April 11, 2017

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, April 18, 2017 at 2:30 p.m., in the Council Room, Gilmour Hall (GH 111)**. The items of business to be discussed are outlined on the agenda provided with this meeting notice.

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, April 18, 2017 at 2:30 p.m.
in the Council Room (GH 111)

AGENDA

I MINUTES of the meeting of January 31, 2017 and February 28, 2017 (attached – for approval)

II BUSINESS ARISING

III CHAIR’S REMARKS

IV FINAL CURRICULUM CHANGES FOR 2017-2018 UNDERGRADUATE CALENDAR (attached – for approval)
   i. Faculty of Engineering
   ii. Faculty of Social Sciences

V REPORT FROM AWARDS COMMITTEE (attached – for approval)
   i. University Aid and Awards Policy
   ii. Terms of Award for New Awards
   iii. Changes to Award Terms
   iv. New Bursaries
   v. Awards Removed from Undergraduate Calendar

VI REPORT FROM CERTIFICATE AND DIPLOMAS COMMITTEE (attached)
   For Approval
   i. Senate Policy on Diplomas and Certificates
   ii. Additional Recommendations following from Policy Review
      a. Non-McMaster Credentials
      b. Credit for a Single Course toward Multiple Credentials
      c. Parchments Appended to the Policy
   iii. New Certificate and Diploma Programs
      a. Diploma in Business of Golf and Resort Management Program
      b. Applied Clinical Research Certificate Program
      c. Certificate in Marketing Program
      d. Canadian Health Studies Certificate Program
   iv. Revisions to Existing Certificate and Diploma Programs
      a. Business Administration Diploma Program – New Creative, Critical and Design Thinking Concentration
      b. Marketing Diploma Program – New Digital Marketing Concentration
      c. Marketing Diploma Program – New Elective, Design Thinking
   For Information
   v. New Certificate of Completion Programs
      a. Certificate of Completion in Creative, Critical and Design Thinking
      b. Certificate of Completion in Epidemiology and Pathophysiology
VII  ESTABLISHMENT OF NEW CONCURRENT CERTIFICATES (attached – for approval)
    i. Certificate in Business Technology Management
    ii. Certificate in International Engagement
    iii. Certificate in Essential French

VIII  POLICY ON ACADEMIC ACCOMMODATION OF STUDENTS WITH DISABILITIES
      (attached – for approval)

IX   POLICY ON ACADEMIC PROGRAM DEVELOPMENT AND REVIEW (attached – for approval)

X    2018-2019 SESSIONAL DATES (attached – for approval)

XI   OTHER BUSINESS
McMaster University

UNDERGRADUATE COUNCIL
Tuesday, February 28, 2017 at 2:30 p.m.
Council Room (Room 111), Gilmour Hall

PRESENT: Dr. L. Campbell (Chair), Dr. R. Cameron, Dr. L. Carter, Dr. R. Chen,
Dr. C. Churchill, Mr. T. Daly, Mr. K. Hurst, Ms M. Khalid, Mr. J. Liu,
Ms M. Pool, Mr. A. Ramadori, Ms A. Recio-Greenwell, Dr. J. Wilson,
Ms T. Bates (Governance Officer and Assistant University Secretary)

REGRETS: Dr. M. Farquharson, Dr. S. Searls Giroux, Ms K. Kuhnert, Ms V. Lewis,
Dr. J. McDermid, Dr. E. Mohammad, Dr. A. Moro, Dr. S. Sarkar,
Dr. J. Song, Mr. S. Van Koughnett

I MINUTES
The minutes of the meeting held on January 31, 2017 were not available.

II BUSINESS ARISING
There was no business arising from the minutes of the previous meeting.

III CHAIR’S REMARKS
The Chair had no remarks.

IV REPORT FROM THE AWARDS COMMITTEE (Appendix A)
i. Terms of Award for New Awards
ii. Changes to Award Terms
iii. New Bursaries

Council reviewed these three items together. Dr. Chen also noted that a statement
must be added to the 2017-2018 Undergraduate Calendar indicating that the
Undergraduate Award Policy is under revision and advising students to refer to
Policy for the most accurate information.

It was duly moved and seconded,

that Undergraduate Council approve the terms of award for seven new awards,
changes to four terms of award, and eleven new bursaries, as set out in Appendix
A, and the statement regarding revisions to the Undergraduate Awards Policy,
as set out above, for inclusion in the 2017-2018 Undergraduate Calendar.

The motion was carried.

iv. Award Name Changes
v. Award Value Changes

Council reviewed these information items together.
V REPORT FROM THE CERTIFICATES AND DIPLOMA COMMITTEE
(Appendix B)

i. New Certificate Program – Big Data Analytics Certificate

Members reviewed the proposal for the establishment of a Big Data Analytics Certificate. It was noted that the proposal refers to the letter of support as being from Dr. John Medcof although, as is clear in the letter itself, it is from Dr. Emad Mohammad.

It was duly moved and seconded,

that Undergraduate Council approve, for recommendation to Senate, the establishment of the Big Data Analytics Certificate, as recommended by the Centre for Continuing Education, and set out in Appendix B.

The motion was carried.

ii. New and Revised Certificates of Completion Programs

a. Establishment of the Certificate of Completion in Foundations in Canadian Health
b. Establishment of the Strategic Leaders Certificate of Completion Program
c. Personal Leadership Certificate of Completion Program – Name Change
d. Emerging Leaders Certificate of Completion Program – Name Change

Members reviewed these new and revised Certificates of Completion for information.

iii. Certificate of Completion Program Closure – Web Analytics Certificate of Completion

Members reviewed, for information, the closure of the Web Analytics Certificate of Completion.

VI FINAL CURRICULUM CHANGES FOR THE 2017-2018 UNDERGRADUATE CALENDAR (Appendix C)

i. Faculty of Business

Council heard that the Integrated Business and Humanities program is the first new program in the Faculty of Business in a very long time. A lot of changes to the Undergraduate Calendar were necessary to accommodate the new material. Many of the changes simply fill out the details of the new program, and some new Level I courses for the Integrated Business and Humanities program have been added. Upper level courses will be introduced later.

In addition to the changes being made as a result of the new program, some other minor changes have been made. Some courses are being opened up to a larger pool of students, changes to the Specialised Minor in Commerce for Students Completing a Single Honours B.A. in Humanities have been made to align with the submission from the Faculty of Humanities at the last meeting.
Members confirmed that the new Sports Management course is open to students in any program, and asked if the Commercial Law course can be made available to Political Science students in addition to students in the Justice, Political Philosophy and Law program.

It was noted that the contact hours for courses in the Faculty of Business are not included in the Calendar descriptions as they are for all other Faculties. Members heard that Business has never included the contact hours for courses in the Undergraduate Calendar, as the Faculty had been advised long ago that the less information that appears in the Calendar, the more flexibility the Faculty has. It was pointed out, however, that the contact hours is an important piece of information that is required for the Calendar. Students need this information when they are planning their courses. All other Faculties include this information. It was suggested that this has always been mixed, and some programs add contact hours to course descriptions and some do not. However, the other Faculties reported that all their course descriptions in the Calendar include this information.

Members agreed that given Business has not historically included contact hours with course descriptions, the Faculty’s curriculum submission could not be turned back for this reason now; however, this information will need to be added during the next curriculum cycle.

In the meantime, the University Secretariat will look into what is required by Senate as the minimum course information that must be included in the Undergraduate Calendar. It is important to know what the requirements are and to ensure that the policies and requirements are being adhered to, and that all the information is consistent across courses within a given Faculty and across Faculties. Council agreed that there must be some flexibility built into the descriptions as well, as some individuals indicated that requests to vary the contact hours from what have been approved from the calendar have been met with resistance. It was also noted, however, that in many cases these requests can be difficult to accommodate because of the timing of the request rather than the nature of the change.

