant that students flow through their degree in somewhat hierarchical bands of courses (students in second year take Level II courses; third-year students take Level III courses, etc.). When pedagogy requires foundational or preparatory learning, this lockstep pathway may be appropriate, but it does not afford students much flexibility or room for exploration. Why can't a student from 2<sup>nd</sup>-year take a 3<sup>rd</sup>-year course, or a 3<sup>rd</sup>-year student take a 4<sup>th</sup>-year course? While this is possible in some cases now, it is not the norm. Students should be able to explore courses more freely and only be restricted by proper prerequisites. Prerequisites only based on supporting student success should greatly reduce the need for reserve capacities based on level or program.

Reserve capacities by level are additionally used as a way of ensuring that seats are available when enrolment windows open. Fourth-level students enrol before third-level students, who enrol before second-level students, etc. Consequently there is a concern that upper-level students will take too many seats in lower-year courses causing a shortage of seats in those courses by the time the later enrolment windows open. Reserve capacities can be removed at any time in the enrolment process, with the consequence that seats can be held during the enrolment windows in June, and unused seats released at a later point. The decision to release seats rests with departments and typically seats are released at the end of August or early September. In speaking with Western University and the University of Toronto the committee learned that they release seats much earlier, e.g., two weeks after the last enrolment window opens.

If the barriers described above are not addressed, other recommendations in this report designed to encourage student exploration will be significantly hampered. For example, if we promote a major and two minors option to students (to be discussed later), we must anticipate that students will want to take courses we do not expect them to take. This may put additional pressure on first-year courses that already have many pressures on them. There are also a number of courses in economics, math, chemistry and biology that are in high demand because they serve as prerequisite courses for many programs within and beyond their own faculty. Currently seats are held for

students who are required to take these courses, but with the creation of a major and two minor option, interest/demand may increase. Space will need to be made available.

All three students on the committee attest that the opportunity to have access to courses that they are currently blocked from taking would appeal to and excite them. This issue of access to courses is not restricted to the Humanities, Science and Social Sciences Faculties. It is important that all Faculties make seats available to students outside of their programs.

In most Faculties, general interest courses have recently been launched. This is a welcome development as these courses have facilitated exploration by students. The committee recommends that departments and programs take advantage of these kinds of courses to create pathways for further exploration, including their inclusion in minors and majors (e.g., major and two minors).

### RECOMMENDATION 3:

Require departments to find ways to open seats in ALL classes except 4<sup>th</sup>-year seminars, thesis, capstone, field-trip, laboratory, performance courses, etc. The committee discussed four possible ways to achieve this goal:

1. A requirement that a percentage of seats in each class (20%) are open enrolment – meaning any student with the prerequisite can take the course, with no program or level requirement.
2. Departments agree to shorten the length of time reserve capacities are in place.
3. Departments are encouraged to review the use of program and level requirements in the reserve capacity process.
4. Departments set the same enrolment capacity and requested room capacity unless there is a strong pedagogical reason for not doing so.

Additionally, this recommendation should be passed along to the Committee on Academic Structures for Student Success (CASS) as it will yield the most benefit to students if all faculties open more seats in their courses.

### Waiting Lists:

McMaster has limited knowledge of current or future student interest in individual courses. Our planning tools are predicated on past behaviour, which has been shaped by the way prerequisites and reserve capacities have been used to manage enrolment. It is difficult for departments to be responsive to student demand when we have such limited data. Mosaic has an automated waiting-list tool that has not been turned on yet due to the anticipated (and actual) disruption of the switch from SOLAR to Mosaic. Now that enrolment in Mosaic is better understood by both staff and students, the committee recommends the wait-list tool be activated. The sooner we turn this tool on, the sooner

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we will have real data to measure student demand for specific courses, which will aid departmental planning. It is important to ease the stress on departments and administrative staff by utilizing every tool available for the difficult process of scheduling and enrolling students in courses. Additionally, there are planning tools available to students in Mosaic that can be data mined. Any methods or processes that generate information on student demand should be explored.

#### RECOMMENDATION 4:

The Provost with the Deans investigate and allocate the resources required to activate the Mosaic wait-list tool by the summer of 2018.

## INTERDISCIPLINARY STUDY

### Major and Two Minors:

The Warner Report posed the following questions:

Are we well positioned to facilitate the emergence of “leaps of knowledge” while, at the same time, preserving and reinvigorating ancient or traditional knowledge?  
Are we well positioned to prepare our students for the constant reinvention of themselves and multiple careers that lay ahead for them?

The PASF committee was asked to consider mechanisms which encourage students to take courses outside of their home Faculty and to consider allowing students to create a ‘personalized’ interdisciplinary program.

With the exception of the Arts and Science program, Faculties and departments design curricula which reward specialization. Programs at McMaster excel at preparing students for graduate school, a strength that should, of course, be maintained. However, not all students, in fact not even the majority of students, will attend graduate school and those that do also stand to benefit from intellectual breadth. The committee believes McMaster University has the ability to produce both excellent candidates for graduate school and excellent candidates for employment. Exposing students to multiple fields of study and methodologies is desirable in itself and makes good sense for students who will have multiple careers in their working lives. The committee recommends the creation of a “major and two minors” pathway leading to either a Hons. B.A. or a Hons. B.Sc. as a way of formally encouraging and recognizing interdisciplinary study.

Currently, many programs offer students the option to earn a ‘combined honours’ degree requiring a stipulated number of units from two programs – see Appendix C. In a major and two minors option, the ‘major’ component of the degree would be satisfied in the same way as one half of a combined honours degree; students would add two minors (24 units each) to complete the degree. The full range of minor options, from all Faculties, would be available for students pursuing this degree. Minors should include no more than 6 Level I units and a maximum of 12 units could be double counted. The required unit count towards a major and two minors might look as follows:

### Required Unit Counts for Major and 2 Minor Degrees\*

Honours degree = 120 units	Humanities	Science	Social Sciences
First Year	6 units towards 1 <sup>st</sup> minor  6 units towards 2 <sup>nd</sup> minor	6 units towards 1 <sup>st</sup> minor	6 units towards 1 <sup>st</sup> minor  6 units towards 2 <sup>nd</sup> minor
Major	33-45	~36-45	36-42
1 <sup>st</sup> Minor	18	18	18
2 <sup>nd</sup> Minor	18	24	18
Total Required Unit Count	81 - 93	84-93	84 – 90

\*Assuming no double counting.

The Faculties of Humanities and Social Sciences are well positioned for this change. Every department has established program requirements for a combined honours degree. The Faculty of Science, however, has fewer combined degrees and those that exist are more narrowly defined. For example, the Biology and Environmental Science combined honours degree requires 27 units of biology, 33 units of environmental science, 3 units of statistics and 6 units from either biology or environmental science and students are limited to this specific combination. In order for science students to be able to participate in the new pathway, Science departments who wish to participate will need to establish a set of requirements for achievement of a major in their discipline as part of a major and two minors degree. Currently, first-year science students are generally required to take 24 Level I science units in order to become eligible for Level II science programs. Science students are well positioned to earn science minors as so many of their Level I units are science courses. However, there is little room in first year to take elective units from other faculties which could lead to minors.

