

January 25, 2018

TO: Members of Undergraduate Council

FROM: Tamara Bates
Governance Advisor and Assistant University Secretary

RE: **Notice of Meeting**

The next meeting of Undergraduate Council will be held on **Tuesday, January 30, 2018 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.

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

**McMaster University
UNDERGRADUATE COUNCIL**

**Tuesday, January 30, 2018 at 2:30 p.m.
in the Council Room (GH 111)**

A G E N D A

- I MINUTES of the meeting of October 3, 2017 (attached), November 14, 2017, and December 5, 2017, (forthcoming – for approval)
- II BUSINESS ARISING
- III CHAIR’S REMARKS
- IV REPORT FROM THE AWARDS COMMITTEE (attached – for approval/information)
 - For Approval
 - i. New Award Terms
 - ii. Changes to Terms of Awards
 - iii. New Bursary Terms
 - For Information
 - iv. Awards Value Changes
- V REPORT FROM THE CURRICULUM AND ADMISSIONS COMMITTEE (attached – for approval)
 - i. General Academic Regulations
 - ii. Faculty of Science
 - iii. Faculty of Health Sciences
 - iv. Faculty of Engineering
 - v. Faculty of Business
 - vi. Faculty of Social Sciences
- VI REPORT FROM THE CERTIFICATES AND DIPLOMAS COMMITTEE (attached – for approval/information)
 - For Approval
 - i. Establishment of New Certificate and Diploma Programs
 - a. Concurrent Certificate in Leadership and Cross-Cultural Literacy
 - b. Concurrent Certificate in Applied Social Sciences Research
 - c. Payroll Compliance Practitioner Certificate
 - ii. Revisions to Existing Certificate Programs
 - a. Concurrent Certificate in Business Technology Management
 - For Information
 - iii. New Certificate of Completion Programs
 - a. ePrivacy Series Certificate of Completion
 - b. Health Care Analytics Certificate of Completion
- VII OTHER BUSINESS



UNIVERSITY SECRETARIAT
 • Board of Governors
 • Senate

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REPORT TO UNDERGRADUATE COUNCIL FROM THE UNDERGRADUATE COUNCIL AWARDS COMMITTEE

FOR APPROVAL

I Terms of Award

At its December 12, 2017 meeting the Undergraduate Council Awards Committee approved the following for recommendation to Undergraduate Council.

- i. Changes to Terms of Award
 - The Steve Baxter Memorial Scholarship
 - The Christine Ditta Memorial Scholarship
 - The Mahatma Gandhi Scholarship
 - The Russell and Winifred Hewetson Memorial Scholarship
 - The Judith and Warren Johnson Academic Grant
- ii. Changes to Terms of Award
 - The Donald Oscar Cannon Scholarship
 - The Dr. Thomas Hobley Prize
 - The McMaster University Retirees Association Prize
 - The McMaster University Retirees Association Scholarship
- iii. New Bursaries
 - The Don and Lois Gasse Memorial Entrance Bursary

The Undergraduate Council Awards Committee now recommends,

that Undergraduate Council approve five new awards, changes to four terms of award and one new bursary, as set out in the attached

FOR INFORMATION

II Award Value Changes

Also at the same meeting, the Awards Committee received, for information, two award value changes.

**Undergraduate Council
 January 30, 2018**



OFFICE OF THE REGISTRAR, STUDENT FINANCIAL AID & SCHOLARSHIPS
To Undergraduate Council
From Undergraduate Council Awards Committee
January 30, 2018

PROPOSED NEW AWARDS FOR APPROVAL

SECTION B: Awards for In-Course Students

The Steve Baxter Memorial Scholarship

Established in 2017 in memory of Steve Baxter. To be awarded to a student in the B.Sc.N. program who, in the judgement of the School of Nursing, has demonstrated exceptional humble leadership qualities.

Value: \$1,000

The Christine Ditta Memorial Award

Established in 2017 in memory of Christine Ditta. To be awarded to a student graduating from a Nursing program, who in the judgement of the School of Nursing, intends to pursue a career in ICU, or excels in this specialty area.

Value: \$1,000

The Mahatma Gandhi Scholarship

Established in 2017 to promote the Gandhian concepts of non-violence and help foster peace and harmony in the world. To be awarded to a student enrolled in any program who has completed at least 6 units in Peace Studies courses and attained a high average in those courses.

Value: \$1,000

The Russell and Winifred Hewetson Memorial Scholarship

Established in 2017 by the estate of Winifred Patricia Hewetson. Scholarships to be awarded to students enrolled in Level III and above in an Earth and Environmental Sciences program.

Value: \$2,500

SECTION G: Academic Grants for Full-Time Students

The Judith and Warren Johnson Academic Grant

Established in 2017 by Judith Johnson (Class of '65) and Warren Johnson (Class of '62). To be awarded to a student in any Faculty who has attained a high average and demonstrates financial need.

Value: \$1,000

CHANGES TO AWARD TERMS FOR APPROVAL

The Donald Oscar Cannon Scholarship

Established in 2012 by the Cannon Family. To be awarded to a student registered with *Student Accessibility Services (SAS)* who obtained the a highest Grade Point Average.

The Dr. Thomas Hobley Prize

Established in 1936 by bequest of Mrs. A. McNee of Windsor. To be awarded to a ~~woman~~ student on the basis of the Fall-Winter Average obtained in the penultimate level of a program in Economics or Political Science.



OFFICE OF THE REGISTRAR, STUDENT FINANCIAL AID & SCHOLARSHIPS
To Undergraduate Council
From Undergraduate Council Awards Committee
January 30, 2018

The McMaster University Retirees Association Prize

Established in 1992 by the McMaster University Retirees Association. To be awarded to the part-time student enrolled in a program in Gerontology or Aging and Society who attains the highest Grade Point Average.

The McMaster University Retirees Association Scholarship

Established in 1991 by the McMaster University Retirees Association. To be awarded to the student who has completed Level I and at least an additional 30 units of a program in Gerontology or Aging and Society and who attains the highest Fall-Winter Average. The student must enrol in a program in Gerontology or Aging and Society in the subsequent Fall/Winter terms.

PROPOSED NEW BURSARIES FOR APPROVAL

Submitted by the Office of Student Financial Aid & Scholarships

The Don and Lois Gasse Memorial Entrance Bursary

Established in 2017 by Dr. Rosanne Gasse, B.A. Hon. (Class of '80), M.A. (Class of '81), Ph.D. (Class of '89), in memory of her parents. To be granted to a student entering Level I in the Faculty of Humanities who demonstrates financial need. Preference will be given to an Indigenous student.

FOR INFORMATION

AWARD VALUE CHANGES

The Schulich Leader Scholarships

Value: Faculty of Engineering ~~\$80,000 (\$20,000 per year)~~ \$100,000 (\$25,000 per year)
 Faculty of Science ~~\$60,000 (\$15,000 per year)~~ \$ 80,000 (\$20,000 per year)

REPORT TO UNDERGRADUATE COUNCIL FROM THE UNDERGRADUATE COUNCIL CURRICULUM AND ADMISSIONS COMMITTEE

FOR APPROVAL

ADDENDA TO CURRICULUM REVISIONS FOR INCLUSION IN THE 2018-2019 UNDERGRADUATE CALENDAR

At its meetings of November 21 and November 22, 2017, the Undergraduate Council Curriculum and Admissions Committee approved, for recommendation to Undergraduate Council, curriculum revisions for inclusion in the *2018-2019 Undergraduate Calendar*.

General Academic Regulations	(Attachment I)
Faculty of Science	(Attachment II)
Faculty of Health Sciences	(Attachment III)
Faculty of Engineering	(Attachment IV)
Faculty of Business	(Attachment V)
Faculty of Social Sciences	(Attachment VI)

The Curriculum and Admissions Committee now recommends,

that Undergraduate Council approve, for recommendation to Senate, revisions to the General Academic Regulations, for inclusion in the 2018-2019 Undergraduate Calendar, as set out in Attachment I.

The Curriculum and Admissions Committee now recommends,

that Undergraduate Council approve, for recommendation to Senate, the move of the *Honours Bachelor of Science in Biology and Pharmacology Co-op* program from the Faculty of Science to the Faculty of Health Sciences, and the change in degree designation for the program from an *Honours Bachelor of Science* to an *Honours Bachelor of Health Sciences*, for inclusion in the 2018-2019 Undergraduate Calendar, as recommended by the Faculties of Health Sciences and Science and set out in Attachment II and III.

The Curriculum and Admissions Committee now recommends,

that Undergraduate Council approve, for recommendation to Senate, the establishment of a new *Minor in Innovation*, for inclusion in the 2018-2019 Undergraduate Calendar, as recommended by the Faculties of Business and Engineering and set out in Attachments IV and V.

The Curriculum and Admissions Committee now recommends,

that Undergraduate Council approve addenda to curriculum revisions for inclusion in the *2018-2019 Undergraduate Calendar*, as recommended by the Faculties of Business, Engineering, Health Sciences, Science, and Social Sciences, as outlined in Attachments I to VI.

Undergraduate Council:

January 30, 2018

GENERAL ACADEMIC REGULATIONS:

This section outlines the general undergraduate academic regulations of the University. Students must read and comply with both these regulations and those set out by their Faculty elsewhere in this Undergraduate Calendar, as applicable. In the event of a conflict between the Faculty's program regulations and the General Academic Regulations, the program regulations take precedence.

Since the Academic Regulations are continually reviewed, the University reserves the right to change the regulations in this section of the Calendar. The University also reserves the right to cancel the academic privileges of a student at any time should the student's scholastic record or conduct warrant so doing.

Faculties are authorized to use discretion in special situations by taking into account past practice, the spirit of the regulations, and extraordinary circumstances. Students who believe their situations warrant special consideration should consult the appropriate [Faculty/Program Office](#).

Academic Commitments

Students should expect to have academic commitments (e.g., classes, labs, tests, examinations, etc.) Monday through Saturday, normally 8:30 a.m. to 10:00 p.m., but not on Sunday or statutory holidays, as outlined in the [Sessional Dates](#). Students are responsible for meeting all course requirements, including final examinations, as scheduled. Students who require accommodations to meet religious, Indigenous or spiritual observances ([hotlink to RISO](#)) must make their requests within 10 working days from the beginning of the start of term to their [Faculty/Program office](#).

Sessional Dates

The academic year is divided into terms, as shown below. Most undergraduate students register for the **Fall** and **Winter** terms, which run from September to December and January to April respectively. The **Spring/Summer** term starts at the beginning of May and ends in early August.

Undergraduate Sessional Dates, as approved by Senate:

- [2017 Fall Term](#)
- [2018 Winter Term](#)
- [2017-2018 Courses Spanning both Terms](#)
- [2018 Spring Session](#)
- [2018 Summer Session](#)
- [2018 Spring/Summer Term: Full-Term Courses](#)

2017 Fall Term (62 days)

Item	Date(s)
Enrolment Begins	<i>To be announced</i>
Classes begin	Tuesday, September 5
Last day for enrolment and course changes	Wednesday, September 13
Mid-term recess(es)	Monday, October 9 to Sunday, October 15
Last day for withdrawing from courses without failure by default	Friday, November 10
Test and Examination Restriction	Thursday, November 30 to Thursday, December 7
Classes end	Wednesday, December 6
Final Examinations	Friday, December 8 to Thursday, December 21
Deferred examinations	Tuesday, February 20 to Friday, February 23

2018 Winter Term (62 days)

Item	Date(s)
Enrolment Begins	<i>To be announced</i>
Classes begin	Thursday, January 4*
Last day for enrolment and course changes	Friday, January 12
Mid-term recess(es)	Monday, February 19 to Sunday, February 25
Last day for withdrawing from courses without failure by default	Friday, March 16
Good Friday: No classes or examinations	Friday, March 30

General Academic Regulations for Undergraduate Curriculum & Admissions, Jan. 2018

Test and Examination Restriction	Tuesday, April 3 to Tuesday, April 10
Classes end	Monday, April 9
Final Examinations	Wednesday, April 11 to Thursday, April 26
Deferred examinations	Monday, June 18 to Thursday, June 21

**The University re-opens on Tuesday, January 2, 2018 after the December holidays; classes begin January 4.*

2017-2018 Courses Spanning both Terms (124 days)

Item	Date(s)
Enrolment begins	<i>To be announced</i>
Classes begin	Tuesday, September 5
Last day for enrolment and course changes	Wednesday, September 13
Mid-term recess(es)	Monday, October 9 to Sunday, October 15 and, Monday, February 19 to Sunday, February 25
Last day for withdrawing from courses without failure by default	Friday, March 16
Good Friday: No classes or examinations	Friday, March 30
Test and Examination Restriction	Tuesday, April 3 to Tuesday, April 10
Classes end	Monday, April 9

Mid-Term Tests Level (I)	Friday, December 8 to Thursday, December 21
Final Examinations	Wednesday, April 11 to Thursday, April 26
Deferred examinations	Monday, June 18 to Thursday, June 21

2018 Spring Session (34 days)

Item	Date(s)
Classes begin	Monday, April 30
Last day for enrolment and course changes	Monday, May 7
Victoria Day: No classes	Monday, May 21
Last day for withdrawing from courses without failure by default	Wednesday, May 30
Classes end	Friday, June 15
Final Examinations	<i>As arranged by instructor in class time</i>
Deferred Examinations	<i>2018 Fall Mid-Term Recess Period</i>

2018 Summer Session (34 days)

Item	Date(s)
Classes begin	Monday, June 18
Last day for enrolment and course changes	Monday, June 25
Canada Day: No classes	Monday, July 2
Last day for withdrawing from courses without failure	Wednesday, July 18

by default	
Classes end	Friday, August 3
Civic Holiday: No classes	Monday, August 6
Final Examinations	<i>As arranged by instructor in class time</i>
Deferred Examinations	<i>2018 Fall Mid-Term Recess Period</i>

2018 Spring/Summer Term: Full-Term Courses (68 days)

Item	Date(s)
Classes begin	Monday, April 30
Last day for enrolment and course changes	Monday, May 7
Victoria Day: No classes	Monday, May 21
Canada Day: No classes	Monday, July 2
Last day for withdrawing from courses without failure by default	Wednesday, July 18
Classes end	Friday, August 3
Civic Holiday: No classes	Monday, August 6
Final Examinations	<i>As arranged by instructor in class time</i>
Deferred Examinations	<i>2018 Fall Mid-Term Recess Period</i>

Student Responsibilities

Academic

General Academic Regulations for Undergraduate Curriculum & Admissions, Jan. 2018

McMaster University provides many resources to help students achieve their academic goals, including the Undergraduate Calendar, program advisement reports and academic advisors. The University endeavours to enable students to enrol in required courses so that their program admission requirements and course requisites can be met in a timely manner. The University reserves the right to change a student's enrolment in classes should the need occur (e.g. low enrolment, urgent timetable changes, etc.).

Students must assume certain responsibilities. They include:

- meeting admission requirements and application deadlines for their intended program(s) of study
- selecting and completing courses in an order that meets requisite and program requirements
- becoming familiar with and respecting University [Sessional Dates](#), the [General Academic Regulations](#) and their [Faculty/Program specific regulations](#) and the Regulations for Aid and Awards as found in the appropriate section of this Calendar.

Students who do not follow these guidelines may experience academic consequences such as cancellation of course enrolment, completion of courses that are not counted toward their degree, or delayed graduation.

In addition to the responsibilities listed above, students are expected to:

- know and follow the [Senate Policies](#)
- keep their [student account](#) in good standing, paying all charges on time
- be aware that changes to course load and program may affect eligibility for government and University [aid and awards](#) (e.g. OSAP, work programs, bursaries, scholarships, etc.)
- consult with [Student Accessibility Services](#) in a timely manner to make disability related accommodation requests

Communication

It is the student's responsibility to:

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

Academic Obligations

General Academic Regulations for Undergraduate Curriculum & Admissions, Jan. 2018

Due dates and evaluations are described in course outlines except where other University policies apply, e.g., SAS accommodations, deferred exams, etc. When students are aware of their progress early in a course they can make informed decisions. Restrictions are placed on academic obligations to enable students to plan their work schedules.

1. Student learning in undergraduate courses should be assessed on more than one occasion. To that end, no single academic obligation (e.g., essay, test, examination, etc.) should have a value of more than 75% of the final grade without approval from the Department Chair or Associate Dean's Office. Clinical, placement, thesis and capstone courses are exempt.

2. For students requiring relief from an academic obligation, it is at the discretion of the instructor to determine the nature of the relief. In cases such as this, students can be offered the choice of another assessment or the option of writing a final examination which may be worth more than 75% of the course grade.

Early Feedback:

3. All students must receive feedback regarding their progress prior to the final date by which a student may cancel the course without failure by default.

4. For Level I and Level II courses, this feedback must equal a minimum of 20% of the final grade.

5. For Level III courses and above, this feedback must equal a minimum of 10% of the final grade.

6. For courses where it is difficult to achieve a numeric grade due to the design of the course (e.g., supervised study, thesis, capstone, inquiry, independent research/study, experiential courses, etc.), clear and early feedback must be provided.

7. When academic obligations are completed by the due dates in the course outline, early feedback will be received by the final date by which a student can cancel a course without failure by default. Students who use the MSAF process and other petitionable accommodations may not receive feedback by the early feedback deadline.

Restrictions:

8. Due dates for all term work must be on or before the final day of classes for courses with a final examination. For courses with no final examination, academic assessments can be due on or before the final date of examinations.

9. Tests, quizzes, exams and take home exams worth more than 10% cannot be assigned or due during the last 5 days of classes plus the day(s) between the end of classes and the beginning of examinations. Assignments worth more than 10% that are assigned at the beginning of the course and noted on the course outline, can be due during this time period, provided students are

given sufficient additional detail to enable them to work on the assignment in advance of the due date.

10. Academic obligations cannot be due during the December holiday break or the fall and winter mid-term recesses, with the exception of deferred exams scheduled by the Office of the Registrar.

Residence Requirements

Most students complete all undergraduate work at McMaster University. However, students who complete work at other universities must meet the minimum requirements set out below.

To obtain any four- or five-level, first undergraduate degree:

- at least two levels (approximately 60 units of work) beyond Level I, including the final level, must be completed at McMaster University.

To obtain a three-level, first undergraduate degree:

- the final level and at least one other level (a minimum of approximately 60 units of work) must be completed at McMaster University,

or,

- the final level (approximately 30 units of work) including at least 18 units of program-specific requirements must be completed at McMaster University.

Courses taken at another university on a Letter of Permission will not count toward the residence requirements.

All course work for a second bachelor's degree must be completed at McMaster University.

McMaster University Statement on the Collection of Personal Information and the Protection of Privacy

McMaster University collects and retains personal information of students, alumni and other parties, including but not limited to faculty, staff, visiting academics and private citizens using services provided by McMaster University, under the authority of the *McMaster University Act, 1976*. This information is used for the academic, administrative, employment-related, safety and security, financial and statistical purposes of the University, including for the administration of admissions, registration, awards and scholarships, convocation, alumni relations and other fundamental activities related to being a member of the University community, a user of services provided by McMaster or an attendee of, or applicant to, a public post-secondary institution in the Province of Ontario. The information will be used, among other things, to admit, register and

General Academic Regulations for Undergraduate Curriculum & Admissions, Jan. 2018

graduate students, record academic achievement, issue library cards and, where applicable, local transit passes, to provide access to information systems and to operate academic, financial, athletic, recreational, residence, alumni and other University programs. Additionally, this information may be shared with other institutions of higher education in order to administer collaborative programs. Information on admissions, registration and academic achievement may also be disclosed and used for statistical and research purposes by the University, other post-secondary educational institutions and the federal and provincial governments. The names of alumni, their Faculty and program, award information, degree(s) awarded and date of graduation is considered public information and may be published by McMaster University. In addition, student photographs posted by the University in the form of individual pictures or class pictures may be publicly displayed. Aside from the foregoing, the information you provide and any other information placed in a student record, or in a personnel record, will be protected and used in compliance with Ontario's *Freedom of Information and Protection of Privacy Act (RSO 1990)* and will be disclosed only in accordance with this Act. If you have any questions about the collection and use of this information please contact the University Registrar, University Hall, Room 209, Student Records, Gilmour Hall, Room 108, or the University Secretary, Gilmour Hall, Room 210, McMaster University.

McMaster University may also collect personal information from other relevant sources including, without limitation, the Ontario Universities' Application Centre, secondary schools, colleges, universities and other institutions previously attended, including third-party services and test score providers where the items collected form a part of the application or admission process to a university program.

Furthermore, McMaster is required to disclose personal information such as Ontario Education Numbers, student characteristics and educational outcomes to the Ministry of Advanced Education and Skills Development (the "MAESD"; formerly known as the Ministry of Training, Colleges, and Universities). The Ministry collects this data for purposes such as planning, allocating and administering public funding to colleges, universities and other post-secondary educational and training institutions and to conduct research and analysis, including longitudinal studies, and statistical activities conducted by or on behalf of the Ministry for purposes that relate to post-secondary education and training. Any information collected by McMaster for the purposes of self-identification as a member of a specific group (i.e. First Generation, First Nations, etc.) may be subject to disclosure to the MAESD by McMaster and collected by the MAESD pursuant to its statutory authority. Further information on how the MAESD uses personal information is available on the ministry's website (<http://www.tcu.gov.on.ca/>).

In addition to collecting personal information for the purposes noted above, McMaster University collects specific and limited personal information on behalf of the McMaster Student Union, the McMaster Association of Part-time Students and/or the McMaster Graduate Students Association. These constituent student groups use personal information for the purpose of membership, administration, elections, annual general meetings, health plans and other related matters only. Please contact the relevant Student Union or Association office if you have questions about this collection, use and disclosure of your personal information and their respective privacy policies.

General Academic Regulations for Undergraduate Curriculum & Admissions, Jan. 2018

September 2015

Notification of Disclosure of Personal Information to Statistics Canada

Statistics Canada is the national statistical agency. As such, Statistics Canada carries out hundreds of surveys each year on a wide range of matters, including education. In order to carry out such studies, Statistics Canada asks all colleges and universities to provide data on students and graduates. Institutions collect and provide to Statistics Canada student identification information (student's name, student ID number), student contact information (address and telephone number), student demographic characteristics, enrolment information, previous education and labour force activity.

The *Federal Statistics Act* provides the legal authority for Statistics Canada to obtain access to personal information held by educational institutions. The information may be used only for statistical purposes, and the confidentiality provisions of the Statistics Act prevent the information being released in any way that would identify a student. Students who do not wish to have their information used are able to ask Statistics Canada to remove their identification and contact information from the national database. For further information, please see Statistics Canada's web site at: <http://www.statcan.ca> or write to the Postsecondary Section, Centre for Education Statistics, 17th Floor, R.H. Coats Building, Tunney's Pasture, Ottawa, K1A 0T6.

Record Retention

When individuals apply for admission to and enrolment in programs at McMaster they accept the University's right to collect pertinent personal information. This information is needed to assess qualifications for entry, establish records of performance in programs and courses, provide the basis for University aid and awards and governmental student aid programs, and to assist the University in the academic and financial administration of its affairs. All documentation submitted to the University in support of applications for admission, residence accommodation, University aid and awards, appeals and/or petitions becomes the property of the University.

All application documents are normally destroyed at the end of each admission cycle for applicants who are not accepted, or who do not enrol following acceptance. For applicants who become McMaster students, their application documents are normally destroyed five years after the last term of their enrolment at the University (regardless of whether or not they graduate).

Supporting documentation relevant to government student aid programs (e.g., OSAP) is kept per the retention policies of the Federal and/or Provincial governments. Supporting documentation, by aid year, relevant to the administration of online aid applications, as well as University aid and awards, will normally be destroyed after seven years.

All information needed to produce official transcripts is maintained permanently.

Second Bachelor's Degree Programs

For admission to a second undergraduate degree program a student must hold a first undergraduate degree. A second degree is not available in all degrees and/or subject areas. See [University Graduates Applying for a Second Bachelor's Degree](#).

1. All work for the second degree must be completed at McMaster University.
2. Second degree programs may not be available where there is substantial overlap in the requirements of the first degree. See individual Faculty/Program regulations or consult [Faculty/Program Offices](#) for exclusions or further information.
3. Extra courses taken while enrolled in a first degree program, or courses completed as a Continuing Student, may, with the approval of the Faculty, be applied to the second degree program.
4. Students must meet the same regulations for continuation and graduation as are applied to students enrolled in a first degree program.
5. Credit from the first two degrees cannot be applied to a third undergraduate degree. To obtain a third undergraduate degree students must complete all program requirements, i.e. approximately 90 units for a three-level degree and approximately 120 units for a four-level degree.

Requirements for Second Bachelor's Degree Programs

- **Honours Degree following a Three-Level Degree in the Same Subject:** For consideration into an Honours B.A. or B.Sc. degree program following a three-level degree in the same subject, a Cumulative GPA of at least 5.0 in the first degree program is required. For consideration into all other eligible degree programs, a Cumulative GPA of at least 6.0 in the first degree program is required. If admitted, at least 30 units beyond the first degree, including all program requirements, must be completed.
- **B.A. or B.Sc. in Another Subject:** For consideration, students must meet the admission requirements for the program. If admitted, at least 30 units beyond the first degree, including all program requirements, must be completed. Students are not eligible for a second B.A. or B.Sc. degree in a program in which they have been awarded a [minor](#), however, they may apply for an honours second degree in that subject.
- **Honours B.A., Honours B.A.Sc., Honours B.Sc. or Honours B.H.Sc. in Another Subject:** For consideration, students must meet the admission requirements for the program and have a Cumulative GPA of at least 5.0. If admitted, at least 60 units beyond the first degree, including all program requirements, must be completed.
- **B.M.R.Sc.:** For consideration, students must meet the admissions requirements for the program. If admitted, students will be required to complete a minimum of 24 units during Level I of the program. Some of these units may be extra to the degree requirements.
- **B. Eng., B.Tech., and B.A.Sc.:** For consideration, students must meet the admission requirements for the program. If admitted, students must complete at least 60 units beyond the first degree including all program requirements.

McMaster Students Studying at Another University: Letter of Permission (LOP) and Exchange (Study Abroad)

McMaster students who wish to complete courses at another university for transfer credit towards their McMaster degree must be in [good academic standing](#).

Grades obtained in courses at another university will not be included in the calculation of McMaster averages, which may affect consideration for in-course academic awards.

Courses taken at another university cannot be used to satisfy McMaster's [Residence Requirements](#).

Students may take up to six units at another university toward a [Minor](#).

Letter of Permission (LOP):

Students must obtain necessary approval in advance from their [Faculty/Program Office](#).

Upon completion of course work, if a grade of 60% or better is obtained, the transcript designation reads T indicating *transfer credit*. If less than a 60% grade is attained, the transcript designation reads NC indicating *no credit*. If the student withdraws from the course, the transcript designation reads W indicating *withdrawn*.

Students who do not to use their Letter of Permission or drop the course must supply the [Faculty/Program Office](#) with a certified letter from the host university, otherwise a grade of NC will be placed on the transcript.

Exchange (Study Abroad):

Students must obtain necessary approvals in advance from both their [Faculty/Program Office](#) and [International Student Services](#).

Upon completion of course work, if a passing grade (as determined by the host university) is obtained, the transcript designation reads T indicating *transfer credit*. If less than a passing grade is attained, the transcript designation reads NC indicating *no credit*. If the student withdraws from the course(s), the transcript designation reads W indicating *withdrawn*.

Students who return from Exchange prior to completion of course work must supply the [Faculty/Program Office](#) with a proof of withdrawal from the host university, otherwise grades of NC will be placed on the transcript.

Credit in Courses by Special Assessment (Challenge Examinations)

Students who have acquired knowledge at a different type of institution or in a manner that makes assessment of their qualifications difficult are 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 evaluating honours or scholarship standing, but is counted as a course attempt. Unsuccessful attempts will be noted on the transcript as a grade of F. 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.

Voluntary Withdrawal from the University

Students who wish to permanently or temporarily withdraw from the University must consult their [Faculty/Program Office](#).

Students in receipt of government student aid (e.g., OSAP) and/or University aid or awards should contact the Office of the Registrar, [Student Financial Aid & Scholarships](#).

Petitions for Special Consideration

The University wishes to assist students with legitimate difficulties. It also has the responsibility to ensure that degree, program and course requirements are met in a manner that is equitable to all students. Students may submit, in a prompt and timely manner, a Petition for Special Consideration to the [Faculty/Program office](#) in those instances where a student acknowledges that the rules and regulations of the University have been applied fairly, but is requesting that an exception to the regulations be made because of special circumstances. Petitions should be submitted in a prompt and timely manner for the relevant term, but no later than July 31 immediately following the Fall/Winter Term or November 15 immediately following the Spring/Summer Term.

Two forms are available in the Offices of the [Faculty/Program office](#):

Petition for Special Consideration (Form A):

The [Petition for Special Consideration \(Form A\)](#) is submitted for a variety of issues, including, when a student wishes to have a leave of absence or seeks to depart from University requirements based on compelling medical or personal reasons; or a student believes that an adverse ruling or decision about their academic performance, such as failing a course, or being

required to withdraw from a program for failure to meet program requirements, should be waived because of compelling medical or personal circumstances.

Petition for Special Consideration: Request for Deferred Examination (Form B):

The [Petition for Special Consideration: Request for Deferred Examination \(Form B\)](#) is used when a student misses an examination because of compelling medical or personal reasons.