In response to questions, members heard that delivery modes are differentiated in the Calendar. Online offerings that are identical to in-class courses have different course codes.

A member wondered when students are looking at this information in the Calendar, when they are making these decisions and what information they are using to make them. For example, are students looking at the Calendar in advance of course registration or are they finding this information in Mosaic when they are registering for classes? A student member said that they personally try to look at the Calendar in advance of registering in Mosaic, but do not always have the opportunity to do so. Another student member said they look only at Mosaic when registering, but that they compare course outlines, which in their program are already posted during the registration period.

In response to questions, Council heard that students enrolled in the Integrated
Business and Humanities program with a GPA of 3.5-4.4 are referred to as “transitional” and are the same as the students who are not eligible for OSAP. Engineering and Nursing also include this category of students. There was concern that these students are not getting adequate support. This is typically a very small group and efforts are made to ensure that these students do not remain in this category for long.

It was also noted that some of the language in the next paragraph in this section does not clearly articulate the purpose of the category. The text reads: “The purpose of this period is to prepare yourself for a program outside the IBH program.” The purpose is really to upgrade, and this section should more clearly indicate that. It should read: “The purpose of this period is to prepare for entry into/eligibility for another program.”

ii. Faculty of Engineering

The proposed changes are all minor. Some changes have been made to prerequisites and other changes reflect revisions that are simply being followed through all requirements in these sections.

iii. Faculty of Science

Minor revisions have been made to relax, very slightly, admission criteria for entry to Level II of the Life Sciences program.

iv. Faculty of Social Sciences

The proposed changes in Social Sciences are also very minor. Some changes have been made to courses as a result of the introduction of the new minor Social Studies of Mental Health and Addiction. Changes made at Mohawk College to the requirements for the Mohawk College Affiliated Certificate in Business Studies have required revisions to courses.

It was duly moved and seconded that Undergraduate Council approves the curriculum revisions for inclusion in the 2017-2018 Undergraduate Calendar, as recommended by the Faculties of Business, Engineering, Science, and Social Sciences, and outlined Appendix C and amended at the meeting.

The motion was carried.

VII OTHER BUSINESS

There being no other business, the meeting was adjourned at 3:26 p.m.
McMaster University

UNDERGRADUATE COUNCIL
Tuesday, January 31, 2017 at 2:30 p.m.
Council Room (Room 111), Gilmour Hall

PRESENT:
Dr. S. Searls Giroux (Chair), Dr. T. Alway, Dr. R. Cameron, Dr. L. Campbell, Dr. R. Chen, Dr. C. Churchill, Mr. T. Daly, Dr. M. Farquharson, Dr. D. Harnish, Mr. K. Hurst, Ms K. Kuhnert, Ms V. Lewis, Mr. J. Liu, Dr. J. McDermid, Dr. E. Mohammad, Dr. A. Moro, Ms M. Pool, Mr. A. Ramadori, Ms A. Recio-Greenwell, Dr. S. Sarkar, Dr. J. Song, Mr. S. Van Koughnett, Dr. J. Wilson, Ms T. Bates (Governance Officer and Assistant University Secretary)

INVITED:
Ms A. Thyret-Kidd

REGRETS:
Dr. L. Carter, Ms M. Khalid

I MINUTES
On a motion duly moved and seconded, the minutes of the meeting held on December 6, 2016 were approved as circulated.

II BUSINESS ARISING
There was no business arising from the minutes of the previous meeting.

III CHAIR’S REMARKS
The Chair had no remarks.

IV REPORT FROM THE CURRICULUM AND ADMISSIONS COMMITTEE
i. Faculty of Science (Appendix A)

Members reviewed the proposals to establish two Life Sciences Specializations: an Honours Life Sciences – Sensory Motor Systems Specialization and an Honours Life Sciences – Origins of Disease Specialization as modifications of the existing Honours Life Sciences program.

It was duly moved and seconded,

that Undergraduate Council approves the establishment of the Honours Life Sciences – Sensory Motor Systems Specialization and the Honours Life Sciences – Origins of Disease Specialization, as modifications of the existing Honours Life Sciences program, for inclusion in the 2017-2018 Undergraduate Calendar, as recommended by the Faculty of Science, and outlined in Appendix A.

The motion was carried, with 21 votes in favour and 2 opposed.
Members heard that admission into Level II of the Medical Radiation Sciences – Radiation Therapy Specialization will be suspended effective September 2018. Enrollment in the program is falling, in part as a result of poor job prospects for graduates of the program. The intention is to review the situation annually for three years and to reach a final decision about the future of the program by the end of that period.

It was duly moved and seconded,

that Undergraduate Council approves the suspension of the suspension of admittance to the Level II of the Medical Radiation Sciences – Radiation Therapy Specialization, effective September 2018, with reinstatement to be reviewed annually for a maximum of three years and a final decision about the continuation of the specialization program to be made no later than September 2020, for inclusion in the 2017-2018 Undergraduate Calendar, as outlined in Appendix A.

The motion was carried.

Members heard that the course HUMBEHV 2NV3 – Non-Violent Crisis Intervention, which was offered for the first time in September 2016, was mistakenly not approved as a pass/fail course. The course was taught as a pass/fail course and the students were expecting to be graded on that basis. The error was not realised until the instructor attempted to enter the final grades for the course and discovered that they were forced to give students a letter grade. Students (all of whom passed the course) have been made aware of the problem and that their grades will be changed.

It was duly moved and seconded,

that the Undergraduate Council approves the revision of the grading scale for HUMBEHV 2NV3 – Non-Violent Crisis Intervention to Pass/Fail, effective September 1, 2016 and for inclusion in the 2017-2018 Undergraduate Calendar, as set out in Appendix A.

The motion was carried.

An addendum to the Faculty of Science’s curriculum submission was circulated at the meeting. During the Fall 2016 curriculum cycle, the closure of the Medical Physics program, housed in the School of Interdisciplinary Science, and revisions to the Biophysics program, offered by the Department of Physics and Astronomy, were approved; the revisions effectively merged the two programs under a new name, Medical and Biological Physics. Students in the Medical Physics program will be able to complete their program. However, these students requested the Medical Physics program also be moved to the Department of Physics and Astronomy.

It was duly moved and seconded

That Undergraduate Council approve, for recommendation to the University Planning Committee, moving the Medical Physics program from the School of
Interdisciplinary Science to the Department of Physics and Astronomy, as circulated at the meeting, and set out in Appendix A.

The calendar copy will note that the change is conditional on approval from the University Planning Committee and Senate to move the program from the School of Interdisciplinary Science to the Department of Physics and Astronomy.

The motion was carried.

ii. Faculty of Health Sciences (Appendix B)

Members reviewed the revisions to the admissions procedures and requirements for the Midwifery Education program and the establishment of one new course, HLTHSCI 41D3 – Innovation by Design, in the Faculty of Health Sciences.

It was duly moved and seconded,

**that Undergraduate Council approves the curriculum revisions for inclusion in the 2017-2018 Undergraduate Calendar, as recommended by the Faculty of Health Sciences, and outlined in Appendix B.**

The motion was carried.

iii. Faculty of Humanities (Appendix C)

Members heard that two new courses are being established in the Faculty of Humanities: CLASSICS 3MT3 – Advanced Ancient Roots of Medical Terminology and LINGUIST 2SL3 – Introduction to American Sign Language. Minor revisions are proposed to the Specialized Minor in Commerce for Students Completing a Single Honours B.A. in Humanities. Approval of the latter are pending approval from the Faculty of Business curriculum submissions.

It was duly moved and seconded,

**that the Undergraduate Council approves curriculum revisions, for inclusion in the 2017-2018 Undergraduate Calendar, as recommended by the Faculty of Humanities, and with the revisions to the Specialized Minor in Commerce for Students Completing a Single Honours B.A. in Humanities pending approval of the corresponding revisions to be submitted by the Faculty of Business, as set out in Appendix C.**

The motion was carried.