The major and two minors pathway would lead to an honours degree. It is important that the degree has academic rigour. To that end departments should ensure that an appropriate number of the units required for the major component of the degree are at Levels III and IV. Without requiring specific courses, Science minors often require a minimum of 6 units at Level III or above (see Appendix D); in the interest of academic rigour other departments might consider following suit.

## RECOMMENDATION 5:

Undergraduate Council create a major and two minors pathway leading to either a Hons. B.A. or Hons. B.Sc. This should be in place for the 2019-2020 academic year.

### Definition and Nomenclature:

If McMaster adopts the major and two minors pathway, continued use of the term 'combined honours' is likely to cause confusion. As a major in the new pathway would satisfy the same requirements as one half of a combined honours degree, it makes sense that 'combined honours' should be re-named a 'double major'.

There is currently some ambiguity in the use of such designations at McMaster; the committee recommends the establishment of clear and consistent definitions of the terms "specialization", "honours", "major" and "double major". The term "minor" was defined when the concept was introduced in the 1990s in an Ad Hoc Undergraduate Council Committee report. Six recommendations were approved which outlined how a minor was to be introduced and administered and what it should consist of. Formal definitions of 'specialization', 'honours', and 'combined honours', however, are lacking and a review of McMaster honours programs shows a wide range in the number of units required. In Humanities, the required units in an honours degree can range from 57-78 while in Social Sciences the range is 63 – 84. The range for a Hons. B.Sc. is 57 – 96. The committee believes that this is too disparate (21 units representing seven 3-unit courses, or 70% of a year's study). While the range may be attributed in part to new "specialized honours" degrees targeted towards students who are intending to pursue graduate studies, other factors are involved. The Warner Report identified as a problem "a slow creep of program and disciplinary requirements over the decades, and indeed, the very way in which a student's education and experience at the University is cast within a rigidly disciplinary framework." The report went on to recommend that programs should reduce the number of required discipline-specific courses.

The PASF committee is not well positioned to do the work of defining these terms. A nomenclature review would affect all undergraduate programs and thus all faculties should be represented. The committee currently reviewing academic structures would be an appropriate body to do this work.

## RECOMMENDATION 6:

McMaster University discontinue the term 'combined honours' and replace it with the term 'double major'.

The Committee on Academic Structures for Student Success (CASS) conduct a review with respect to the terms 'specialization', 'honours', 'major', 'double major' and 'minor' to determine appropriate required unit ranges and administrative arrangements. The review should be complete by December 2017.

## Declaring Minors:

Students currently declare minors as part of the graduation process. With the creation of a major and two minors pathway, faculties will require that declaration earlier. Every May and/or August, students' academic progress is reviewed. Without knowing which two minors the student is trying to complete, it will be difficult to review their progress. Additionally, it will benefit department planning to know how many students are taking courses to earn a minor. The program selection process could be modified to allow students to add one or two minors. Students in the major and two minors option should be required to declare their minors as part of the Level II selection process and to use the program change process should they wish to make changes after Level II. Students earning an honours or specialization should also be able to declare their minor as part of the Level II selection process. This should not be required, however, as students on this pathway may realize later in their degree that they wish to complete a minor. The option to declare a minor should be available to these students up to the time of graduation.

### RECOMMENDATION 7:

The program selection process be modified to allow students to add up to two minors. Students enrolling in the major and two minors pathway are required to declare their minor programs as part of the Level II selection process. This work should be complete for the 2019-2020 academic year.

## Certificates:

Continuing with the theme of recognizing student achievements in ways commensurate with future employment opportunities, certificates offer students the opportunity to develop skills and/or study broadly and gain a valuable credential. The committee finds that certificates align nicely with the mandate of this report. Currently, however, McMaster certificates must include a percentage of unique units (40%) dedicated towards the certificate and not counted towards a degree. For a certificate with 15 units, this means 6 units of work must be unique to the certificate. In effect, this means students must pay for and take extra courses outside of their degree, which may delay graduation and be cost prohibitive for many. A review of the Policy on Certificates and Diplomas is currently underway and the PASF committee does not wish to interfere with that on-going work, but would like to make a specific recommendation on the issue of certificates. The committee feels strongly that it should be possible to earn a certificate within the 120 units of an honours degree, meaning that the units earned for the certificate count towards both the certificate and the degree.

### RECOMMENDATION 8:

Undergraduate Council create options for certificates that can be achieved within the 120 units of a Hons. B.A. or Hons. B.Sc. degree.

## Department Reviews:

It is not the expectation of this committee that all departments will want to provide every option to their students. Departments would need to determine whether they wish to offer a major or minor as part of a major and two minors option and what, if any, certificates to offer. This would, of course, require consideration of a number of factors, including student interest and the implications for the department's curriculum. One important consideration is how students might switch between pathways (e.g., should a student enrolled in an honours path decide in third year they would rather pursue a major and two minors or vice versa). Any new standards in respect of unit requirements for various pathways might also require a department to revise its curriculum and course offerings.

### RECOMMENDATION 9:

Departments consider which pathways to degrees they wish to offer and make curriculum adjustments through the Undergraduate Council curriculum process. The Warner Report's recommendation that programs reduce the number of required discipline-specific courses to afford students more time for exploration and interdisciplinary study should be part of the conversation. Curriculum changes will be approved by Undergraduate Council in 2018-2019.

The undergraduate IQAP process be modified to include a review of the pathway(s) offered by the department.

## Challenge for Credit:

Currently McMaster has a challenge for credit policy. This is found in the Admissions section of the Undergraduate Calendar rather than the Academic Regulations section. Committee members were unaware of the existence of this policy and it appears that the option to challenge for credit is rarely, if ever, utilized. The policy reads:

### Credit in Courses by Special Assessment (Challenge Examinations)

If you have acquired knowledge at a different type of institution or in a manner that makes assessment of your qualifications difficult, you may be permitted to seek degree credit through special assessment (Challenge for Credit).

Challenge for credit is not intended to give credit for skills or knowledge gained through high school, college or previous university instruction. The special assessment may include one or more of the following: written examinations, papers, essays, submissions of a substantial body of work, or portfolios, or laboratory tests. Credit can be granted only for those courses listed in the current McMaster calendar. Not all courses in all disciplines are available for challenge. Faculties and departments are free to determine which, if any, of their courses are open for special assessment. Challenges are assessed on a



pass/fail basis. The passing grade for a challenge appears on the transcript as COM (Complete) and is not used in computing averages or evaluation honours or scholarship standing, but is counted as a course attempt. Unsuccessful attempts will be noted on the transcript. Special Assessment is not available for a course taken previously and a course may be attempted only once by special assessment. Once you have registered for a course by such means (known as challenge exams) the registration may not be cancelled and you may not withdraw from the course.

Waivers of prerequisites only (i.e. no degree credit) will be at the discretion of the department.

The committee feels that this language may discourage students to challenge courses and its location in the calendar makes it unlikely that students will be aware of the option. In the United States, schools have created gateway programs incorporating challenge exams as a path for mature students to return to university. McMaster has experienced a great deal of student growth for many years but that growth has not been evenly distributed among the Faculties. Humanities and Social Sciences have not experienced the same level of student enrolment and mature students may be a new market to pursue. This is just one example of a circumstance in which challenge for credit would expand options for students and departments while acknowledging anticipated demographic shifts in enrolment.