1. Once a student has completed an examination, no special consideration will be granted.
2. A student who misses an examination because of compelling medical or personal reasons may submit a [Petition for Special Consideration: Request for Deferred Examination \(Form B\)](#) to the [Faculty/Program Office](#), normally within five working days of the missed examination.
3. If the reason is medical, the approved [McMaster University Medical Form](#) must be used. The student must be seen by a doctor at the earliest possible date, normally on or before the date of the missed exam and the doctor must verify the duration of the illness. Relief will not be available for minor illnesses. If the reason is non-medical, appropriate documentation with verifiable origin covering the relevant dates must be submitted, normally within five working days.
4. In deciding whether or not to grant a petition, the adequacy of the supporting documentation, including the timing in relation to the due date of the missed work and the degree of the student's incapacitation, will be taken into account.
5. It is the student's responsibility to check *Mosaic Student Center > Deferred Exam Approvals* or with the [Faculty/Program Office](#) for a decision on the request for a deferred examination. If the deferred examination is granted, the student will be informed officially by means of the notation **DEF** which will appear against the relevant course on the student's academic record and via *Mosaic > Student Centre > View My Grades*.
6. Deferred examinations are written during the next official University [deferred examination period](#). Default of the deferred examination will result in a fail for that examination.
7. Students who have been granted more than one deferred examination may be required by their [Faculty/Program Office](#) to reduce their course load during the term in which the deferred examinations are being written. The decision on a reduced load will be made and communicated with the decision on the request for deferred examinations.
8. At the discretion of the [Faculty/Program Office](#), students who have been granted one or more deferred examinations, may not be allowed to enrol in a subsequent term until all deferred examinations have been completed and the [Academic Standing](#) calculated. Students will be notified of this decision by their [Faculty/Program Office](#).
9. Students who will be living more than 160 kilometres from Hamilton during the deferred examination period and wish to write their approved deferred examination at an institution other than McMaster must submit a [Request to Write Deferred Examination Off-campus Form](#) at least 15 working days prior to the [deferred examination period](#). Students are responsible for making arrangements for a presider to conduct the deferred examination at an outside institution and for paying any fees such as invigilation and return courier.

10. The authority to grant any petitions lies with the [Faculty/Program Office](#) and is discretionary. It is imperative that students make every effort to meet the originally-scheduled course requirements and it is a student's responsibility to write examinations as scheduled.

Decisions made on Petitions for Special Consideration are final. In accordance with the [Student Appeal Procedures](#), decisions made on Petitions for Special Consideration cannot be appealed to the Senate Board for Student Appeals. However, should students believe a decision violates their human rights, they may wish to consult McMaster's Policy on [Discrimination and Harassment: Prevention & Response](#) and visit one of the four intake offices ([Equity and Inclusion Office](#), [Student Support & Case Management](#), [Employee/Labour Relations](#), [Professionalism Office in Faculty of Health Sciences](#)) to initiate a complaint.

Requests for Relief for Missed Academic Term Work

The University recognizes that students periodically require relief from academic work for medical or other personal situations. This academic regulation aims to manage these requests by taking into account the needs and obligations of students, instructors and administrators. It is the prerogative of the instructor of the course to determine the appropriate relief for missed term work in his/her course.

Any concerns regarding the granting of relief should be directed to the respective [Faculty/Program Office](#). Requests for relief should be made with a commitment to academic integrity in mind. Requests that deviate from this commitment will be handled under the [Academic Integrity Policy](#) and [Code of Student Rights and Responsibilities](#), where appropriate.

1. Relief for missed academic work worth less than 25% of the final grade resulting from medical or personal situations lasting up to three calendar days:
 - Use the [McMaster Student Absence Form \(MSAF\)](#) on-line self-reporting tool. No further documentation is required.
 - Students may submit requests for relief using the MSAF once per term.
 - An automated email will be sent to the course instructor, who will determine the appropriate relief. Students must immediately follow up with their instructors. Failure to do so may negate the opportunity for relief.
 - The MSAF cannot be used to meet a religious obligation or to celebrate an important religious holiday.
 - The MSAF cannot be used for academic work that has already been completed/attempted.
 - An MSAF applies only to work that is due within the period for which the MSAF applies, i.e. the 3-day period that is specified in the MSAF; however, all work due in that period can be covered by one MSAF.
 - The MSAF cannot be used to apply for relief for any final examination or its equivalent. See [Petitions for Special Consideration](#).

2. For medical or personal situations lasting more than three calendar days, and/or for missed academic work worth 25% or more of the final grade, and/or for any request for relief in a term where the MSAF has been used previously in that term:
 - Students must report to their Faculty/Program Office to discuss their situation and will be required to provide appropriate supporting documentation (see [Documentation Requirements](#)).
 - If warranted, the Faculty/Program Office will approve the absence, and the instructor will determine appropriate relief.

Documentation Requirements

If the reason for a request for relief is medical, the approved [McMaster University Medical Form](#) covering the relevant dates must be submitted. The student must be seen by a doctor at the earliest possible date, normally on or before the date of the missed work and the doctor must verify the duration of the illness.

If the reason is non-medical, appropriate documentation with verifiable origin covering the relevant dates must be submitted, normally within three working days.

In some circumstances, students may be advised to submit a [Petition for Special Consideration \(Form A\)](#) seeking relief for missed academic work. In deciding whether or not to grant a petition, adequacy of the supporting documentation, including the timing in relation to the due date of the missed work and the degree of the student's incapacitation, may be taken into account. Failure to do so may negate the opportunity for relief.

If the petition is approved, the [Faculty/Program Office](#) will notify the instructor(s) recommending relief. It is the prerogative of the instructor of the course to determine the appropriate relief for missed term work in their course.

Examinations ([link to Registrar Office Examinations page](#))

Examinations conducted by the Office of the Registrar will appear in the Mosaic Student Centre and may be scheduled in the morning, afternoon, or evening, Monday through Saturday. Other instructor-scheduled tests and examinations may be held throughout each term in compliance with [Academic Obligations – Restrictions](#).

Full details regarding examination procedures conducted by the Office of the Registrar are found in the [Undergraduate Examinations Policy](#).

McMaster student photo identification cards are required at all examinations.

Examinations are not rescheduled for purposes of travel. Students must be available for the entire examination period as listed in the [Sessional Dates](#) section.

The Office of the Registrar will reschedule final examinations within the examination period for the reasons listed below. Application to reschedule examinations must be made at least 10 working days before the scheduled examination period. Failure to meet the stated deadline may result in the denial of the application.

- Conflict with religious obligations
- More than one examination scheduled at the same time
- Three examinations in one calendar day (midnight to midnight).
- Three consecutive examinations over two days (e.g., December 14th at 4:00 pm and 7:30 pm and December 15th at 9:00 am).

Students who miss a final examination for medical or personal reasons may submit a [Petition for Special Consideration: Request for Deferred Examination \(Form B\)](#) to their Faculty/Program Office, normally within five working days of the missed examination

Students who begin a final examination, but are unable to complete it for medical reasons, may submit a [Petition for Special Consideration \(Form A\)](#) to their Faculty/Program Office, normally within five working days of the examination.

Students with disabilities are required to inform [Student Accessibility Services](#) of accommodation needs for examinations on or before the [last date for withdrawal from a course without failure by default](#). This allows sufficient time to verify and arrange appropriate accommodation.

Request to Write Deferred Examinations at an Off-Campus Location

Students living more than 160 kilometers from Hamilton during the deferred examination period and wishing to write their approved deferred examination at an institution other than McMaster must submit a [Request to Write Deferred Examination Off-campus Form](#) at least 15 working days prior to the deferred examination period.

If the deferred examination is written at an off-campus location, any fees incurred are the responsibility of the student. This includes the fee to courier the written examinations back to the Office of the Registrar, Scheduling and Examinations.

For information regarding application for Deferred Examination, see [Petitions for Special Consideration: Requests for Deferred Examinations \(Form B\)](#).

Academic Evaluations

Numeric Grading System

The results of all courses attempted will appear on the transcript. The method for determining final grades will be given in the course outline. Unless otherwise specified in the course outline,

course results determined on a percentage scale will be converted to an official letter grade, as indicated in the following equivalent percentage scale.

Grade	Equivalent Grade Point	Equivalent Percentages
A+	12	90-100
A	11	85-89
A-	10	80-84
B+	9	77-79
B	8	73-76
B-	7	70-72
C+	6	67-69
C	5	63-66
C-	4	60-62
D+	3	57-59
D	2	53-56
D-	1	50-52
F	0	0-49 – Failure

Non-Numeric Grades and Notations:

AUD – Audit

CAN – Cancelled

COM – Complete

CR - Credit

F – Fail

INC – Incomplete

IP – In Progress

MT – Multi-Term

NC – No Credit

NMR – No Mark Received

P – Pass

T – Transfer Credit

W – Withdrawn

XCH – Exchange

Notations

DEF
EXTRA
REPEAT
UPGRADE

Withdrawn

After the [last day for enrolment and course changes](#), students may withdraw from courses until the last day to withdraw without failure by default. Withdrawn courses will be shown on the student's transcript with a grade of W. After the last day to withdraw without failure by default, the student will remain enrolled, whether or not they fulfil any further academic obligations, and a final grade will be assigned.

DEF

Courses with the notation DEF have been approved for a deferred examination.

Extra

Courses designated as “Extra” at the time of registration by the Faculty Office are not included as units toward completion of a student's program. The grades obtained in such courses will not be included in the computation of the Cumulative GPA. However, they will be included in the computation of the [Fall-Winter Average](#) and the [Spring-Summer Average](#).

Unused

Courses designated as “Unused” cannot be used to fulfil the requirements for the student's current degree program. The grades obtained in such courses will be included in the computation of all averages.

Graded Units

Graded units refer to the number of units taken at McMaster for which a letter or [Numeric Grade](#) is earned. Graded units do not include courses assessed with a [Non-Numeric Grade](#).

Pass/Fail Courses

Courses evaluated on a Pass/Fail basis are not included in the calculation of averages. The earned units are counted towards degree requirements.

Multi-Term Fall/Winter Courses

Codes for multi-term Fall/Winter courses have an A/B suffix. Part A must always be taken in the Fall Term immediately preceding Part B. Neither Part A nor B of a multi-term course has

General Academic Regulations for Undergraduate Curriculum & Admissions, Jan. 2018

academic credit independent of both parts being successfully completed. Students who drop or withdraw from Part A must also withdraw from B.

Upon completion of the Fall Term, a grade of MT indicating *multi-term* will be assigned to Part A and the final grade will be assigned to Part B.

Cumulative Grade Point Average (Cumulative GPA)

The Cumulative GPA is the [weighted average](#) based on the [Graded Units](#) taken throughout the undergraduate career. The [Repeating Courses](#) regulation, effective September 1, 2018, will affect the calculation of subsequent Cumulative GPA.

Fall-Winter Average

The Fall-Winter Average is a [weighted average](#) based on the grades attained in the Fall and Winter Terms. [Overload](#) courses and [Extra](#) courses are included in the Fall-Winter Average.

Spring-Summer Average

The Spring-Summer Average is a [weighted average](#) based on the grades attained in the Spring and Summer Term. [Overload](#) courses and [Extra](#) courses are included in the Spring-Summer Average.

Term Grade Point Average (Term GPA)

The Term GPA is a [weighted average](#) based on the [Graded Units](#) taken in the term.

Weighted Average

Weighted average is calculated by multiplying the grade points achieved in each course by the number of units in each course, totaling these results, and then dividing this result by the total number of course units.

Example of a [weighted average](#) calculation, using the grade points and units for courses attempted:

Grade	Grade Points		Units	Total Points	
A-	10	x	6	=	60
C+	6	x	3	=	18
B	8	x	6	=	48
B+	9	x	3	=	27

F	0	x	<u>6</u>	=	<u>0</u>
		Total	24		153

To calculate average: $153 \div 24 = 6.4$

Honour Lists

Students are reviewed for Deans' Honour Lists (DHL) and Provost's Honour List (PHL) each time a minimum of 30 units (may not exceed 6 units assessed with a [non-numeric grade](#)) have been completed. Subsequent assessments are based on all units completed since the previous review.

Students will be named to the Deans' Honour List when a minimum average of 9.5 is achieved.

Students will be named to the Provost's Honour List when an average of 12.0 is achieved.

With Distinction

Graduation *With Distinction* standing is awarded when a minimum [Cumulative GPA](#) of 9.5 is achieved in a degree program. In this case, the Latin phrase *summa cum laude* ("with highest honour") will appear on the graduate's diploma.

Transcripts

A [transcript](#) summarizes a student's academic career at McMaster University and is available by electronic request through [Mosaic](#). Transcript requests will not be processed for students with outstanding financial accounts at the University or those under investigation for an academic integrity violation.

Credentials

A credential is a body of academic work or collection of course work that stands on its own and for which a parchment is issued. McMaster credentials include certificates, diplomas and degrees. A single course is permitted to be counted toward a maximum of two credentials.

Minors

Students enrolled in a four- or five-level program (with the exception of the Medical Radiation Sciences programs) are eligible to obtain a Minor in another subject area, provided that the subject area is not integral to the requirements of their degree program. At least 18 units must be completed at McMaster. Students who wish to receive a Minor must consult the appropriate department section of the calendar. McMaster also offers [Interdisciplinary Minors and Thematic](#)

Areas. To apply for a Minor, students must complete the Minor/Certificate Application in addition to their online [Graduation Information Centre \(GIC\)](#) application. The student's Faculty will verify that the requirements have been met and, if successful, the [transcript](#) will indicate that a Minor has been obtained. Minors cannot be revoked once approved.

Overload Work

Students wishing to take more units than prescribed for their Level/program in the Fall-Winter Term or more than 12 units in the Spring-Summer Term (no more than 6 units in either session of that term) must seek permission from their Faculty/Program Office. Normally, a [Fall-Winter Average](#) of at least 7.0 in the immediately preceding [review period](#) will be required if an overload is to be permitted. Additional academic [fees](#) will be assessed for overload work.

OSAP Eligible Course Load

OSAP Eligible Course Load or equivalent refers to the 60% minimum course load per term (40% minimum course load per term for students with permanent disabilities) required to be eligible for full-time OSAP government student aid funding.

Repeating Courses

Effective September 1, 2018, students may repeat a course twice (i.e. attempt a course three times). Cross-listed courses count as attempts. Grades from every attempt will appear on the academic [transcript](#). The [Cumulative GPA](#) will include only the grade earned on the most recent attempt. Units earned will be counted once toward the student's program requirements, regardless of the number of times the course is repeated.

Auditing Courses

Students currently enrolled in a degree program wishing to audit a course must obtain approval from the course instructor and their [Faculty/Program Office](#). Additionally:

- course requisites must be met
- academic obligations (assignments, test, examinations, etc.) are not completed
- a grade of AUD (audit) will be assigned
- units will not be earned nor applied toward the student's program requirements
- tuition [fees](#) apply
- students will not be permitted to enrol for credit in the course after the [Last Day for enrolment and course changes](#)
- students enrolled in a course for credit will not be permitted to change the course to 'audit' after the [Last Day for enrolment and course changes](#)

Non-McMaster students wishing to audit a course must enrol as a [Listener](#).

Personal Interest Course (PIC)

General Academic Regulations for Undergraduate Curriculum & Admissions, Jan. 2018

McMaster University encourages interdisciplinary study and believes undergraduate studies provides an excellent opportunity to explore topics which are new and unfamiliar. Students, however, may be reluctant to take a course if they are unsure of their academic performance for fear of compromising their [Cumulative GPA](#). The Personal Interest Course (PIC) option is designed to encourage students to explore interests outside of their program without affecting their [Cumulative GPA](#).

1. A student can declare a PIC to signify they want an elective course to be assessed on a Credit or No Credit (CR/NC) grading scale.
2. To receive the grade of CR, the student must earn a final mark of at least 50%. Units earned from a successfully completed PIC will be counted in the units required for a student's degree as applicable.
3. Courses with a final grade of NC do not count as degree credits or as failures, nor are they included in the [GPA](#) calculation or averages. Please note, government student aid (e.g., OSAP) will consider a NC grade as a failure.
4. The PIC option is not available for any course that is considered a program requirement (which includes courses listed as possible required courses), independent study, thesis, field study or placement course, or on a list of required courses. Students are responsible for ensuring the course is an elective course for their program. Engineering students should note the PIC option is available only for complementary studies electives.
5. Students may declare a maximum of 3 units of PIC per term to a maximum of 12 units per four- or five-level degree or a maximum of 9 units per three-level degree. A maximum of 6 units of PIC may be used to satisfy requirements toward a [Minor](#).
6. The PIC option is available to undergraduate students registered in a program above Level I, with a [Cumulative GPA](#) of at least 3.5, who are enrolled in a Program/Faculty which is participating in the PIC option. Exchange students should seek advice from the [International Study Office](#) and [Faculty/Program Office](#).

The PIC 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 PIC option (see [Faculty Academic Regulations](#)), or
 - have graduated and are in a second degree or a non-degree program, e.g., continuing, etc.
7. If a percentage grade in a course is required for future applications to graduate or professional school, the PIC option should not be selected for that course. Students may not subsequently request to have a PIC grade recalculated to a numeric grade. Students must carefully review any government (e.g., OSAP) and University [aid and award](#) eligibility rules which may be affected by the use of the PIC option.

8. If the student changes their program of study and a course taken as a PIC becomes a required course, the new [Faculty/Program 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.

9. Students cannot use the PIC option for courses in which they have been found guilty of academic dishonesty. In these cases, the grade will be converted into a numeric grade.

Deadlines:

1. Students must declare a course as a PIC on Mosaic by the [last day for enrollment and course changes](#) date. The student progresses in the course as per normal, and has the option to withdraw from the course as per the normal procedures and deadlines.
2. If the student would rather keep the numeric grade, they must indicate the course is no longer a PIC on Mosaic by the [last day for cancelling courses without failure by default](#) and the numeric grade will appear on their transcript.

Academic Standing Review:

Each year in May and August (and after deferred examinations) academic standing is reviewed and determined for students who have:

- attempted at least 18 units of work since the last review, or
- may be eligible to graduate.

In the academic standing review, three determinations are made:

- whether a student may graduate
- whether a student may continue at the University
- whether a student may continue in a program.

Academic Standings:

Good Standing

A student who satisfies the [minimum requirements](#) to continue in their program without restriction.

May Continue in Program - Academic Probation

Academic probation is assigned when a student:

- achieves a [Cumulative GPA](#) between 3.0 and 3.4. If at any future [academic standing review](#) their [Cumulative GPA](#) falls below 3.5, the academic standing assigned will be [May Not Continue at the University](#).
- returns to studies after being [Reinstated](#). If at any future [academic standing review](#) their [Cumulative GPA](#) falls below 3.5, the academic standing assigned will be [Required to Withdraw from the University](#).

May Continue in Program - Program Probation

Program Probation is assigned when a student's [Cumulative GPA](#) falls below the minimum requirements to remain in their program. Failure to achieve [Good Standing](#) at the next [academic standing review](#) will result in their removal from the program. See Faculty specific [Minimum Requirements for Entering and Continuing in a Program Beyond Level I](#).

May Not Continue in Program

This standing is assigned to:

- students who fail to achieve the minimum [Cumulative GPA](#) to remain in the program, or
- students previously on [Program Probation](#) who fail to achieve [Good Standing](#).

To continue at the University, the student must apply to transfer to another program.

May Not Continue in Faculty

May Not Continue in Faculty is assigned when:

- a student enrolled in a program in the Faculty of Engineering or Business has achieved a [Cumulative GPA](#) between 3.0 and the minimum requirements to remain in their Faculty, or
- a student enrolled in a program in the Faculty of Business in Level II or above receives a grade of F in more than 6 units.

To continue at the University, the student must apply to transfer to another program or continue as a *transition* student for one reviewing period.

May Not Continue at University

May Not Continue at University is assigned when:

- a student achieves a [Cumulative GPA](#) below 3.0, or
- a student previously on Academic [Probation](#) fails to achieve [Good Standing](#).

The student cannot enroll in courses at the University unless granted [Reinstatement](#).

Required to Withdraw from University

A student who at any time received a standing of [Academic Probation](#) and at a future [academic standing review](#) achieves a [Cumulative GPA](#) below 3.5 will be Required to

Withdraw from the University. The student will be unable to apply for [Reinstatement](#) for at least 12 months.

Reinstatement

Students must contact the [Office of the Registrar](#) to apply for reinstatement within the application deadlines. Reinstatement is not guaranteed.

If reinstatement is granted, the student is placed on [academic probation](#) and their [Cumulative GPA](#) is re-set to 0.0 on zero units. At the discretion of the Faculty, the student may retain credit for courses successfully completed. If at any [academic standing review](#) after reinstatement the student's [Cumulative GPA](#) falls below 3.5, the student will be [required to withdraw from the University](#).

The student must complete a minimum of 60 units of work after reinstatement to be eligible for [Graduation with Distinction](#) or other recognition based on the [Cumulative GPA](#).

Level I Registration and Academic Standing Requirements

Minimum Requirements for Entering and Continuing in a Program Beyond Level I

Graduation

The following minimum [Cumulative GPA](#) are required to graduate:

- B.A. – 3.5
- B.A. (Honours) – 5.0
- B.S.W. (Honours), B.A. /B.S.W. and B.S.W. – 6.0
- B.Arts Sc. and B.Arts Sc. (Honours) – 5.0
- B.A.Sc. (Faculty of Engineering) – 4.0
- B.A.Sc. (Honours) (Faculty of Science) – 5.0
- B.Com. – 4.0
- B.Com. (Honours) – 5.0
- B.Eng., B.Eng.MBE., B.Eng.Biosciences, B.Eng.Mgt., B.Eng.Society – 4.0
- B.F.A. (Honours) – 5.0
- B.H.Sc. - 5.0
- B.H.Sc. (Honours) – 5.0
- B.H.Sc. (Midwifery) – 6.0

- B.M.R.Sc.* – 4.5
- B.Mus. (Honours) – 5.0

- B.Sc. – 3.5
- B.Sc. (Honours) – 5.0
- B.Sc.Kin. (Honours) – 5.0
- B.Sc.N. – 5.0
- B.Tech – 3.5

** All requirements must be completed within five years from the time of registration in Level II.*

Students who intend to graduate must complete the online [Graduation Information Centre](#) form by the appropriate deadline in their final term of study. Students wishing to graduate with a [Minor](#) must complete the application in the [Minor/Certificate Application Centre](#).

Degrees will be conferred at the Convocation immediately following the completion of the degree. Students unable to attend the convocation ceremony who wish to attend a later ceremony should consult the [Policy on Deferral of Attendance at Convocation](#) and must contact the [Office of the Registrar](#) within the prescribed deadlines.

Parchments, Diplomas and Certificates

Diplomas will not be released to students with an outstanding financial account with the University.

Diplomas are held for a period of 12 months following the Convocation date before being destroyed. Students requesting diplomas after this period are required to pay a replacement [fee](#).

Graduates may request a duplicate or replacement degree parchment, diploma or certificate ([fees](#) apply.)

- A duplicate copy will be issued when requested by a graduate or when the original document has been lost or destroyed.
 - The words *duplicate copy* or *reissued* will be affixed to all degree parchments, diplomas or certificates requested in this manner and will bear the signatures of the current Chancellor, President and Vice-Chancellor, and Registrar.
 - Damaged parchments must be returned to the Office of the Registrar before the new parchment, diploma or certificate is issued.
-

GENERAL ACADEMIC REGULATIONS:

Academic Commitments

Students should expect to have academic commitments (e.g., classes, labs, tests, examinations, etc.) Monday through Saturday, normally 8:30 a.m. to 10:00 p.m., but not on Sunday or statutory holidays, as outlined in the [Sessional Dates](#). Students are responsible for meeting all course requirements, including final examinations, as scheduled. Students who require accommodations to meet a religious, Indigenous or spiritual obligation or to celebrate an important religious holiday observances ([hotlink to RISO](#)) must should make their requests within 10 working days from the beginning of as soon as possible after the start of term to their Faculty/Program office.

The Sessional Dates have been moved into the General Academic Regulations document.

Sessional Dates

The academic year is divided into terms, as shown below. Most undergraduate students register for the **Fall** and **Winter** terms, which run from September to December and January to April respectively. The **Spring/Summer** term starts at the beginning of May and ends in early August.

On this page:

Undergraduate Sessional Dates, as approved by Senate:

- [2017 Fall Term](#)
- [2018 Winter Term](#)
- [2017-2018 Courses Spanning both Terms](#)
- [2018 Spring Session](#)
- [2018 Summer Session](#)
- [2018 Spring/Summer Term: Full-Term Courses](#)

2017 Fall Term (62 days)

Item	Date(s)
Registration Enrolment Begins	<i>To be announced</i>
Classes begin	Tuesday, September 5
Last day for registration enrolment and course changes in registration	Wednesday,

General Academic Regulations Track Changes Version, Jan. 2018

	September 13
Mid-term recess(es)	Monday, October 9 to Sunday, October 15
Last day for cancelling withdrawing from courses without failure by default	Friday, November 10
Test and Examination Restriction Assessment Ban (See Undergraduate Course Management Policies)	Thursday, November 30 to Thursday, December 7
Classes end	Wednesday, December 6
Final Examinations	Friday, December 8 to Thursday, December 21
Deferred examinations	Tuesday, February 20 to Friday, February 23

2018 Winter Term (62 days)

Item	Date(s)
Registration Enrolment Begins	<i>To be announced</i>
Classes begin	Thursday, January 4*
Last day for registration enrolment and course changes in registration	Friday, January 12
Mid-term recess(es)	Monday, February 19 to Sunday, February 25
Last day for cancelling withdrawing from courses without failure by default	Friday, March 16
Good Friday: No classes or examinations	Friday, March 30
Test and Examination Restriction Assessment Ban (See Undergraduate Course Management Policies)	Tuesday, April 3 to Tuesday, April 10

Classes end	Monday, April 9
Final Examinations	Wednesday, April 11 to Thursday, April 26
Deferred examinations	Monday, June 18 to Thursday, June 21

**The University re-opens on Tuesday, January 2, 2018 after the December holidays; classes begin January 4.*

2017-2018 Courses Spanning both Terms (124 days)

Item	Date(s)
Registration Enrolment Begins	<i>To be announced</i>
Classes begin	Tuesday, September 5
Last day for registration enrolment and course changes in registration	Wednesday, September 13
Mid-term recess(es)	Monday, October 9 to Sunday, October 15 and, Monday, February 19 to Sunday, February 25
Last day for cancelling withdrawing from courses without failure by default	Friday, March 16
Good Friday: No classes or examinations	Friday, March 30
Test and Examination Restriction Assessment Ban (See Undergraduate Course Management Policies)	Tuesday, April 3 to Tuesday, April 10
Classes end	Monday, April 9
Mid-Term Tests Level (I)	Friday, December 8 to Thursday, December

	21
Final Examinations	Wednesday, April 11 to Thursday, April 26
Deferred examinations	Monday, June 18 to Thursday, June 21

2018 Spring Session (34 days)

Item	Date(s)
Classes begin	Monday, April 30
Last day for registration enrolment and course changes in registration	Monday, May 7
Victoria Day: No classes	Monday, May 21
Last day for cancelling withdrawing from courses without failure by default	Wednesday, May 30
Classes end	Friday, June 15
Final Examinations	<i>As arranged by instructor in class time</i>
Deferred Examinations	<i>2018 Fall Mid-Term Recess Period</i>

2018 Summer Session (34 days)

Item	Date(s)
Classes begin	Monday, June 18
Last day for registration enrolment and course changes in registration	Monday, June 25
Canada Day Observation: No classes	Monday, July 2

Last day for cancelling withdrawing from courses without failure by default	Wednesday, July 18
Classes end	Friday, August 3
Civic Holiday: No classes	Monday, August 6
Final Examinations	<i>As arranged by instructor in class time</i>
Deferred Examinations	<i>2018 Fall Mid-Term Recess Period</i>

2018 Spring/Summer Term: Full-Term Courses (68 days)

Item	Date(s)
Classes begin	Monday, April 30
Last day for registration enrolment and course changes in registration	Monday, May 7
Victoria Day: No classes	Monday, May 21
Canada Day Observation: No classes	Monday, July 2
Last day for cancelling withdrawing from courses without failure by default	Wednesday, July 18
Classes end	Friday, August 3
Civic Holiday: No classes	Monday, August 6
Final Examinations	<i>As arranged by instructor in class time</i>
Deferred Examinations	<i>2018 Fall Mid-Term Recess Period</i>

Student Academic Responsibility Responsibilities

Academic

General Academic Regulations Track Changes Version, Jan. 2018

~~In its commitment to helping students achieve their academic goals, through the following McMaster University makes available numerous tools and resources, including the Undergraduate Calendar, advisement reports and academic advisors. However, students must assume certain responsibilities. They include:~~

McMaster University provides many resources to help students achieve their academic goals, including the Undergraduate Calendar, program advisement reports and academic advisors. The University endeavours to enable students to enrol in required courses so that their program admission requirements and course requisites can be met in a timely manner. The University reserves the right to change a student's enrolment in classes should the need occur (e.g. low enrolment, urgent timetable changes, etc.).

Students must assume certain responsibilities. They include:

- meeting admission requirements and application deadlines for their intended a program(s) of study
- ~~applying to that program by the stated deadline~~
- ~~selecting courses that meet the program requirements~~
- ~~completing courses in an order that meets prerequisite requirements~~
- selecting and completing courses in an order that meets requisite and program requirements
- becoming familiar with and respecting University [Sessional Dates](#), the [General Academic Regulations](#) and their [Faculty/Program /School specific regulations](#) and the Regulations for Aid and Awards as found in the appropriate section of this Calendar.

~~Experience has shown that s-~~Students who do not follow these guidelines may experience academic consequences such as cancellation of registration in courses, course enrolment, completion of courses that are not counted toward their degree, or delayed graduation.