V SESSIONAL DATES (Appendix D)

Council heard that the Undergraduate Council Ad Hoc Committee for Academic Structures for Student Success (CASS) has discussed, at length, extending the deadline by which students must cancel courses without failure by default. Extending the deadline will give students additional time to assess their ability to successfully complete the course and to get additional help if required.
The Federal Government’s Net Zero Tuition plan requires setting Sessional Dates well ahead of time. CASS has also had discussions regarding setting the dates in advance. Undergraduate Council will, therefore, be asked to approve Sessional Dates for the next year earlier in the year, although the dates could still be changed during the regular fall curriculum cycle. Going forward Sessional Dates will be approved one additional year in advance.

In response to questions, Council heard that extending the last date to cancel classes without penalty will help reduce the number of students who miss the date. Members were reminded that the last date to cancel classes used to be later, and classes used to begin the Monday after Labour Day; however, classes now start earlier. The first part week of classes is still considered Week 1 and the instruction schedule remained the same, despite the fact that not a lot of instruction is being done in that time. With this shift, students were missing date to drop classes without penalty.

It was duly moved and seconded

that the Undergraduate Council approve revisions to the 2017-2018 Sessional Dates, as set out in the attached.

The motion was carried.

VI DISCOVERY CREDITS (Appendix E)

Ms Thyret-Kidd joined the meeting.

There has been considerable discussion to date about discovery courses, and it is anticipated that there will still be more before the concept receives final approval. The current proposal requires students to declare their intention to take a course as a discovery course in advance; students can declare it as such in Mosaic immediately on registration (or by the final date to register and make changes to registration), upon which the course will be flagged in the system, but the flag will not be visible to instructors. Once the course has been declared, it does not have to be confirmed as a discovery course until about 5 days after the end of exams, so after the student sees the grade.

Adding the discovery credit option in Mosaic will be a simple build for UTS. The intention is that the process will established for a 2-2.5 year trial and will be modified as necessary after that period.

The intention is that students will have to declare the Discovery Credit in Mosaic until the last day to make changes to registration in September. Other schools require students to declare the discovery course in November, by the last date to drop a course. Having students declare the discovery course by the earlier date may mean that there will not be time to implement the option for September 2017, as the process has to be built in Mosaic and tested in June.

Discovery Courses will not be available for Level I students because the option is intended to be used for electives. Level I students will not necessarily know what program they will be entering in Level II, so will not be able to be sure of the electives for their prospective
program. Faculties can opt out of the Discovery Course option. Some programs may also be exempt, as program may have students in Level II who have not yet declared a program.

In response to questions, Council heard that students can retain their numeric grade up until five days after the end of the examination period. There was concern that the final grades will not be entered into Mosaic by that date. There was also some question about why students are being given the option to change their grade back to a number grade after the fact. A member noted that it may make some sense that numeric grade can be retained, for professional associations, for example, but agreed that returning to a numeric grade retroactively is a problem. Council heard that during discussions about the concept of Discovery Courses, there has been an ongoing concern about the course becoming a required course if a student switches programs or begins a second degree. Some other universities allow it and others do not. Some members were in favour of enabling retroactive changes back to letter grades.

A member noted that the Faculty of Science has a Discovery program and suggested that the name Discovery Course or Credit may cause confusion with that program. It was suggested that another name, such as Exploration Credit/Course, could be considered. Members heard that the name can be changed. The concept was initially referred to as a Freedom Credit, but that was not well liked. Some members expressed support for the term ‘exploration.’

In response to questions, Council heard that if a student wants to change their grade to a numeric grade the course will still count toward their maximum number of Discovery Courses. The Discovery Course option is limited to 3 units per term to a total of 12 units for the degree. Some universities exclude students who are in first year and some do not. There is an argument to be made for allowing Level I students to take Discovery Courses, and this is something that can continue to be discussed. If a student is worried about not doing well in a particular course, they are not likely to be majoring in a program in that field.

There was considerable discussion about when students would have to declare the course a Discovery Course and when the deadline to declare it should be. Many were in favour of having students declare the Discovery Course by the final date to register and to change registration. Others, particularly some of the student members, were in favour of enabling students to see the grade first. It was noted, in particular, that if during the trial period students are able to see their final grades before they have to declare, it will be impossible to take that away later. It was acknowledged, however, that there may be a window during which students can see their grade after it is posted by the instructor but before it is changed to NC/DC.

It was noted that UTS is wary of building the option in Mosaic if it will not be used. Members pointed out, however, that it is important not to build it halfway and then be stuck with it. It is better to build it properly. There was some concern that building the Discovery Credit option in Mosaic will take resources away from other, more important, projects that need to be carried out. Ms Thyret-Kidd reminded members that UTS has indicated that the changes required are simple and easy, especially given the time frame.

A member suggested that the option will create a lot of work that will fall on administrative offices. If the option takes off, it involve hundreds of students, which would be a lot of work if the date to declare is after the grade is known. It was pointed out, however, that
this option may well reduce the numbers of students who appeal to have the grade changed back to a numeric grade if the date is early.

It is important that the Discovery Course option is built into the advisement report from the beginning. It was noted that there are already several problems with grade approval and when grades become live in Mosaic. There has been some discussion about including a delay and about ways to speed up the approval of grades.

Members were very supportive of running a simulation of Discovery Courses in Mosaic, so stakeholders can be sure it is done properly, before it goes live.

In response to questions, members heard that it would be difficult to reach out to other universities to find out what they have found works and does not because the proposal is not reflective of what other universities are doing. All the other schools ask students to declare the option at the end, whereas the proposal is to have students declare the Discovery Course up front. It is possible to remove the confirmation step after the grades are posted so that the student would declare the Discovery Course and then the process is final. However, some members supported students seeing the grade first, indicating that they would not want to see students penalised for a bad grade. Others noted that the intention was to give students the opportunity to try something new or different, for which they would get a credit or not, and in this case it would be good for them to see their grade. Others expressed concern about what might happen if a student were to switch not only programs, but Faculties. It was pointed out that some Faculties have different types of electives; Engineering, for example, has technical electives that would not be possible to take as a Discovery Course.

It was agreed that more exploration into what can and cannot be done would be useful. It is already tight to put this in place for September. Council was reminded that the Discovery Course option has already been approved in principle. Members agreed that they would like to see the tool, and what is needed for it and what can be done. Testing the tool is also very important.

Members agreed that the directive to UTS is to build a tool to be built over the 2017-2018 year that would not be implemented before September 2018. The tool that would require an early declaration of the Discovery Course option. Members agreed that the switch to a NC/DC grade cannot be automatic, as there are too many components to be verified before the grade is converted. The tool has to enable the possibility of converting the grade back to a number grade retroactively. Switching back to numeric grades, however, would be at the discretion of the Faculty. Members also agreed that the maximum number of units that can be used as Discovery Courses set out in the proposal is appropriate. However, it was pointed out that the number of Discover Courses that can be used toward a minor is still to be determined. The Committee on Programming in the Arts and Science Faculties is looking at minors and will be putting forward recommendations that may affect how Discovery Courses can be used, so further discussion related to Discovery Courses and minors will be held until those recommendations are released.
VII McMaster Standard Calculator (Appendix F)

A number of concerns have been raised about the use of communicating of connected calculators in test and examinations. The current McMaster Standard Calculator, Casio fx991, has a number of models, some of which are able to connect to the internet or can otherwise be used to communicate. Following consultation, it was determined that the Casio fx991 will continue to be the McMaster Standard Calculator, but only models MS and MS Plus are acceptable. These are the only models that are sold in the Campus Store. This change will be communicated to all stakeholders, including students and instructors.