The students on the committee were unaware of the challenge for credit option and were immediately able to think of situations in which they might have utilized it. For example, students who go on exchange may wish to challenge a language credit. Similarly, a student might be in a position to challenge a required statistics course. Challenge exams also offer a way for students to demonstrate fitness to enter a course without a prerequisite; the student may lack a specific prerequisite, but nevertheless be well positioned to pass a challenge for credit by virtue of other courses they have taken in the department or of independent study. They might demonstrate this by sitting for a challenge exam, not for credit, but to gain admission to the course.

#### RECOMMENDATION 10:

The Committee on Academic Structures for Student Success (CASS) conduct a review of the challenge for credit policy and make recommendations about whether it should be revised and/or expanded.

## CORE COMPETENCIES

The PASF committee reviewed how other institutions approach core competencies and graduation requirements. Schools with the approach of mandating study tend to have a distribution or breadth requirement and/or a writing requirement. The distribution approach simply requires students to complete a minimum of 3 or 6 units of courses from each of the three faculties. This ensures students are exposed to different areas during their time at university. Breadth requirements are more involved as they stipulate a particular structure of distribution and so entail the categorization of all undergraduate courses. The University of Toronto St. George Campus, for example, has five breadth categories:

1. Creative and Cultural Representations
2. Thought, Belief, and Behaviour
3. Society and Its Institutions
4. Living Things and Their Environment
5. The Physical and Mathematical Universes

Students are required to take a specific number of units (24 units at U of T) across the breadth categories, ensuring that students are exposed to a broad range of courses across the stipulated areas. Universities with distribution or breadth requirements have been thoughtful and deliberate about how students can satisfy the requirements and, while there was some debate about requiring students to take a range of courses, the majority of the committee, including its student members, felt that this is desirable. The committee also discussed the benefit of a common reading programme (in which first-year students all have the common experience of studying the same book), the possibility in addition to distribution or breadth requirements of creating new interdisciplinary courses and/or courses specifically designed for non-specialists, and core competency courses. For its recommendations, the committee decided to concentrate, as a first step, on writing and numeracy requirements.

### Writing Requirement:

The ability to write clearly and cogently is a crucial and fundamental skill which all arts and science students should develop throughout their undergraduate careers. The committee was in agreement that students should learn to write within the genre appropriate to their field of study but should also learn skills of written communication and argumentation of general applicability, and that their education in writing should extend beyond only academic writing to other forms of written communication important in today's world (technical reports, memoranda, writing for social media, etc.).

There is a widespread view, shared within the committee, that as things currently stand many students are not reaching a sufficient level of competence. Achieving this requires more than merely designating existing courses that have a writing component

as writing courses. It requires a dedicated foundational writing course (involving intensive instruction, criticism, and practice) and ongoing development throughout a student's university career.

The committee favours a required introductory 3-unit writing course followed by 9 required units of courses in the student's field of study with a writing component meeting certain curricular requirements. The committee discussed how to design and deliver an introductory writing course. The committee felt strongly that the delivery of such a course should be a shared responsibility and that tasking one department with the responsibility for teaching it is not advisable. Expertise in writing exists across the campus and it is important to leverage that knowledge and all faculties and departments should be engaged and involved in the delivery of writing skills. Indeed, the committee believes that every department should give consideration to writing competency in the context of their IQAP report. The committee recommends:

- A required 3-unit foundation course with key writing skills delivered as on-line modules and in-class tutorials focussed on discipline-specific writing, and
- The establishment of curricular criteria that a course must meet to count to the fulfillment of a writing requirement. Students are required to take 9 units of writing courses before graduation.

Importantly, instructors should be supported by a central writing center. It was suggested that senior PhD students might be employed to teach writing courses and/or to work in the writing center, to the benefit of their professional development.

Concerns were expressed which the committee did not have the time to fully explore and resolve, e.g. expertise in writing pedagogy, the time commitment for faculty members teaching a writing class, the difficulty of getting students to make use of a writing center, the need for appropriate expertise in writing styles appropriate for technical fields of study, etc. Additionally, the committee recognized that implementation will require funding and space. To work out these questions it would be advisable to include campus partners like the MacPherson Institute, the Student Success Center and CCE (who were not represented on the committee) in the conversation and to learn from the best practices of other institutions in respect of how to structure and implement a writing requirement.

#### RECOMMENDATION 11:

All students in the Humanities, Social Sciences and Science Faculties take a 3-unit foundational writing course and a further 9 units in courses identified as fulfilling the writing requirement. The committee recommends that a committee of 6 faculty members (2 from each faculty) and 3 students (1 from each faculty) be struck, together with appropriate campus partners, to work out in greater detail how to implement a

writing requirement. The committee recommends that the writing requirement be in place for incoming 2019-20 students.

### Numeracy Requirement:

The discussion of numeracy skills centered on numerical literacy. Many arts and science students are required to take a math and/or statistics course as part of their program requirements, and while these are critically important to progressing in the student's program, the committee was not focussed on this type of skill. An arts and science graduate should have sufficient numeracy skills to function well in society: to be able to reason with quantities and numbers, to understand news reports quoting numbers and statistics, to be able to make decisions involving numbers in a competent manner, etc. The committee was very interested in the new Math 2UU3 course designed by Dr. Miroslav Lovric with the following course objectives:

- To show that math is indeed relevant and a lot more interesting than formulas and algebraic manipulations taught in high school and in some university math courses.
- To discuss a variety of important and amazing mathematical concepts, notions, and ideas, and to connect them to sciences, humanities, social sciences, and other disciplines.
- To inform and learn about critical problems that we, and our planet, face in the near (and not so near) future. To equip us with tools and skills that will enable us to live as concerned, reflective, and constructive citizens.
- To improve our logical thinking skills, so that we can learn how to be smart and alert in dealing with everyday situations, and to make good decisions based on knowing how to analyze numeric and statistical information.
- To recognize nonsense, fake science, intentionally misleading narratives, and fallacies in someone's arguments, in our daily interactions with other people, in media, books, newspapers, research articles, and on the internet.
- To teach us how to reason about risk, probability and chance.
- To present basics of inference and its importance in supporting scientific (and general) arguments.
- To motivate us to learn more on our own, to appreciate ideas in mathematics and statistics, and to use them whenever appropriate.

It would be problematic to rely on one course and one faculty member to deliver numeracy skills. Ideally, there would be multiple courses available that would fulfil a numeracy requirement, for example, a course on personal finance may also qualify. Initially, it is important to establish curricula criteria for a numeracy course.

#### RECOMMENDATION 12:

All students in the Humanities and Social Sciences Faculties meet a 3-unit numeracy requirement. The committee recommends that a committee of 6 faculty members (2 from each faculty) and 3 students (1 from each faculty) be struck to propose curricular criteria for a course to be counted as a numeracy course, to be submitted for approval by the Undergraduate Curriculum Committee and Senate. Once the curriculum is set, departments would submit courses to be designated as numeracy courses and a sufficient number of courses and seats would then have to be made available in order for students to fulfill the requirement before graduation. The committee recommends that the numeracy requirement be in place for incoming 2019-20 students.