In addition to the responsibilities listed above, students are expected to:

- ~~become familiar with and respect~~ know and follow the [Senate Policies](#)
- keep their [student account](#) in good standing, paying all charges on time by their respective due dates
- be aware that changes to course load and program may affect eligibility for government and University aid and awards (e.g. OSAP, work programs, bursaries, scholarships, etc.)
~~Please contact the Office of the Registrar, Student Financial Aid & Scholarship, if you have questions about changes to your eligibility.~~
- consult with [Student Accessibility Services](#) in a timely manner to make the necessary disability related accommodation requests for special needs

Student Communication Responsibility

It is the student's responsibility to:

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

Academic Regulations This section has been moved and now serves as the introduction to the General Academic Regulations.

This section outlines the general undergraduate academic regulations of the University. Students must read and comply with both these regulations and those set out by their Faculty elsewhere in this Undergraduate Calendar, as applicable. In the event of a conflict between the Faculty's program regulations and the General Academic Regulations, the program regulations take precedence.

~~The regulations which follow are the general regulations of the University. You should read both these general academic regulations and your Faculty regulations which may be more specific. They appear in the Faculty sections of this Calendar.~~

Since the Academic Regulations are continually reviewed, the University reserves the right to change the regulations in this section of the Calendar. This University also reserves the right to cancel the academic privileges of a student at any time should the student's scholastic record or conduct warrant so doing.

~~In the event there is a conflict between the program regulations and the general regulations in this chapter, the program regulations take precedence.~~

Faculties are authorized to use discretion in special situations by taking into account past practice, the spirit of the regulations, and extraordinary circumstances. Students who believe their situations warrant special consideration should consult the appropriate [Faculty/Program Office of the Associate Dean](#).

~~The Academic Regulations listed below are effective as of September 1993. These regulations apply to all undergraduate students admitted or readmitted to the University from September 1993 onward.~~

The language in the Academic Obligations section below is proposed language in the Undergraduate Course Management Policy. A working group in 2016-17 reviewed and drafted most of the language and UGC is expected to review/approve in the fall of 2017. The Early Feedback section was re-written by CASS, with expected review and approval by UGC in the fall of 2017. The group working on the academic regulations re-write noted the Undergraduate Course Management Policy is a policy written for faculty members/instructors and is unlikely to be seen by students. The language should be included in the General Academic Regulations.

Academic Obligations

Due dates and evaluations are described in course outlines except where other University policies apply, e.g., SAS accommodations, deferred exams, etc. When students are aware of their progress early in a course they can make informed decisions. Restrictions are placed on

academic obligations to enable students to plan their work schedules.

1. Student learning in undergraduate courses should be assessed on more than one occasion. To that end, no single academic obligation (e.g., essay, test, examination, etc.) should have a value of more than 75% of the final grade without approval from the Department Chair or Associate Dean's Office. Clinical, placement, thesis and capstone courses are exempt.

2. For students requiring relief from an academic obligation, it is at the discretion of the instructor to determine the nature of the relief. In cases such as this, students can be offered the choice of another assessment or the option of writing a final examination which may be worth more than 75% of the course grade.

Early Feedback:

3. All students must receive feedback regarding their progress prior to the final date by which a student may cancel the course without failure by default.

4. For Level I and Level II courses, this feedback must equal a minimum of 20% of the final grade.

5. For Level III courses and above, this feedback must equal a minimum of 10% of the final grade.

6. For courses where it is difficult to achieve a numeric grade due to the design of the course (e.g., supervised study, thesis, capstone, inquiry, independent research/study, experiential courses, etc.), clear and early feedback must be provided.

7. When academic obligations are completed by the due dates in the course outline, early feedback will be received by the final date by which a student can cancel a course without failure by default. Students who use the MSAF process and other petitionable accommodations may not receive feedback by the early feedback deadline.

Restrictions:

8. Due dates for all term work must be on or before the final day of classes for courses with a final examination. For courses with no final examination, academic assessments can be due on or before the final date of examinations.

9. Tests, quizzes, exams and take home exams worth more than 10% cannot be assigned or due during the last 5 days of classes plus the days(s) between the end of classes and the beginning of examinations. Assignments worth more than 10% that are assigned at the beginning of the course and noted on the course outline, can be due during this time period, provided students are given sufficient additional detail to enable them to work on the assignment in advance of the due date.

10. Academic obligations cannot be due during the December holiday break or the fall and winter mid-term recesses, with the exception of deferred exams scheduled by the Office of the Registrar.

University Regulations Residence Requirements

While in Most students will complete all their undergraduate work at McMaster University, the minimum requirements set out below apply to. However, students who take part of their work complete work at other institutions universities must meet the minimum requirements set out below.

In order to obtain any four- or five-level, first undergraduate degree, you must complete

- at least two of the levels (approximately 60 units of work) beyond Level I, including the final level, must be completed at McMaster University.

To obtain a three-level, first undergraduate degree, you may satisfy the residence requirements either:

- by completing the final level and at least one other level (a minimum of approximately 60 units of work) must be completed at McMaster University;
- or,
- by completing the final level (approximately 30 units of work) at McMaster University, including at least 18 units of program- specific courses. requirements must be completed at McMaster University.

The work used to satisfy the residence requirements must be completed at McMaster University; work Courses taken at another university on a Letter of Permission will not count toward the minimum residence requirements.

All the course work for a second bachelor's degree must be completed at McMaster University.

ENROLMENT Committee believes most of the Enrolment section is not a regulation but rather instructions to students – exceptions are noted. The information is being conveyed to students through websites, instructions, etc.

Policy on Access to Undergraduate Courses

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. Moved to the first section of the regs.

1. Enrolment capacities are set on all undergraduate courses taking into account enrolment projections along with resources, enrolment trends and type of course (required or elective).
2. If need exceeds approved capacity, enrolment capacities for courses will be reviewed and may be adjusted.
3. Faculties and Department Offices are responsible for determining which courses require seats to be reserved. These reserved seats must be managed so that students are able to

complete program admission requirements, meet course requisites and enrol in courses required to meet their program of studies in a timely manner.

4. Where students are selecting from a list of required courses, access to a specific course is not guaranteed when there is another course available to meet a specific degree requirement.
5. The University reserves the right to change a student's enrolment in classes should the need occur (e.g. low enrolment, urgent timetable changes, etc). **Moved to the Student Responsibilities Academic Section.**

Enrolment:

The purpose of enrolment is to officially record your program and courses. Information on how to enrol is available online at: <http://registrar.mcmaster.ca/category/enrol/>. You must enrol in courses during the official registration period designated for each session or term. You are responsible for ensuring that you're enrolment information is complete, and that your course selections meet the requirements of your degree. Academic counselling is available from your Faculty or Program Office to assist you in course selections.

Admission to Programs

Admission to and transfer between programs must be approved by the Office of the Associate Dean of your Faculty.

Selection of Courses

Before you select the courses you wish to take, please read the requirements for your program in the appropriate Faculty sections of this Calendar. You are responsible for ensuring that your course selection meets the requirements of your degree. If you fail to meet the program requirements, you will not be eligible to graduate. Select the courses required for your program; then select your electives. Ensure that you have completed the courses which are listed as **prerequisites**, have completed or chosen courses that are listed as **co-requisites** and that permissions have been obtained, if required. If you do not have the course requisites, you will not be able to take the course selected.

Multi-Term ~~Fall/Winter~~ Courses Policy **This section moved to the Academic Evaluations section.**

Codes for multi-term Fall/Winter courses have an A/B suffix. Part A must always be taken in the Fall Term immediately preceding Part B. Neither Part A nor B of a multi-term course has academic credit independent of both parts being successfully completed. Students who drop or withdraw from Part A must also withdraw from B.

Upon completion of the Fall Term, a grade of MT indicating *multi-term* will be assigned to Part A and the final grade will be assigned to Part B. ~~Students who withdraw from Part B are not eligible to receive academic credit for Part A.~~

~~Prior to Spring/Summer Term 2015:~~

~~All undergraduate courses had course codes of 4 alpha-numeric digits and were administered as a singular course (e.g. ENGLISH 2G06 CANADIAN LITERATURE).~~

~~Effective Spring/Summer Term 2015:~~

~~All undergraduate course codes will retain the 4 alpha-numeric digits. Courses that span more than one term (e.g. both Fall and Winter terms), will have the characters A and B added to the code. Therefore, all courses with an additional A/B suffix are multi-term courses. (e.g. ENGLISH 2G06A/B CANADIAN LITERATURE). The A/B S suffix (e.g. HTHSCI 3A15 A/B S) indicates that the course may be delivered as either a multi-term course or within a single term.~~

~~Neither Part A nor Part B of a multi-term course has academic credit or value independent of both parts being successfully completed. Students who drop or cancel the 'A' portion of a course are not eligible to receive academic credit for the 'B' portion (and vice versa). Part A must always precede Part B and both must be taken sequentially within the same academic year. Upon completion of the first Term, the 'A' portion of the course will be included on the transcript with a grade designation of MT (Multi-Term). Final grades will not be determined until both A and B components have been completed.~~

~~The last day for adding or dropping as well as the last day for cancelling without failure by default for multi-term courses are reflected in the [Sessional Dates](#).~~

~~Changes to Enrolment Withdrawal from Courses~~ Moved to Academic Evaluations section

~~The last day for adding or dropping courses is approximately one week after classes begin for each term. (please see the tables in the [Sessional Dates](#) section for the relevant dates for each term of the academic year.). After the above-mentioned period, the last day for enrolment and course changes, you students may withdraw from courses until the last day to withdraw without failure by default. Withdrawn courses will be shown on the student's your transcript with a W notation grade of W. After the last day to withdraw without failure by default, this date, you the~~
General Academic Regulations Track Changes Version, Jan. 2018

student will remain enrolled, whether or not you they attend classes fulfil any further academic obligations, and a final grade will be assigned. Your transcript will show a grade of F for any course not successfully completed. Changes to your course load may also affect your fees and your eligibility for scholarships and financial aid such as OSAP.

You are responsible for ensuring that your course selection meets the requirements of your degree. You should review your personal advisement report on the working day following each time you drop or add courses, and contact an Academic Advisor in the Office of the Associate Dean of your Faculty if you have questions. Changes to your course load may also affect your fees and your eligibility for scholarships and financial aid such as OSAP. **Limit on Level I Courses:** In most Faculties, you may not obtain credit in more than 42 units of Level I courses in a three-level program, or more than 48 units in a four-level program.

Eligibility for Awards

See [Undergraduate Academic Awards](#) chapter in this Calendar for more information.

Overload Work This section has been moved to the Academic Evaluations section.

If you Students wishing to take more than the normal number of units than prescribed for their Level/program in the Fall-Winter Term or more than 12 units in the Spring-Summer Term (no more than 6 units in either session of that term) a Level, you may must seek do so only with the permission of from their Faculty/Program Office of the Associate Dean of your Faculty. Normally, a [Fall-Winter Average](#) of at least 7.0 in the immediately preceding review period will be required if an overload is to be permitted. Additional academic fees will be assessed for overload work. For further information please visit <http://www.mcmaster.ca/bms/student/>.

Load in Spring/Summer Term This section has been moved to the Academic Evaluations section.

If you wish to take more than 12 units in the Spring/Summer term, or more than six units in either session of that term, you may do so only with the permission of the Office of the Associate Dean of your Faculty.

Repetition of Courses This section has been moved to Academic Evaluations.

Students may repeat courses that have been failed or for which credit has been obtained a number of times, with the exception of the students in the Faculty of Business who may only repeat courses with permission of the Student Experience Academic Office (DSB-112) or for which they have failed. The grades for all attempts appear on the transcript and enter into the

computation of the Grade Point Average. However, only one successful attempt will enter into the computation of credit earned towards your degree.

Repeating Courses

Effective September 1, 2018, students may repeat a course twice (i.e. attempt a course three times). Cross-listed courses count as attempts. Grades from every attempt will appear on the academic transcript. The Cumulative GPA will include only the grade earned on the most recent attempt. Units earned will be counted once toward the student's program requirements, regardless of the number of times the course is repeated.

Auditing Courses This section has been moved to Academic Evaluations.

If you are a Student currently enrolled student in a degree program and you do not wishing to have credit for a course, you may, with the audit a course must obtain approval from the course instructor of the Chair of the Department and the Office of the Associate Dean, audit the course, and their Faculty/Program Office. Additionally: You must satisfy the prerequisite for the course, but will not complete assignments nor write the final examinations. You will not be permitted to enrol for credit in the course after the enrolment deadline for the term has passed. Please see Financial Information. <http://www.mcmaster.ca/bms/student/> for any applicable fees.

- course requisites must be met
- academic obligations (assignments, test, examinations, etc.) are not completed
- a grade of AUD (audit) will be assigned
- units will not be earned nor applied toward the student's program requirements
- tuition fees apply
- students will not be permitted to enrol for credit in the course after the Last Day for enrolment and course changes
- students enrolled in a course for credit will not be permitted to change the course to 'audit' after the Last Day for enrolment and course changes

Non-McMaster students wishing to audit a course must enrol as a Listener.

Note: The Financial Information section includes a section titled "Listeners" but nothing titled "Auditing".

Letters of Permission

If you are in good academic standing at McMaster and if you wish to attend another university to take courses for credit towards a McMaster degree, you must obtain permission ahead of time. To do this you must seek a Letter of Permission from the Office of the Associate Dean. This request can be initiated in the Student Centre in Mosaic. Please take note of any conditions that might apply, including the requirement of a grade of at least C for transfer credit. You should note that the grades obtained in courses taken at another university will not be included in the

calculation of averages nor count toward the load required for Undergraduate awards. Students taking courses on a Letter of Permission must continue to carry the course load specified by aid and awards programs at McMaster should they wish to be considered.

McMaster Students Studying at Another University: Letter of Permission (LOP) and Exchange (Study Abroad)

McMaster students who wish to complete courses at another university for transfer credit towards their McMaster degree must be in [good academic standing](#).

Grades obtained in courses at another university will not be included in the calculation of McMaster averages, which may affect consideration for in-course academic awards.

Courses taken at another university cannot be used to satisfy McMaster's [Residence Requirements](#).

Students may take up to six units at another university toward a [Minor](#).

Letter of Permission (LOP):

Students must obtain necessary approval in advance from their [Faculty/Program Office](#).

Upon completion of course work, if a grade of 60% or better is obtained, the transcript designation reads T indicating *transfer credit*. If less than a 60% grade is attained, the transcript designation reads NC indicating *no credit*. If the student withdraws from the course, the transcript designation reads W indicating *withdrawn*.

Students who do not to use their Letter of Permission or drop the course must supply the [Faculty/Program Office](#) with a certified letter from the host university, otherwise a grade of NC will be placed on the transcript.

Exchange (Study Abroad):

Students must obtain necessary approvals in advance from both their [Faculty/Program Office](#) and [International Student Services](#).

Upon completion of course work, if a passing grade (as determined by the host university) is obtained, the transcript designation reads T indicating *transfer credit*. If less than a passing grade is attained, the transcript designation reads NC indicating *no credit*. If the student withdraws from the course(s), the transcript designation reads W indicating *withdrawn*.

Students who return from Exchange prior to completion of course work must supply the [Faculty/Program Office](#) with a proof of withdrawal from the host university, otherwise grades of NC will be placed on the transcript.

Voluntary Withdrawal from the University

Students who wish to permanently or temporarily withdraw from the University must consult their [Faculty/Program Office](#).

Students in receipt of government student aid (e.g., OSAP) and/or University aid or awards should contact the [Office of the Registrar, Student Financial Aid & Scholarships](#).

If you wish to withdraw from the University, you must consult the appropriate Office of the Associate Dean. Your student identity card must be surrendered to the Office of the Associate Dean. Your course record will be handled as outlined above in [Changes to Enrolment](#). If you are in receipt of government (e.g. OSAP) and/or University aid or awards, please also contact the Office of the Registrar, Student Financial Aid & Scholarships.

Transfer of Credit between Faculties Committee believes the language in the calendar regarding transferring programs and transfer credit is not a general regulation. Information on this belongs in the Faculty sections.

Transfer of credit between Faculties is handled by the Office of the Associate Dean to which you wish to transfer. It is possible that full credit may not be given at the time of transfer between Faculties and additional courses may need to be taken.

Transfer between Programs

If you wish to transfer from one program to another, you should discuss the possibility with the appropriate Office of the Associate Dean to which you wish to transfer. It is possible that full credit may not be given at the time of transfer between Faculties and additional courses may need to be taken.

Reinstatement [Moved to follow the Academic Standing Section.](#)

~~A. May Not Continue at the University~~

If you are ineligible to continue at the University (i.e. the Academic Standing on your last grade report was *May Not Continue at University*) and you wish to apply for reinstatement to a particular program, please contact the Office of the Registrar to obtain the appropriate application form. Students are considered for reinstatement for September entry or for May entry only.

You will be required to submit the following information along with your application:

- ~~A brief summary of the circumstances relevant to your lack of academic success.~~
- ~~Reasons for selection of program indicated.~~
- ~~Reasons for selection of courses/program indicated.~~

- ~~Activities since last enrolled at the University, including all academic work. You should provide evidence that you will now be able to succeed in a post-secondary program. Please refer to the website of the Faculty offering your selected program for further advice.~~

~~If applicable, you should support your application with appropriate documentation (e.g. from a doctor, lawyer, therapist).~~

~~**Reinstatement is not guaranteed.** There is limited room for students who have been unsuccessful in their previous studies.~~

~~If at any review after reinstatement your Grade Point Average (GPA) falls below 3.5, you will be required to withdraw from the University for a period of at least 12 months.~~

~~**B. Required to Withdraw from University**~~

~~If you are required to withdraw from the University because your GPA falls below 3.5 at any review after reinstatement, you may apply for reinstatement only after you have been away from the University for a period of at least 12 months. Please contact the Office of the Registrar to obtain the appropriate application form and follow the procedure above.~~

~~**Calculation of Grade Point Average Following Reinstatement after Poor Academic Performance:**~~

~~Effective September 1997, if you are reinstated at the University, your Grade Point Average will be reset to 0.0 on zero units, although you may (at Faculty discretion) retain credit for prior work. If you are reinstated, you will be on academic probation. You must complete a minimum of 60 units of work after reinstatement to be eligible for Graduation with Distinction or other recognition based on the Grade Point Average.~~

Students must contact the [Office of the Registrar](#) to apply for reinstatement within the application deadlines. Reinstatement is not guaranteed.

If reinstatement is granted, the student is placed on [academic probation](#) and their [Cumulative GPA](#) is re-set to 0.0 on zero units. At the discretion of the Faculty, the student may retain credit for courses successfully completed. If at any [academic standing review](#) after reinstatement the student's [Cumulative GPA](#) falls below 3.5, the student will be [required to withdraw from the University](#).

The student must complete a minimum of 60 units of work after reinstatement to be eligible for [Graduation with Distinction](#) or other recognition based on the [Cumulative GPA](#).

Study Abroad — [See Section McMaster Students Studying at Another University: Letter of Permission \(LOP\) and Exchange \(Study Abroad\)](#)

If you ~~Students who~~ wish to engage in international study internationally, you may do so either by:

- ~~participating in one of the formal exchange programs that exist between McMaster and a number of universities in other countries;~~
- ~~participating in one of the programs available through specific Faculties; or,~~
- ~~independent study abroad.~~

~~For details on the programs available and information on how to apply, please contact your Academic Advisor and/or the International Student Services Office.~~

Formal exchange programs are those in which McMaster has an agreement with another institution, involving a temporary exchange of students. As an exchange student, you enrol and pay your tuition fees, and supplementary fees at McMaster. No tuition is paid at the foreign institution. If you are interested in participating in a formal exchange program, you can obtain further information and an application form from the **International Student Services Office**. Applications are normally due mid-January for exchanges expected to begin the following September. Admission is by selection. A registration checklist is available to assist you in making all necessary arrangements.

McMaster also offers other programs which allow you to spend all or part of your third year of a four-year program at another institution. You enrol but do not pay tuition at McMaster. These programs are not available at universities with which McMaster University has a formal exchange agreement. For more information on these programs, please see your Academic Advisor or the International Student Services Office.

Students must recognize and accept the fact that in many countries of the world, especially the newly emerging nations, change may be the only constant. There are no guarantees that certain courses will be offered or that housing will be as one might expect. Spending time on an exchange program or an independent study abroad program offers an opportunity to develop one's adaptability and resourcefulness in the face of new situations. McMaster University cannot be held accountable for unforeseen changes in the host country.

For information about programs and universities, please contact the **International Student Services Office**.

Academic Standing and Program Requirements

Academic Standing

Academic Standing Review:

Each year in May and August (and after deferred examinations) Academic standing is reviewed and determined in May and August each year for students who have:

- have attempted at least 18 units of work since the last review, or

- may be eligible to graduate at the next Convocation.

In the review of academic standing review, three determinations sets of decisions are made:

- whether a student may graduate;
- whether a student may continue at the University; and,
- whether a student may continue in a program.

Academic Standings:

Good Standing

A student who satisfies the minimum requirements to continue in their program without restriction.

May Continue in Program - Academic Probation

Academic probation is assigned when a student:

- achieves a Cumulative GPA between 3.0 and 3.4. If at any future academic standing review their Cumulative GPA falls below 3.5, the academic standing assigned will be May Not Continue at the University.
- returns to studies after being Reinstated. If at any future academic standing review their Cumulative GPA falls below 3.5, the academic standing assigned will be Required to Withdraw from the University.

May Continue in Program - Program Probation

Program Probation is assigned when a student's Cumulative GPA falls below the minimum requirements to remain in their program. Failure to achieve Good Standing at the next academic standing review will result in their removal from the program. See Faculty specific Minimum Requirements for Entering and Continuing in a Program Beyond Level I.

May Not Continue in Program

This standing is assigned to:

- students who fail to achieve the minimum Cumulative GPA to remain in the program, or
- students previously on Program Probation who fail to achieve Good Standing.

To continue at the University, the student must apply to transfer to another program.

May Not Continue in Faculty

May Not Continue in Faculty is assigned when:

- a student enrolled in a program in the Faculty of Engineering or Business has achieved a **Cumulative GPA** between 3.0 and the minimum requirements to remain in their Faculty, or
- a student enrolled in a program in the Faculty of Business in Level II or above receives a grade of F in more than 6 units.

To continue at the University, the student must apply to transfer to another program or continue as a **transition student** for one reviewing period. **Engineering and Business Faculties provide a definition for transition student in their faculty pages.**

May Not Continue at University

May Not Continue at University is assigned when:

- a student achieves a **Cumulative GPA** below 3.0, or
- a student previously on Academic **Probation** fails to achieve **Good Standing**.

The student cannot enroll in courses at the University unless granted **Reinstatement**.

Required to Withdraw from University

A student who at any time received a standing of **Academic Probation** and at a future **academic standing review** achieves a **Cumulative GPA** below 3.5 will be Required to Withdraw from the University. The student will be unable to apply for **Reinstatement** for at least 12 months.

Minimum Requirements to Continue at the University

All students must maintain a Grade Point Average (GPA) of at least 3.5 at each review to continue at the University. Under certain circumstances, as described below, students may be allowed to continue on academic probation for one reviewing period with a GPA of 3.0 to 3.4. If your GPA is less than 3.0, you may not continue at the University.

Level I Registration and Academic Standing Requirements **This section is controlled by the Faculty/Program offices, committee did not review.**

Minimum Requirements for Entering and Continuing in a Program Beyond Level I **This section is controlled by the Faculty/Program offices, committee did not review.**

Minors **Moved to Academic Evaluations section.**

If you are **Students** enrolled in a four- or five-level program (with the exception of the Medical Radiation Sciences programs which is a three-level program offered over a four-year period), you are eligible to obtain a Minor in another subject area, provided that the subject area is not integral to the requirements of their your degree program. At least 18 units must be completed at McMaster. You should check the calendar requirements statement for your program in the case of Science programs, or check with your Faculty in the case of other programs, for subject areas that are excluded from consideration as a Minor in your program. If you **Students** who wish to receive a Minor, you should **must** check the information under **consult** the heading Minor in the appropriate department's listing section of the calendar. McMaster also offers many different minors including those in Archaeology, Globalization Studies and Jewish Studies (see [Interdisciplinary Minors and Thematic Areas](#).) You will be responsible for ensuring that you enrol in the required Minor courses. Normally, you must complete a minimum of 24 units in the Minor subject. No more than six of these units can be at Level I, unless otherwise stated in the specific requirements of the minor. At least 18 units must be completed at McMaster.

In the final year of your program, when you complete your profile in the To apply for a Minor, students must complete the Minor/Certificate Application in addition to their online [Graduation Information Centre](#) (GIC) application. ; you must indicate your desire to receive a Minor in the chosen subject. The student's Faculty Reviewing Committee will verify that the requirements have been met and, if successful, - If you are successful, your the [transcript](#) will indicate that a contain a designation for Minor has been obtained in that area. Minors cannot be revoked once approved. (see *Note 3 under Second Bachelor's Degree Programs*.)

The [Specialized Minor in Commerce for Students Completing a Single Honours B.A. in Humanities](#) requires an application for admission after Level I. See the [Faculty of Humanities](#) section for more information.

Second Bachelor's Degree Programs

For admission to a second undergraduate degree program you a student must hold a first undergraduate degree. whether it be a three-level, four-level, or five-level degree. The minimum admission requirements and program of study for the second degree depend on the subject areas of the two degrees. A second degree is not available in all degrees and/or subject areas. See [University Graduates Applying for a Second Bachelor's Degree](#).

1. All work for the second degree must be completed at McMaster University.
2. A second degree is not available in all subject areas. See individual Faculty/Program regulations or consult Faculty/Program Offices for exclusions or further information.
3. You will not be admitted to a Second degree programs may not be available where there is substantial overlap in the requirements of the first degree. See individual Faculty/Program regulations or consult [Faculty/Program Offices](#) for exclusions or further information.
4. Minors will not be revoked to permit later registration in a three-year second degree in the same subject. Students may return for a second degree in a subject in which they have obtained a Minor, but only at the Honours level. (See Minors)

5. Extra courses taken while ~~you are~~ enrolled in a first degree program, or courses completed as a Continuing Student, may, with the approval of the Faculty, be applied to the second degree program.
6. ~~You~~ Students must meet the same ~~standard~~ regulations for continuation and graduation as are applied to students enrolled in a first degree program.
7. Credit from the first two degrees cannot be applied to a third undergraduate degree. To obtain a third undergraduate degree ~~you~~ students must ~~take the complete program~~ **complete all program requirements**, i.e. approximately 90 units for a three-level degree and approximately 120 units for a four-level degree.

Requirements for Second Bachelor's Degree Programs

- **Honours Degree following a Three-Level Degree in the Same Subject:** For ~~consideration~~ entry into an Honours B.A. or B.Sc. degree program following a three-level degree in the same subject, a ~~Grade Point Average~~ Cumulative GPA of at least 5.0 in the first degree program is required. For ~~entry~~ consideration into all other eligible degree programs, a ~~Grade Point Average~~ Cumulative GPA of at least 6.0 in the first degree program is required. If admitted, ~~you must take at least 30 units beyond the first degree, including all Honours program requirements specified for the program, must be completed. In some Faculties, this includes a minimum number of units of work in the discipline.~~
- **B.A. or B.Sc. in Another Subject:** For ~~consideration~~ entry, ~~you~~ students must meet the admission requirements for the program. If admitted, ~~you must complete at least 30 units beyond the first degree, including all program requirements, must be completed. In some Faculties, this includes a minimum number of units of work in the discipline.~~ Students are not eligible for a second B.A. or B.Sc. degree in a program in which they have been awarded a **minor**, however, they may apply for an honours second degree in that subject.
- **Honours B.A., Honours B.A.Sc., Honours B.Sc. or Honours B.H.Sc. in Another Subject:** For ~~consideration~~ entry, ~~you~~ students must meet the admission requirements for the program and have a ~~Grade Point Average~~ Cumulative GPA of at least 5.0. ~~for admission to applicable Honours B.Sc. programs, applicable Honours B.A.Sc. programs or applicable Honours B.A. programs. If admitted, you must complete at least 60 units beyond the first degree, including all Honours program requirements, must be completed. specified for the program.~~
- **B.M.R.Sc.:** For consideration, students must meet the admissions requirements for the program. If admitted, students will be required to complete a minimum of 24 units during Level I of the program. Some of these units may be extra to the degree requirements.
- **B. Eng., B.Tech., and B.A.Sc.:** For ~~consideration~~ entry, ~~you~~ students must meet the admission requirements for the program. If admitted, ~~you~~ students must complete at least 60 units beyond the first degree including all program requirements.

Notes

- ~~1. All work for the second degree must be completed at McMaster University.~~
- ~~2. A second degree is not available in all subject areas. You will not be admitted to a second degree program where there is substantial overlap in the requirements. See individual Faculty/Program regulations or consult Faculty/Program Offices for exclusions or further information.~~

3. ~~Minors will not be revoked to permit later registration in a three-level second degree in the same subject. Students may return for a second degree in a subject in which they have obtained a Minor, but only at the Honours level. (See Minors)~~
4. ~~Extra courses taken while you are enrolled in a first degree program, or courses completed as a Continuing Student, may, with the approval of the Faculty, be applied to the second degree program.~~
5. ~~You must meet the same standards for continuation and graduation as are applied to students enrolled in a first degree program.~~
6. ~~Credit from the first two degrees cannot be applied to a third undergraduate degree. To obtain a third undergraduate degree you must take the complete program. i.e. approximately 90 units for a three-level degree and approximately 120 units for a four-level degree.~~

Credit in Courses by Special Assessment (Challenge Examinations) This section comes from the Admissions pages. The Admissions pages will need to be adjusted and reference the regulation here.