VIII 2014-2015 and 2015-2016 IQAP Cyclical Program Reviews (Appendix J)

Members reviewed the Final Assessment Reports for the Cyclical Program Reviews conducted in 2014-2015 and 2015-2016. A member noted that many of the recommendation charts identify the Undergraduate Curriculum Committee as responsible for leading the implementation of or following up on a number of recommendations. It was confirmed that this refers to the Faculty Undergraduate Curriculum Committees, not the Undergraduate Council Curriculum and Admissions Committee. These reports will now be submitted by the Quality Assurance Committee to the University Planning Committee.

IX OTHER BUSINESS

There being no other business, the meeting was adjourned at 3:49 p.m.
Department of Materials Science and Engineering

MATLS 2H04 A/B - Measurements and Communication
4 unit(s)
Characterization of materials by microscopy and electrical, mechanical and chemical methods. Matlab and computer graphics. Team projects involving materials characterization and synthesis.
Three lectures, One lecture, two three-hour labs; both terms. One tutorial per week; both terms.
Prerequisite(s): Registration in a program administered by the Department of Materials Science and Engineering

MATLS 2Q04 - Electronic Properties of Materials
4 unit(s)
An introduction to the electronic structure and properties of materials: electrons and their behaviour in vacuum and in a crystal lattice, electronic structure of elements, crystal bonding, free electron theory of metals and band structure of solids, electrical and thermal properties of solids.
Three lectures; one lab (3 hours): first term

MATLS 2X03 - Crystalline Structure of Materials
3 unit(s)
Crystal geometry, point groups, space groups, x-ray diffraction analysis to determine crystalline solubility limits in structures, phase diagrams, phase identification, chemical compositions, epitaxy, nanocrystals and strain, electron and neutron diffraction, crystalline defects, properties of crystals, crystal growth, phase analyst, phase transitions, protein crystallography.
Two lectures, one lab (three hours), one tutorial (three hours); first term
Prerequisite(s): Completion of Science I or Engineering I

MATLS 3B03 - Materials Production
3 unit(s)
Surface science and technology related to the preparation of fine particles of minerals, metals and ceramics for industrial production. Application of electrochemistry for diverse materials processing, such as electrometallurgy, thin film production and anodizing.
Three lectures; second term
Prerequisite(s): MATLS 2D03

MATLS 3C04 3C03 - Thermodynamics of Multicomponent Systems Applied Thermodynamics
4 unit(s)
Gibbs criterion of equilibrium and its applications. Equilibria in systems with gas phase and condensed solutions. Phase rule, Predominance diagrams, Multicomponent dilute solutions, Gibbs energies of phases and phase diagrams, Isothermal and isoplethal sections of multicomponent systems, Electrochemistry, Pourbaix diagrams, batteries.
Three lectures, one lab (three hours), one tutorial; first term
Two lectures, two tutorials, one (1.5 hours) lab; first term
Prerequisite(s): MATLS 2D03
Antirequisite(s): MATLS 3C04

MATLS 3E04 - Mass Transfer
4 unit(s)
Phenomenological and mechanistic approaches to steady and non-steady state diffusion, boundary conditions, mechanisms of diffusion, Arrhenius behaviour, gas-solid reactions, precipitate growth and dissolution, plate and spherical geometries, plane front solidification, diffusion in concentrated alloys, the Kirkendall effect, the interdiffusion coefficient, diffusion couples with intermediate phases, mass transport with convection, transient diffusion in fluids, the mass transfer coefficient.
Three Two lectures, three hours; two tutorials one hour; first term; second term.
Prerequisite(s): MATLS 1M03 and both MATH 2A03 and MATH 2C03, or both MATH 2Z03 and MATH 2ZZ3 or registration in Level IV or above in Civil Engineering

MATLS 3T04 - Phase Transformations
4 unit(s)
Three lectures, one lab (three hours); second term, first term
Prerequisite(s): MATLS 1M03, 2D03 and 2X03

MATLS 4I03 - Sustainable Manufacturing Processes
3 unit(s)
Sustainable development, ingenuity gap, materials cycles, Eco-Efficiency, Environmental Impact parameters, introduction and computational structure of life cycle analysis, waste treatment and recycling technologies, impact of sustainable practice, Vision 2050. Two lectures, (three hours); one tutorial (one hour); first term
Prerequisite(s): Registration in final or penultimate Level of any Materials Engineering program or permission of instructor or registration in Level IV or above in Civil and Chemical Engineering

**MATLS 4L04 A/B - Materials Manufacturing**
4 unit(s)
A sequence of experiments based on processing methods used in industry.
One lecture, one lab (three hours); both terms
Prerequisite(s): Registration in the final Level of a Materials Engineering program
Antirequisite(s): MATLS 4A02, 4L02

Justification: this course is being replaced by MATLS 4LA2 - Heat-treatable Al alloys; MATLS 4LF2 - Synthesis, properties, and application of thin films; and MATLS 4LS2 - Physical Metallurgy of Steels, all of which were approved in November/December 2016.

**Materials Engineering and Management, Materials Engineering and Management Co-op (B.Eng.Mgt.)**

Level IV: 38-39 Units

4 units
- CHEMENG 3A04 - Heat Transfer

12 units
- COMMERCE 2AB3 - Managerial Accounting I
- COMMERCE 2BC3 - Human Resource Management and Labour Relations
- COMMERCE 3FA3 - Managerial Finance
- COMMERCE 3MC3 - Applied Marketing Management

3 units
- ENGINEER 4A03 - Sustainability and Ethics in Engineering

3 units
- ENGNMGT 4A03 - Innovation Driven Project Development and Management

10 units
- MATLS 3B03 - Materials Production
- MATLS 3E04 - Mass Transfer
- MATLS 3M03 - Mechanical Behaviour of Materials

6-7 units
- approved Level III or IV technical electives

Level V: 35 Units

6 units
- COMMERCE 4PA3 - Business Policy: Strategic Management
- COMMERCE 4QA3 - Operations Modelling and Analysis

7 units
- ENGINEER 4J03 - Materials Fabrication
- ENGINEER 4T04 - Materials Selection in Design and Manufacturing

13 units 9 units
- MATLS 4I03 - Sustainable Manufacturing Processes
- MATLS 4L04 A/B - Materials Manufacturing
- MATLS 4Z06 A/B - Industrial Projects

4 units

from
• MATLS 4LA2 - Heat-treatable Al alloys
• MATLS 4LF2 - Synthesis, properties, and application of thin films
• MATLS 4LS2 - Physical Metallurgy of Steels

3 units
from
• ENGINEER 4ID3 - Addressing Social Problems Through Business, Engineering and the Social Sciences
• ENGNMGT 5B03 - Engineering and Management Projects
• ENGNMGT 5EP3 - New Enterprise Capstone Project (for Entrepreneurship Stream)

6 units
• Commerce electives selected from Level III or IV Commerce or
• ENGNMGT 5E03 - Entrepreneurial Processes and Skills
• ENGNMGT 5EL3 - Leading Innovation (for Entrepreneurship Stream)

Materials Engineering and Society, Materials Engineering and Society Co-op (B.Eng.Society)
Level IV: 32-36 Units
3 units
• ENGINEER 2B03 - Engineering Economics

4 units
• CHEMENG 3A04 - Heat Transfer

10 units
• MATLS 3B03 - Materials Production
• MATLS 3E04 - Mass Transfer
• MATLS 3M03 - Mechanical Behaviour of Materials

6-7 units
• approved Level III or IV technical electives

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: 29-36 Units
7 units
• ENGINEER 4J03 - Materials Fabrication
• ENGINEER 4T04 - Materials Selection in Design and Manufacturing

9 13 units
• MATLS 4I03 - Sustainable Manufacturing Processes
• MATLS 4L04 A/B - Materials Manufacturing
• MATLS 4Z06 A/B - Industrial Projects

4 units
from
• MATLS 4LA2 - Heat-treatable Al alloys
• MATLS 4LF2 - Synthesis, properties, and application of thin films
• MATLS 4LS2 - Physical Metallurgy of Steels