## Summary of Recommendations and Responsible Party:

### **RECOMMENDATION #1:**

Undergraduate Council creates guidelines for prerequisites to be employed in the annual curriculum process and in the IQAP curricular review. The guidelines should be established and in place for the 2018-19 academic year.

Departments review their course prerequisites against the guidelines and implement a prerequisite structure which enables student success. The stated goal should be to minimize the number of prerequisites and to remove unnecessary prerequisites. Prerequisites that serve purposes other than student success, such as controlling seats, should be removed.

The undergraduate IQAP process be modified to include a review of all prerequisites.

*Responsible Party – Undergraduate Department & Program Curriculum Committees*

### **RECOMMENDATION #2:**

The University not interpret the Policy on Access to Undergraduate Courses as a “graduation guarantee”, but rather interpret it as a “required course guarantee”.

The policy on Access to Undergraduate Courses should be modified to read:

McMaster’s policy on Access to Undergraduate courses is designed to ensure that ~~that resources are properly managed while enabling~~ students **are able to** enrol in required courses so that their program admission requirements and course requisites can be met **in a timely manner.**, ~~and that their program of study is not extended~~

*Responsible Party – Undergraduate Council*

### **RECOMMENDATION #3:**

Require departments to find ways to open seats in ALL classes except 4<sup>th</sup>-year seminars, thesis, capstone, field-trip, laboratory, performance courses, etc. The committee discussed four possible ways to achieve this goal:

1. A requirement that a percentage of seats in each class (20%) are open enrolment – meaning any student with the prerequisite can take the course, with no program or level requirement.
2. Departments agree to shorten the length of time reserve capacities are in place.
3. Departments are encouraged to review the use of program and level requirements in the reserve capacity process.

4. Departments set the same enrolment capacity and requested room capacity unless there is a strong pedagogical reason for not doing so. Additionally, this recommendation should be passed along to the Committee on Academic Structures for Student Success (CASS) as it will yield the most benefit to students if all faculties open more seats in their courses.

*Responsible Party – Undergraduate Departments & Programs*

**RECOMMENDATION #4:**

The Provost with the Deans investigate and allocate the resources required to activate the Mosaic wait-list tool by the summer of 2018.

*Responsible Party – Provost, Deans, UTS, Registrar's Office and Faculty Offices*

**RECOMMENDATION #5:**

Undergraduate Council create a major and two minors pathway leading to either a Hons. B.A. or Hons. B.Sc. This should be in place for the 2019-2020 academic year.

*Responsible Party: Undergraduate Council*

**RECOMMENDATION #6:**

McMaster University discontinue the term 'combined honours' and replace it with the term 'double major'.

The Committee on Academic Structures for Student Success (CASS) conduct a review with respect to the terms 'specialization', 'honours', 'major', 'double major' and 'minor' to determine appropriate required unit ranges and administrative arrangements. The review should be complete by December 2017.

*Responsible Party – CASS, recommendations to Undergraduate Council*

**RECOMMENDATION #7:**

The program selection process be modified to allow students to add up to two minors. Students enrolling in the major and two minors pathway are required to declare their minor programs as part of the Level II selection process. This work should be complete for the 2019-2020 academic year.

*Responsible Party – Undergraduate Council, UTS, Registrar's Office & Faculty Offices*

**RECOMMENDATION #8:**

Undergraduate Council create options for certificates that can be achieved within the 120 units of a Hons. B.A. or Hons. B.Sc. degree.

*Responsible Party – Undergraduate Council*

### **RECOMMENDATION #9:**

Departments consider which pathways to degrees they wish to offer and make curriculum adjustments through the Undergraduate Council curriculum process. The Warner Report's recommendation that programs reduce the number of required discipline-specific courses to afford students more time for exploration and interdisciplinary study should be part of the conversation. Curriculum changes will be approved by Undergraduate Council in 2018-2019.

The undergraduate IQAP process be modified to include a review of the pathway(s) offered by the department.

*Responsible Party – Undergraduate Department & Program Curriculum Committees*

### **RECOMMENDATION #10:**

The Committee on Academic Structures for Student Success (CASS) conduct a review of the challenge for credit policy and make recommendations about whether it should be revised and/or expanded.

*Responsible Party – CASS, recommendations to Undergraduate Council*

### **RECOMMENDATION #11:**

All students in the Humanities, Social Sciences and Science Faculties take a 3-unit foundational writing course and a further 9 units in courses identified as fulfilling the writing requirement. The committee recommends that a committee of 6 faculty members (2 from each faculty) and 3 students (1 from each faculty) be struck, together with appropriate campus partners, to work out in greater detail how to implement a writing requirement. The committee recommends that the writing requirement be in place for incoming 2019-20 students.

*Responsible Party: Committee struck by JASC. Committee report goes to Undergraduate Council for approval.*

### **RECOMMENDATION #12:**

All students in the Humanities and Social Sciences Faculties meet a 3-unit numeracy requirement. The committee recommends that a committee of 6 faculty members (2 from each faculty) and 3 students (1 from each faculty) be struck to propose curricular criteria for a course to be counted as a numeracy course, to be submitted for approval by the Undergraduate Curriculum Committee and Senate. Once the curriculum is set, departments would submit courses to be designated as numeracy courses and a sufficient number of courses and seats would then have to be made available in order for students to fulfill the requirement before graduation. The committee recommends that the numeracy requirement be in place for incoming 2019-20 students.



*Responsible Party: Committee struck by JASC. Committee report goes to Undergraduate Council for approval.*

## **APPENDIX B**

### **2016-17 - Review of Requirements**

#### **McMaster Sociology Requirements:**

Course Level	1	2	3	4	Total
Number of Courses Offered	1	15	19	25	70

2 Courses with no prerequisites

20 Level 2 and 3 courses that are open if a student takes Sociology 1A06.

\_\_\_\_\_ Open Courses = 31.4%

12 Level 3 courses with pre-requisite courses & a program requirement & a level of program requirement

25 Level 4 courses (all) require both program and level requirement

3 Level 4 courses additionally require permission

21 Level 4 courses – “or” students who do not meet the prerequisites can take the course with department permission

#### **Queen’s Sociology Requirements:**

Course Level	1	2	3	4	5	Total
Number of Courses Offered	1	12	19	15	4	51

2 Courses with no prerequisites

25 Level 2 & 3 courses that are open if a student takes 6 units of 1<sup>st</sup> year sociology with a minimum grade of C-

\_\_\_\_\_ Open Courses = 52.9%

19 Level 4 & 5 courses (all) which require 3 or more prerequisites with a minimum grade and enrolment in a specific program and level

### Western's Sociology Requirements:

Course Level	1	2	3	4	Total
Number of Courses Offered	7	42	23	26	98

- 24 Courses with no requisites (1<sup>st</sup> year courses = 7, 2<sup>nd</sup> year courses = 17)
- 18 Courses available if student takes 6.0 units of 1<sup>st</sup> year sociology (2<sup>nd</sup> year courses = 17, 3<sup>rd</sup> year courses = 1)
- 4 Courses (2<sup>nd</sup> year) which require a grade of at least 60% in 6.0 units of 1<sup>st</sup> year sociology