~~If you~~ Students who have acquired knowledge at a different type of institution or in a manner that makes assessment of ~~you're their~~ qualifications difficult, ~~you may be~~ are 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 evaluating honours or scholarship standing, but is counted as a course attempt. Unsuccessful attempts will be noted on the transcript as a grade of F. 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.

Deans' Honour List **Evaluations Section.**

DHL and PHL has been moved to the Academic

~~Each year outstanding students with a minimum average of 9.5 on at least 30 units are named to the Deans' Honour List. Students will be assessed at the reviewing period (either after the Fall and Winter terms or Spring/Summer term) when a minimum of 30 units (may not exceed 6 units~~

that are pass/fail) has been completed since the previous Deans' Honour List review. At each review the assessment will be based on all units completed since the previous Deans' Honour List review.

Provost's Honour Roll

Each year outstanding students with a 12.0 average on at least 30 units (usually their Fall-Winter Average) are named to the Provost's Honour Roll. Students will always be assessed at the same time and using the same average calculation as applied to the Deans' Honour List assessment (may not exceed 6 units that are pass/fail). (See [Deans' Honour List](#) section above)

Honour Lists

Students are reviewed for Deans' Honour Lists (DHL) and Provost's Honour List (PHL) each time a minimum of 30 units (may not exceed 6 units assessed with a [non-numeric grade](#)) have been completed. Subsequent assessments are based on all units completed since the previous review.

Students will be named to the Deans' Honour List when a minimum average of 9.5 is achieved.

Students will be named to the Provost's Honour List when an average of 12.0 is achieved.

Petitions for Special Consideration

The University wishes to assist students with legitimate difficulties. It also has the responsibility to ensure that degree, program and course requirements are met in a manner that is equitable to all students. Students may submit, in a prompt and timely manner, a Petition for Special Consideration to the [Office of the Associate Dean of their Faculty \(Faculty office\)](#) [Faculty/Program Office](#) in those instances where a student acknowledges that the rules and regulations of the University have been applied fairly, but is requesting that an exception to the regulations be made because of special circumstances. Petitions should be submitted in a prompt and timely manner for the relevant term, but no later than ~~July 31~~ July 31 immediately following the ~~Fall/Winter term~~ or ~~November 15~~ November 15 immediately following the Spring/Summer term.

Two forms are available in the Offices of the [Faculty/Program Office](#): ~~Associate Deans (Faculty office)~~:

Petition for Special Consideration (Form A):

The [Petition for Special Consideration \(Form A\)](#) is submitted for a variety of issues, including, when a student wishes to have a leave of absence or seeks to depart from University

requirements based on compelling medical or personal reasons; or a student believes that an adverse ruling or decision about his/her/their academic performance, such as failing a course, or being required to withdraw from a program for failure to meet program requirements, should be waived because of compelling medical or personal circumstances.

Petition for Special Consideration: Request for Deferred Examination (Form B):

The [Petition for Special Consideration: Request for Deferred Examination \(Form B\)](#) is used when a student misses an examination because of compelling medical or personal reasons.

Notes:

1. Once a student has completed an examination, no special consideration will be granted.
[separated into 2 points rather than 1]
2. A student who misses an examination because of compelling medical or personal reasons may submit a [Petition for Special Consideration: Request for Deferred Examination \(Form B\)](#) to the Faculty/Program Office, normally within five working days of the missed examination.
3. If the reason is medical, the approved [McMaster University Medical Form](#) must be used. The student must be seen by a doctor at the earliest possible date, normally on or before the date of the missed exam and the doctor must verify the duration of the illness. Relief will not be available for minor illnesses. If the reason is non-medical, appropriate documentation with verifiable origin covering the relevant dates must be submitted, normally within five working days.
4. In deciding whether or not to grant a petition, the adequacy of the supporting documentation, including the timing in relation to the due date of the missed work and the degree of the student's incapacitation, will be taken into account.
5. It is the student's responsibility to check *Mosaic Student Center > Deferred Exam Approvals* or with the [Faculty/Program Office](#) of the Associate Dean for a decision on the request for a deferred examination. If the deferred examination is granted, the student will be informed officially by means of the notation DEF which will appear against the relevant course on the student's academic record and via *Mosaic > Student Centre > View My Grades*.
6. Deferred examinations are written during the next official University [deferred examination period](#). Examination and deferred examination dates appear in the [Sessional Dates](#) section of this Calendar. Default of the deferred examination will result in a fail for that examination.
7. Students who have been granted more than one deferred examination may be required by their [Faculty/Program Office](#) to reduce their course load during the term in which the deferred examinations are being written. The decision on a reduced load will be made and communicated with the decision on the request for deferred examinations.
8. At the discretion of the [Faculty/Program Office](#), students who have been granted one or more deferred examinations, may not be allowed to enrol in a subsequent term or session until all deferred examination(s) have been completed and the [Academic Standing](#) calculated. Students will be notified of this decision by their [Faculty/Program Office](#).
9. Students who will be living more than 160 kilometres from Hamilton during the deferred examination period and wish to write their approved deferred examination at an institution other than McMaster must submit a [Request to Write Deferred Examination Off-campus Form \(PDF\)](#) at least ~~15 working days prior~~ 15 working days prior to the [deferred examination period](#). Students are

responsible for making arrangements for a presider to conduct the deferred examination at an outside institution and for paying any fees such as invigilation and return courier.

10. The authority to grant any petitions lies with the [Faculty/Program eOffice](#) and is discretionary. It is imperative that students make every effort to meet the originally-scheduled course requirements and it is a student's responsibility to write examinations as scheduled.

Decisions made on Petitions for Special Consideration are final. In accordance with the [Student Appeal Procedures](#), decisions made on Petitions for Special Consideration cannot be appealed to the Senate Board for Student Appeals. However, should students believe a decision violates their human rights, they may wish to consult McMaster's Policy on [Discrimination and Harassment: Prevention & Response](#) and visit one of the four intake offices ([Equity and Inclusion Office](#), [Student Support & Case Management](#), [Employee/Labour Relations](#), [Professionalism Office in Faculty of Health Sciences](#)) to initiate a complaint. However, if a student believes that a decision is a violation of his/her human rights, he or she must contact the office of the Human Rights and Equity Services in room 212 of the McMaster University Student Centre, to initiate a complaint.

Requests for Relief for Missed Academic Term Work

The University recognizes that students periodically require relief from academic work for medical or other personal situations. This academic regulation aims to manage these requests by taking into account the needs and obligations of students, instructors and administrators. It is the prerogative of the instructor of the course to determine the appropriate relief for missed term work in his/her course.

Any concerns regarding the granting of relief should be directed to the respective [Faculty/Program Office](#). Requests for relief should be made with a commitment to academic integrity in mind. Requests that deviate from this commitment will be handled under the [Academic Integrity Policy](#) and [Student Code of Student Rights and Responsibilities](#) Conduct, where appropriate.

~~1. Relief for missed academic work worth less than 25% of the final grade resulting from medical or personal situations lasting up to three calendar days:~~

Relief for missed academic work worth less than 25% of the final grade resulting from medical or personal situations lasting up to three calendar days:

- Use the [McMaster Student Absence Form \(MSAF\)](#) on-line self-reporting tool. No further documentation is required.
- Students may submit requests for relief using the MSAF once per term.
- An automated email will be sent to the course instructor, who will determine the appropriate relief. Students must immediately follow up with their instructors. Failure to do so may negate the opportunity for relief.
- The MSAF cannot be used to meet a religious obligation or to celebrate an important religious holiday.
- The MSAF cannot be used for academic work that has already been completed/ attempted.

- An MSAF applies only to work that is due within the period for which the MSAF applies, i.e. the 3-day period that is specified in the MSAF; however, all work due in that period can be covered by one MSAF.
- The MSAF cannot be used to apply for relief for any final examination or its equivalent. See [Petitions for Special Consideration](#) above.

~~2. For medical or personal situations lasting more than three calendar days, and/or for missed academic work worth 25% or more of the final grade, and/or for any request for relief in a term where the MSAF has been used previously in that term:~~

For medical or personal situations lasting more than three calendar days, and/or for missed academic work worth 25% or more of the final grade, and/or for any request for relief in a term where the MSAF has been used previously in that term:

- Students must report to their [Faculty/Program Office](#) to discuss their situation and will be required to provide appropriate ~~supporting documentation~~ supporting documentation (see [Documentation Requirements](#) below).
- If warranted, the [Faculty/Program Office](#) will approve the absence, and the instructor will determine appropriate relief.

Documentation Requirements

If the reason for a request for relief is medical, the approved [McMaster University Medical Form](#) covering the relevant dates must be submitted. The student must be seen by a doctor at the earliest possible date, normally on or before the date of the missed work and the doctor must verify the duration of the illness.

If the reason is non-medical, appropriate documentation with verifiable origin covering the relevant dates must be submitted, normally within three working days.

In some circumstances, students may be advised to submit a [Petition for Special Consideration \(Form A\)](#) seeking relief for missed academic work. In deciding whether or not to grant a petition, adequacy of the supporting documentation, including the timing in relation to the due date of the missed work and the degree of the student's incapacitation, may be taken into account. Failure to do so may negate the opportunity for relief.

If the petition is approved, the [Faculty/Program Office](#) will notify the instructor(s) recommending relief. It is the prerogative of the instructor of the course to determine the appropriate relief for missed term work in ~~his/her~~ [their](#) course.

Examinations ([link to Registrar Office Examinations page](#))

~~The Office of the Registrar schedules and conducts most final examinations, and December mid-year examinations for full-year multi-term Level I courses. See the [Sessional Dates](#) section in *General Academic Regulations Track Changes Version, Jan. 2018*~~

~~the Calendar.~~ Examinations conducted by the Office of the Registrar will appear in the Mosaic Student Centre and during these dates may be scheduled in the morning, afternoon, or evening, Monday through Saturday. Other instructor-scheduled tests and examinations may be held throughout each term in compliance with the [Academic Obligations - Restrictions](#) Assessment Ban.

Assessment Ban

1. Purpose:

~~The Assessment Ban is intended to enable students to continue to attend classes and start preparing for examinations held during the official University examination period. There is a university wide ban on examinations and tests in the final week of classes: see below for exemptions. Each year the dates will be listed in the [Sessional Dates](#) section of the Undergraduate Calendar.~~

2. Application:

- ~~a. Assignments worth more than 10% of the final course grade cannot be assigned during the examination ban period.~~
- ~~b. Tests and exams cannot be scheduled during the examination ban period.~~
- ~~c. Take home exams worth more than 10% of the final course grade cannot be due during the examination ban period.~~

3. Exemptions:

- ~~a. Tests, including lab tests, are exempt when they have the following characteristics:

 - ~~• The test is held in the normal class or lab time slot;~~
 - ~~• The test is worth no more than 10% of the final course grade.~~~~
- ~~b. Requests for a waiver of the ban must be approved by the Faculty or Program Office before being considered by Undergraduate Council.~~

Note: ~~The Assessment Ban does not apply to the M.D., B.H.Sc. (Midwifery), B.H.Sc. (Physician Assistant), or to Levels 2 and above of the Medical Radiation Sciences programs.~~

Full details regarding examination procedures conducted by the Office of the Registrar are found in the [Undergraduate Examinations Policy](#).

Examinations Conducted by the Office of the Registrar

McMaster student photo identification cards are required at all examinations.

If you arrive at an examination without presenting a proper McMaster Student I.D. card you will not be admitted to the room and will be required (before being seated) to obtain a single use supplemental photo for that exam only; a \$30.00 fee applies. No additional time is given to compensate for examination time missed.

- You may only use books, papers or instruments during an examination if they are specifically prescribed on the examination paper. No examinations books or supplies are to be removed from the room.
- Conversation or any form of communication between students is forbidden in the examination room.
- All mobile phones, smart phones, smart watches and web accessible electronic devices must be turned off and must not be in the student's possession during the exam.
- No food is permitted and drinks must be in a spill proof container.
- The University is not responsible for lost or stolen articles.
- Items (including back packs) that are not required to write the examination should not be brought into the examination as they must be left at the side of the room at your own risk.
- Handbags or small personal belongings may be placed underneath your chair but not on your desk.
- You are expected to use the washroom before or after and not during an examination.
- You are responsible for writing the correct examination from the right instructor at the place and time indicated on your personal examination timetable in [Mosaie](#).
- Students arriving late will be admitted only within the first 30 minutes of the start time of the exam and will not be given extra time.

Examinations are not rescheduled for purposes of travel. You **Students** must be available for the entire examination period as listed in the [Sessional Dates](#) section.

The Office of the Registrar will reschedule final examinations within the examination period for the reasons listed below. Application to reschedule examinations and where applicable, acceptable documentation must be supplied must be made at least 10 working days before the scheduled examination period. Failure to meet the stated deadline may result in the denial of the application. special arrangements. Examinations will be rescheduled only for: Special examination arrangements may be made upon application to the Office of the Registrar, Scheduling and Examinations, in some circumstances, such as:

- Conflict with religious obligations
- More than one examination scheduled at the same time
- Three examinations in one calendar day (midnight to midnight). Examples follow:
 - 9:00am, 12:30pm and 4:00pm
 - 12:30pm, 4:00pm and 7:30pm
 - 9:00am, 4:00pm and 7:30pm
 - 9:00am, 12:30pm and 7:30pm
- Three consecutive examinations over two days (e.g., December 14th at 4:00 pm and 7:30 pm and December 15th at 9:00 am). Examples follow:

and where applicable, acceptable documentation must be supplied.

If you ~~Students who miss~~ miss a final examination for medical or personal reasons you may submit a [Petition for Special Consideration: Request for Deferred Examination \(Form B\)](#) with supporting documentation to their ~~Office of the Associate Dean of your Faculty/Program Office~~, normally within five working days of the missed examination

If you ~~Students who~~ begin a final examination, but are unable to complete it for medical reasons, you may submit a [Petition for Special Consideration \(Form A\)](#) with supporting documentation to their ~~Office of the Associate Dean of your Faculty/Program Office~~, normally within five working days of the examination.

Students with disabilities are required to inform [Student Accessibility Services](#) of accommodation needs for examinations on or before the [last date for withdrawal from a course without failure by default](#). This allows sufficient time to verify and arrange appropriate accommodation. ~~Failure to meet the stated deadline may result in the denial of special accommodation. See Academic Facilities, Student Services and Organizations, Student Accessibility Services section of this Calendar, or contact that office.~~

Request to Write Deferred Examinations at an Off-Campus Location

Students living more than 160 kilometers from Hamilton during the deferred examination period and wishing ~~to~~ write their approved deferred examination at an institution other than McMaster must submit a [Request to Write Deferred Examination Off-campus Form \(PDF\)](#) at least ~~15 working days~~ 15 working days prior to the deferred examination period.

If the deferred examination is written at an off-campus location, any fees incurred are the responsibility of the student. This includes the fee to courier the written examinations back to the Office of the Registrar, Scheduling and Examinations.

~~Deferred Examination dates appear in the [Sessional Dates](#) section of this Calendar.~~

For information regarding application for Deferred Examination, see [Petitions for Special Consideration: Requests for Deferred Examinations \(Form B\)](#).

GRADES Academic Evaluations

Numeric Grading System

The results of all courses attempted will appear on ~~your~~ the transcript. The method for determining ~~your~~ final grades will be given in the course outline. Unless otherwise specified in a ~~the~~ course outline, course results determined on a percentage scale will be converted to an official letter grade, as indicated in the ~~following~~ equivalent percentage scale; ~~which follows.~~
~~The results of all courses attempted will appear on your transcript as letter grades.~~

- Before submitting a failing grade, your instructor reassesses whatever examples of your work are available.
- To satisfy prerequisite requirements, a grade of at least D- is required, unless otherwise stated.
- You retain credit for all courses with grades of D- or better, except in those programs for which a higher grade is specified in the program regulations. (This bullet point is a program regulation and programs need to convey this information in their regulations when it applies.)

Since September 1982, the grading scale has been:

Grade	Equivalent Grade Point	Equivalent Percentages
A+	12	90-100
A	11	85-89
A-	10	80-84
B+	9	77-79
B	8	73-76
B-	7	70-72
C+	6	67-69
C	5	63-66
C-	4	60-62
D+	3	57-59
D	2	53-56
D-	1	50-52
F	0	0-49 – Failure

Non-Numeric Grades and Notations: Added from the transcript legend

AUD – Audit

CAN – Cancelled

COM – Complete

CR - Credit

F – Fail

INC – Incomplete

IP – In Progress

MT – Multi-Term

NC – No Credit

NMR – No Mark Received

P – Pass

General Academic Regulations Track Changes Version, Jan. 2018

T – Transfer Credit
W – Withdrawn
XCH – Exchange

Notations

DEF
EXTRA
REPEAT
UPGRADE

DEF

Courses with the notation DEF have been approved for a deferred examination.

Extra Moved from the Glossary

Extra-Courses are those courses designated as “Extra” at the time of registration as “Extra” by the Faculty Office, which are not included as units toward completion of a student’s program. The grades obtained in such courses will not be included in the computation of the Cumulative GPA. However, they will be included in the computation of the Fall-Winter Average and the Spring-Summer Average.

Unused

Courses designated as “Unused” cannot be used to fulfil the requirements for the student’s current degree program. The grades obtained in such courses will be included in the computation of all averages.

Graded Units

Graded units refer to the number of units taken at McMaster for which a letter or Numeric Grade is earned. Graded units do not include courses assessed with a Non-Numeric Grade.

Pass/Fail Courses

~~Pass/Fail Courses:~~ Courses evaluated on a Pass/Fail basis are not included in the calculation of averages. The earned units are counted towards degree requirements.

The definitions for averages shown below have been moved from the glossary. The Weighted Average Example was already in this section.

~~Full-load Average (FA)~~ is based on the successful completion of a Full Load of course units (see Full Load definition), and includes only courses taken in the Fall/Winter session. ~~Overload~~ units (those above Full Load) and ~~Extra~~ courses taken during the Fall/Winter session are included in the FA.

Cumulative Grade Point Average (Cumulative GPA)

General Academic Regulations Track Changes Version, Jan. 2018

The **grade point average** (Cumulative GPA) is the **weighted average** based on the **Graded Units** taken throughout the undergraduate career. The **Repeating Courses** regulation, effective September 1, 2018, will affect the calculation of subsequent Cumulative GPA. ~~grades obtained in all courses taken. Failed courses are included in the GPA calculation,~~

Fall-Winter Average

The Fall-Winter Average is a **weighted average** based on the grades attained in the Fall and Winter Terms. **Overload** courses and **Extra** courses are included in the Fall-Winter Average.

Spring-Summer Average

The Spring-Summer Average is a **weighted average** based on the grades attained in the Spring and Summer Term. **Overload** courses and **Extra** courses are included in the Spring-Summer Average.

Term Grade Point Average (Term GPA)

The Term GPA is a **weighted average** based on the **Graded Units** taken in the term.

Weighted Average

Weighted Average is calculated by multiplying the grade points achieved in each course by the number of units in each course, totaling these results, and then dividing this result by the total number of course units.

Example of a weighted average calculation, using the grade points and units for courses completed:~~attempted:~~

Course Grade	Grade Points		Course Units		Total Points
A-	10	x	6	=	60
C+	6	x	3	=	18
B	8	x	6	=	48
B+	9	x	3	=	27
F	0	x	6	=	0
		Total	24		153

To calculate Average: $153 \div 24 = 6.4$

OSAP Eligible Course Load

General Academic Regulations Track Changes Version, Jan. 2018

OSAP Eligible Course Load or equivalent refers to the 60% minimum course load per term (40% minimum course load per term for students with permanent disabilities) required to be eligible for full-time OSAP government student aid funding.

Personal Interest Course (PIC)

McMaster University encourages interdisciplinary study and believes undergraduate studies provides an excellent opportunity to explore topics which are new and unfamiliar. Students, however, may be reluctant to take a course if they are unsure of their academic performance for fear of compromising their [Cumulative GPA](#). The Personal Interest Course (PIC) option is designed to encourage students to explore interests outside of their program without affecting their [Cumulative GPA](#).

1. A student can declare a PIC to signify they want an elective course to be assessed on a Credit or No Credit (CR/NC) grading scale.
2. To receive the grade of CR, the student must earn a final mark of at least 50%. Units earned from a successfully completed PIC will be counted in the units required for a student's degree as applicable.
3. Courses with a final grade of NC do not count as degree credits or as failures, nor are they included in the [GPA](#) calculation or averages. Please note, government student aid (e.g., OSAP) will consider a NC grade as a failure.
4. The PIC option is not available for any course that is considered a program requirement (which includes courses listed as possible required courses), independent study, thesis, field study or placement course, or on a list of required courses. Students are responsible for ensuring the course is an elective course for their program. Engineering students should note the PIC option is available only for complementary studies electives.
5. Students may declare a maximum of 3 units of PIC per term to a maximum of 12 units per four- or five-level degree or a maximum of 9 units per three-level degree. A maximum of 6 units of PIC may be used to satisfy requirements toward a [Minor](#).
6. The PIC option is available to undergraduate students registered in a program above Level I, with a [Cumulative GPA](#) of at least 3.5, who are enrolled in a Program/Faculty which is participating in the PIC option. Exchange students should seek advice from the [International Study Office](#) and [Faculty/Program Office](#).

The PIC 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 PIC option (see [Faculty Academic Regulations](#)), or
- have graduated and are in a second degree or a non-degree program, e.g., continuing, etc.

7. If a percentage grade in a course is required for future applications to graduate or professional school, the PIC option should not be selected for that course. Students may not subsequently request to have a PIC grade recalculated to a numeric grade. Students must carefully review any government (e.g., OSAP) and University aid and award eligibility rules which may be affected by the use of the PIC option.

8. If the student changes their program of study and a course taken as a PIC becomes a required course, the new Faculty/Program 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.

9. Students cannot use the PIC option for courses in which they have been found guilty of academic dishonesty. In these cases, the grade will be converted into a numeric grade.

Deadlines:

1. Students must declare a course as a PIC on Mosaic by the last day for enrollment and course changes date. The student progresses in the course as per normal, and has the option to withdraw from the course as per the normal procedures and deadlines.
2. If the student would rather keep the numeric grade, they must indicate the course is no longer a PIC on Mosaic by the last day for cancelling courses without failure by default and the numeric grade will appear on their transcript. ~~Please note, once declared as PIC, the course counts towards the maximum 12-unit limit regardless of whether or not the course is graded as a PIC.~~

Graduation Graduation with Distinction has been moved to Academic Evaluations.

Graduation *With Distinction* standing will be is awarded if when a minimum Grade Point Average (Cumulative GPA) of 9.5 is achieved in a degree program. In this case, the Latin phrase *summa cum laude* (“with highest honour”) will appear on the graduate’s diploma.

The following minimum Cumulative GPA Grade Point Averages are required to graduate:

- B.A. – 3.5
- B.A. (Honours) – 5.0
- B.S.W. (Honours), B.A. /B.S.W. and B.S.W. – 6.0
- B.Arts Sc. and B.Arts Sc. (Honours) – 5.0
- B.A.Sc. (Faculty of Engineering) – 4.0
- B.A.Sc. (Honours) (Faculty of Science) – 5.0
- B.Com. – 4.0
- B.Com. (Honours) – 5.0
- B.Eng., B.Eng.BME., B.Eng. Biosciences, B.Eng.Mgt., B.Eng.Society – 4.0
- B.F.A. (Honours) – 5.0
- B.H.Sc. – 6.0 (on all graded courses) 5.0

- B.H.Sc. (Honours) – 5.0
- B.H.Sc. (Midwifery) – 6.0
- B.M.R.Sc.* – 4.5
- B.Mus. (Honours) – 5.0
- B.Sc. – 3.5
- B.Sc. (Honours) – 5.0
- B.Sc.Kin. (Honours) – 5.0
- B.Sc.N. – 5.0
- B.Tech – 3.5

** All requirements must be completed within five years from the time of registration in Level II.*

Please see the graduation regulations for individual Health Sciences programs in the *Faculty of Health Sciences* section.

If, at the time of graduation, you Students who fail to meet the requirements for an Honours degree, you may seek to transfer to another program.

If you are enrolled in Level III of an Honours program and wish to transfer to a three-level degree program to be eligible for graduation at the next Convocation, you must submit your request through your Mosaic Student Centre by May 15 for Spring Convocation, and by October 15 for Fall Convocation (if these dates fall on a Saturday or a Sunday, the next business day will be the deadline). If permission is granted, you must complete your profile in the online *Graduation Information Centre*.

If you are scheduled to graduate from a three-level program and wish to be considered to transfer to Level IV of an Honours program rather than graduate, you must submit your request through your Mosaic Student Centre by May 15 for Spring Convocation, and by October 15 for Fall Convocation (if these dates fall on a Saturday or a Sunday, the next business day will be the deadline). The decision regarding your eligibility to transfer will appear in your submitted service request in the Mosaic Student Centre. If you are not eligible to transfer, you will graduate from your three-level program as scheduled.

The graduation information struck out above should be pared down and put into faculty pages (if relevant).

During the term in which you Students who intend to graduate who expect to complete their your graduation requirements, you must complete your profile in the online [Graduation Information Centre form](http://registrar.mcmaster.ca/grad) by the appropriate deadline in their final term of study, available at <http://registrar.mcmaster.ca/grad>. If you wish to Students wishing to graduate with receive a Minor in addition to your major program of studies, you must complete the application in the [Minor/Certificate Application Centre](#). indicate this in your profile in the *Graduation Information Centre* as well.

Degrees will be conferred ~~Students will graduate with their degree~~ You must take the degree at the Convocation **immediately** immediately following the completion of the appropriate degree work. Students unable to attend the convocation ceremony who wish to attend a later ceremony should consult the [Policy on Deferral of Attendance at Convocation](#) and must contact the [Office of the Registrar](#) within the prescribed ~~time~~ deadlines.

These next two bullet points have been moved to the **Parchments, Diplomas and Certificates section**: ~~Diplomas will not be released to students with an outstanding account with the University.~~

~~Diplomas are held for a period of 12 months following the Convocation date before being destroyed. Students requesting diplomas after this period are required to pay a replacement fee.~~

~~Duplicate and Replacement~~ Parchments, Diplomas and Certificates

Diplomas will not be released to students with an outstanding **financial** account with the University.

Diplomas are held for a period of 12 months following the Convocation date before being destroyed. Students requesting diplomas after this period are required to pay a replacement [fee](#).

Graduates may request, a duplicate or replacement degree parchment, diploma or certificate ([fees](#) apply.)

- A duplicate copy will be issued when **requested by a graduate** ~~a student requires~~ or when the original document has been lost or destroyed.
- The words *duplicate copy* or *reissued* will be affixed to all degree parchments, diplomas or certificates requested in this manner and will bear the signatures of the current Chancellor, President and Vice-Chancellor, and Registrar.
- Damaged parchments must be returned to the Office of the Registrar before the new parchment, diploma or certificate is issued.

~~Records Policy~~

Transcripts This language is now in the Academic Evaluations section.

A transcripts summarizes a student's academic career at McMaster University and ~~are~~ **is** available by electronic request through [Mosaic](#). ~~Academic terms do not appear on transcripts until the first day of classes in the term has passed. Transcripts are only released for students in good standing; transcript requests will not be processed for students with outstanding financial accounts at the University or those under investigation for an academic integrity violation.~~

~~Transcripts summarize a student's academic career at McMaster University and are available by electronic request through [Mosaic](#). Please contact the Office of the Registrar for questions related to transcript requests.~~

General Academic Regulations Track Changes Version, Jan. 2018

Transcripts

Office of the Registrar, Services

Room 108, Gilmour Hall

McMaster University

L8S 4L8

Phone: (905) 525-4600

Fax: (905) 527-1105

<http://registrar.mcmaster.ca/services/transcripts>

NOTE: Academic terms do not appear on transcripts until the first day of classes in the term has passed.

There is no charge for transcripts; however, charges for rush, fax or courier services apply (<http://registrar.mcmaster.ca/category/services/transcripts/>) and are due at the time of order. Requests received by mail or fax must include credit card information along with the signature of the student and card owner (if different from the student). Please allow five to seven business days for processing; mail delivery times vary and are beyond the control of the University.

Credentials This language comes from the Senate Policy on Diplomas and Certificates and is now in the Academic Evaluations section.

A credential is a body of academic work or collection of course work that stands on its own and for which a parchment is issued. McMaster credentials include certificates, diplomas and degrees. A single course is permitted to be counted toward a maximum of two credentials.

Record Retention Policy This section has been moved to much earlier in the regulations.

When you individuals apply for admission to McMaster University and enrolment in programs at McMaster the University, you they accept the University's right to collect pertinent personal information. This information is needed to assess your qualifications for entry, establish records of performance in programs and courses, provide the basis for University aid and awards and governmental student aid programs funding, and to assist the University in the academic and financial administration of its affairs. All documentation that you submitted to the University in support of applications for admission, residence accommodation, or financial University aid and awards, or any appeals and/or petitions, becomes the property of the University. You are

~~notified of your academic performance in courses through the [Mosaic Student Centre > View My Grades](#)~~

All application documents are normally destroyed at the end of each admission cycle for applicants who are not accepted, or who do not enrol following acceptance. For applicants who become McMaster students, their application documents are normally destroyed five years after the last term of their enrolment at the University (regardless of whether or not they graduate).

Supporting documentation relevant to government student aid programs (e.g., OSAP) is kept per the retention policies of the Federal and/or Provincial governments. Supporting documentation, by aid year, relevant to the administration of online aid applications, as well as University aid and awards, will normally be destroyed after seven years.