Society:
3 units
  • ENGSOCTY 4X03 A/B - Inquiry in an Engineering Context III

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

6-9 units
  • Engineering and Society focus electives

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

Level IV: 35-36 Units

10 units
  • ENGINEER 4A03 - Sustainability and Ethics in Engineering
  • ENGINEER 4J03 - Materials Fabrication
  • ENGINEER 4T04 - Materials Selection in Design and Manufacturing

9 43 units
  • MATLS 4I03 - Sustainable Manufacturing Processes
  • MATLS 4L04 A/B - Materials Manufacturing
  • MATLS 4Z06 A/B - Industrial Projects

4 units
from
  • MATLS 4LA2 - Heat-treatable Al alloys
  • MATLS 4LF2 - Synthesis, properties, and application of thin films
  • MATLS 4LS2 - Physical Metallurgy of Steels

3 units
  • approved complementary studies electives

9-10 units
  • approved Level III or IV technical electives
Faculty of Social Sciences

Request to Correct the Title of New Minor

Included with this document you will find the Curriculum Amendment that was submitted to the Faculty of Social Sciences Faculty Council meeting on February 16, 2017 for approval.

The new Minor in the Social Sciences of Mental Health and Addiction was originally submitted for with the Faculty of Social Sciences 2017-18 Curriculum Report that was approved by UGC Curriculum & Admissions Committee on November 24, 2016 and by UGC on December 6, 2016.

In January, 2017 the department of Health Aging and Society discovered an issue with one of the courses for their programs and this new minor. With the opportunity to submit a new course for approval, they also submitted a new title “Minor in Mental Health, Addiction and Society” which was more in line with the other minor offered by the department. I submitted the following document to our Faculty Council as mentioned above and it was approved.

Upon preparing the document to present to UGC, I made a clerical error with the title and submitted the revisions to the minor with the old title by accident. The Department of Health Aging and Society would very much appreciate having the new title in the Undergraduate Calendar for 2017-18 and wish to use the new title going forward in the materials they distribute to students. We would appreciate it if UGC would permit the Department and the Faculty of Social Sciences to use the new title.
Faculty of Social Sciences
REPORT TO UNDERGRADUATE COUNCIL SUMMARY
OF CURRICULUM CHANGES FOR 2017-18
Addendum

Health Aging & Society

1.0 NEW COURSES:

1.1 COURSE ABBREVIATION & CODE COURSE TITLE

HLTHAGE 2GG3 - Mental Health and Society
3 unit(s)
An examination of mental health and illness from different social, cultural and historical perspectives, including consideration of changing notions of diagnosis, treatment and prevention.

Three hours (lectures and discussion); one term

Prerequisite(s): Registration in Level II or above

Justification: HLTHAGE 2GG3 will replace HLTHAGE 2G03 due to HLTHAGE 2G03 having significant overlap with HLTHAGE 1CC3. Initially this was not anticipated to be problematic but once the new minor, The Social Studies of Mental Health and Addiction was introduced, this created a path for students to take HLTHAGE 1CC3 and then HLTHAGE 2G03 afterwards. This problem is rectified with now with the introduction of HLTHAGE 2GG3 and new and different content from that of HLTHAGE 1CC3.

2.0 COURSE DELETIONS:

2.1 HLTHAGE 2G03 - Mental Health and Society

Justification: see above

3.0 REVISIONS TO EXISTING PROGRAMS:

3.1 Minor in Mental Health, Addiction and Society
REQUIREMENTS
24 units total

3 units
from
  • HLTH AGE 1CC3 (or HLTH AGE 2G03 if taken prior to Spring 2016) – Introduction to Mental Health and Illness

3 units
from
  • HLTH AGE 1AA3 – Introduction to Health Studies
  • HLTH AGE 1BB3 - Aging and Society
  • SOCWORK 1AA3 - So You Think You Can Help? Introduction to Social Work I
  • SOCWORK 1BB3 - Reimagining Help: Introduction to Social Work II
  • SOCIOL 1C03 - Canadian Society: Social Problems, Social Policy, and the Law
  • SOCPsy 1Z03 – An Introduction to Social Psychology

3 units
from
  • HLTH AGE 2GG3 (or if HLTH AGE 2G03 taken between June 2016 and August 2017) – Mental Health and Society

15 units
from
  • Course List

3.2 This new course HLTHAGE 2GG3 will be added wherever HLTHAGE 2G03 was present in the Course Lists for:

Honours Social Psychology

Minor in Justice Law & Order

Interdisciplinary Minor in Social Justice and Inclusive Communities
REPORT TO UNDERGRADUATE COUNCIL
FROM THE
UNDERGRADUATE COUNCIL AWARDS COMMITTEE

FOR APPROVAL

I  University Aid and Awards Policy (Attachment I)

At its meeting of March 21, 2017, the Undergraduate Council Awards Committee approved, for recommendation to Undergraduate Council and Graduate Council, the University Aid and Awards Policy. The policy revisions were undertaken by the Ad Hoc Committee to Review the Undergraduate Awards Policy. The Ad Hoc Committee was struck to review the policy as a whole and to give particular consideration to ensuring and promoting access and equity in the administration of entrance awards under the Undergraduate Awards Policy. Further, once the Ad Hoc Committee had begun its work, a request from the School of Graduate Studies to include graduate awards in the policy revisions was approved. As there were a number of changes to be made to the policy, the Ad Hoc Committee decided to make the revisions to the policy in two stages. The first stage includes revisions to the overall structure of the policy, the general regulations or terms and conditions for awards, the addition of graduate awards in the policy, and clarification of terms and processes. The second phase addresses the specific eligibility requirements for awards, entrance awards in particular, and the Award Regulations that appear in the Undergraduate Calendar and the Graduate Calendar.

The attached proposed revisions are the result of the first phase of the revisions, and include a change in the name of the policy to University Aid and Awards Policy. The Ad Hoc Committee will continue to work on the remaining changes required, as well as to the Award Regulations that appear in the Undergraduate Calendar and the Graduate Calendar.

Graduate Council will review the Policy, for approval, at its meeting of Tuesday, April 18, 2017.

The Undergraduate Council Awards Committee now recommends,

that Undergraduate Council approve the University Aid and Awards Policy, conditional on the approval of Graduate Council, as set out in Attachment I.

II  Terms of Award (Attachment II)

At the same meeting, the Undergraduate Council Awards Committee approved the following for recommendation to Undergraduate Council.

(i) Terms of Award for New Awards
    The Asante Sana Global Health Award
    The Walker Wood Foundation Academic Grant

(ii) Changes to Terms of Award
The CFUW-Hamilton Memorial Prize in Political Science

(iii) New Bursaries
The Paul Ray and Alexander Bishop Bursary
The Collegiate Guardian Bursary
The Averbuch Family MD Bursary for New Canadians
The Clinical Education Leaders Bursary Fund

III Awards Removed from the Undergraduate Calendar (Attachment II)
Also at the same meeting, the Undergraduate Council Awards Committee approved, for recommendation to Undergraduate Council, removal of the following awards from the Undergraduate Calendar.

The Ryan B. Clarke Political Science Scholarship
The Hamilton Transportation Club Scholarship
The Multimedia Senior Thesis Prize
The Science Class of ‘97 Legacy Community Contribution Award
The Mark and Bev Taylor Family Academic Grant
The Rachel Barsky Memorial Bursary
The Rachel Barsky II Memorial Bursary
The Matt Casey Bursary
The Gupta Family Emergency Bursary Fund
The Labour Studies Class Of ’97 Legacy Bursary
The McFadgen Bursary
The McMaster MBA Alumni Association Bursaries
The Allen and Milli Gould Family Foundation Bursaries
The Ross Hammond Bursary
The Gary James Minnett Bursary
The Physician’s Assistant Bursary
The Rotary Club of Ancaster A.M. Murray Ferguson Bursary
The Albert Snow Hair Design Bursary

The Undergraduate Council Awards Committee now recommends,

that Undergraduate Council approve the terms of award for two new awards, changes to terms of one award, four new bursaries, and eighteen awards removed from the Undergraduate Calendar, as set out in Attachment II.