\_\_\_\_\_ Open Courses = 46.9%

- 47 Level 3 & 4 courses which require specific program and level registration (13 of which also have additional course prerequisites)

### U of T St. George Sociology Requirements:

Couse Level	1	2	3	4	Total
Number of Courses Offered	3	29	44	35	111

- 2 Courses with no requisites
- 27 Level 2 courses which require 6 units of Level 1 sociology
- 33 Level 3 courses with a prerequisite of "A sociology course at the 200+ level" (min of 9 units of sociology)
- \_\_\_\_\_ Open Courses = 55.8%
- 8 Courses with 2 prerequisites courses
- 35 Level 4 courses (all) are restricted to Level 4 students (some have recommended preparation courses listed)

28 Level 4 courses with a prerequisite of “A sociology course at the 300+ level”

**McMaster’s Biology Requirements:**

Course Level	1	2	3	4	Total
Number of Courses Offered	3	7	18	13	41

1 Courses with no prerequisite

\_\_\_\_\_ Open Courses = 2.4%

20 Courses with a program and/or level requirement

9 Courses with at least 2 prerequisites

**Queen’s Biology Course Requirements:**

Course Level	1	2	3	4	5	Total
Number of Courses Offered	4	5	22	18	20	69

5 Courses with no prerequisites

\_\_\_\_\_ Open courses = 7.2%

38 All Level 4 & 5 courses require a min. GPA of 2.0 (C or 63-66.9%) in any previously taken course on the Biology Foundations List

20 All Level 5 courses are Advanced Honours Seminars. Require Level 4 and registration in an honours biology plan and/or permission of the department

### Western's Biology Requirements:

Course Level	1	2	3	4	Total
Number of Courses Offered	7	11	36	33	77

3 Courses with no prerequisite

3 Level 2 courses that require 6 units of Level 1 biology

7 Level 2 & 3 courses that require 6 units of Level 1 biology with a 60% grade

\_\_\_\_\_ Open Courses = 16.8%

3 Level 3 courses with a level requirement

15 Level 4 courses with program and/or level requirements

16 Level 4 courses with 3 or 4 prerequisite courses

6 Level 4 courses with only 1 prerequisite course

### U of T St. George Cell & Systems Biology\* Course Requirements:

\*U of T also offers Ecology & Evolutionary Biology courses but these are not included

Course Level	1	2	3	4	Total
Number of Courses Offered	1	8	20	27	56

2 Courses with no prerequisites

- 3 Courses which require 1 (3 unit) first year biology class; 2 of which also require 3 units of first year chemistry
- 8 Level 2, 3 & 4 courses which require Bio 130, 6 units of chemistry & Bio 230 (total of 12 units)

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Open Courses = 23.2%

- 0 Courses with program or level requirements
- 11 Level 4 courses which have 1 pre-requisite course
- 13 Courses which list “Recommended Preparation courses” – usually recommending a single course and sometimes the recommendation is to take the courses concurrently

### McMaster’s English & Cultural Studies Requirements:

Course Level	1	2	3	4	Total
Number of Courses Offered	4	13	21	27	65

- 4 Courses with no prerequisites
- 9 Courses that require 3 units of English & Level 2 registration or above in any program
- 9 Courses that require registration in Level 2 or above in any program

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Open Courses = 33.8%

- 6 Level 3 courses that require registration in Level 3 or above in English
- 26 Level 4 courses that require registration in Level 4 of an Honours program in English

### Queen's English Requirements:

Course Level	1	2	3	4	5	Total
Number of Courses Offered	2	38	25	46	1	112

1 Course with no prerequisite

37 Level 2 courses that require a min. grade of C in ENGL 100 (6 units)

\_\_\_\_\_ Open Courses = 33.9%

4 Level 3 courses that require 9 units of Level 2 English AND a GPA of 2.4 on all English units OR a GPA of 2.6 and registration in a MDVL plan (Medieval Studies)

66 Level 3 or 4 course which require 9 units of Level 2 English AND a GPA of 2.4 on all English units AND English program registration

### Western's English Requirements:

Course Level	1	2	3	4	Total
Number of Courses Offered	5	34	34	48	121

20 Courses with no prerequisite (4 courses at Level 1 and 16 courses at Level 2)

52 Level 2 & 3 courses that require 6 units of Level 1 English with a min. grade of 60%

48 Level 4 courses that require 12 units of Level 2 English OR dept. permission

\_\_\_\_\_ Open courses = 99.1%

1 Level 1 course requires minimum of 85% in Grade 12 English

**U of T, St. George's English Requirements:**

Course Level	1	2	3	4	Total
Number of Courses Offered	4	26	55	16	101

4 Level 1 courses with no prerequisites

26 Level 2 courses which require 6 units of English OR any 24 units

\_\_\_\_\_ Open Courses = 29.7%\*

49 Level 3 courses which require 18 units of English AND any 24 units

\_\_\_\_\_ Open Courses = 78.2%\*

15 Level 4 courses which require 24 units of English AND any 54 units

\_\_\_\_\_ Open Courses = 93%\*

\*Very hard to determine where courses stop being 'open'. If a student takes English courses as part of their degree, more English courses open for them.



## APPENDIX C

### McMaster Unit Count for Combined Honours Programs

Based on 2016-17 Calendar

Faculty	Program	Required Units (after 1 <sup>st</sup> year)	Required Units (after 1 <sup>st</sup> year	Total Required Upper-Level Units
<b>Humanities*</b> Level I req'd units = 12 units	Art History	33-36		
	Music	39		
	Theatre & Film Studies	36		
	Classics	36		
	Communication Studies	36		
	Multimedia	39		
	Cultural Studies & Critical Theory	36		
	English & Cultural Studies	36		
	English & Cultural Studies & Mathematics		English = 36 Math = 36	Upper-level Units = 72
	French	36		
	French & Mathematics		French = 36 Math = 36	Upper-level Units = 72
	History	33		
	History & Mathematics		History = 33 Math = 36	Upper-level Units = 72
	Peace Studies	36		
	Cognitive Science of Language	42		

	Linguistics	45		
	Philosophy & Biology		Philosophy = 36 Biology = 36	Upper-level Units = 72
	Philosophy & Mathematics		Philosophy = 39 Math = 36	Upper-level Units = 75
<b>Science *</b> <b>Level 1 req'd</b> <b>units ~ 24</b> <b>units</b>	Biology & Environmental Science		Biology = 27 EnviroSci = 33 Other = 3 Mixed = 6	Upper-level Units = 69
	Biology & Mathematics		Biology = 21 Math = 15 Choice = 6-18 Additional = 3	Upper – level units = 45-57
	Biology & Pharmacology Co-Op (admission after Level II)			Upper-level Units = 60
	Biology & Psychology, Neuroscience & Behaviour			Upper-level Units = 72
	Geography & Environmental Science		Geography = 27 EnviroSci = 18 Choice = 6-9	Upper-level Units = 51-54
	Mathematics & Computer Science		Math = 27 CompSci = 30 Choice = 9	Upper-level Units = 66
	Mathematics & Physics		Math = 36 Physics = 36 Choice = 3	Upper-level Units = 75
<b>Social Sciences *</b> <b>Level 1 req'd</b> <b>units = 18</b> <b>units from SocSci and Sci programs</b>	Anthropology	39		
	Economics	45		
	Economics & Computer Science		Economics = 36 CompSci = 36	Upper-level Units = 72