~~All information needed to produce official transcripts is maintained permanently. If you are not accepted, or if you fail to enrol following acceptance, your documentation is normally destroyed at the end of each admissions cycle. If you reapply, you must resubmit any previous documentation and any additional academic information.~~

~~Supporting documentation relevant to your admission to, and performance at, the University will normally be eliminated five years after the end of your enrolment at the University (regardless of whether you graduate).~~

~~Supporting documentation relevant to government student aid (e.g. OSAP) is kept per the retention policies of the Federal and/or Provincial governments. Supporting documentation, by aid year, relevant to the administration of online aid applications, as well as University aid and awards, will normally be eliminated after seven years.~~

McMaster University Statement on the Collection of Personal Information and the Protection of Privacy **This section has been moved to much earlier in the regulations.**

McMaster University collects and retains personal information of students, alumni and other parties, including but not limited to faculty, staff, visiting academics and private citizens using services provided by McMaster University, under the authority of the *McMaster University Act, 1976*. This information is used for the academic, administrative, employment-related, safety and security, financial and statistical purposes of the University, including for the administration of admissions, registration, awards and scholarships, convocation, alumni relations and other fundamental activities related to being a member of the University community, a user of services provided by McMaster or an attendee of, or applicant to, a public post-secondary institution in the Province of Ontario. The information will be used, among other things, to admit, register and graduate students, record academic achievement, issue library cards and, where applicable, local transit passes, to provide access to information systems and to operate academic, financial, athletic, recreational, residence, alumni and other University programs. Additionally, this information may be shared with other institutions of higher education in order to administer collaborative programs. Information on admissions, registration and academic achievement may

General Academic Regulations Track Changes Version, Jan. 2018

also be disclosed and used for statistical and research purposes by the University, other post-secondary educational institutions and the federal and provincial governments. The names of alumni, their Faculty and program, award information, degree(s) awarded and date of graduation is considered public information and may be published by McMaster University. In addition, student photographs posted by the University in the form of individual pictures or class pictures may be publicly displayed. Aside from the foregoing, the information you provide and any other information placed in a student record, or in a personnel record, will be protected and used in compliance with Ontario's *Freedom of Information and Protection of Privacy Act (RSO 1990)* and will be disclosed only in accordance with this Act. If you have any questions about the collection and use of this information please contact the University Registrar, University Hall, Room 209, Student Records, Gilmour Hall, Room 108, or the University Secretary, Gilmour Hall, Room 210, McMaster University.

McMaster University may also collect personal information from other relevant sources including, without limitation, the Ontario Universities' Application Centre, secondary schools, colleges, universities and other institutions previously attended, including third-party services and test score providers where the items collected form a part of the application or admission process to a university program.

Furthermore, McMaster is required to disclose personal information such as Ontario Education Numbers, student characteristics and educational outcomes to the Ministry of Advanced Education and Skills Development (the "MAESD"; formerly known as the Ministry of Training, Colleges, and Universities). The Ministry collects this data for purposes such as planning, allocating and administering public funding to colleges, universities and other post-secondary educational and training institutions and to conduct research and analysis, including longitudinal studies, and statistical activities conducted by or on behalf of the Ministry for purposes that relate to post-secondary education and training. Any information collected by McMaster for the purposes of self-identification as a member of a specific group (i.e. First Generation, First Nations, etc.) may be subject to disclosure to the MAESD by McMaster and collected by the MAESD pursuant to its statutory authority. Further information on how the MAESD uses personal information is available on the ministry's website (<http://www.tcu.gov.on.ca/>).

In addition to collecting personal information for the purposes noted above, McMaster University collects specific and limited personal information on behalf of the McMaster Student Union, the McMaster Association of Part-time Students and/or the McMaster Graduate Students Association. These constituent student groups use personal information for the purpose of membership, administration, elections, annual general meetings, health plans and other related matters only. Please contact the relevant Student Union or Association office if you have questions about this collection, use and disclosure of your personal information and their respective privacy policies.

September 2015

**Notification of Disclosure of Personal Information to Statistics Canada
section has been moved to much earlier in the regulations.**

This

General Academic Regulations Track Changes Version, Jan. 2018

Statistics Canada is the national statistical agency. As such, Statistics Canada carries out hundreds of surveys each year on a wide range of matters, including education. In order to carry out such studies, Statistics Canada asks all colleges and universities to provide data on students and graduates. Institutions collect and provide to Statistics Canada student identification information (student's name, student ID number), student contact information (address and telephone number), student demographic characteristics, enrolment information, previous education and labour force activity.

The *Federal Statistics Act* provides the legal authority for Statistics Canada to obtain access to personal information held by educational institutions. The information may be used only for statistical purposes, and the confidentiality provisions of the Statistics Act prevent the information being released in any way that would identify a student. Students who do not wish to have their information used are able to ask Statistics Canada to remove their identification and contact information from the national database. For further information, please see Statistics Canada's web site at: <http://www.statcan.ca> or write to the Postsecondary Section, Centre for Education Statistics, 17th Floor, R.H. Coats Building, Tunney's Pasture, Ottawa, K1A 0T6.



SCIENCE

Changes to the 2017-2018 Undergraduate Calendar

Report to Undergraduate Council Committee

January 12, 2018

REPORT TO SENATE

FACULTY OF SCIENCE

SUMMARY OF CURRICULUM CHANGES FOR 2018-2019

Below, is the summary of substantive curriculum changes being proposed by the Faculty of Science. For a complete review of all changes, refer to the November, 2017, Report of the Academic Planning and Policy Committee for changes to the 2017-2018 Undergraduate Calendar, found at:

<https://macdrive.mcmaster.ca/d/8e0d7523c5/>

Additionally, substantive amendments to existing course capacities and categories are included for information only and can be found in the *Changes to Existing Courses* sections of the Departments and Schools.

1.1 NEW PROGRAMS:

- None

2.1 PROGRAM CLOSURES/MERGER:

- None

3.1 MAJOR REVISIONS:

- Honours B.Sc. in Biology and Pharmacology Co-op

Faculty of Science section of the Calendar:

CHANGES TO EXISTING PROGRAMS:

Honours Biology and Pharmacology Co-op (B.Sc.)

Effective September 2018, the Honours Biology and Pharmacology Co-op program is administered by the Faculty of Health Sciences. Students interested in applying to this program should see the Honours Biology and Pharmacology program (B.H.Sc.) in the Faculty of Health Sciences section of the Calendar.

Students who are currently registered in the program, seeking the B.Sc. (Hons) degree, should refer to the 2017-2018 Undergraduate Calendar or their personal Advisement Reports for program requirements. Such students will graduate at a Faculty of Science convocation.

Admission

~~Enrolment in this program is limited.~~ Selection is based on academic and other achievement and an interview but requires, as a minimum, submission of the on-line application by the stated deadline, completion of any Level II program with a Grade Point Average of at least 5.0 and completion of the following courses:

3-units

- ~~BIOLOGY 2A03 – Integrative Physiology of Animals~~

3-units from

- ~~BIOLOGY 2C03 – Genetics~~
- ~~MOLBIOL 2C03 – Genetics~~

6-units

- ~~CHEM 2OA3 – Organic Chemistry I~~
- ~~CHEM 2OB3 – Organic Chemistry II~~

6-units from

- ~~BIOLOGY 2B03 – Cell Biology~~
- ~~BIOLOGY 2D03 – Plant Biodiversity and Biotechnology~~
- ~~BIOLOGY 2EE3 – Introduction to Microbiology and Biotechnology~~
- ~~BIOLOGY 2F03 – Fundamental and Applied Ecology~~
- ~~CHEMBIO 2A03 – Introduction to Bio-Analytical Chemistry~~
- ~~CHEMBIO 2P03 – Applications of Physical Chemistry~~

3-units from

- ~~PHYSICS 1A03 – Introductory Physics~~
- ~~PHYSICS 1C03 – Physics for the Chemical and Physical Sciences~~

1-course

- ~~SCIENCE 2C00 – Skills for Career Success in Science~~

Note

Information about this program and the selection procedure can be obtained from Science Career and Cooperative Education and the Program Director.

Program Notes

1. ~~This is a five level (year) co-op program, three terms of which must be spent in work related to biology or pharmacology placements.~~
2. ~~A senior thesis, PHARMAC 4F09, will be completed in Level IV, Summer Term. Work terms must be completed in Level IV, Term 2 and Level V, Term 1.~~

3. ~~PHARMAC 3A06 A/B, 3B06 A/B, 4A03, 4AA3, 4C03, 4D03 and 4E03 will use a self-directed problem-based learning approach.~~
4. ~~Students must be registered full-time and take a full academic workload as prescribed by Level and Term.~~
5. ~~Students are required to complete SCIENCE 2C00 and SCIENCE 3C00 before the first work placement and are strongly recommended to complete SCIENCE 2C00 in Level II.~~
6. ~~Students should seek academic advising for this program in the Department of Biology.~~
7. ~~If BIOCHEM 2B03 and 2BB3 have not been completed at the time of admission, BIOCHEM 3G03 must be completed in Level III. Students with credit in BIOCHEM 2B03 and 2BB3 are not required to complete further Biochemistry courses.~~

Course List

- ~~BIOCHEM 3D03 – Metabolism and Regulation~~
- ~~BIOCHEM 3H03 – Clinical Biochemistry~~
- ~~BIOCHEM 3X03~~
- ~~BIOCHEM 3Y03~~
- ~~BIOCHEM 4E03 – Gene Regulation in Stem Cells and Development~~
- ~~BIOCHEM 4M03 – Cellular and Integrated Metabolism~~
- ~~BIOCHEM 4N03 – Molecular Membrane Biology~~
- ~~all Levels III and IV Biology and Molecular Biology courses~~
- ~~CHEM 2H3 – Introductory Inorganic Chemistry: Structure and Bonding~~
- ~~CHEM 4B3 – Bio-Inorganic Chemistry~~
- ~~CHEM 4OA3 – Natural Products~~
- ~~CHEMBIO 3OA3 – Bio-Organic Chemistry~~
- ~~CHEMBIO 3P03 – Biomolecular Interactions~~
- ~~CHEMBIO 4A03 – Bio-Analytical Chemistry and Assay Development~~
- ~~CHEMBIO 4IB3 – Bio-Inorganic Chemistry~~
- ~~CHEMBIO 4OA3 – Natural Products~~
- ~~CHEMBIO 4OB3 – Medicinal Chemistry: Drug Design and Development~~
- ~~EARTHSC 4EA3 – Environmental Assessment~~
- ~~ENVIRSC 3B03 – Global Change, Ecosystems, and the Earth System~~
- ~~ENVIRSC 4EA3 – Environmental Assessment~~
- ~~HTHSCI 2G03 – Epidemiology~~
- ~~HTHSCI 3I03 – Introductory Immunology~~
- ~~HTHSCI 3K03 – Introductory Virology~~
- ~~HTHSCI 4H3 – Advanced Concepts in Immunology~~
- ~~HTHSCI 4J03 – Immunological Principles In Practice~~
- ~~STATS 2D03 – Introduction to Probability~~

Requirements

129 units total (Levels I to IV), of which no more than 48 units may be Level I

Level I: 30 Units

30 units

Completed prior to admission to the program

Level II: 30 Units

30 units

- ~~Completion of any Level II program including courses as outlined in Admission statement~~

- ~~_____ (See Admission above.)~~

Level III

Consists of academic studies (Fall and Winter Terms) and Co-op Work Term (Spring/Summer Term)

Fall and Winter Terms: 30 units:

0-3 units

- ~~_____ BIOCHEM 3G03 Proteins and Nucleic Acids~~

~~(See Program Note 7 above.)~~

3-6 units from

- ~~_____ Course List~~

9 units

- ~~_____ BIOLOGY 3P03 Cell Physiology~~
- ~~_____ BIOLOGY 3U03 Animal Physiology Homeostasis~~
- ~~_____ BIOLOGY 3UU3 Animal Physiology Regulatory Systems~~

12 units

- ~~_____ PHARMAC 3A06 A/B Introduction to Pharmacology~~
- ~~_____ PHARMAC 3B06 A/B Methods in Pharmacology~~

3 units

- ~~_____ Electives~~

2 courses

- ~~_____ SCIENCE 2C00 Skills for Career Success in Science (if not already completed)~~
- ~~_____ SCIENCE 3C00 Advanced Job Search Skills For Science Co-op Students~~

Spring/Summer Term:

Work Term

1 course

- ~~_____ SCIENCE 3WW0 Science Co-op Work Term~~

Level IV

Consists of academic studies (Fall Term), Co-op Work Term (Winter Term), and completion of senior thesis (Spring/Summer Term)

Fall Term: 15 units:

6 units

- ~~_____ PHARMAC 4A03 Receptor Drug Interactions~~
- ~~_____ PHARMAC 4C03 Principles of Toxicology~~

0-3 units

- ~~_____ STATS 2B03 Statistical Methods for Science~~

6 units from

- ~~_____ Course List~~

0-3 units

- ~~_____ Electives~~

Winter Term:

Work Term

1 course

- ~~_____ SCIENCE 4WW0 Science Co-op Work Term~~

Spring/Summer Term: 9 units:

9 units

- ~~_____ PHARMAC 4F09 Senior Thesis~~

(See *Program Note 2* above.)

~~Level V~~

~~Consists of Co-op Work Term (Fall Term) and academic studies (Winter Term)~~

~~Fall Term:~~

~~Work Term~~

~~1 course~~

- ~~• SCIENCE 5WW0 – Science Co-op Work Term~~

~~Winter Term: 15 units:~~

~~6 units from~~

- ~~• HTHSCI 3TA3~~
- ~~• PHARMAC 4AA3 – Advanced Topics in Pharmacology~~
- ~~• PHARMAC 4D03 – Drug Design~~
- ~~• PHARMAC 4E03 – Social Pharmacology~~

~~3 units from~~

- ~~• Course List~~

~~6 units~~

- ~~• Electives~~

~~Co-op Program Chart~~

	FALL TERM (September to December)	WINTER TERM (January to April)	SPRING/SUMMER TERM (May to August)
Level III	15 units from Academic Level III + SCIENCE 2C00 (if not completed) and SCIENCE 3C00	15 units from Academic Level III	Work Term SCIENCE 3WW0
Level IV	15 units from Academic Level IV	Work Term SCIENCE 4WW0	Senior Thesis
Level V	Work Term SCIENCE 5WW0	15 units from Academic Level IV	-

Justification:

Effective, September 2018, the Biology and Pharmacology program will be administered by the Faculty of Health Sciences. While the curriculum will not change, the degree will be amended to the Hons B.H.Sc. Current Level 2 students, interested in applying to the program, will be directed to the Faculty of Health Sciences section of the Calendar for admission and program requirements. Currently enrolled students will be given the option of remaining in the Faculty of Science and completing the Hons.B.Sc. degree or transferring to Health Sciences to obtain the Hons.B.H.Sc degree.

Faculty of Health Sciences section of the Calendar:

CHANGES TO EXISTING PROGRAMS:

Honours Biology and Pharmacology Co-op (B.H.Sc.)

Admission

Enrolment in this program is limited. Selection is based on academic and other achievement and an interview but requires, as a minimum, submission of the on-line application by the stated deadline, completion of any Level II program with a Grade Point Average of at least 5.0 and completion of the following courses:

3 units

- BIOLOGY 2A03 - Integrative Physiology of Animals

3 units from

- BIOLOGY 2C03 - Genetics
- MOLBIOL 2C03 - Genetics

6 units

- CHEM 2OA3 - Organic Chemistry I
- CHEM 2OB3 - Organic Chemistry II

6 units from

- BIOLOGY 2B03 - Cell Biology
- BIOLOGY 2D03 - Plant Biodiversity and Biotechnology
- BIOLOGY 2EE3 - Introduction to Microbiology and Biotechnology
- BIOLOGY 2F03 - Fundamental and Applied Ecology
- CHEMBIO 2A03 - Introduction to Bio-Analytical Chemistry
- CHEMBIO 2P03 - Applications of Physical Chemistry

3 units from

- PHYSICS 1A03 - Introductory Physics
- PHYSICS 1C03 - Physics for the Chemical and Physical Sciences

1 course

- SCIENCE 2C00 - Skills for Career Success in Science

Note

Information about this program and the selection procedure can be obtained from Science Career and Cooperative Education and the Program Director.

Program Notes

1. This is a five-level (year) co-op program, three terms of which must be spent in work related to biology or pharmacology placements.
2. A senior thesis, PHARMAC 4T12, will be completed in Level V, Fall Term. Work terms must be completed in Level III, Spring/Summer Term, Level IV, Fall Term and Level IV, Spring/Summer Term.
3. PHARMAC 3A06 A/B, 3B06 A/B, 4A03, 4AA3, 4C03, 4D03 and 4E03 will use a self-directed problem-based learning approach.
4. Students must be registered full-time and take a full academic workload as prescribed by Level and Term.
5. Students are required to complete SCIENCE 2C00 and SCIENCE 3C00 before the first work placement and are strongly recommended to complete SCIENCE 2C00 in Level II.
6. Students should seek academic advising for this program in the Biology and Pharmacology program office, HSC 3N4A-3N49.

7. If BIOCHEM 2B03 and 2BB3 have not been completed at the time of admission, BIOCHEM 3G03 must be completed in Level III. Students with credit in BIOCHEM 2B03 and 2BB3 are not required to complete further Biochemistry courses.

Course List

- BIOCHEM 3D03 - Metabolism and Regulation
- BIOCHEM 3H03 - Clinical Biochemistry
- BIOCHEM 4E03 - Gene Regulation in Stem Cells and Development
- BIOCHEM 4M03 - Cellular and Integrated Metabolism
- BIOCHEM 4N03 - Molecular Membrane Biology
- all Levels III and IV Biology and Molecular Biology courses
- CHEM 2I13 - Introductory Inorganic Chemistry: Structure and Bonding
- CHEM 4IB3 - Bio-Inorganic Chemistry
- CHEM 4OA3 - Natural Products
- CHEMBIO 3OA3 - Bio-Organic Chemistry
- CHEMBIO 3P03 - Biomolecular Interactions
- CHEMBIO 4A03 - Bio-Analytical Chemistry and Assay Development
- CHEMBIO 4IB3 - Bio-Inorganic Chemistry
- CHEMBIO 4OA3 - Natural Products
- CHEMBIO 4OB3 - Medicinal Chemistry: Drug Design and Development
- EARTHSC 4EA3 - Environmental Assessment
- ENVIRSC 3B03 - Global Change, Ecosystems, and the Earth System
- ENVIRSC 4EA3 - Environmental Assessment
- HTHSCI 2G03 - Epidemiology
- HTHSCI 3I03 - Introductory Immunology
- HTHSCI 3K03 - Introductory Virology
- HTHSCI 4I13 - Advanced Concepts in Immunology
- HTHSCI 4J03 - Immunological Principles In Practice
- STATS 2D03 - Introduction to Probability

Requirements

129 units total (Levels I to IV), of which no more than 48 units may be Level I

Level I: 30 Units

30 units

Completed prior to admission to the program

Level II: 30 Units

30 units

- Completion of any Level II program including courses as outlined in Admission statement
- (See *Admission* above.)

Level III

Consists of academic studies (Fall and Winter Terms) and Co-op Work Term (Spring/Summer Term)

Fall and Winter Terms: **30** units:

0-3 units

- BIOCHEM 3G03 - Proteins and Nucleic Acids

(See *Program Note 7* above.)

6-9 units from

- *Course List*

6 units

- BIOLOGY 3P03 - Cell Physiology
- BIOLOGY 3UU3 - Animal Physiology - Regulatory Systems

12 units

- PHARMAC 3A06 A/B - Introduction to Pharmacology
- PHARMAC 3B06 A/B - Methods in Pharmacology

3 units

- Electives

2 courses

- SCIENCE 2C00 - Skills for Career Success in Science (if not already completed)
- SCIENCE 3C00 - Advanced Job Search Skills For Science Co-op Students

Spring/Summer Term:

Work Term

1 course

- SCIENCE 3WW0 - Science Co-op Work Term

Level IV

Consists of Co-op Work Term (Fall Term), academic studies (Winter Term), and Co-op Work Term (Spring/Summer Term)

Fall Term:

Work Term

1 course

- SCIENCE 4WW0 – Science Co-op Work Term

Winter Term: 15 units:

6 units

- PHARMAC 4A03 - Receptor-Drug Interactions
- PHARMAC 4C03 - Principles of Toxicology

0-3 units

- STATS 2B03 - Statistical Methods for Science

6 units from

- *Course List*

0-3 units

- Electives

Spring/Summer Term:

Work Term

1 course

- SCIENCE 5WW0 - Science Co-op Work Term

Level V

Consists of completion of senior thesis (Fall Term) and academic studies (Winter Term)

Fall Term: 9 units:

9 units

- PHARMAC 4F09 - Senior Thesis

(See Program Note 2 above.)

Winter Term: 15 units:

6 units from

- HTHSCI 3TA3
- PHARMAC 4AA3 - Advanced Topics in Pharmacology
- PHARMAC 4D03 - Drug Design
- PHARMAC 4E03 - Social Pharmacology

3 units from

- *Course List*

6 units

- *Electives*

Co-op Program Chart

	FALL TERM (September to December)	WINTER TERM (January to April)	SPRING/SUMMER TERM (May to August)
Level III	15 units from Academic Level III + SCIENCE 2C00 (if not completed) and SCIENCE 3C00	15 units from Academic Level III	Work Term SCIENCE 3WW0
Level IV	Work Term SCIENCE 4WW0	15 units from Academic Level IV	Work Term SCIENCE 5WW0
Level V	Senior Thesis	15 units from Academic Level IV	

Justification:

Effective, September 2018, the Biology and Pharmacology program will be administered by the Faculty of Health Sciences. While the curriculum will not change substantively, the degree will be amended to the Hons B.H.Sc. Current Level 2 students, interested in applying to the program, will be directed to the Faculty of Health Sciences section of the Calendar for admission and program requirements. Currently enrolled students will be given the option of remaining in the Faculty of Science and completing the Hons.B.Sc. degree or transferring to Health Sciences to obtain the Hons.B.H.Sc degree.

Pharmacology

Courses in Pharmacology are administered by the Honours Biology & Pharmacology Co-op Program, Faculty of Health Sciences, HSC 3N4A-3N49. Ext. 22590

<http://www.sciencebiopharm.mcmaster.ca/biopharm>

These courses are available only to those students registered in Honours Biology and Pharmacology.

Note

PHARMAC 3A06 A/B, 3B06 A/B, 4A03, 4AA3, 4C03, 4D03 and 4E03 will be based on self-directed problem based learning.

Courses

PHARMAC 3A06 A/B - Introduction to Pharmacology

6 unit(s)

Principles of pharmacodynamics, principles of pharmacokinetics. Drugs acting on the CNS, female reproductive system, autonomic nervous system and respiratory system. Antimicrobials.

One tutorial (three hours); two terms

Prerequisite(s): Registration in the Honours Biology and Pharmacology Co-op (B.H.Sc.) program

PHARMAC 3B06 A/B - Methods in Pharmacology

6 unit(s)

Experimental methods for the study of drugs in vitro. Interpretation and communication of experimental data. Design and conduct of a Discovery Project.

One lab (three hours); two terms

Prerequisite(s): Credit or registration in PHARMAC 3A06 A/B

PHARMAC 4A03 - Receptor-Drug Interactions

3 unit(s)

Receptor classification, receptor theory, stimulus response coupling, second messengers.

One tutorial (three hours); one term

Prerequisite(s): PHARMAC 3A06 A/B

PHARMAC 4AA3 - Advanced Topics in Pharmacology

3 unit(s)

New developments in pharmacology, with an emphasis on mechanisms of drug action.

One tutorial (three hours); one term

Prerequisite(s): PHARMAC 4A03

PHARMAC 4C03 - Principles of Toxicology

3 unit(s)

General principles of toxicology, adverse effects of selected agents on humans and other organisms.

One tutorial (three hours); one term

Prerequisite(s): PHARMAC 3A06 A/B

PHARMAC 4D03 - Drug Design

3 unit(s)

Principles of drug design based on drug transport, metabolism and selectivity of action at the target sites with emphasis on quantitative structure-activity relationships.

One tutorial (three hours); one term

Prerequisite(s): PHARMAC 3A06 A/B, 4A03

PHARMAC 4E03 - Social Pharmacology

3 unit(s)

Epidemiological analysis of drug use in humans; adverse drug reactions; legal and economic aspects of drug utilization, prescribing patterns in national and international contexts.

One tutorial (three hours); one term

Prerequisite(s): PHARMAC 3A06 A/B

PHARMAC 4F09 - Senior Thesis

9 unit(s)

A thesis based upon a research project carried out under the direction of a supervisor approved by the Committee of Instruction.

Prerequisite(s): PHARMAC 3A06 A/B

Not open to students with credit or registration in any Level IV department- or program-based thesis or independent study/project course.

This course will last be offered in 2019-20.

PHARMAC 4T12 - Senior Thesis

12 unit(s)

A thesis based upon a research project carried out under the direction of a supervisor approved by the Committee of Instruction.

Prerequisite(s): PHARMAC 3A06 A/B

Not open to students with credit or registration in any Level IV department- or program-based thesis or independent study/project course.

Justification:

Effective, September 2018, the Biology and Pharmacology program and all PHARMAC offerings will be administered by the Faculty of Health Sciences.

FACULTY OF HEALTH SCIENCES
2018-2019 UNDERGRADUATE CURRICULUM REVISIONS

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BACHELOR OF HEALTH SCIENCES (HONOURS) PROGRAM

CHANGES TO EXISTING COURSES:

HTHSCI 3T03 - Inquiry into Work, Self and Purpose

3 unit(s)

This course will explore ideas of work, career/life design and personal purpose. Students will undertake self-assessment activities, group projects and personal reflection with a view to integrating a critical appreciation of course content into their personal decision making.

Three hours; one term

Prerequisite(s): HTHSCI 2D06 A/B, 2E03 or enrolment in Level III or above of the B.H.Sc. (Honours) Program or the B.H.Sc.(Honours) Specializations Registration in Level III or above.

Rationale: To open the course for students outside of BHSc (Honours) in Level 3 or above.

FACULTY OF ENGINEERING

UNDERGRADUATE CURRICULUM REPORT

TO UNDERGRADUATE COUNCIL

ADDENDUM

FOR THE 2018-19 CALENDAR

January 16

**FACULTY OF ENGINEERING
REPORT TO SENATE
SUMMARY OF MAJOR CURRICULUM CHANGES FOR 2018-19**

This report highlights substantive changes being proposed. For a complete review of all changes, please refer to the Faculty of Engineering Curriculum Report for changes to the 2018-19 Undergraduate Calendar, found at:
<https://macdrive.mcmaster.ca/d/b1797fb597/>

NEW PROGRAMS

None

PROGRAM CLOSURES

None

MAJOR REVISIONS

New Minor in Innovation offered jointly with DeGroote School of Business

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**FACULTY OF ENGINEERING
REPORT TO UNDERGRADUATE COUNCIL
SUMMARY OF CURRICULUM CHANGES FOR 2018-19**

This report highlights substantive changes being proposed. For a complete review of all changes, please refer to the Faculty of Engineering Curriculum Report for changes to the 2017-18 Undergraduate Calendar, found at:
<https://macdrive.mcmaster.ca/d/b1797fb597/>

FACULTY OF ENGINEERING (General)

- Minor in Innovation
- Seven new courses

Engineering Faculty courses

- One course description change

ENGINEERING AND SOCIETY

- Five programs changes

FACULTY OF ENGINEERING (GENERAL)

***Rationale:** This minor is intended to nurture the innovation culture within our student body. The program is aimed at students who wish to become innovators as well as those who wish to develop a level of innovation literacy.*

MINOR IN INNOVATION

The minor in innovation is a partnership between the Faculties of Engineering and Business and is intended for students from all Faculties who wish to learn more about innovation and develop a level of innovation literacy, as well as those who are themselves innovators and wish to develop skills to create their own enterprise. To meet these varied needs, the minor includes a wide range of courses in innovation and may be taken as a course only option, or may include a practicum.

REQUIREMENTS

24 units total

6 units

- INNOVATE 1X03 - The World of Entrepreneurship
- INNOVATE 2X03 - Lean Startup

6 units

- INNOVATE 3X03 – Persuasion, Pitching Skills and Marketing
- INNOVATE 3Z03 – From Founder to CEO
- INNOVATE 2Z03 – Sprint Methodologies

12 units

- INNOVATE 3EX3 –Experiential Learning in Innovation
- INNOVATE 4EX6 – Founders Startup
- COMMERCE 2AB3 – Managerial Accounting
- COMMERCE 3MA3 – Marketing Research
- COMMERCE 3S03 – Management Skills
- COMMERCE 4AK3 – Accounting Information for Decision Making
- COMMERCE 4BB3 – Recruitment and Selection
- COMMERCE 4BK3 – Strategic Management of Technology
- COMMERCE 4BN3 – Leadership Development
- COMMERCE 4FO3 – Small Business/Entrepreneurial Finance
- COMMERCE 4FV3 – Venture Capital
- COMMERCE 4FW3 – Finance for Entrepreneurs
- COMMERCE 4KH3 – Strategies for Electronic and Mobile Business
- COMMERCE 4KF3 – Project Management
- COMMERCE4KI3 – Implementation of IS for Small and Medium Size Enterprises
- COMMERCE 4MC3 – New Product Marketing
- COMMERCE 4ME3 – Sales Management
- COMMERCE 4PA3 – Business Policy: Strategic Management
- COMMERCE 4SD3 – Business Law
- COMMERCE 4SE3 – Entrepreneurship
- COMP SCI 4EN3 – Software Entrepreneurship
- ENGMGT 4A03 – Innovation Driven Project Development and Management
- HISTORY 2EE3 – Science and Technology in World History

- HISTORY 3UA3 - The History of the Future
- HTH SCI 4ID3 – Innovation by Design
- SUSTAIN 3S03 – Implementing Sustainable Change

NEW COURSES:

Courses offered in 2018-19

1. INNOVATE 1X03 - The World of Entrepreneurship *(offered 2 times once in each term)*

Course description: Fundamentals of entrepreneurship via a series of guest lectures by prominent entrepreneurs. Case studies will be used to analyse strategies and methods for growing a scalable business.