Undergraduate Council
April 18, 2017
Complete Policy Title: University Aid and Awards Policy

Approved by: Senate

Date of Original Approval(s): April 12, 1989

Responsible Executive: Senior Associate Registrar, Student Financial Aid and Scholarships Associate Registrar and Graduate Secretary

DISCLAIMER: If there is a Discrepancy between this electronic policy and the written copy held by the policy owner, the written copy prevails
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SECTION I: PREAMBLE
McMaster University (the University) seeks to maximize aid and award opportunities for students while ensuring equity in competition and consistency in administration. In doing so, the University operates within the University Aid and Awards Policy to ensure its responsibilities to students and donors are met.

SECTION II: SCOPE
The University Aid and Awards Policy provides the framework through which all University-established aid and award programs must be approved and administered. Established aid and award programs include academic awards, community contribution awards, academic grants, bursaries and work programs.

This Policy does not cover aid and awards established outside the University including, but not limited to, those offered by federal and provincial governments, the Tri-Council Agencies and private organizations. This Policy does not cover departmental financial awards. For further information about the administration of awards outside this policy, please contact the external organization or the administering department.

This Policy is reviewed every three years by the Undergraduate Council Awards Committee, Undergraduate Council, and Graduate Council.

SECTION III: GLOSSARY
For the purposes of this Policy:

Aid Program Funding allocated to students on the basis of demonstrated financial need.

Academic Award An award program that recognizes a student for academic excellence and, in some cases, other forms of earned merit. Academic awards are assigned to categories such as Entrance, In-Course, Graduand, Travel and Exchange.

Academic Grants A hybrid aid and award program for students that recognizes academic excellence and, in some cases, other forms of earned merit, and demonstrated financial need.

In-course academic grants are awarded based on academic achievement in degree work completed at the University.

Entrance academic grants are awarded to students entering Level 1, based on the academic achievement in the studies which qualified them for admission to their program.

Award Program Funding allocated to students on the basis of academic excellence or earned merit.

Bursary An aid program providing funding to students in the form of a non-repayable grant. A bursary may include a minimum expectation of academic achievement or other miscellaneous criteria.
| **Community Contribution Awards** | Community contribution awards are non-monetary, non-academic awards, allocated on the basis of demonstrated qualities of leadership or innovative skills, service to the University or community at large, or outstanding athletic or artistic participation. Recipients of community contribution awards receive letters of recognition. |
| **Departmental Financial Awards** | Departmental financial awards support students in a manner consistent with the goals of the University, but do not meet all of the approved regulations through which University-established aid and award programs are administered (e.g. assessment of financial need or merit). Departmental financial awards are administered by designated representatives at the University (e.g. Athletics and Recreation) that have established their own processes for identifying recipients. Financial awards do not have “University” or “McMaster University” in the name of the award and contain words such as “Faculty of xxx Financial Award” or “Department of xxx Financial Award” or “Athletic Financial Award”. Departmental financial awards are not Senate-approved awards and thus are not included on University transcripts, in University Calendars or recognized at University Convocations. |
| **Funds** | The financial resources supporting aid and award programs. Funds may be directed from operating, research and/or donor gifts (trust funds) for awards, academic grants, bursaries and work programs. |
| **Fund Terms** | The criteria, typically specified by a donor, that a student must meet in order to receive the proceeds of a fund. |
| **Level** | Level is used to describe a student’s progression through a program. |
| **Prizes** | Academic awards, with a monetary value of $100 or less, and those with no disbursed monetary value (e.g. books, medals, letters of recognition, etc.). |
| **Registrar** | The Office of the Registrar, Student Financial Aid & Scholarships in reference to the Undergraduate Aid and Award Programs, and the School of Graduate Studies in reference to Graduate Aid and Award Programs. |
| **Student** | An individual enrolled in a course or program of study approved by the Senate. |
| **University Calendars** | The current versions of the Undergraduate Calendar and Graduate Calendar. See [http://academiccalendars.romcmaster.ca](http://academiccalendars.romcmaster.ca). |
| **Work Programs** | An aid program providing on-campus employment opportunities for students. Part-time opportunities are available during the fall and winter terms, while both part-time and full-time opportunities are available during the summer term. Students earn at least minimum wage. Work programs provide partial reimbursement of an approved student’s salary to employers who hired students into approved work program positions. |
SECTION IV: PURPOSE
This Policy provides guidance and consistency for members of the University community in the provision of aid and award programs including:

(a) principles that govern aid and award programs,
(b) establishing minimum eligibility requirements, and
(c) establishing and amending fund terms.

SECTION V: PRINCIPLES
The University offers aid programs to assist students who demonstrate the greatest financial need. Need-based aid may be delivered in the form of bursaries and/or work programs.

The University offers award programs to encourage and recognize the achievement of entering, enrolled, and graduating students. University award programs include:

(a) Academic awards which recognize high levels of scholarship, and in some cases other forms of earned merit, in the form of awards and prizes;
(b) Academic grants which recognize high academic achievement and demonstrated financial need; and
(c) Community contribution awards, which recognize non-academic achievement, such as service to the University or community at large.

The University administers aid and award programs according to Canadian law, trust law and the Ontario Human Rights Commission Policy on Scholarships and Awards.

Undergraduate Council and Graduate Council, on behalf of the Senate, approve the granting of aid and awards, as recommended by the Registrar, and, in the case of School of Medicine administered aid and awards, the Program Manager of the Undergraduate Medical Program.

To ensure a fair and wide allocation of aid and awards, the Registrar:

(a) Maintains, through an annual review process, the current University Calendars as the primary source of aid and award program information.
(b) Updates the General Regulations of aid and award programs in the University Calendars to confirm the availability of aid and award programs, to define all aid and award program eligibility criteria, and to identify any restrictions on the number and value of awards that a student may receive.
(c) Restricts the allocation of aid and awards, to remain compliant with external regulating bodies (e.g. Tri-Council Agencies).
(d) Restricts second baccalaureate Undergraduate degree students from receiving any academic award or academic grant, unless the terms of a particular donor award specify eligibility and the student has not received the award previously.
(e) Restricts the allocation of aid and awards according to the fund terms imposed by a donor (e.g. higher academic average requirement).
(f) May choose not to grant aid or awards in the absence of a suitable candidate; may choose to limit the number of recipients selected where funding is limited; may choose to limit the number of recipients...
selected where too few suitable candidates exist; and/or may choose to generate applicant pools for awards by application, where complete applications have not been received.

(g) May revise the terms and stated value and/or suspend the granting of aid and award funds (e.g., donor funds).

(h) Will make aid and award program information widely available to students through the University Calendars, websites and other means, as appropriate.

(i) Will not violate other University approved by-laws and policies (e.g., Senate By-Laws; Operational Policy and Procedures for Trust and Endowed Fund Management; Freedom of Information and Protection of Privacy Act; Field Trips, Student Placements and Research Activity Planning and Approval Program, etc.).

SECTION VI: ELIGIBILITY FOR AID AND AWARD PROGRAMS

This Policy identifies the minimum eligibility requirements for student aid and award programs:

(a) To receive the monetary value of aid and awards, students must be enrolled at the University.

(b) Upon request of the student, and with the express permission of the Registrar, aid and awards may be deferred up to one academic year, unless otherwise specified in the General Regulations for aid and award programs or in the specific fund terms in the University Calendars.