	Economics & Mathematics		Economics = 30 Math = 30 Choice = 12	Upper-level Units = 72
	Geography (B.A.)	42		
	Gerontology	36		
	Health Studies	36-39		
	Indigenous Studies	39		
	Labour Studies	39-42		
	Political Science	36		
	Psychology, Neuroscience & Behaviour (BA)	36-39		
	Religious Studies	36-42		
	Sociology	42-45		

## APPENDIX D

### McMaster Unit Counts and Requirements for Minors

Program	Total Units	1st year Units	Required Upper Year Units	Flexible Units	Enrolment Limit	Application?	Notes
<i>Business</i>							
Accounting & Financial Mgmt Services	33	6	27	0	30	Yes	
Business	24	6	18	0	40	Yes	
Finance	33	6	18	9	30	Yes	
Information Systems	24-25	6 to 7	18	0	30	Yes	
Specialized Minor in Commerce for Humanities Students	33	6	21	6	30	Yes	
<i>Engineering</i>							
Computer Science	24	6		18			
<i>Health Sciences</i>							
<i>Humanities</i>							
Art History	24			24			
Music	24	No more than 9 units					No more than 12 units from a list of 31 courses
Theatre & Film Studies	24						Limit of 12 units from Course List 3 (Level 2 and 3 year courses)
Diploma in Music Performance	24	0	24			Yes	Lesson Fees are charged over and above tuition. 9 units cannot be used as credit toward McMaster degree.
Classics	24	No more than 6 units					
Greek	24	No more than 6 units					
Latin	24	No more than 6 units					

Program	Total Units	1st year Units	Required Upper Year Units	Flexible Units	Enrolment Limit	Application?	Notes
English & Cultural Studies	24	6		18 units at Levels II and III English			
French	24	6	6	12 units from Level II or III French (3 courses excluded)			
History	24	No more than 6 units					
Peace Studies	24	0	24 units from a list of 44 courses. 9 units must be Peace Studies courses.				Only one 3 unit Peace Studies course on the list. All other courses Level II and III.
Women's Studies	24	3	3 units from Level II, 18 units from a list of 14 courses.				
German Studies	24	6		18 units from Level II, III & IV German or 2 History courses, or 2 Philosophy courses.			
Italian Studies	24	6		18 units from Level II, III & IV Italian or 1 Art History course, or 1 History course.			
Linguistics	24	6		18 units from Levels II and III Linguistics			

Program	Total Units	1st year Units	Required Upper Year Units	Flexible Units	Enrolment Limit	Application?	Notes
Philosophy	24	No more than 6 units	9	15 units of Philosophy and may include 1 Humanities course			
<i>Science</i>							
Biochemistry	24	6	6 units required & 6 units from a list of 6 courses)	6 units from Levels III & IV Biochemistry			At least 12 units (above Level I) must be elective to degree. Notes allowing specific course substitutions.
Biology	24	6		18 units from Levels II, III & IV Biology or Molecular Biology including at least 6 units from Levels III & IV.			At least 12 units (above Level I) must be elective to degree. Notes allowing specific course substitutions.
Chemical Biology	24	6		6-12 units from Levels II, III, IV ChemBio courses or a list of 6 courses. 0-6 units from Levels II & III Bio. 6 units from Levels III & IV ChemBio.			At least 12 units (above Level I) must be elective to degree. Notes allowing specific course substitutions.

Program	Total Units	1st year Units	Required Upper Year Units	Flexible Units	Enrolment Limit	Application?	Notes
Chemistry	24	6		12 units from Level II, III, IV Chemistry courses or a list of 4 courses. 6 units from Levels III, IV Chemistry.			At least 12 units (above Level I) must be elective to degree. Notes allowing specific course substitutions.
Earth Sciences	24	6 units from a choice of 4 courses		18 units from a list of 25 courses, at least 6 units have to be Level III, IV Earth Sciences			At least 12 units (above Level I) must be elective to degree. Notes allowing specific course substitutions.
Environmental Sciences	24	6 units from a choice of 4 courses		18 units from a list of 53 courses, at least 6 units have to be Level III, IV Environmental Sciences courses & at least 3 units from Levels II, III, IV Biology or Chemistry courses			At least 12 units (above Level I) must be elective to degree. Notes allowing specific course substitutions.

Program	Total Units	1st year Units	Required Upper Year Units	Flexible Units	Enrolment Limit	Application?	Notes
Environmental Studies	24	6 units from a choice of 5 courses	3	3 units from a list of 4 courses, 12 units from a list of 32 courses 6 units of which must be Level III or IV			At least 12 units (above Level I) must be elective to degree. Notes allowing specific course substitutions.
Geographic Information Systems (GIS)	24	6 units from a choice of 8 courses	18 units. All divided up into small choice packages (e.g., 3 units from a list of 3 courses)				
Geography	24	6 required units		18 units from Levels II, III & IV Geography courses, at least 6 of which must be Level III or IV			At least 12 units (above Level I) must be elective to degree. Notes allowing specific course substitutions.



Program	Total Units	1st year Units	Required Upper Year Units	Flexible Units	Enrolment Limit	Application?	Notes
Geography & Earth Sciences	24	6 units from a choice of 6 courses		18 units from Levels II, III & IV Geography or Earth Sciences courses, at least 6 of which must be Level III or IV			At least 12 units (above Level I) must be elective to degree. Notes allowing specific course substitutions.
Mathematics	27	9 units from among 3 groups of courses		18 units from Levels II, III, IV Math or Stats courses including at least 6 units from Levels III or IV			At least 12 units (above Level I) must be elective to degree. Notes allowing specific course substitutions. A minor in Math cannot be declared together with a minor in Stats
Statistics	27	9 units from among 3 groups of courses	9 units from a list of 6 courses	9 units from Levels II, III, IV of Math or Stats			At least 12 units (above Level I) must be elective to degree. Notes allowing specific course substitutions. A minor in Stats cannot be declared with a minor in Math

Program	Total Units	1st year Units	Required Upper Year Units	Flexible Units	Enrolment Limit	Application?	Notes
Astronomy	24-25	6 units from 4 courses	9 units required plus 9-10 units from a list of 11 courses				At least 12 units above Level I must be elective to degree
Physics	24	6 units from 6 courses		18 units from Level II, III, IV Astronomy, Biophysics, Physics including at least 6 units from Levels III, IV			At least 12 units (above Level I) must be elective to degree. Notes allowing specific course substitutions.
Psychology	24	6 units from 4 courses		18 units from Levels II or III Psychology at least 6 units from Level III			At least 12 units (above Level I) must be elective to degree. Notes allowing specific course substitutions. No course guarantee and the minor may not be possible to complete.
<i>Social Sciences</i>							
Anthropology	24	6 required units	3 Level II units from a list of 3 classes	15 units Level II, III or IV Anthropology			