One lecture (three hours), one term

Prerequisite: open

Enrolment: 150 in Term 1,
150 in Term 2 (total 300)

2. INNOVATE 2X03 - Lean Startup

Course description: Introduction to lean methodologies of building a successful start-up business, including market validation, analysing market potential for start-up ideas, establishing a business model and “failing fast”. Students will learn how to test business ideas and hypotheses with customers and stakeholders.

Three lectures, one term

Prerequisite: Open

Enrolment: 200 in Term 2

Courses offered in 2019-20

1. INNOVATE 2Z03 – Sprint Methodologies

Course description: Rapid prototyping, testing and iteration of ideas with customers using design sprint methodologies. Students will also learn about agile development and pathways from idea to market.

Three lectures, one term

Prerequisite: Registration in Level II or above of any program

Enrolment: 100, Term ?

2. INNOVATE 3X03 – Persuasion, Pitching Skills and Marketing

Course description: In both individual and group settings, students will explore the theoretical and practical aspects of how to persuasively market and sell their ideas, their vision and their products to target audiences.

Three lectures, one term

Prerequisite: Registration in Level II or above of any program

Enrolment: 100 in Term ?

3. INNOVATE 3Z03 – From Founder to CEO

Course description: Students will learn how a start-up Founder transitions into becoming a CEO to properly manage and grow the company, effectively manage Human Resources and work with a Board of Directors.

One lecture (three hours); one term

Prerequisite: Registration in Level II or above of any program

Enrolment: 200 in Term ?

Courses offered in 2020-21

1. INNOVATE 3EX3 – Experiential Learning in Innovation

Course description: This course will provide students an opportunity to gain direct experience working at an existing start-up company. Course credit will be evaluated based on the maintenance of a comprehensive learning portfolio.

Prerequisite: INNOVATE 1X03, 2X03, 2Z03, and permission of the instructor

Lectures, one term

Grade: Pass/Fail

Enrolment: 50 in Term ?

2. INNOVATE 4EX6 – Founders Startup

Course description: Working with The Forge, McMaster's startup accelerator, students will form teams to develop a new startup venture. Through the application of lean startup and design sprint methodologies, students will rapidly test and iterate product-market fit with customers and refine their business models. Admission to the course will be based on a written application (one application per team) and a successful panel interview. At the end of the course, students will pitch their validated business models and evidence for product-market fit to a panel of Forge entrepreneurs, advisers, and mentors for possible entry into The Forge's Stage II program.

Prerequisite: INNOVATE 1X03, 2X03, 2Z03, and permission of the instructor.

Grade: Pass/Fail

Lectures; both terms.

One term course (6 units in each term)

Enrolment: 30

Offered: Term 1 Fall, Term 2 Winter, Summer Session

COURSE DESCRIPTION CHANGE(S)**ENGINEER 1EE0 - Introduction to the Engineering Co-op Program**

0 unit(s)

Orientation to Engineering Co-op programs, self-assessment exercises, job and employer research, cover letter and resume writing, interviewing skills and work place professionalism.

~~Five sessions; first or second term~~

Prerequisite(s): Registration in a Co-op program in the Faculty of Engineering

Not open to students in their final level.

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ENGINEERING AND SOCIETY

Rationale: Adjusting the focus elective unit to reflect the already approved curriculum of 18-24 units of focus electives.

Please note: Grey highlights are the original changes that have been submitted and approved. Yellow and green are the new changes.

Materials Engineering and Society, Materials Engineering and Society Co-op (B.Eng.Society)

Level II: ~~31~~34 Units

3 units

- ENGINEER 2MM3 - Electrical Circuits and Power

13 units

- MATLS 2B03 - Introduction to the Thermodynamics of Materials
- MATLS 2D03 - Thermodynamics of Alloys and Phase Diagrams
- MATLS 2H04 A/B - Measurements and Communication
- MATLS 2X03 - Crystalline Structure of Materials

6 units

- MATH 2Z03 - Engineering Mathematics III
- MATH 2ZZ3 - Engineering Mathematics IV

6 units

- ENGSOCTY 2X03 - Inquiry in an Engineering Context I
- ENGSOCTY 2Y03 - Case Studies in History and Technology

~~3~~6 units

- Engineering and Society focus electives

Mechanical Engineering and Society, Mechanical Engineering and Society Co-op (B.Eng.Society)

Requirements

Level II: 37 Units

6 units

- MATH 2Z03 - Engineering Mathematics III
- MATH 2ZZ3 - Engineering Mathematics IV

22 units

- MECHENG 2A03 - Design Communication
- MECHENG 2C04 - Mechanical Engineering Design I
- MECHENG 2D03 - Mechanical Engineering Design Elements
- MECHENG 2P04 - Statics and Mechanics of Materials
- MECHENG 2Q04 - Engineering Mechanics: Kinetics and Dynamics
- MECHENG 2W04 - Thermodynamics

6 units

- ENGSOCTY 2X03 - Inquiry in an Engineering Context I
- ENGSOCTY 2Y03 - Case Studies in History and Technology

3 units

- Engineering and Society focus electives

Level III: ~~35~~38 Units

6 units

- ENGINEER 2B03 - Engineering Economics
- ENGINEER 2MM3 - Electrical Circuits and Power

3 units

- MATH 3I03 - Partial Differential Equations for Engineering

20 units

- MECHENG 2B03 - Mechanical Engineering Measurements
- MECHENG 3A03 - Engineering Mechanics
- MECHENG 3C03 - Manufacturing Engineering
- MECHENG 3F04 - Modelling and Numerical Solutions
- MECHENG 3O04 - Fluid Mechanics
- MECHENG 3R03 - Heat Transfer

3 units

- ENGSOCTY 3Y03 - Technology and Society

~~3~~6 units

- Engineering and Society focus electives

Level IV: ~~35~~38 Units

3 units

- MATLS 3M03 - Mechanical Behaviour of Materials

3 units

- STATS 3Y03 - Probability and Statistics for Engineering

17 units

- MECHENG 3E05 - Mechanical Engineering Design II
- MECHENG 3M03 A/B - Composite Laboratory
- MECHENG 4Q03 - Mechanical Vibrations
- MECHENG 4R03 - Control Systems
- MECHENG 4V03 - Thermo-Fluids Systems Design and Analysis

3 units

- Program option courses or approved technical electives
- (See *Note 1* above.)

6 units

- ENGSOCTY 3X03 - Inquiry in an Engineering Context II
- ENGSOCTY 3Z03 - Preventive Engineering: Environmental Perspectives

~~3~~6 units

- Engineering and Society focus electives

Level V: 30-37 Units

9 units

- MECHENG 4M06 A/B - Project
- MECHENG 4P03 A/B - Composite Laboratory

12-13 units

- Program option courses or approved technical electives
- (See *Note 1* above.)

Society:

3 units

- ENGSOCTY 4X03 A/B - Inquiry in an Engineering Context III

3 units

- ENGINEER 4ID3 - Addressing Social Problems Through Business, Engineering and the Social Sciences
- ENGSOCTY 4Y03 - Society Capstone Design

3-9 units

- Engineering and Society focus electives

Mechatronics Engineering and Society, Mechatronics Engineering and Society Co-op (B.Eng.Society)

Level V: ~~30-33-36~~ Units

6 units

- MECHTRON 4TB6 A/B - Mechatronics Capstone Design Project

6 units

- approved technical electives from List A (Contact the Department of Computing and Software.)

6 units

- approved technical electives from List B (Contact the Department of Computing and Software.)

Society:

3 units

- ENGSOCTY 4X03 A/B - Inquiry in an Engineering Context III

3 units

- ENGINEER 4ID3 - Addressing Social Problems Through Business, Engineering and the Social Sciences OR
- ENGSOCTY 4Y03 - Society Capstone Design

~~6-9-12~~ units

- Engineering and Society focus electives

Level V: ~~30-33-36~~ Units (effective 2021–2022)

6 units

- MECHTRON 4TB6 A/B - Mechatronics Capstone Design Project

3 units

- approved technical electives from List A (Contact the Department of Computing and Software.)

6 units

- approved technical electives from List B (Contact the Department of Computing and Software.)

3 units

- ENGSOCTY 4X03 A/B - Inquiry in an Engineering Context III

3 units

- ENGINEER 4ID3 - Addressing Social Problems Through Business, Engineering and the Social Sciences OR
- ENGSOCTY 4Y03 - Society Capstone Design

~~12–15~~ ~~9-12~~ units

- Engineering and Society focus electives

Software Engineering and Society, Software Engineering and Society Co-op (B.Eng.Society)

Level V: ~~36~~-39 Units

18 units

- SFWRENG 4C03 - Computer Networks and Security
- SFWRENG 4E03 - Performance Analysis of Computer Systems
- SFWRENG 4G06 A/B - Software Design IV - Capstone Design Project
- SFWRENG 4HC3 - Human Computer Interfaces
- SFWRENG 4X03 - Scientific Computation

3 units

- STATS 3Y03 - Probability and Statistics for Engineering

3 units

- approved technical electives from List D (contact the Department of Computing and Software)

3 units

- ENGSOCTY 4X03 A/B - Inquiry in an Engineering Context III

3 units

- ENGINEER 4ID3 - Addressing Social Problems Through Business, Engineering and the Social Sciences OR
- ENGSOCTY 4Y03 - Society Capstone Design

6-9 units

- Engineering and Society focus electives

Electrical Engineering and Society, Electrical Engineering and Society Co-op (B.Eng.Society)

Level II: 39 Units

12 units

- COMPENG 2DI4 - Logic Design
- COMPENG 2SH4 - Principles of Programming
- COMPENG 2SI4 - Data Structures, Algorithms and Discrete Mathematics

9 units

- ELECENG 2CI5 - Introduction to Electrical Engineering
- ELECENG 2CJ4 - Circuits and Systems

6 units

- MATH 2Z03 - Engineering Mathematics III
- MATH 2ZZ3 - Engineering Mathematics IV

6 units

- ENGSOCTY 2X03 - Inquiry in an Engineering Context I
- ENGSOCTY 2Y03 - Case Studies in History and Technology

3 units

- Engineering and Society focus electives

3 units

- STATS 3Y03 - Probability and Statistics for Engineering

Level III: ~~30-33-36~~ Units

7 units

- COMPENG 2DP4 - Microprocessor Systems
- COMPENG 3SK3 - Computer-Aided Engineering

14 units

- ELECENG 2EI5 - Electronic Devices and Circuits I
- ELECENG 2FH3 - Electromagnetics I
- ELECENG 3TP3 - Signal & Systems
- ELECENG 3TQ3 - Advanced Probability and Random Processes

6 units

- ENGSOCTY 3Y03 - Technology and Society
- ENGSOCTY 3Z03 - Preventive Engineering: Environmental Perspectives

~~3-6-9~~ units

- Engineering and Society focus electives

Level IV: ~~32-35~~ Units

20 units

- ELECENG 3CL4 - Introduction to Control Systems
- ELECENG 3EJ4 - Electronic Devices and Circuits II
- ELECENG 3FK4 - Electromagnetics II
- ELECENG 3PI4 - Energy Conversion
- ELECENG 3TR4 - Communication Systems

3 units

- ENGINEER 2B03 - Engineering Economics

3 units

- ENGSOCY 3X03 - Inquiry in an Engineering Context II

6-9 units

- Engineering and Society focus electives

Level IV: ~~33-35~~ 35 Units (Effective 2018-19)

20 units

- ELECENG 3CL4 - Introduction to Control Systems
- ELECENG 3EJ4 - Electronic Devices and Circuits II
- ELECENG 3FK4 - Electromagnetics II
- ELECENG 3PI4 - Energy Conversion
- ELECENG 3TR4 - Communication Systems

3 units

- ENGINEER 2B03 - Engineering Economics

3 units

- ENGSOCY 3X03 - Inquiry in an Engineering Context II

6-9 units

- Engineering and Society focus electives

3-4 units

- approved Level III or IV technical electives of the Faculty of Engineering (excluding ELECENG and COMPENG)

Chemical Engineering and Society, Chemical Engineering and Society Co-op, (B.Eng.Society)

Requirements

Level IV: ~~33-37~~ 35 Units (2019 onwards)(~~2018-2019 only~~)

8 units

- CHEMENG 3E04 - Process Model Formulation and Solution
- ~~CHEMENG 3G04 - Simulation, Modelling and Problem Solving~~
- CHEMENG 3P04 - Process Control

9 units

from

- CHEMENG 3BK3 - Bio-Reaction Engineering
- CHEMENG 3BM3 - Bioseparations Engineering
- CHEMENG 4A03 - Energy Systems Engineering
- CHEMENG 4B03 - Polymer Reaction Engineering
- CHEMENG 4C03 - Statistics for Engineers
- CHEMENG 4K03 - Reactor Design for Heterogeneous Systems
- CHEMENG 4M03 - Industrial Separations Processes
- CHEMENG 4T03 - Applications of Chemical Engineering in Medicine
- CHEMENG 4X03 - Polymer Processing

- CHEMENG 4Z03 - Interfacial Engineering
- ENGINEER 4EX3 A/B - Experiential Engineering Design

Note: Only one course from List B (Chem Eng Sci/Math courses) can be taken over the course of the program

6 units

from

- BIOCHEM 2EE3 - Metabolism and Physiological Chemistry
- CHEM 3I03 - Industrial Chemistry
- CHEMBIO 2A03 - Introduction to Bio-Analytical Chemistry
- CHEMENG 3Q03 - Introduction to Polymer Science

6 units

- ENGSOCTY 3Z03 - Preventive Engineering: Environmental Perspectives
- ENGSOCTY 3X03 - Inquiry in an Engineering Context II

~~3~~-6 units

- Engineering and Society focus electives

Level IV: 36 Units (2018-2019 only)

12 units

- CHEMENG 3E04 - Process Model Formulation and Solution
- CHEMENG 3G04 - Simulation, Modelling and Problem Solving
- CHEMENG 3P04 - Process Control

9 units

from

- CHEMENG 3BK3 - Bio-Reaction Engineering
- CHEMENG 3BM3 - Bioseparations Engineering
- CHEMENG 4A03 - Energy Systems Engineering
- CHEMENG 4B03 - Polymer Reaction Engineering
- CHEMENG 4C03 - Statistics for Engineers
- CHEMENG 4K03 - Reactor Design for Heterogeneous Systems
- CHEMENG 4M03 - Industrial Separations Processes
- CHEMENG 4T03 - Applications of Chemical Engineering in Medicine
- CHEMENG 4X03 - Polymer Processing
- CHEMENG 4Z03 - Interfacial Engineering
- ENGINEER 4EX3 A/B - Experiential Engineering Design

Note: Only one course from List B (Chem Eng Sci/Math courses) can be taken over the course of the program

6 units

from

- BIOCHEM 2EE3 - Metabolism and Physiological Chemistry
- CHEM 3I03 - Industrial Chemistry
- CHEMBIO 2A03 - Introduction to Bio-Analytical Chemistry
- CHEMENG 3Q03 - Introduction to Polymer Science

3 units

- ENGSOCTY 3Z03 - Preventive Engineering: Environmental Perspectives

~~3~~-6 units

Engineering and Society focus electives



FACULTY OF BUSINESS

**UNDERGRADUATE CURRICULUM REPORT
TO UNDERGRADUATE COUNCIL**

FOR THE 2018-19 CALENDAR

JANUARY 2018 – ADDENDUM

**APPROVED BY THE FACULTY OF
BUSINESS**

**FACULTY OF BUSINESS
REPORT TO SENATE
SUMMARY OF MAJOR CURRICULUM CHANGES FOR 2018-19**

This report highlights substantive changes being proposed to the undergraduate curriculum. For a complete review of all changes, please refer to the Faculty of Business Curriculum Report for Changes to the 2017-18 Undergraduate Calendar located electronically at:

<https://ug.degrootemcmaster.ca/curriculum-report/>

NEW PROGRAMS

N/A

MAJOR MODIFICATIONS

New Minor in Innovation – Partnership between the Faculties of Engineering and Business (see attached)

PROGRAM CLOSURES

N/A

FACULTY OF BUSINESS REPORT TO UNDERGRADUATE COUNCIL SUMMARY OF CURRICULUM CHANGES FOR 2018-19

This report highlights substantive changes being proposed to the undergraduate curriculum. For a complete review of all changes, please refer to the Faculty of Business Curriculum Report for Changes to the 2018-19 Undergraduate Calendar located electronically at:

<https://ug.degroote.mcmaster.ca/curriculum-report/>

NEW MINOR

Minor in Innovation – Partnership between the Faculties of Engineering and Business

REVISIONS TO EXISTING MINOR

Specialized Minor in Commerce for Students Completing a Single Honours B.A. in Humanities

NEW COURSES

3 new courses (Principles of Leadership – Commerce 4BP3, Introduction to FinTech – Commerce 4FY3 & Marketing Analytics - Commerce 4MI3)

REVISIONS TO EXISTING COURSES

10 new Integrated Business and Humanities courses have been revised to include the required lecture and tutorial course hours.

1 Course Title Change – Leadership (Commerce 4BN3)

COURSE DELETIONS

None

NEW MINOR

Minor in Innovation

The minor in innovation is a partnership between the Faculties of Engineering and Business and is intended for students from all Faculties who wish to learn more about innovation and develop a level of innovation literacy, as well as those who are themselves innovators and wish to develop skills to create their own enterprise. To meet these varied needs, the minor includes a wide range of courses in innovation and may be taken as a course only option, or may include a practicum.

REQUIREMENTS

24 units total

6 units

- INNOVATE 1X03 - The World of Entrepreneurship
- INNOVATE 2X03 - Lean Startup

6 units

- INNOVATE 3X03 – Persuasion, Pitching Skills and Marketing
- INNOVATE 3Z03 – From Founder to CEO
- INNOVATE 2Z03 – Sprint Methodologies

12 units

- INNOVATE 3EX3 – Experiential Learning in Innovation
- INNOVATE 4EX6 – Founders Startup
- COMMERCE 2AB3 – Managerial Accounting
- COMMERCE 3MA3 – Marketing Research
- COMMERCE 3S03 – Management Skills
- COMMERCE 4AK3 – Accounting Information for Decision Making
- COMMERCE 4BB3 – Recruitment and Selection
- COMMERCE 4BK3 – Strategic Management of Technology
- COMMERCE 4BN3 – Leadership Development
- COMMERCE 4FO3 – Small Business/Entrepreneurial Finance
- COMMERCE 4FV3 – Venture Capital
- COMMERCE 4FW3 – Finance for Entrepreneurs
- COMMERCE 4KH3 – Strategies for Electronic and Mobile Business
- COMMERCE 4KF3 – Project Management
- COMMERCE 4KI3 – Implementation of IS for Small and Medium Size Enterprises
- COMMERCE 4MC3 – New Product Marketing
- COMMERCE 4ME3 – Sales Management
- COMMERCE 4PA3 – Business Policy: Strategic Management
- COMMERCE 4SD3 – Business Law
- COMMERCE 4SE3 – Entrepreneurship
- COMP SCI 4EN3 – Software Entrepreneurship
- ENGMGT 4A03 – Innovation Driven Project Development and Management
- HISTORY 2EE3 – Science and Technology in World History
- HISTORY 3UA3 - The History of the Future
- HTH SCI 4ID3 – Innovation by Design
- SUSTAIN 3S03 – Implementing Sustainable Change

Rationale: This minor is intended to nurture the innovation culture within our student body. The program is aimed at students who wish to become innovators as well as those who wish to develop a level of innovation literacy.

*Note: The courses listed below are not Business courses, it is for information purposes only.

Courses offered in 2018-19

1. INNOVATE 1X03 - The World of Entrepreneurship (offered 2 times once in each term)

Course description: Fundamentals of entrepreneurship via a series of guest lectures by prominent entrepreneurs. Case studies will be used to analyse strategies and methods for growing a scalable business. One lecture (three hours), one term

Prerequisite: open

Enrolment: 150 in Term 1,
150 in Term 2 (total 300)

2. INNOVATE 2X03 - Lean Startup

Course description: Introduction to lean methodologies of building a successful start-up business, including market validation, analysing market potential for start-up ideas, establishing a business model and “failing fast”. Students will learn how to test business ideas and hypotheses with customers and stakeholders.

Three lectures, one term

Prerequisite: Open

Enrolment: 200 in Term 2

Courses offered in 2019-20

1. INNOVATE 2Z03 – Sprint Methodologies

Course description: Rapid prototyping, testing and iteration of ideas with customers using design sprint methodologies. Students will also learn about agile development and pathways from idea to market.

Three lectures, one term

Prerequisite: Registration in Level II or above of any program

Enrolment: 100, Term ?

2. INNOVATE 3X03 – Persuasion, Pitching Skills and Marketing

Course description: In both individual and group settings, students will explore the theoretical and practical aspects of how to persuasively market and sell their ideas, their vision and their products to target audiences.

Three lectures, one term

Prerequisite: Registration in Level II or above of any program

Enrolment: 100 in Term ?

3. INNOVATE 3Z03 – From Founder to CEO

Course description: Students will learn how a start-up Founder transitions into becoming a CEO to properly manage and grow the company, effectively manage Human Resources and work with a Board of Directors.

One lecture (three hours); one term

Prerequisite: Registration in Level II or above of any program

Enrolment: 200 in Term ?

Courses offered in 2020-21

1. INNOVATE 3EX3 – Experiential Learning in Innovation

Course description: This course will provide students an opportunity to gain direct experience working at an existing start-up company. Course credit will be evaluated based on the maintenance of a comprehensive learning portfolio.

Prerequisite: INNOVATE 1X03, 2X03, 2Z03

Lectures, one term

Grade: Pass/Fail

Enrolment: 50 in Term ?

2. INNOVATE 4EX6 – Founders Startup

Course description: Working with The Forge, McMaster's startup accelerator, students will form teams to develop a new startup venture. Through the application of lean startup and design sprint methodologies, students will rapidly test and iterate product-market fit with customers and refine their business models. Admission to the course will be based on a written application (one application per team) and a successful panel interview. At the end of the course, students will pitch their validated business models and evidence for product-market fit to a panel of Forge entrepreneurs, advisers, and mentors for possible entry into The Forge's Stage II program.

Prerequisite: INNOVATE 1X03, 2X03, 2Z03, permission of instructor.

Grade: Pass/Fail

Lectures; both terms.

One term course (6 units in each term)

Enrolment: 30

Offered: Term 1 Fall, Term 2 Winter, Summer Session

REVISIONS TO EXISTING MINORS

Specialized Minor in Commerce for Students Completing a Single Honours B.A. in Humanities

The Specialized Minor in Commerce for Humanities students is administered by the DeGroote School of Business. A maximum of 30 students will be admitted each year to this Specialized Minor.

Notes

1. For admission, Humanities students (Level 1) must complete an application for admission to the Minor by using the Service Request function in the Student Centre in Mosaic **during the Program/Plan Selection process in April by April 30.**
2. Students must also be admitted to a Single Honours B.A. in one of the following programs: Art History, Classics, Cognitive Science of Language, Communication Studies, English and Cultural Studies, French, History, Justice, Political Philosophy and Law, Linguistics, Multimedia, Philosophy, or Theatre & Film Studies.
3. Students seeking the Specialized Minor in Commerce for Humanities must have completed ECON 1B03 with a grade of at least B-, and one of MATH 1M03 or ECON 1BB3.
4. Students must have a Grade Point Average of at least 6.0 to be considered for entry into the Minor.
5. Students planning to apply to the accelerated MBA program at McMaster are strongly encouraged to consult with MBA Admissions at the Ron Joyce Centre regarding admission requirements. In addition to meeting all other admission criteria students must complete, with a minimum grade of B-, the following courses:

- all three of ECON 1B03, 1BB3, and MATH 1M03;
- all level 2 Commerce courses listed below;
- COMMERCE 3FA3, and 3MC3

Requirements

33 units total

6 units

- COMMERCE 1AA3 - Introductory Financial Accounting
- COMMERCE 1BA3 - Organizational Behaviour

18 units

from

- COMMERCE 2AB3 - Managerial Accounting I
- COMMERCE 2BC3 - Human Resource Management and Labour Relations
- COMMERCE 2FA3 - Introduction to Finance
- COMMERCE 2KA3 - Information Systems in Business
- COMMERCE 2MA3 - Introduction to Marketing
- COMMERCE 2QA3 - Applied Statistics for Business
- COMMERCE 2OC3 - Operations Management
- COMMERCE 3MC3 - Applied Marketing Management
- COMMERCE 3S03 - Management Skills Development

3 units

from

- ~~HUMAN 4BU3 - Applied Arts and Commerce~~
- HUMAN 3LM3 - The Art of Leadership: Mentorship
- or
- ~~HUMAN 4LM3 - Reimagining Leadership~~ HUMAN 3CM3 – Leadership: Cross-Cultural Mentorship Lab

6 units

- Level III or IV Commerce courses

Rationale: Clarification of application timeline and process; inclusion of all single Honours eligible programs; updating of relevant course additions and deletions.

NEW COURSES

Commerce 4BP3 Principles of Leadership

This course reviews the key concepts, approaches, models and theories of leadership. It develops students' understanding of major elements of leadership research and will equip students to critically evaluate the popular writing on leadership and consider their own leadership potential and how to develop it. Fundamental leadership skills will be introduced with opportunities for student self-diagnosis.

Prerequisite(s): COMMERCE 1BA3 (Or 2BA3), 2BC3, 3S03

Rationale: Currently, we have only one elective leadership course in the Commerce program, 4BN3. It provides a valuable, impactful experience to our students emphasizing self-awareness and skill development, consistent with the university's learning portfolio initiatives. It builds on the fundamentals of leadership provided in our prerequisite courses, 1BA3, 2BC3 and 3S03. 4BN3 providing a valuable

learning experience. It has been well-received by those who have taken it. This is a proposal to add a complementary elective course on principles of leadership, that may serve as a foundation for those intending to take 4BN3 and for students who want a more knowledge- and research-based approach.

Commerce 4FY3

Introduction to FinTech

The course provides a broad overview of the financial technology (FinTech) industry. Specifically, it will cover; how financial services have evolved – key players and their roles; existing products, how FinTech has evolved – key players and their innovations; technologies underpinning FinTech innovations, major FinTech innovations and their impact on financial services, regulations governing the financial services industry and how to identify and analyze future trends/opportunities of FinTech.

Prerequisites: COMMERCE 3FA3.

Rationale: *It is proposed that a course on Financial Technology (FinTech) be established. FinTech refers to the use of technology to introduce innovations that make financial services more efficient. FinTech covers many areas of financial services such as electronic payments, peer-to-peer deposits/lending, capital raising, wealth management, insurance, and crypto currencies. It is now the fastest-growing segment of the finance industry, and its importance is expected to be even larger in the future. To be successful in their careers (and also competitive with graduates of other institutions), our students need to have a good basic understanding of the FinTech industry – how it operates and opportunities therein.*

Commerce 4MI3

Marketing Analytics

Marketing departments are increasingly utilizing data routinely collected by their organizations to improve marketing decision making and more effectively allocate resources. This course will familiarize students with tools necessary for converting raw data into valuable consumer insights. The course offers a hands-on, practical approach, giving students the opportunity to become familiar with data analysis software. The course will emphasize both inference and prediction and highlight the trade-offs associated with different marketing analytics methods.

Prerequisites: Registration in any Commerce, Engineering and Management, or Honours Business Informatics program; COMMERCE 2MA3 and COMMERCE 3MA3 for students registered in any Commerce program; COMMERCE 2MA3 for students registered in any Engineering and Management or Honours Business Informatics program.

Rationale: *As marketing data is being generated and collected at rapid rates, developing the capability to understand the data and extract meaningful insights that inform marketing decision making becomes essential and important for firms in many sectors and industries. DSB Commerce graduates and future marketing analysts need to develop competencies i) to collect, clean, organize, manipulate, visualize and present information from marketing data, ii) to make statistical inferences and iii) to make predictive forecasts and classifications based on the available data. These skills can translate into substantial competitive advantages for both marketing analysts and the businesses they consult or work for. A marketing analytics course is also well aligned with the School's Strategic Plan, in focusing on analytics and evidence-based management.*

REVISIONS TO EXISTING COURSES

***10 New IBH Courses were previously put toward to the UGC in December 2017. These 10 new courses have been revised to include the number of lecture and tutorial hours.**

IBH 2AA3

Introduction to Marketing

3 units

This course introduces the conceptual underpinnings and operational facets of marketing with a primarily

consumer (as opposed to an industrial) focus. During this course, students will learn about the 4Ps of marketing: product, price, promotion, and place. **Three hours (lecture).**

Prerequisite: Registration in Level 2 of the Integrated Business and Humanities Program

IBH 2AB3 Information Systems in Management

3 units

This course prepares Integrated Business and Humanities students to leverage information systems effectively. The course focuses on the opportunities and pitfalls provided by information systems, how they are likely to affect the world, and what managers need to know to make effective use of information systems in business and society. **Two hours (lecture); one hour (tutorial).**

Prerequisite: IBH 1AA3 and registration in Level 2 of the Integrated Business and Humanities Program

IBH 2AC3 Talent Management

3 units

This course provides knowledge of the key aspects of identifying, selecting, developing, and managing people in organizations, emphasizing the link between talent management and practices and organizational strategy. Topics include job design and job analysis, staffing, the legal environment, training and development, performance appraisal, compensation, health and safety, and labour relations. **Three hours (lecture).**

Prerequisite: IBH 1BA3 and registration in Level 2 of the Integrated Business and Humanities Program..