(c) A student who withdraws, is on approved leave, changes academic load from full to part-time, reduces course load or units, has approved to graduate status or otherwise alters their program of study may be required to forfeit all or part of their funding, per the General Regulations of the aid and award programs in the University Calendars. The decision to rescind or reduce funding will be made by the Registrar and will consider the General Regulations of the aid and award programs, the specific terms of the aid/award funding, the circumstances leading to the student's decision (e.g. compassionate grounds), the educational costs already incurred and other relevant information.

(d) If the University concludes, based on reasonable grounds, that an aid or award applicant or recipient has falsified or withheld information as part of an application or misrepresented oneself or achieved academic results through dishonest means (see the Academic Integrity Policy), the student may have their application removed from consideration and/or be required to forfeit all or part of their funding and/or be restricted from receiving further funding by the Registrar.

(e) Where selection of an aid or award recipient requires judgment, faculty representatives, and/or department representatives, a Faculty Selection Committee and/or a University-wide Selection Committee may be asked to rank and/or recommend eligible students. The Registrar and, in the case of School of Medicine administered funds, the Program Manager of the Undergraduate Medical Program, will review the returned rankings/recommendations and make the final funding decision.

(f) Allocation of aid is completed according to the General Regulations of the aid program in the University Calendars and is dependent on demonstrated financial need.

(g) Financial need must be determined on the basis of one or more of the following:
   - Canadian federal and/or provincial government student aid applications (e.g. OSAP),
   - completion of a standard University Need Profile,
• student discussions with designated staff on campus (e.g. Student Loans Officer, Indigenous Student Counsellor, etc.) who confirm the need for emergency or special consideration funding.

(h) In determining need, and the allocation of University administered funds, the Registrar must also comply with the policies, procedures and guidelines provided by the Ministry of Advanced Education and Skills Development (MAESD). This includes, but is not limited to, the Ministry's Student Access Guarantee, which mandates the institutional aid obligation (payment amount and deadline date) for a student.

(i) Allocation of awards is completed according to the General Regulations of the award program in the University Calendars.

(j) All awards must be granted on the basis of one or more of the following:

• Overall academic performance;
• Academic performance in a particular program, course, project or thesis using one or more of the following criteria including, but not limited to, work completed (e.g. essay, project, thesis, placement, research, research potential, etc.), grades, averages or standing;
• Achievement in a skill related to academic studies;
• Non-academic achievement(s) and/or the display of qualities deemed worthy of consideration;
• Demonstrated financial need in the case of academic grants (see g above).

(k) All awards have a minimum academic requirement. The minimums are defined in the General Regulations of the award program in the University Calendars. Donor funds may have additional academic requirements noted in the University Calendars and/or fund documentation.

SECTION VII: APPEAL PROCEDURES

The University has a responsibility to provide fair and equitable procedures for student appeals relating to aid and award programs. These appeal procedures are outlined in the General Regulations in the University Calendars.

SECTION VIII: PRIVACY CONSIDERATIONS

Applications for aid and awards, supporting documentation (e.g. transcripts, letters of reference, income tax notices of assessment, student loan entitlements, etc.) and responses to applications shall be held by the Registrar and, in the case of School of Medicine administered aid and awards, the Program Manager of the Undergraduate Medical Program in accordance with the Freedom of Information and Protection of Privacy Act.

That Act and McMaster University's Notice of Collection statement shall govern the information provided to donors and others concerning award recipients, including publications such as convocation programs and award booklets.

SECTION IX: REPORTING REQUIREMENTS

Mandatory annual reporting to the Undergraduate Council Awards Committee, Undergraduate Council and Graduate Council, include identification of award recipients, aid and award performance summaries and identification of participating committee members.
SECTION X: ESTABLISHING FUNDS TO SUPPORT AID AND AWARD PROGRAMS

When establishing funds, to support aid and award programs, the Registrar:

(a) Ensures that the fund terms benefit students and are written with a minimum of limiting criteria.

(b) Seeks approval of the fund terms through the Undergraduate Council Awards Committee and Undergraduate Council, or the Graduate Council.

(c) Ensures all necessary approvals are in place prior to publicizing the fund terms, making application forms available, receiving applications, selecting recipients and/or disbursing funds.

(d) Determines the manner in which recipients will be selected, for example, mathematically on the basis of calculated need or average, or judgmentally, on the basis of an application or nomination.

(e) Determines whether an application is needed to support the evaluation of non-academic criteria, such as community involvement.

(f) Where an application is required, determines the content, deadlines, and supporting documentation requirements to support the evaluation and selection process (e.g. reference letters, curriculum vitae, University transcript, statement of interest, essay, etc.).

(g) Establishes University-wide Selection Committees to rank and/or recommend students for funding where use of judgment is required. Additionally, the Registrar will provide a list of University-wide Selection Committees and participating members to the Undergraduate Council Awards Committee and Undergraduate Council on an annual basis.

(h) Oversees the University-wide Selection Committees ensuring a minimum of three members, including at least one faculty member, are involved in the funding recommendations. If the funding is open to students from more than one career (i.e. students enrolled in Graduate, Medicine, Undergraduate degrees), the Registrar ensures that the committee has representation from each area (i.e. Graduate, Medicine and Undergraduate).

(i) Establishes faculty and department contacts where faculty- or department-specific award adjudication is required.

(j) Protects the University’s academic integrity and autonomy as it relates to funding decisions. In no case shall a donor and/or their representatives select, vote or have a veto over the recipients of funding. The final choice of recipients rests solely in hands of McMaster University.

(k) Requires a minimum donor contribution to support aid and awards. Currently:

- The minimum value to establish an endowed fund that supports University aid and awards is $20,000. This commitment, at the current expenditure policy rate of 4%, generates $800 annually.
- The minimum value to establish a fund that is not endowed that will support University aid and awards is $3000 (a minimum commitment of $1000 per year for three years).
- The minimum value to establish a fund that is not endowed that will support University aid and awards by application is $7500 (a minimum commitment of $2500 per year for three years). The minimum value to establish an endowed fund that will support university aid and awards by application is $62,500. This commitment, at the current expenditure rate of 4%, generates $2500 annually.
*These minimums will be reviewed from time to time by the Undergraduate Council Awards Committee, Undergraduate Council and Graduate Council and adjusted appropriately.

(a) Undertakes to abide by the terms attached to trust funds received through bequests and gifts, provided that such terms are consistent with this Policy. See also the Operational Policy and Procedures for Trust and Endowed Fund Management.

(m) Includes only Senate approved awards (i.e. approved through the Undergraduate Council Awards Committee and Undergraduate Council and/or Graduate Council) on University transcripts.

(n) Includes only Senate approved awards in the University Calendars.

(o) Includes only Senate approved graduand awards in University Convocation publications, and of these, recognizes only the top University and Faculty awards, at University Convocations.

(p) Considers the potential for emerging gift types that do not meet current University-established aid and award program policy. University Advancement may also recommend to the Registrar, the Undergraduate Awards Committee, Undergraduate Council and Graduate Council that new aid and award programs and/or policies, be established to meet the requirements of emerging gift types.

SECTION XI: GUIDELINES FOR WRITING FUND TERMS

When writing fund terms to support new aid and awards, the following guidelines apply (see Appendix A for further information):

Name
The name could be representative of the donor and the aid or award program (e.g. The McMaster Alumni Association Bursary).

Descriptive Sentence 1
The first sentence typically identifies the year in which the award was established, the donor name(s), degree awarded, class year (e.g. Class of '50 (for 1950) and Class of 2020), or anonymous request, and the reason for its establishment.

Descriptive Sentence 2
The second sentence identifies the specific criteria (need-based, academic and/or other form of earned merit) that must be met by the student for whom the funding is intended. Note: the fund terms should be as broad as possible to ensure administrative sustainability and disbursement of funding as intended.