Program	Total Units	1st year Units	Required Upper Year Units	Flexible Units	Enrolment Limit	Application?	Notes
Economics	21-24	3-6 units from 3 courses	18 units from Levels II, III or IV Economics with no more than 6 units from a list of 11 courses	18 units from Levels II, III or IV Economics with no more than 6 units from a list of 11 courses			Notes allowing specific course substitutions.
Health , Aging & Society	24	6 required units		18 units from Health Aging & Society plus a list of 39 courses			
Indigenous Studies	24	6 units from 5 courses		18 units from Level II, III Indigenous students plus a course list of 31 courses			At least 12 of the 18 units must be from Indigenous Studies or Indigenous language courses
Labour Studies	24	6 required units	6 Level II required units	12 units levels II, III or IV Labour Studies	10	Yes	No more than 3 units of Level IV Labour Studies

Program	Total Units	1st year Units	Required Upper Year Units	Flexible Units	Enrolment Limit	Application?	Notes
Justice, Law & Order	24	6	6 Level II required units, 6 units Level III required units	6 units from a course list of 21 courses			At least 12 units (above Level I) must be elective to the degree.
Japanese Studies	24	6		3-6 units from a list of 5 courses, 12-15 units from Levels II, III, IV Japanese plus a list of 9 courses			
Religion & Diversity	24	6 required units	3 units Level II, 6 units Level III from a list of 4 courses	9 units from Level II, III, IV Religious Studies			
Religious Studies	24			24 units with no more than 6 units from Level I			

Program	Total Units	1st year Units	Required Upper Year Units	Flexible Units	Enrolment Limit	Application?	Notes
Sociology	24	6 required units		18 units Level II or III Sociology with at least 9 units at Level III			
<i>Interdisciplinary</i>							
African & African Diaspora Studies	24			24 units from a list of 61 courses			No more than 6 units of Level I
Archaeology	24	3 units from Level I Anthropology	6 units required from a list of 3 courses	15 units from a list of 46 courses			At least 9 of the 15 units must be from outside the student's own department
Community Engagement	24		3 units	21 units from 2 or more Faculties; must include a min. of 6 units from Course List A (52 courses) and a min. of 6 units from Course List B (32 courses)			No more than 6 units of Level I

Program	Total Units	1st year Units	Required Upper Year Units	Flexible Units	Enrolment Limit	Application?	Notes
Globalization Studies	24	3 required units		21 units from Course Lists 1, 2 and 3.			At least 9 of the 21 units must be from outside the student's own department and no more than 12 units may be selected from any 1 of the 3 lists.
Jewish Studies	24			24 units. At least 12 units from List A, minimum of 6 units from List B.			Student must be registered in a 4 or 5 level program. Students are encouraged to engage in a year of study in Israel.
Sustainability	24	3 required units		21 units from the Course List			Students are encouraged to speak to their Faculty advisors about Faculty-specific rules on double-counting courses.
Origins Research Cancelled							
Radiation Sciences Cancelled							
Thematic Areas:							
Asian Studies							
Canadian Studies							



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## **REPORT TO UNDERGRADUATE COUNCIL FROM THE UNDERGRADUATE COUNCIL EXECUTIVE COMMITTEE**

### **Recommendation to Strike an Ad Hoc Committee on a Major and Two Minors Pathway**

The report of the Committee on Programming in the Arts and Science Faculties (PASF) included a recommendation to Undergraduate Council to create a new pathway to an honours degree that enables students to study one major and two minor areas of concentration. In order to review the requirements for and implications of such a pathway, it is necessary for Undergraduate Council to strike an ad hoc committee. The Undergraduate Council Executive Committee, by e-mail vote on June 16-23, 2017, has reviewed and approved the terms of reference. The Executive Committee's approval was conditional on further review of the terms of reference and adjustment of the membership to ensure representation from each of the Faculties of Humanities, Science and Social Sciences, and from faculty, student and administrative staff. It was also noted that the Undergraduate Council Ad Hoc Committee on Academic Structures for Student Success (CASS) is also looking at the development of a major and two minors pathway and the terms of reference may need further revision as the CASS Report is finalized.

Key members of the proposed ad hoc committee met soon after the Executive Committee approved the terms of reference. This group, which included the proposed Chair, the Associate Deans (Academic) from Science and Social Sciences, Andrea Thyret Kidd and Tamara Bates, expanded the composition of the proposed ad hoc committee. This group also made some minor revisions to the terms of reference, including reorganizing the specific tasks. Additional feedback from CASS to date also suggested additional minor revisions.

Undergraduate Council Executive Committee now recommends,

**that Undergraduate Council ratifies the decision by the Undergraduate Council Executive Committee to strike an Ad Hoc Committee on a Major and two Minors Pathway and approves the terms of reference and membership of the Ad Hoc Committee, as set out in the attached.**

Undergraduate Council: For Approval  
 September 12, 2017

## **Undergraduate Council Ad Hoc Committee on a Major and Two Minors Pathway**

### **Proposed Terms of Reference**

The Committee on Programming in the Arts and Sciences Faculties (PASF) has recommended that Undergraduate Council create a new pathway, consisting of a major and two minors, leading to an Honours Bachelor of Arts or an Honours Bachelor of Science degree. The Undergraduate Council Ad Hoc Committee on a Major and Two Minors Pathway is asked to consider the option of a major and two minors degree pathway and to make recommendations on the academic and other requirements such a pathway would involve. The Ad Hoc Committee is asked, particularly, to:

- Consult with other institutions regarding their experiences with the major and two minors pathway.
- Consult with the Ministry and the IQAP Office regarding what approvals may be necessary for the proposed new pathway.
- Consult with the Undergraduate Council Ad Hoc Committee on Academic Structures for Student Success regarding that Ad Hoc Committee's development of nomenclature and definitions of terms such as "major" "double major" and "minor" to ensure consistency.
- Discuss opportunities to encourage the Faculties of Business, Engineering and Health Sciences to create minors that can be included as options within this pathway.
- Recommend regulations or thresholds for determining the degree awarded for combinations that include components from both Bachelor of Arts and Bachelor of Science programming. For example, would a student pursuing a major in Physics and minors in English and History necessarily receive an Honours Bachelor of Science degree?
- Make recommendations on the identification of the "home" Faculty for students pursuing majors and minors from different Faculties. For example, should a student pursuing a major in Biology and minors in Economics and Sociology necessarily be a Science student or could they be a Social Sciences student?
- Recommend processes and procedures to enable Faculty Offices to continue to provide excellent academic advisement for students.
- Set requirements to ensure academic rigour in a major and two minors pathway, for example, setting minimum unit counts of Level III and Level IV courses and ensuring that a major and two minors pathway will meet the established degree level expectations for honours programs.
- Review and consider the composition of minors. Currently, minors are a collection of courses rather than a set of prescribed courses, which is an important feature that distinguishes minors from certificates and diplomas. Minors consist of 24 units, of which, in most cases, a maximum of 6 units can be Level I courses.
- Develop recommendations regarding the allocation of courses within the major and two minors pathway. For example, minors currently allow 12 units to be double counted towards programs requirements; the possible effect of using cross-listed courses to satisfy requirements, etc.
- Consider and make recommendations on an optional capstone/project course, or some other method of providing students the ability to bring together the three fields of study.
- Anticipate and make recommendations regarding program alternatives and options for students who decide they no longer wish to pursue the major and two minors pathway, do not complete the requirements for one or more components, or who wish to make changes to the major and minors they have selected.
- Make recommendations to the University Registrar regarding how program names might appear on degree parchments. (Effective beginning with the 2017 Spring Convocations, degree designations and program names will be printed with on degree parchments; minors and specialisations will not be included.)