IBH 2AD3 Statistical Data Analysis

3 units

Overwhelmed with big data, businesses are looking at ways of analysing this data to better understand their customers and develop innovative business models. Using several programming tools, this course will provide students with skills to build data models and perform common statistical analysis techniques. Topics will include sampling techniques, common distributions, inference and hypothesis testing, regression, analysis of variance, categorical data analysis and nonparametric inference. The course will also address issues related to data security, confidentiality and ethics. **Three hours (lecture); one hour (tutorial).**

Prerequisite: Registration in Level 2 of the Integrated Business and Humanities Program.

IBH 2AE3 Critical Thinking

3 units

Critical thinking essentially distinguishes between the capacity and quality of human thought. That is, it essentially denies that thought is merely the ability to process information and to make judgments with respect to it. Rather, critical thinking attests that there are certain modes of thinking that we can cultivate to clearly and carefully understand, evaluate, and communicate information. This course introduces students to such modes of thought. In order to facilitate such an introduction the course will be guided by four intellectual virtues that critical thinking fundamentally involves: 1) humility (the ability to admit limitations, ignorance, or confusion, etc.), 2) carefulness (the ability to identify and avoid mistakes and errors in reasoning), 3) thoroughness (the ability to think clearly and distinctly, providing sufficient justification for claims), and 4) open-mindedness (the ability judge fairly, empathetically, and with sensitivity to alternative beliefs). Within these guidelines course topics will include the nature, limitations and justifications of knowledge, cognitive errors, formal and informal fallacies of reasoning, the structure of arguments, deductive and inductive reasoning, basic propositional and categorical logic, and socio-cultural criticism. **Three hours (lecture); one hour (tutorial).**

Prerequisite: Registration in Level 2 of the Integrated Business and Humanities Program..

IBH 2BA3 Managerial Accounting

3 units

An introduction to concepts underlying the use of cost accounting information for managerial planning and control and for inventory valuation. The nature and analysis of costs and the usefulness and limitations of accounting data for decision-making, including ethical considerations, will be discussed. Three hours (lecture); one hour (tutorial).

Prerequisite: IBH 1AA3 and registration in Level 2 of the Integrated Business and Humanities Program.

IBH 2BB3 **Introduction to Finance**
3 units

This course provides an overview of financial management and the financial system. The goal is to equip students with the basic understanding of how financial decisions are made. Students will learn fundamental finance concepts and tools, and how they are applied in practice. The course will lay a foundation for more advanced finance courses that students will subsequently take. Topics include time value of money, capital budgeting, risk and return tradeoff, and security valuation. Three hours (lecture).

Prerequisite: IBH 1AA3, ECON 1B03 and registration in Level 2 of the Integrated Business and Humanities Program.

IBH 2BC3 **Operations Management**
3 units

Operations management (OM) is the science and art of creating and delivering goods and services to customers. Basic topics in operations management include goods and service design, facility design, locating facilities, quality management, project planning, supply chain management, lean operating systems, forecasting customer demand, process strategy, and inventory management. These days this field of study is subjected to changes and challenges. Maintaining a sustainable environment while efficiently converting resources into safe and quality outputs, coordinating between operations and other business functions, increasing profitability while providing a safe workplace and honouring stakeholder commitments are a few to mention. These topics will be discussed in this introductory operations management course. Three hours (lecture); one hour (tutorial).

Prerequisite: Registration in Level 2 of the Integrated Business and Humanities Program.

IBH 2BD3 **Moral Issues**
3 units

An introduction to moral philosophy through a consideration of issues in professional ethics (e.g., health care and energy). Topics such as abortion, human experimentation, euthanasia, genetic screening, sustainability and pollution will be investigated. Three hours (lecture); one hour (tutorial).

Prerequisite: Registration in Level 2 of the Integrated Business and Humanities Program.

IBH 2BE3 **Canadian Business History: the Canadian Experience in International Perspective**
3 units

Canadian business history has fallen out of favour among recent historians. While the field was extensively studied in previous decades, it became displaced by the growing popularity of social and cultural history. However, Canadian business history is deeply intertwined with broader questions about the economic, social and political climate of the country. Through examining key themes in business history in the last two centuries, this course will provide a broader perspective on the role and perception of Canadian business and industry in the country's past. It will also question what these lessons can tell us about its present economic state and its potential futures. This course includes discussion sessions which, along with the assignments, are intended to help students develop their critical reading and communication skills. Students do not need a background in economic or business history to succeed in this course. Three hours (lecture); one hour (tutorial).

Prerequisite: Registration in Level 2 of the Integrated Business and Humanities Program.

Global Rationale: Adding the number of course lecture hours and tutorial hours allows students to more accurately plan their schedules. This is a new course being added to the IBH program.

COMMERCE 4BN3 – ~~Leadership~~ Leadership Development

3 unit(s)

This highly participative learning portfolio-based course on Leadership focuses on the potential for personal and professional growth of the student. The course provides an initial understanding of the fundamentals and theories of leadership, and then moves to an appreciation of students' own leadership styles, behaviors, and experiences as well as an understanding of other individuals' leadership styles, behaviors, and experiences. A major objective of the course is to encourage the student to become more reflective and self-aware. Three hours (lecture).

Prerequisite(s): COMMERCE 1BA3 (or 2BA3), 2BC3, 3S03

Rationale: *Currently, we have only one elective leadership course in the Commerce program, 4BN3. It provides a valuable, impactful experience to our students emphasizing self-awareness and skill development, consistent with the university's learning portfolio initiatives. It builds on the fundamentals of leadership provided in our prerequisite courses, 1BA3, 2BC3 and 3SO3. 4BN3 provides a valuable learning experience and has been well-received by those who have taken it. The proposed title changes arises from our proposal to add another course related to leadership, and the need to ensure that the course titles reflect the emphases of these courses. The proposed new elective course is on leadership principles, which may serve as a foundation for those intending to take 4BN3 and for students who want a more knowledge- and research-based approach. Thus, the title of 4BN3 is being changed to clarify its focus on Leadership Development and its complementarity to the new leadership course.*

**Faculty of Social Sciences
REPORT TO UNDERGRADUATE COUNCIL
SUMMARY OF CURRICULUM CHANGES FOR 2018-19
Addendum**

Religious Studies

1.0 NEW COURSES:

1.0 COURSE ABBREVIATION & CODE	COURSE TITLE
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1.1 RELIGST 2AA3 Introduction to Modern Standard Arabic

3 unit(s)

This course introduces students to the basics of the Arabic language. Students will learn the Arabic alphabet, pronunciation, verb forms, and basic grammar. No prior knowledge of Arabic is necessary.

Three hours; one term

Delivery: Four hours (lectures and tutorials); one term

Prerequisite: Open

Course capacity: 50 Categories: SSA; OTHER

Rationale: The new Arabic language courses will complement our new Muslim Studies Minor.

1.2 RELIGST 2AR3 Introduction to Modern Standard Arabic II

This course builds on the fundamentals covered in RELIGST 2AA3. The course expands students' vocabulary, reading fluency, composition skills, and knowledge of grammatical constructions.

Delivery: Four hours (lectures and tutorials); one term

Prerequisite: RELIGST 2AA3

Course Capacity: 50 Categories: SSA; OTHER

Rationale: The new Arabic language courses will complement our new Muslim Studies Minor.

**REPORT TO UNDERGRADUATE COUNCIL
FROM THE
UNDERGRADUATE COUNCIL
CERTIFICATES AND DIPLOMAS COMMITTEE**

FOR APPROVAL

I Establishment of New Certificate Programs (Attachment I)

i. Concurrent Certificate in Leadership and Cross-Cultural Literacy

At its meeting of December 12, 2017, the Certificate and Diplomas Committee approved, for recommendation to Undergraduate Council, a proposal for the establishment of a concurrent *Certificate in Leadership and Cross-Cultural Literacy* program. The proposed concurrent certificate builds on the two leadership and mentorship courses (HUMAN 3LM3 and 4LM3) first offered by the Faculty of Humanities in 2015, which have been extremely well-received by students from across the University. The proposed program consists of 15 units of ethics and leadership and cross-cultural literacy taken as electives toward degree programs.

The Undergraduate Council Certificates and Diplomas Committee now recommends

that Undergraduate Council approve, for recommendation to Senate, the establishment of a concurrent *Certificate in Leadership and Cross-Cultural Literacy* program, for inclusion in the 2018-2019 Undergraduate Calendar, as recommended by the Faculty of Humanities and set out in Attachment I (i).

ii. Concurrent Certificate in Applied Social Sciences Research

At the same meeting, the Certificates and Diplomas Committee approved, for recommendation to Undergraduate Council, a proposal to establish a concurrent *Certificate in Applied Social Sciences Research* program. The proposed concurrent certificate will provide students with the opportunity to develop a deeper understanding of the necessary skills to conduct applied social sciences research, such as identifying appropriate research methods, analysing statistical/quantitative data, creating surveys and questionnaires. The proposed program consists of 15-18 units taken as electives toward degree studies.

The Undergraduate Council Certificates and Diplomas Committee now recommends

that Undergraduate Council approve, for recommendation to Senate, the establishment of a concurrent *Certificate in Applied Social Sciences Research* program, for inclusion in the 2018-2019 Undergraduate Calendar, as recommended by the Faculty of Social Sciences and set out in Attachment I (ii).

iii. Payroll Compliance Practitioner Certificate

Also at the same meeting, the Certificates and Diplomas Committee approved, for recommendation to Undergraduate Council, a proposal to establish a *Payroll Compliance Practitioner Certificate* program. The proposed program is designed to develop and/or enhance the core competencies, compliance knowledge and skills necessary for those looking to pursue a career in payroll or those looking to enhance their current payroll knowledge.

The Undergraduate Council Certificates and Diplomas Committee now recommends,

that Undergraduate Council approve, for recommendation to Senate, the establishment of a *Payroll Compliance Practitioner Certificate* program, effective May 1, 2018, as recommended by the Centre for Continuing Education and set out in Attachment I (iii).

II Revisions to Certificate and Diploma Program (Attachment II)

i. Concurrent Certificate in Business Technology Management

At its December 12, 2017 meeting, the Certificates and Diplomas Committee approved, for recommendation to Undergraduate Council, minor revisions to courses required for the concurrent *Certificate in Business Technology Management* program.

The Certificates and Diplomas Committee now recommends,

that Undergraduate Council approve the proposed revisions to the concurrent *Certificate in Business Technology Management* program, for inclusion in the 2018-2019 Undergraduate Calendar, as recommended by the Faculty of Business and set out in Attachment II.

FOR INFORMATION

III New Certificate of Completion Programs (Attachment III)

i. ePrivacy Series Certificate of Completion

ii. Health Care Analytics Series Certificate of Completion

At its meeting of December 12, 2017, the Certificates and Diplomas Committee reviewed information about two certificate of completion programs offered by the Centre for Continuing Education, effective February 1, 2108. Both the *ePrivacy Series* and *Health Care Analytics Series Certificates of Completion* are offered in partnership with the National Institute of Health Informatics. Details of the programs are set out in Attachment III.

**Undergraduate Council
January 30, 2018**

FACULTY OF HUMANITIES

PROPOSAL FOR A CONCURRENT CERTIFICATE IN LEADERSHIP & CROSS-CULTURAL LITERACY

1 Certificate Overview

The concurrent Certificate in Leadership & Cross-cultural Literacy builds on the two leadership and mentorship courses (HUMAN 3LM3 and 4LM3) first offered by the Faculty of Humanities in 2015, which have been extremely well-received by students from across the University. The Certificate fills a critical need for undergraduate students to learn about and develop professional skills that are highly desirable for the pursuit of graduate studies, professional programs, and employment opportunities, following undergraduate studies. A key objective of the course sequence is to help students develop leadership skills within a rigorous academic framework that balances both theory and practice.

1.1 Broader context

There is a growing awareness of a global shortage of effective leadership. In the World Economic Forum's last *Outlook on the Global Agenda* report (2015), a *lack of leadership* was identified as the third most significant challenge facing the regions of the world (after *deepening income inequality* and *persistent jobless growth*).¹ According to the respondents to the survey that informed the *Outlook* report, the most sought-after leadership qualities are: 'a global interdisciplinary perspective; long-term, empirical planning; strong communication skills; a prioritization of social justice and well-being over financial growth; empathy; courage; morality; and a collaborative nature.' According to the same survey, 'four out of the five regions prioritized training, coaching and mentoring as the best way to develop tomorrow's leaders.' In short, ethical and effective leadership is widely desired.

It is also well known that workplace-based leadership training programs are 'missing the mark' demographically. An international survey of employees participating in leadership training programs found that the average age of participation in a leadership training program was 42, but that the average age of supervisors was 33.² Many studies point to a global leadership deficit, or leadership crisis.

The certificate program proposed here follows a model of leadership development that has been shown to be translatable and effective across different cultures and generations. Students will gain valuable insights into their strengths and weaknesses through critical and scaffolded self-assessments, and guided reflection. Reflective practice, which underpins the model of leadership development adopted for the certificate, has been recognized by researchers as indispensable for a comprehensive leadership program 'that fosters personal integration of theory and practice over time in a manner that is both reiterative and reflective.'³ The innovative embedded mentorship program that is part of the core leadership courses, and that pairs senior undergraduate students with new international students, enables leadership students to put skills into practice in a structured and guided manner – a manner that affords all participants safe spaces for the development of mentor-mentee relationships.

¹ It is worth noting that survey respondents in all regions of the world appear uniformly concerned with this leadership deficit: 92% in N America and Sub-Saharan Africa; 85% in Europe, the Middle East and N Africa; 84% in Latin America; 83% in Asia.

² The study, conducted by J. Zenger, is cited in J. M. Kouzes and B. Z. Posner, *Learning Leadership*, 2016.

³ Roberts, C. (2008). Developing future leaders. *Journal of Leadership Education* 7(1), 116-130.

2 Academic Merit

As outlined below, the certificate helps students develop the key competencies for career development, regardless of whether or not they are seeking employment immediately upon graduation.

2.1 Learning Outcomes

Upon completion of the Certificate in Leadership & Cross-Cultural Literacy, students will have achieved a deep understanding of, and critical experience in, the application and articulation of the following career-readiness core competencies:

- ethical behaviour and practices;
- effective oral and written communication, including presentation skills;
- teamwork and collaboration;
- interdisciplinary and creative thinking;
- the management of self and others using empathetic skills;
- cross-cultural fluency;
- career management skills – the identification and articulation of one’s skills, strengths and career aspirations based on evidence and reflective practice.

These competencies have been identified by NACE (the National Association of Colleges and Employers), an American organization dedicated to the employment of university graduates, as key competencies necessary for career readiness.⁴

2.2 Certificate Requirements

Any student in an undergraduate degree program at McMaster may declare the certificate, at the time of graduation, and upon completion of the following courses. See Appendix 1 for detailed course descriptions of existing Philosophy courses. Non-McMaster credit may not be utilized in fulfilment of certificate requirements.

Requirements (15 units)

3 units	Ethics requirement (one of)
	PHILOS 2D03 – BIOETHICS
	PHILOS 2N03 – BUSINESS ETHICS
	PHILOS 2TT3 – ETHICAL ISSUES IN COMMUNICATION
	PHILOS 2YY3 – INTRODUCTION TO ETHICS
12 units	Leadership & cross-cultural literacy required courses
	HUMAN 3CM3 – LEADERSHIP: CROSS-CULTURAL MENTORING LAB
	HUMAN 3LM3 – FOUNDATIONS OF LEADERSHIP
	HUMAN 4RM3 – LEADERSHIP: RELATIONSHIP MANAGEMENT
	HUMAN 4CL3 – LEADERSHIP CAPSTONE: THEORY & PRACTICE

⁴ After establishing a task force, and collecting significant survey data from public and private sector employers (2015), NACE identified seven competencies associated with career readiness for university graduates (<http://www.nacweb.org/career-readiness/competencies/career-readiness-defined/>). NACE represents 98% of research universities in the US, and numerous American and global organizations representing diverse employers.

2.3 Calendar description of core courses

Students wishing to complete the concurrent Certificate in Leadership & Cross-cultural Literacy must complete all of the following courses. The prerequisite structure ensures that the capstone can only be completed by students who have completed all other certificate requirements; no Level IV course can be completed without 3LM3, Foundations of Leadership. All courses require completion of an online application.

HUMAN 3CM3 – Leadership: Cross-Cultural Mentoring Lab

3 unit(s)

Through on-campus experiential placements (embedded mentorship), students will participate in the peer mentoring of international students in the McMaster English Language Development (MELD) program. Students receive upfront training and ongoing support in mentorship, using aspects of the learning-centred mentoring paradigm (reciprocity, collaboration and the elaboration of mutually-defined goals). Students document their learning through a structured portfolio. Prior to beginning mentorship placements, students will participate in intensive training workshops (start of term) on: second language learning, reflective practice, goal-setting, and cross-cultural communication.

Discussion and placements (three hours), training sessions; one term

Prerequisite(s): Registration in Level II or above of any program; completion of online application; and permission of the Associate Dean (Humanities) or delegate

HUMAN 3LM3 – Foundations of Leadership

3 unit(s)

Effective leaders possess strong ethical values, emotional and social intelligence, excellent communication skills, and creativity; they have empathy, and are able to influence and inspire through informed, reasoned arguments. Students will explore how these elements fit together in various leadership models and how they apply cross-culturally. They will also take several assessments that measure their developing skills, as well as engage in reflective practice to increase self-awareness. Students apply these leadership skills through the peer-to-peer mentoring of first year international students in the McMaster English Language Development (MELD) program. Student learning is documented through a structured portfolio.

Lecture and discussion (two hours), placement (one hour); one term

Prerequisite(s): Registration in Level II and HUMAN 3CM3, or registration in Level III or above of any program; completion of online application; and permission of the Associate Dean (Humanities) or delegate

HUMAN 4RM3 - Leadership: Relationship Management

3 unit(s)

Team work, conflict management, negotiation, giving and receiving feedback, communicating vision and expectations – these are all key elements of leadership. Ultimately, succeeding in these areas is about managing relationships. Building upon the foundational elements of leadership already acquired, students will gain a deeper awareness of their own and others' motivations, strengths, filters, and responses to conflict, of and how to apply this knowledge to communicate effectively.

Three hours; one term

Prerequisite(s): HUMAN 3LM3; and permission of the Associate Dean (Humanities) or delegate

Anti-requisite(s): HUMAN 4LM3

HUMAN 4CL3 – Leadership Capstone: Theory and Practice

3 unit(s)

Working with a faculty supervisor, students will combine theory and practice by conducting in-depth research on a chosen aspect of leadership followed by proposing and, in most cases, implementing a practical application of that knowledge.

Three hours; one term

Prerequisite(s): One of PHILOS 2D03, 2N03, 2TT3 or 2YY3; and HUMAN 3CM3, 3LM3 and 4RM3 (or 4LM3); completion of online application; and permission of the Associate Dean (Humanities) or delegate
First offered in 2019/20

2.4 Competencies at a glance

The table below illustrates the links between courses and core competencies.

The last two rows illustrate the type of learning that predominates in each course. The penultimate row shows the relative anticipated distribution of theory (●) and practice (❖) in each course (each course has been arbitrarily assigned four possible symbols). The final row demonstrates the courses in which guided reflective practice figures prominently in the assessment method.

COMPETENCY	ETHICS REQUIREMENT	CROSS-CULTURAL MENTORING	FOUNDATIONS OF LEADERSHIP	RELATIONSHIP MANAGEMENT	CAPSTONE
Ethical behaviour/practices	✓	✓	✓	✓	✓
Communication skills	✓	✓	✓	✓	✓
Collaboration		✓	✓	✓	✓
Creative thinking	✓	✓		✓	✓
Self-management; empathy		✓	✓	✓	✓
Cross-cultural fluency		✓	✓	✓	✓
Career management			✓	✓	✓
<i>Theory ~ practice (experiential)</i>	●●●●	●❖❖❖	●●●❖	●●❖❖	●●❖❖
<i>Reflective practice</i>		✓	✓	✓	✓

3 Statement of Academic Responsibility

The Dean's Office, Faculty of Humanities, will oversee the administration of the concurrent Certificate in Leadership & Cross-cultural Literacy, in conjunction with the MELD Program Office. The MELD program will have direct oversight of all mentorship labs, and assumes responsibility for vetting of student applications to mentorship roles working with MELD students, for the training and ongoing support of students in these roles, and for the pairing of mentors and mentees.

Appendix I

Course Descriptions – Ethics Requirement (Philosophy courses)

Students completing the concurrent Certificate in Leadership & Cross-cultural Literacy must complete one of:

PHILOS 2YY3 - Introduction to Ethics

3 unit(s)

An introduction to moral philosophy and its application to contemporary moral problems. Topics may include the objectivity of values, the nature of moral judgments, rights and duties, virtues, and consequentialism.

Two lectures, one tutorial; one term

Prerequisite(s): Registration in Level II or above

PHILOS 2D03 - Bioethics

3 unit(s)

An introduction to moral philosophy, through a consideration of issues in health care ethics. Topics such as abortion, human experimentation, euthanasia, and genetic screening will be investigated.

Two lectures, one tutorial; one term

Prerequisite(s): Registration in Level II or above

Antirequisite(s): HTHSCI 3L03, PEACEST 2D03

Cross-list(s): RELIGST 2C03

PHILOS 2N03 - Business Ethics

3 unit(s)

An analysis of ethical issues arising in contemporary business life. Sample topics include: fair and unfair competition; responsibilities towards employees, society and the environment; honesty and integrity in business; the moral status of corporations.

Two lectures, one tutorial; one term

Prerequisite(s): Registration in Level II or above

Antirequisite(s): COMMERCE 2SB3

PHILOS 2TT3 - Ethical Issues in Communication

3 unit(s)

This course will examine ethical issues as they arise in interpersonal communication, social media, and mass communication. The dominant moral theories and approaches to moral decision-making will be analyzed and put to use to help students understand and evaluate concrete examples.

Two lectures, one tutorial; one term

Prerequisite(s): Registration in Level II or above

Antirequisite(s): CMST 2TT3, 3N03, PEACEST 2TT3, 3N03

Proposal for Concurrent Certificate

Faculty of Social Sciences

Proposal for a Concurrent Certificate in Applied Social Sciences Research

1.0 Certificate Overview

15-18 units

1.1 Context

Canadian employers increasingly prioritize hiring employees with a range of soft skills, rather than industry-specific or functional knowledge. These skills include working well with others, written and organized communication, problem solving, and analytical skills. Despite evidence that in the medium-term that earnings of social science graduates mostly catch up with those in STEM fields, enrolments in the social sciences have grown more slowly than those in STEM fields. The rapid growth of post-graduate diplomas and certificates at Ontario colleges also reflects an interest among university graduates for hands-on experience, training, and credentialing in specific skills, including many of the research methodologies already offered as part of social science undergraduate degrees. This proposed concurrent certificate aims to provide opportunities for interested students to acquire broader exposure and competencies in applied research methods to meet the needs of the labour market and student interests. It also provides a way to reflect these types of skill development within the structure of a certificate.

2.0 Academic Merit

As outlined below, the certificate helps students develop the key competencies for career development, regardless of whether or not they are seeking employment immediately upon graduation.

2.1 Learning Outcomes

Upon completion of the Certificate in Applied Social Sciences Research, students will have had the opportunity to achieve a deeper understanding of the following competencies, along with ability to apply them in practice:

- Identify and define appropriate methods for studying a wide range of topics;
- Define and operationalize concepts;
- Statistical/quantitative data analysis (including the use of software);
- Qualitative data analysis (including the use of software);
- Create original surveys/questionnaires;
- Identify, gather and clean (original and secondary) data;
- Presentation of research findings.

2.2 Certificate Requirements

Any McMaster student in an undergraduate degree program in the Faculty of Social Sciences or in a Combined Honours degree program with a Social Sciences subject may declare the certificate, at the time of graduation, and upon completion of the following courses. Non-McMaster credit may not be utilized in fulfilment of certificate requirements.

Students are advised to consult with the Undergraduate Chair or Academic Advisor for their program of study in Social Sciences to ensure individual courses (such as their project plan for an Independent Study course) meet the criteria of a research course.

Requirements (15-18 units)

3 units Foundations Course in Research Methods in the Social Sciences

SOCSCI 1RM3 HOW DO WE KNOW?: DOING SOCIAL SCIENCES RESEARCH (*See description below*)

6-9 units Research Methods and/or Analysis courses

ANTHROP 3IS3	Independent Study in Anthropology
ANTHROP 3K03	Archaeological Interpretation
ANTHROP 3P03	Doing Ethnography: Theory and Research Methods
ECON 2B03	Analysis of Economic Data
ECON 3E03	Applied Econometrics (<i>formerly ECON 3WW3</i>)
ECON 4F03	Methods of Inquiry in Economics (<i>formerly ECON 3F03</i>)
ECON 4FF3	Research Methods in Economics (<i>formerly ECON 3FF3</i>)
ECON 4G03	Econometrics II
GEOG 3MA3	Research Methods in Human Geography
GEOG 3MB3	Statistical Methods
GEOG 4GA3	Applied Statistical Analysis
HLTHAGE 2A03	Research Methods in Health and Aging I
HLTHAGE 3B03	Advanced Research Inquiry
HLTHAGE 3G03	Community Based Research
HLTHAGE 3I03	Independent Study in Health, Aging and Society
HLTHAGE 3G03	Community Based Research
HLTHAGE 3G03	Community Based Research
INDIGST 2M03	Indigenous Research Methods and Ethics
INDIGST 2MM3	Indigenous Ways of Knowing: Theory
LABRST 3H03	Research Methods
LABRST 3J03	Independent Study
POLSCI 2NN3	Politics by Design
POLSCI 3NN3	Statistical Analysis of Primary Data
POL SCI 4SS3	Public Opinion and Policy
PNB 2XE3	Descriptive Statistics
PNB 3XE3	Inferential Statistics
PNB 3RM3	Research Methods Lab
PSYCH 3MT3	Psychometrics
PSYCH 4KK3	Bayesian Inference
RELIGST 3F03	Approaches to the Study of Religion
SOCPSY 2K03	Research Methods in Social Psychology

SOCSCI 2J03	Introduction to Statistics
SOCWORK 2A06 A/B	Theory, Process and Communication Skill for Social Work
SOCIOL 2Z03	Introduction to Sociological Research
SOCIOL 3FF3	Introductory Statistics for Sociology
SOCIOL 3W03	Historical Methods in Sociology
SOCIOL 4FF3	Applications of Quantitative Methods in Social Sciences

3-6 units Experiential/Capstone courses

ANTHROP 3CC6	Archaeological Field School
ANTHROP 4D03	Practicing Anthropology: Ethics, Theory, Engagement
ANTHROP 4G03	Independent Research I
ANTHROP 4GG3	Independent Research II
ECON 4A03	Honours Economics Analysis
ECON 4AA3	Honours Economics Specialist Seminar
GEOG 3ME3	Environmental Studies Field Camp
GEOG 3MF3	Human Geography Field Camp
GEOG 3MI3	Geography Internship
GEOG 4MF3	Senior Human Geography Field Camp
GEOG 4MT6 A/B	Senior Thesis
GEOG 4MS3	Independent Study
HLTHAGE 3BB3	Field Experience
HLTHAGE 3EE3	The Practice of Everyday Life: Observations and Inquiry
HLTHAGE 3I03	Independent Study in Health, Aging and Society
HLTHAGE 4Z06 A/B	Health, Aging and Society Thesis
INDIGST 4A03	Storytelling and Environmental Conservation
INDIGST 4T06A/B	Honours Thesis
LABRST 4A06 A/B	Research and Field Experience
POLSCI 4Z06 A/B	Honours Essay
POLSCI 4ZZ6 A/B	Experiential Learning in Research
PNB 4D06 A/B	Senior Thesis
PNB 4D09 A/B	Senior Honours Thesis
PNB 4J03	Inquiry in Psychology, Neuroscience & Behaviour
PNB 4Q03 A/B S	Advanced Individual Library Study
PNB 4QQ3 A/B S	Advanced Individual Lab Study
RELIGST 4RP6 A/B	Honours Thesis
SOCPSY 4IS3	Independent Research
SOCPSY 4IS6 A/B	Independent Research
SOCPSY 4ZZ6 A/B	Social Psychology Research Project
SOCSCI 3F03 A/B S	Social Sciences in Action
SOCWORK 3DD6 A/B	Field Practicum I
SOCWORK 4DD6 A/B	Field Practicum II
SOCIOL 4M03	Directed Research I for Honours Students
SOCIOL 4MM6 A/B	Directed Research for Honours Students
SOCIOL 4N03	Directed Research II for Honours Students
SOCIOL 4VV3	Introduction to Post-Graduate Research in Sociology

2.3 Competencies at a glance

The concurrent certificate is intended to recognize students' competencies to integrate social sciences skills and knowledge when performing quantitative or qualitative analyses within their program of study. The coursework will provide the working knowledge required in statistics, principles of experimental design, survey and data analysis techniques, and qualitative methodologies. This may include learning to understand and use some of the statistical and qualitative software packages available. Students will learn how to apply research methods to real social science phenomenon and interpretation of findings. Students are encouraged to complete a research, experiential or capstone project in their program of study.

3.0 Statement of Academic Responsibility

The Associate Dean's Office, Faculty of Social Sciences, will oversee the administration of the concurrent Certificate in Applied Social Sciences Research.