Reporting: report to be submitted to Undergraduate Council by February 1, 2018.



**Proposed Membership**

**Voting Members:** (minimum 5 members, a majority of members must be members of Undergraduate Council – membership should ensure representation from the Faculties of Humanities, Science and Social Sciences)

Dr. Gary Warner (Chair)	An elected faculty representative (to Undergraduate Council), an Associate Dean, or a knowledgeable faculty member of the University
Dr. Susan Searls Giroux	Chair of Undergraduate Council (Ex Officio)
Dr. Michael Farquharson/Acting	Associate Dean (Academic), Faculty of Science
Dr. Lori Campbell	Associate Dean (Academic), Faculty of Social Sciences
Dr. Todd Alway	Faculty member, Faculty of Social Sciences
Ms Melissa Pool	University Registrar
Dr. Sean Corner†	Faculty member, Faculty of Humanities
Dr. Bhagwati Gupta†	Faculty member, Faculty of Science
TBD	Undergraduate Student Representative, Faculty of Humanities
Ms Adina Silver	Undergraduate Student Representative, Faculty of Science
Ms Tamara Bates	Governance Advisor & Assistant University Secretary (non-voting)

**Proposed Consultants:** Members of key groups/units will be included as permanent consultants to the Ad Hoc Committee. The Ad Hoc Committee can also invite other individuals to specific meetings for consultation as needed.

Ms Lori Goff or Ms Amy Gullage	IQAP Office
Ms Jackie Osterman	Assistant Dean (Studies), Faculty of Humanities
Ms Joanne Smith	Assistant Dean (Studies), Faculty of Science
Ms Lynn Giordano	Assistant Dean (Studies), Faculty of Social Sciences
Ms Bernadette Belan	Registrar's Office (Scheduling)
Ms Trish Sullivan	Registrar's Office (Systems)
Ms Sophia Holness	Mosaic/University Technology Services
Ms Andrea Thyret-Kidd	Office of the Provost

### **Ad Hoc Committee on a Major and Two Minors Pathway**

*(Not yet formally recommended or struck. Report anticipated by February 1, 2018.)*

COMMITTEE MEMBERS		
<b>Dr. Gary Warner (Chair)</b>	<b>Acting Director</b>	<b>Arts &amp; Science Program</b>
Dr. Susan Searls Giroux	Vice-Provost (Faculty)	
Dr. Michael Farquharson/Acting	Associate Dean (Academic)	Faculty of Science
Dr. Lori Campbell	Associate Dean (Academic)	Faculty of Social Sciences
<i>(Dr. Sean Corner?)†</i>	<i>Faculty Member</i>	<i>Faculty of Humanities</i>
<i>TBD†</i>	<i>Faculty Member</i>	<i>Faculty of Science</i>
Dr. Todd Alway	Elected Faculty Member	Faculty of Social Sciences
TBD	Undergraduate Student Representative	Faculty of Humanities
Ms Adina Silver	Undergraduate Student Representative	Faculty of Science
CONSULTANTS		
Ms Lori Goff/Ms Amy Gullage		IQAP Office
Ms Jackie Osterman	Assistant Dean (Studies)	Faculty of Humanities
Ms Joanne Smith	Assistant Dean (Studies)	Faculty of Science
Ms Lynn Giordano	Assistant Dean (Studies)	Faculty of Social Sciences
Ms Melissa Pool	University Registrar	Registrar's Office
Ms Bernadette Belan	Senior Associate Registrar, Scheduling and Examinations	Registrar's Office
Ms Trish Sullivan	Senior Associate Registrar, Systems & Records	Registrar's Office
Ms Sophia Holness	Senior Manager, Mosaic Sustainment Organization	Mosaic/University Technology Services
Ms Andrea Thyret-Kidd		Office of the Provost

† Members external to Undergraduate Council

## 2017-2018 Undergraduate Council Meeting Dates

Date: May 16, 2017

### Undergraduate Council

Tuesday, September 12, 2017	GH 111, Council Room	2:30pm – 4:30pm
Tuesday, October 3, 2017	GH 111, Council Room	2:30pm – 4:30pm
Tuesday, November 14, 2017	GH 111, Council Room	2:30pm – 4:30pm
Tuesday, December 5, 2017	GH 111, Council Room	2:30pm – 4:30pm
Tuesday, January 30, 2018	GH 111, Council Room	2:30pm – 4:30pm
Tuesday, February 27, 2018	GH 111, Council Room	2:30pm – 4:30pm
Tuesday, March 27, 2018	GH 111, Council Room	2:30pm – 4:30pm
Tuesday, April 17, 2018	GH 111, Council Room	2:30pm – 4:30pm

### Curriculum & Admissions

Tuesday, September 19, 2017	GH 111, Council Room	2:30pm – 4:00pm
Tuesday, October 24, 2017	GH 111, Council Room	2:30pm – 4:00pm
Tuesday, November 21, 2017	GH 111, Council Room	<b>12:30pm – 4:30pm</b>
Wednesday, November 22, 2017	GH 111, Council Room	<b>9:30am – 12:30pm</b>
Thursday, November 23, 2017	GH 111, Council Room	<b>12:30pm – 4:30pm</b>
Tuesday, January 16, 2018	GH 111, Council Room	2:30pm – 4:00pm
Tuesday, February 13, 2018	GH 111, Council Room	2:30pm – 4:00pm
Tuesday, March 13, 2018	GH 111, Council Room	2:30pm – 4:00pm

### Awards

Tuesday, September 26, 2017	MUSC 224	2:30pm – 3:30pm
Tuesday, October 31, 2017	MUSC 224	2:30pm – 3:30pm
Tuesday, December 12, 2017	MUSC 224	2:30pm – 3:30pm
Tuesday, March 6, 2018	MUSC 224	<b>2:30pm – 4:00pm</b>
Tuesday, April 3, 2018	MUSC 224	2:30pm – 3:30pm

### **Certificates & Diplomas**

Tuesday, September 26, 2017	MUSC 224	3:30pm – 4:30pm
Tuesday, October 31, 2017	MUSC 224	3:30pm – 4:30pm
Tuesday, December 12, 2017	MUSC 224	3:30pm – 4:30pm
Tuesday, February 6, 2018	MUSC 224	2:30pm – 4:00pm
Tuesday, April 3, 2018	MUSC 224	3:30pm – 4:30pm

**The meeting schedules for Ad Hoc Committees will be set separately and according to the availability of their members.**