New Courses:

SOCSCI 1RM3 HOW DO WE KNOW?: DOING SOCIAL SCIENCES RESEARCH

This course provides students with a glimpse in at the diversity among the types of research methods used within the social sciences. Students will learn how we study the things we do, such as economic inequality, access to health care, changing patterns of crime, the interplay of religious practice and civil rights, by providing students with basic concepts and language related to conducting research.

Prerequisite: Registration in Social Sciences I and credit or registration in SOCSCI 1SS3; or registration in Level II or above in a program in the Faculty of Social Sciences.

Three hours; one term

Enrollment cap: 100 TBD

Reserve Capacities: SS1 50%; SS2 50%

Justification: This new course is being created as a broad overview course on research methods in the Social Sciences for a new concurrent Certificate in Applied Social Sciences Research. This course is not intended to replace the introductory research methods courses within each program, but rather to demonstrate the diversity of methods used across the Social Sciences.



Centre for Continuing Education Program Approval

A. Department & Program Information (Complete all fields):	
Academic Designation:	Certificate and Diploma
Program Name:	Payroll Compliance Practitioner Certificate
Name of Representative:	Anne Dwyer, Program Manager
Proposed Date/Term of Program Start:	Spring 2018 (May 2018)
Date of Submission:	December 12, 2017
B. Faculty Statement (Required):	
Refer to attached letter of support from Associate Dean (Academic), Dr. Susan McCracken, DeGroote School of Business.	
C. Academic Merit (Complete all fields; write “not applicable” as needed):	
i. Program Overview:	<p>The Payroll Compliance Practitioner Certificate (PCP) is designed to develop and/or enhance the core competencies, compliance knowledge and skills necessary for those looking to pursue a career in payroll or those looking to enhance their current payroll knowledge. McMaster University’s Payroll Compliance Practitioner certificate will provide learners with the foundation needed to succeed in a career in payroll, including an understanding of legislative compliance requirements of an organization's annual payroll cycle. It provides the compliance knowledge required to process an organization’s annual payroll cycle, effectively communicate payroll information to all stakeholders, and understand the accounting function as it relates to payroll.</p> <p>Learners will be required to complete 5 core courses (15.0 units). Upon successful completion of the 5 content modules, participants will be awarded McMaster University’s Payroll Compliance Practitioner Certificate. Program courses will be available in both in-class and online formats.</p>

	<p>Courses will use a combination of experiential learning activities (i.e. presentations, case studies, facilitated group discussions, group work) and traditional teaching methods to cover the fundamental concepts in payroll compliance. Emerging trends, theories, practices and core competencies will be discussed to aid in the learning process and ensure that course content is current and relevant.</p> <p>The program's instructors will be practitioners in the field and will emphasize the use of experiential learning techniques.</p> <p>The Payroll Compliance Practitioner Certificate will be an open enrolment program (see "Program Admission Requirements" and "Program Pre-requisites" sections below).</p>
<p>ii. Learning Objectives:</p>	<p>The Payroll Compliance Practitioner Certificate is designed to prepare payroll practitioners to manage the compliance requirements of an organization's annual payroll cycle, deliver clear and reliable payroll information, and contribute a payroll perspective to organizational policy and strategy discussions.</p> <p>Specifically, graduates will be able to:</p> <ul style="list-style-type: none"> • Demonstrate awareness of ethical practices and professional standards as applied to the payroll profession • Demonstrate awareness of organizational structure and the role of payroll practices within an organization • Communicate all aspects of organizational remittances, accounting and year-end requirements to internal, external and government stakeholders • Recognize appropriate organizational, legal, and professional policies that regulate payroll professionals • Demonstrate a thorough understanding of the compliance requirements • Apply federal and provincial legislation to payroll • Develop knowledge and skills applicable to the Canadian

	<p>Payroll Association's Payroll</p> <ul style="list-style-type: none"> • Calculate regular individual pay, non-regular individual pay, and termination payments • Calculate organizational remittances to federal, provincial and third party stakeholders • Complete a Record of Employment (ROE) • Prepare accounting documentation for payroll • Complete year-end documentation
iii. Meeting Learning Objectives:	<p>The Payroll Compliance Practitioner Certificate uses a series of academic courses to achieve the stated program objectives. Individual course objectives are mapped to the overall program objectives. The delivery format and teaching methods are structured to have a maximum effect on achieving the learning objectives.</p>
iv. Program Admission Requirements:	<p>The Payroll Compliance Practitioner Certificate will be an open enrolment program. Potential learners will not be required to apply to the program for admission; however, in order to comply with the Certificates and Diploma, admission policy from Undergraduate Council, students who wish to enter the program must</p> <ul style="list-style-type: none"> • Have an Ontario Secondary School Diploma, or equivalent • Be a mature student as defined in the Undergraduate Calendar of McMaster University; or • Be deemed an exceptional case by the Centre for Continuing Education <p>In order to ensure that students have the basic capabilities necessary to be successful in the program's academic courses, learners are required to have the following pre-requisite knowledge and/or skills:</p> <ul style="list-style-type: none"> • Knowledge and skills with general computer applications, such as keyboarding, file management, spreadsheets and word processing; • Familiarity with internet browsers and web surfing • English Language Proficiency requirements: Completion of TOEFL exam with minimum acceptable score of IBT:

	86 overall with a minimum score of 20 on each of the four components (Reading, Writing, Speaking, Listening), valid for 2 years.
v. Program Pre-requisites (if applicable):	n/a
vi. Program Completion Requirements:	Students must complete all 5 core courses (15 units) in order to qualify for the Payroll Compliance Practitioner Certificate.
viii. Program Delivery Format:	<p>All program courses will be available in both in-class and online formats. The online payroll compliance courses are taken directly with the Canadian Payroll Association.</p> <p>In-class offerings will include a mixture of lecture and experiential learning activities, such as case studies, presentations, individual and group work and are the preferred method of instruction for the payroll compliance practitioner courses.</p> <p>Online delivery will use primarily asynchronous activities designed to present the fundamental concepts and theories in payroll compliance and promote the application to the workplace and professional practice. Course activities will include instructor video lecture/presentations, discussion board topics, web-based learning activities, as well as, experiential learning activities (i.e. case studies, group discussions, projects).</p>
ix. Student Evaluations (Grading Process):	Each course will include an evaluation component. The evaluation will consist of assignments, case studies, presentations, individual or group projects, participation, mid-term and a final examination or a combination thereof. Where appropriate, evaluations will be structured to evaluate students' level of competency in achieving overall learning objectives.
x. Course Evaluation:	For each course, students will complete an evaluation that explores content, delivery, materials, method of evaluation and instruction.
xi. Course Instruction:	Instructors for courses will be selected from a pool of qualified applicants. In compliance with McMaster's Senate and Undergraduate Council Guidelines for Certificates and Diplomas,

	<p>selection will be based on academic background and/or experience within the field. Instructors will have the equivalency of a Master's Degree or significant professional and teaching experience within the field. Instructors for payroll compliance legislation, fundamentals of payroll 1 and fundamentals of payroll 2 courses are required to be certified either as a PCP - Payroll Compliance Practitioner or a CPM - Certified Payroll Manager.</p>
xii. Credit Towards Degree Programme Studies:	<p>The academic credit courses included in the certificate program can be used for credit towards degree program studies in accordance with the normal academic rules specified by the Faculty offering the degree.</p>
xiii. Program Advanced Standing:	<p><i>Option A:</i> Learners entering the Payroll Compliance Practitioner Certificate, who have completed Payroll Compliance Legislation, and/or Payroll Fundamentals 1, and/or Payroll Fundamentals 2, through the Canadian Payroll Association, may be eligible to apply the 3 courses to the Payroll Compliance Practitioner Certificate for a maximum of three transfer credits (9 units).</p> <p><i>Option B:</i> Learners who have completed equivalent coursework in business communications or financial accounting may be eligible to apply for a maximum of one transfer credit (3 units).</p> <p>Approved transfer credit will be approved by the Program Manager based on the following criteria:</p> <ul style="list-style-type: none"> • courses must have an 80% overlap in content/curricula and a similar number of classroom or contact hours; • courses must have been taken within the last five years; • courses must have been taken from an accredited academic institution and listed on an official transcript with a grade of "C-" or better. <p><i>NOTE: Learners may apply and qualify for only one of the above options.</i></p>

D. Statement of Financial Viability:

"I have reviewed the business case and financial projections, which includes enrolment projections and costs. Sources of revenue for this program include tuition, as well as supplementary fees (MAPS) and other fees (transfer credit fees and deferred exam fees). Initial startup costs are minimal, since 2 of the 5 courses are currently offered under existing CCE programs. Expenses are typical and include marketing costs, as well as typical ongoing delivery costs (such as instructor honoraria, materials, advertising and administration)".
Lorraine Carter, Director, Centre for Continuing Education, November 2017

E. Statement of Administrative Responsibilities:

The human and systems infrastructure to support the following functions exists within CCE. Costs will be fully covered by tuition.

Responsibilities for the programs are as follows:

- Budget development and monetary responsibilities
- Program and Course Development
- Course Registrations/Administration
- Supervision of Instructors to ensure University policies and practices are adhered to; course are taught according to program requirements and standards
- Marketing and Promotions

DeGroote School of Business

The DeGroote School of Business will act as academic liaison and is charged with the responsibility of on-going academic review and assessment of curriculum. In return for services rendered, the DeGroote School of Business will receive an annual stipend at the end of each fiscal year during which the program records a surplus.

F. Listing of Courses

Course Name	Required/Elective	Academic Units	Proposed Term
Business Communications	Required	3.0	Currently offered each term
Payroll Compliance Legislation	Required	3.0	Spring 2018
Payroll Fundamentals 1	Required	3.0	Spring or Fall 2018
Introductory Financial Accounting	Required	3.0	Currently offered each term
Payroll Fundamentals 2	Required	3.0	Fall 2018 or Winter 2019

Notes: Courses are to be taken in the order, as listed above.

Required Course Descriptions:

Business Communications (3 units)

Canada's business environment requires that business people communicate effectively, persuasively and ethically in written, verbal and interpersonal communications. During this course, students will learn how to plan, write and review a variety of business communications vehicles from presentations to letters to informational reports and business proposals. Using a combination of teaching methods – lectures, discussion, small group, in-class writing and editing projects, and in-class tutorials, this course will help develop participant's critical thinking and analysis, research, writing, editing and presentation skills. Special emphasis will be placed on developing appropriate business language skills (spelling, grammar, punctuation, voice and tone).

Payroll Compliance Legislation (3 units)

This course will provide students with the payroll-related legislation affecting organizations, as well as the tools to find information and apply that information to different payroll scenarios. Students who complete the course will know the payroll compliance responsibilities that affect organizations, be able to comprehend legislation and effectively communicate these to all stakeholders. (Pre-requisite: BUS 850 Business Communications or equivalent Recommended Pre-requisite: Thorough understanding of mathematical principles will increase the probability of success in this course. Some students might consider taking ACC 929 Preparatory Mathematics to brush up on skills.)

Payroll Fundamentals 1 (3 units)

Students who complete this course will be able to apply payroll legislation and calculate individual pay. This includes all components of individual pay from remuneration, through deductions, to net pay for both regular and non-regular situations. Students will have the content and skills to effectively communicate all aspects of the individual pay calculation process to external and internal stakeholders. (Prerequisite: Payroll Compliance Legislation)

Introductory Financial Accounting (3 units)

This course explores the basic principles and techniques underlying the financial statements typically issued to the general public. Generally accepted accounting principles, the accounting transaction cycle, financial statements and the specific items, which make up the balance sheet are examined. (Recommended ahead of Payroll Fundamentals 2)

Payroll Fundamentals 2 (3 units)

Students who complete this course will be able to calculate and report the government and third party remittances, year end requirements, discuss payroll technology solutions and account for payroll at the compliance level for the organization. Students will be able to effectively communicate these organizational processes and requirements to internal and external stakeholders. (Prerequisite: Payroll Fundamentals 1. Recommended: Introductory Financial Accounting)



Letter of Endorsement and Statement of Academic Merit

DATE: November 7, 2017

TO: Certificate and Diploma Committee of Undergraduate Council

FROM: Dr. Susan McCracken, Associate Dean (Academic), DeGroote School of Business

RE: Payroll Compliance Practitioner Certificate

We have reviewed the submission to Undergraduate Council for a Payroll Compliance Practitioner Certificate presented by the Centre for Continuing Education in affiliation with the DeGroote School of Business. We have determined that the program meets the standards of academic rigour held by the DeGroote School of Business and that the program is comprehensive and appropriate.

Our support and endorsement of the proposed Payroll Compliance Practitioner Certificate is based on our assessment that the objectives of the program are viable. Additionally, the courses in it will fulfill these objectives.

We are delighted to work with the Centre for Continuing Education in mounting this Certificate program, and believe it will serve a growing market demand continuing education that is certificate-based.

On behalf of the DeGroote School of Business, we are pleased to endorse this submission.

A rectangular box containing a handwritten signature in black ink. The signature appears to read "Susan McCracken".

Associate Dean (Academic)
DeGroote School of Business

Cc: Lorraine Carter, Director, CCE
Suzanne Brown, Assistant Director, CCE

FACULTY OF BUSINESS

BUSINESS TECHNOLOGY MANAGEMENT (BTM) CERTIFICATE REQUIREMENTS TO THE CERTIFICATES AND DIPLOMA COMMITTEE

DECEMBER 2017

Certificate in Business Technology Management (BTM)

Note

1. The courses comprising the BTM certificate will count as elective courses for students enrolled in the Honours Commerce (B.Com.) program.
2. SWFRTECH 3IT3 and SWFRTECH 3PR3 are anti-requisites.

Admission

Enrolment in the Honours Commerce (B.Com.) program is required for admission to the certificate.

Requirements

27 units total

21 units

- COMMERCE 3KD3 - Database Design Management and Applications
- COMMERCE 3KE3 - Management of Enterprise Data Analytics
- COMMERCE 4KF3 - Project Management
- COMMERCE 4KG3 - Data Mining and Business Intelligence
- COMMERCE 4KH3 - Strategies for Electronic and Mobile Business
- SWFRTECH 3OS3 - Operating Systems
- ~~SWFRTECH 3IT3 - Networking Principles~~
- ~~SWFRTECH 3PR3 - Procedural and Object Oriented Programming Concepts~~

And One of the following:

- SWFRTECH 3IT3 - Networking Principles
- SWFRTECH 3PR3 - Procedural and Object Oriented Programming Concepts

6 units

from

- COMMERCE 3KA3 - System Analysis and Design
- COMMERCE 4KI3 - Implementation of is for Small and Medium Size Enterprises
- COMMERCE 4BK3 - The Management of Technology
- COMMERCE 4MH3 - Electronic Marketing
- SWFRTECH 3CS3 - Computer Security
- SWFRTECH 3RQ3 - Software Requirements and Specification
- SWFRTECH 4NI3 - Advanced Networking Infrastructure
- SWFRTECH 4SD3 - Software Design
- SWFRTECH 4WP3 - Advanced Web Programming

Rationale: Currently Honours Commerce students interested in obtaining the BTM certificate are asked to complete two required Software Technology courses (SWFRTECH 3IT3 and SWFRTECH 3PR3).

The issue is that SFWR TECH 3IT3 is only offered in the Spring/Summer term. This is not conducive to Commerce students as most want to complete their course requirements for the Honours Commerce program during the Fall and Winter terms.

In working with Department of Software Engineering Technology, we have identified an additional course (SFWR 3OS3 – Operating Systems) which is well aligned with the certificate and is offered during the Fall/Winter.



Centre for Continuing Education Program Submission (For Information Purposes)

A. Department & Program Information (Complete all fields):	
Program Name:	ePrivacy Series (Certificate of Completion)
Name of Representative:	Nancy McQuigge, Program Manager
Effective Date:	February 1, 2018
Date of Submission:	December 5, 2017
B. Academic Merit (Complete all fields; write “not applicable” as needed):	
i. Program Overview:	<p>The partnership involves the National Institute of Health Informatics (NIHI) and the Centre for Continuing Education to award a McMaster Certificate of Completion upon participants’ successful completion of NIHI professional development courses/training modules.</p> <p>NIHI and CCE have identified two programming options for this partnership initiative: Healthcare Analytics and ePrivacy. Participants will complete their training with NIHI, and, upon completion of a specified number of hours and coursework, McMaster CCE will issue a Certificate of Completion.</p>
ii. Learning Objectives:	<p>Learning Objectives for the ePrivacy series are established by the NIHI: Privacy in an application, technology and an organization has become an essential component of success. These sessions cover practical steps to addressing legal privacy requirements as well as look into the interactions and principles needed to manage privacy-related security risks.</p>
iii. Meeting Learning Objectives:	<p>The ePrivacy program will use a series of courses to achieve the stated program objectives. Individual course objectives are mapped to the overall program objectives. The delivery format and teaching methods are structured to have a maximum effect on achieving the learning objectives.</p>
iv. Program Admission Requirements:	<p>There are no formal admission requirements for this professional development program. Open enrolment is permitted for any offering of the program.</p>
v. Program Pre-requisites (if applicable):	Not applicable.

vi. Program Completion Requirements:	To receive a Certificate of Completion, participants must complete a minimum of 30 hours of course/workshop/live sessions offered by NIHI within the ePrivacy series. Participants will submit an evaluative component upon the completion of each course/workshop/live session.
viii. Program Delivery Format:	NIHI offers online and in-person courses, workshops and training sessions throughout the year. There is no restriction as to which type of delivery format a participant may attend.
ix. Student Evaluations (Grading Process):	In consultation with CCE, NIHI and its facilitators are committed to developing a series of activities to evaluate participants' comprehension and application of specific course/training content. Suggested forms of assessment include quizzes, case study, reflective journal, capstone project.
x. Course Evaluation:	For each course/workshop/training session, participants will complete an evaluation to assess content, delivery, materials, and facilitation. These results will be shared with CCE as part of an annual program review.
xi. Course Instruction:	Facilitators are selected by NIHI from a pool of qualified professionals. Selection is based on academic background and/or experience within the program area (privacy, data analytics, health informatics).
xii. Credit Towards Degree Programme Studies:	Not applicable
xiii. Program Advanced Standing:	Not applicable

D. Statement of Financial Viability:

I have reviewed this submission and foresee no financial risks to the Centre for Continuing Education (CCE). The National Institute of Health Informatics (NIHI) and CCE have developed an agreement whereby expenses pertaining to instructors and delivery costs will be assumed by NIHI. Marketing and other administrative costs will be assumed by CCE.

Lorraine Carter, Director, Centre for Continuing Education

F. Listing of Courses (complete the chart to provide suggested course title, required/elective, number of academic units, proposed hours, and estimated term offering):

Course Name	Hours	Course Description
Introduction to Privacy: Privacy Principles	1.5	Introduction to privacy; definition of key terms; technological, social and business trends impacting privacy; detailed review of each of the 10 principles of the CSA Model Code for the Protection of Personal Information.
Privacy and Information	1.5	Overview of the multidisciplinary structures, policies,

Course Name	Hours	Course Description
Governance		procedures, processes and controls needed to manage information at an enterprise level that supports an organization's immediate and future regulatory, legal, risk, environmental and operational requirements.
Canadian Privacy Laws	1.5	Privacy as a basic human right; Canadian privacy laws impacting the public, private and health sectors; Opportunities and challenges for organizations operating across multiple jurisdictions.
International Privacy Laws	1.5	International privacy laws impacting the Canadian environment; emphasis placed on US privacy laws including those managed by the Federal Trade Commission and Health and Human Services (HIPAA) and the European General Data Protection Regulation (GDPR).
Individual Privacy Rights	1.5	Overview of the privacy rights of individuals enshrined in privacy laws including individual access to personal information, correction of personal information, choice and consent, control over the collection, use and disclosure of personal information, redress and challenging compliance.
Privacy and Security Policies and Procedures	1.5	The importance of enterprise-wide privacy and security policies and procedures to ensure the consistent application of privacy rights and obligations across the organization. Review of a minimum set of policies and procedures derived from privacy laws, standards and guidelines.
Agreements and Contracts	1.5	The importance of agreements and contracts to address privacy roles and responsibilities in complex multi-stakeholder environments, including business associates, customers and consumers; agreements mandated by privacy legislation; end-user licensing agreements, terms and conditions, privacy policies and other consumer oriented agreements.
Privacy by Design Principles	1.5	Introduction to Privacy by Design (PbD); foundational principles of PbD;
Privacy and Security Standards and Guidelines	1.5	Review of privacy and security standards and guidelines that can be used to support PbD, including standards published by ISO, National Institute of Standards and Technology (NIST), and Canada Health Infoway.
PbD and Agile Development	1.5	How to apply PbD principles as part of an agile development methodology. Build privacy and security into user stories, releases and sprints.
PbD and Emerging	1.5	Application of PbD principles to emerging technologies

Course Name	Hours	Course Description
Technologies		including cloud, Internet of things, mobile, big data analytics, and social media. This session will address opportunities and challenges to privacy posed by emerging technologies.
Building End-to-End Security	1.5	How to ensure that personal information is protected throughout the entire information lifecycle from the collection or creation of data through to its final disposal of destruction. The session will address the application of security best practices to system development and the establishment of an information security management program in the organization.
Building a Privacy Program	1.5	This session will define the essential components of an integrated information privacy program for small and large organizations. This session will consolidate and build on information from previous sessions on privacy management, policies and procedures, agreements with business partners, monitoring and audit and other elements of a comprehensive program.
Privacy and Security Certification	1.5	Many organizations are turning to privacy and security certification programs for evidence that Business partners and suppliers are applying best practices to privacy and security management. This session will review the certification and audit programs established by Canada Health Infoway, HITRUST. CPA Canada and PCI DSS.
Risk Management Principles	1.5	Introduction to risk management principles and methods including establishing the context, risk assessment, and risk treatment. Discussion of privacy and security in the context of enterprise risk management. Day-to-day management of risk using the risk register and the risk treatment plans
Privacy Impact Assessment	1.5	How to assess privacy risk using privacy impact assessment (PIA). Review of PIA methodologies. Review major PIA components including readiness assessment, legislative analysis, organizational analysis, solution analysis, and risk assessment. Presenting findings and recommendations to senior management and stakeholders.
Threat and Risk Assessment	1.5	How to assess security risk using threat and risk assessment (TRA). Review of TRA methodologies. Review of major TRA components including readiness assessment, system description, asset inventory, asset valuation, threat assessment, vulnerability assessment, and risk

Course Name	Hours	Course Description
		assessment. Presenting findings and recommendations to senior management and stakeholders.
Privacy Monitoring and Audit	1.5	How to proactively detect and contain privacy and security incidents, enable audit logging capabilities in information systems, establishing criteria for monitoring and audit.
Managing Privacy Breaches and Complaints	1.5	How to establish policies and procedures for managing privacy and security breaches and incidents. Focus on prevention, detection, containment and response privacy and security breaches. Mandatory notification and reporting of privacy breaches to affected individuals, regulators in professional colleges.
Privacy Training	1.5	How to establish a comprehensive privacy and security awareness training program; tailoring content to specific audiences; modes of delivery; tracking progress; specialty training for privacy officer and senior management.
Total hours:	30	



Centre for Continuing Education Program Submission (For Information Purposes)

A. Department & Program Information (Complete all fields):	
Program Name:	Health Care Analytics Series (Certificate of Completion)
Name of Representative:	Nancy McQuigge, Program Manager
Effective Date:	February 1, 2017
Date of Submission:	December 5, 2017
B. Academic Merit (Complete all fields; write “not applicable” as needed):	
i. Program Overview:	<p>The partnership involves the National Institute of Health Informatics (NIHI) and the Centre for Continuing Education to award a McMaster Certificate of Completion upon participants’ successful completion of NIHI professional development courses/training modules.</p> <p>NIHI and CCE have identified two programming options for this partnership initiative: Healthcare Analytics and ePrivacy. Participants will complete their training with NIHI, and upon completion of a specified number of hours and coursework, McMaster CCE will issue a Certificate of Completion.</p>
ii. Learning Objectives:	Learning objectives for the Healthcare Analytics series are established by the NIHI.
iii. Meeting Learning Objectives:	The Healthcare Analytics program will use a series of courses /training modules to achieve the stated program objectives. Individual course objectives are mapped to the overall program objectives. The delivery format and teaching methods are structured to have a maximum effect on achieving the learning objectives.
iv. Program Admission Requirements:	There are no formal admission requirements for this professional development program. Open enrolment is permitted for any offering of the program.
v. Program Pre-requisites (if applicable):	Not applicable.
vi. Program Completion Requirements:	To receive a Certificate of Completion, participants must complete a minimum of 30 hours of course/workshop/live sessions offered by NIHI within the Healthcare Analytics Participants will submit an evaluative component upon the completion of each

	course/workshop/live session.
viii. Program Delivery Format:	NIHI offers online and in-person courses, workshops and training sessions throughout the year. There is no restriction as to which type of delivery format a participant may attend.
ix. Student Evaluations (Grading Process):	In consultation with CCE, NIHI and its facilitators are committed to developing a series of activities to evaluate participants' comprehension and application of specific course/training content. Suggested forms of assessment include quizzes, case study, reflective journal, capstone project.
x. Course Evaluation:	For each course/workshop/training session, participants will complete an evaluation to assess content, delivery, materials, and facilitation. These results will be shared with CCE as part of an annual program review.
xi. Course Instruction:	Facilitators are selected by NIHI from a pool of qualified professionals. Selection is based on academic background and/or experience within the program area (privacy, data analytics, health informatics).
xii. Credit Towards Degree Programme Studies:	Not applicable
xiii. Program Advanced Standing:	Not applicable

D. Statement of Financial Viability:

I have reviewed this submission and foresee no financial risks to the Centre for Continuing Education (CCE). The National Institute of Health Informatics (NIHI) and CCE have developed an agreement whereby expenses pertaining to instructors and delivery costs will be assumed by NIHI. Marketing and other administrative costs will be assumed by CCE.

Lorraine Carter, Director, Centre for Continuing Education

F. Listing of Courses (complete the chart to provide suggested course title, required/elective, number of academic units, proposed hours, and estimated term offering):

Course/Module Title	Content Hours
<p>A Strategic Framework for Quality and Performance Improvements</p> <p><i>Description:</i> Using real-life success stories and lessons learned from the front-lines of health care, this two-part series will enable attendees to accelerate the transformation from relying on generic reports and dashboards to achieving truly useful Quality Improvement (QI)-focused analytic information and insights. This series will provide healthcare decision-makers, analysts, and improvement specialists with a strategy development and execution framework that will immediately improve analytics effectiveness and return-on-investment within</p>	3

your health care organization. It will provide the tools and skills necessary to develop analytics strategies that fit the quality and performance improvement needs of your health care organization. The sessions will also discuss the analytical tools for leveraging healthcare information technology (HIT), data from source systems, and proven Quality Improvement (QI) methodologies to make more insightful, fact-based decisions for an HCO.	
<p>Components of an Analytics System</p> <p><i>Description:</i> It seems that everywhere we turn, someone is talking about harnessing the power of analytics and ‘Big Data’ to help us make decisions about healthcare finances and delivery or how to personalize care for individual patients. Consultants are marketing data platforms and analytic services that leverage electronic health records and administrative databases to find answers for healthcare decision makers. But how can you tell if the answers are true? These sessions look at the background and principles for sensible interpretation of results from routine healthcare data.</p> <ul style="list-style-type: none"> • Analytics Inputs (Dialogue, Context, Data) • Analytics Enablers (Team, Technology, Techniques) • Analytics Outputs (Descriptive, Diagnostic, Predictive, Prescriptive) 	6
<p>Healthcare Performance Measurement</p> <p><i>Description:</i> The complexity of health care demands that a robust approach to measuring quality be followed. Healthcare quality and performance must be defined in terms that are quantifiable—meaning they can be measured, monitored, analyzed, and acted on. Quantitative approaches combined with proven quality improvement frameworks and tools improve decision making by replacing gut instinct with data-driven, transparent, verifiable, and robust decision methods.</p> <ul style="list-style-type: none"> • Improvement methodologies • Measurement Framework (Structure, Process, Outcomes) • Run Charts • Statistical Process Control Charts 	3
<p>Introduction to Healthcare Quality & Performance Improvement Data Analysis Using R</p> <p><i>Description:</i> This course is designed for analysts with experience in one or more business intelligence, reporting, and/or dash boarding tools but who are looking for a more robust tool that enables increased insight gained from healthcare-related data sources (such as electronic medical records, surveys, and even social media).</p> <ul style="list-style-type: none"> • Introduction to R • Analysis & reporting with R • Predictive analytics with R 	6
<p>Data Analytics Primer</p> <p><i>Description:</i> This session will provide healthcare leaders with the essential information they need to fully leverage the power of the data within their</p>	6

healthcare organizations. The goal is to provide healthcare decision-makers with the knowledge and tools to immediately improve analytics effectiveness and return-on-investment within your healthcare organization.	
<ul style="list-style-type: none"> • Data summarization & reporting (a.k.a. intro to stats) • Data visualization • Predictive analytics • Simulation 	
Optional : Focus on Improvement, Innovation & Transformation	
<ul style="list-style-type: none"> • Hands on Healthcare Analytics “Makeover” project 	6
Optional: Speaker Series/Sessions (participant must attend all speaker sessions for 6 hours of content delivery:	
<ul style="list-style-type: none"> • Karim Keshavjee: Landscape of Clinical Analytics in Canada [1.5 hours] • Susan Anderson: Health Analytics, Precision Medicine, and the Patient [1.5 hours] • Susan Anderson: Data Liberation & Actionable Analytics [3.0 hours] 	6
Total:	30