Preference Statement
The third sentence may confirm a donor’s preference (if applicable). “Preference will be given to ...” confirms that attempts will be made to identify a student meeting the donor preference after all conditions specified in the descriptive sentences have been met. For award purposes, this usually means that the award is judgmental in nature. For aid purposes, it may mean that a student must self-identify (e.g. "I am a sole support parent"), to be allocated particular funding. Preference statements are treated as self-declarations and are not necessarily verified by the Registrar. In the case of bursaries, preference statements typically affect the source of a student’s bursary funding, not the amount.
Note: the preference statement should be as broad as possible to ensure administrative sustainability and disbursement of funding as intended.

**Award Value**
An initial award value is typically specified for awards and academic grants. The value may be specified as total dollars and duration. Award values may also be non-monetary, as is the case for prizes (e.g. books, medals, etc.) or community contribution awards (e.g. letters of recognition).

**Number of Recipients**
It is preferable that the number of intended recipients not be specified, to allow the Registrar to set the number based on available funding.

It is also preferable that bursary values not be specified, to allow the Registrar to set bursary values annually, in accordance with the General Regulations of the bursary program.

**SECTION XII: AMENDING TERMS OF ESTABLISHED FUNDS**
The terms of established funds, supporting aid and awards, represent a formal agreement, whether funded through an operating or research account or donor trust fund. When a donor establishes aid or award funding it takes the form of a trust fund administered by McMaster as trustee. Trust funds hold gifts (donations and bequests) that have been designated according to terms and conditions agreed upon by a donor and the University. Trust funds may only be altered in accordance with their original purpose, and generally may only be altered if the original purpose is impossible or impracticable to administer. Superficial changes (such as changes to a name or value of an award) are allowed.

Amendment to terms may, however, become necessary due to changes such as cancellations of courses or programs which have been named in the terms, or when there are no longer eligible students. The University may propose to amend the terms to carry out the nearest possible original intent of the donor.

When aid and awards are no longer available (e.g. operating or research funding no longer exists or a trust fund has been closed) they need to be discontinued and removed from publications such as the University Calendars.

Changes to aid and award fund names and terms, as well as discontinuation of aid and awards funding must be approved through the Undergraduate Council Awards Committee and Undergraduate Council or Graduate Council.

Changes to aid and award values are managed by the Registrar based on available funding and the Operational Policy and Procedures for Trust and Endowed Fund Management and do not require Undergraduate Council Awards Committee and Undergraduate Council or Graduate Council approval. Changes to aid and award values are reported to the Undergraduate Council Awards Committee, Undergraduate Council and Graduate Council for information.
SECTION XIII: POLICY AMENDMENTS AND EXCEPTIONS

The University Aid and Awards Policy is reviewed every three years by the Undergraduate Council Awards Committee and Graduate Council. Recommended amendments must be approved by the Undergraduate Council Awards Committee, Undergraduate Council, Graduate Council, and Senate prior to implementation.

The University may amend, from time to time, the general requirements to be met by all recipients of University aid and award programs. This may include, but is not limited to, the attainment of some overall level of scholarships, independent of the terms of an individual award. See Senate By-Laws (Article XI, 164, (f) and (g)).

The University may amend this Policy, as recommended, from time to time, by the Registrar to the Undergraduate Council Awards Committee, Undergraduate Council, Graduate Council, and Senate.
APPENDIX A: COMMONLY USED PHRASES IN FUND TERMS

i. “A student who has completed Level x” Example: “A student who has completed Level 1” refers to a student who is enrolled above Level 1, while “A student who has completed Level 2” refers to a student who is enrolled above Level 2. Note: This phrase should not be used where level is not a factor in determining the aid or award recipient.

ii. “A graduating student” or “student graduating” refers to a student who is in their graduating year and will be assessed for an award at the completion of their graduating term. Example - “... to be awarded to a student graduating from an Engineering and Management program.”

iii. “A student in a Sociology program...” allows students in all B.A., Honours and Combined Honours Sociology programs to be considered. This open language is preferred.

iv. “A student currently enrolled in a graduate program in Chemistry...” allows graduate students enrolled in programs offered by the Department of Chemistry to be considered. This includes both Master's and Ph.D. students.

v. “A student in an Honours program in Sociology...” allows students in both a single Honours program and Combined Honours programs in Sociology to be considered.

vi. “A student in Level 3 of the Honours Sociology program...” allows a student in Level 3 of the specified Honours program and will not include Combined Honours programs. This is typically as narrow as terms should be written. Note: The inclusion in the terms of a program description, rather than a specific program name or course number, is strongly encouraged to avoid a future problems where programs and/or courses are no longer offered.

vii. “A student registered in the English Ph.D. program...” allows only students enrolled in the specified Ph.D. program to be considered.

viii. “To be awarded to a graduate student in the Faculty of Health Sciences. Preference to be given to a graduate student pursuing research in preventative medicine...” allows Master’s and Ph.D. students in the Faculty of Health Sciences, who are pursuing research in preventative medicine, to be considered for the award. If the administrator is unable to first identify an eligible student pursuing research in preventative medicine, the award may then be granted to eligible graduate students enrolled in Master’s or Ph.D. programs in the Faculty of Health Sciences.

ix. “Most notable” or “high standing” or “excellence in” or “outstanding academic achievement” or “on the basis of scholarship” does not mean “highest mathematical standing” and must be used in conjunction with “in the judgment of ...”.

x. “In the judgment of ...” means that judgment will be used to select a student who has fulfilled the minimum aid or award program requirements and other criteria as noted in the fund terms. Selection by committee may be required.

xi. “Penultimate” means the second to last level of a program. Example: “To be awarded to the student who has completed the penultimate year at the most recent spring review, and who ranks highest in scholarship, leadership and influence.”
PROPOSED NEW AWARDS FOR APPROVAL

SECTION B: Awards for In-Course Students

THE ASANTE SANA GLOBAL HEALTH AWARD
Established in 2016 by Anne Ehrlich, Professor Emerita of McMaster’s School of Nursing, in celebration of the School’s 70th anniversary and in gratitude for the years she was a part of McMaster’s wonderful community of nurses who have been leaders in primary health care, social justice, locally and globally. To be awarded, on the recommendation of the Associate Dean and Director of the School of Nursing, to a student in the School of Nursing who have completed a clinical placement in primary health care in (a) a global health community, or (b) a remote First Nations community.
Value: $1,000

SECTION G: Academic Grants for Full-Time Students

THE WALKER WOOD FOUNDATION ACADEMIC GRANT
Established in 2016 by the Walker Wood Foundation. To be awarded annually to a student enrolled in Level 1 of a program of study in the Faculty of Engineering who achieves a minimum admission average of 90%, and who demonstrates financial need and community leadership. The recipient must be a Canadian citizen. Preference will be given to a student from a rural location. The grant is tenable for up to three years provided the recipient remains enrolled in at least 24 units and maintains a minimum Fall-Winter Average of 9.5.
Value: $5,000 per year

CHANGES TO AWARD TERMS FOR APPROVAL

THE CFUW-HAMILTON MEMORIAL PRIZE IN POLITICAL SCIENCE
Established in 1992 by the members of CFUW-Hamilton to honour the memory of past members. Renewed in 2015 on the occasion of the Club’s 90th anniversary to honour the memory of past members. To be awarded to a female student graduating from a Political Science program who has demonstrated outstanding academic achievement.

PROPOSED NEW BURSARIES FOR APPROVAL

Submitted by the Office of Student Financial Aid & Scholarships

THE PAUL RAY & ALEXANDER BISHOP BURSARY
Established in 2016 by Paul Ray, B.Com.H (Class of ’07) and Alexander Bishop, MA (Class of ’08) to support students in achieving their educational goals. To be granted to students enrolled in the Bachelor of Commerce program who demonstrate financial need. Preference will be given to students whom identify as LGTBQ+.

THE COLLEGIATE GUARDIAN BURSARY
Established in 2016 by a student to support other students in their pursuit of academic success. To be granted to a student who demonstrates financial need. Preference will be given to a student who is an expectant mother or who has pre-school age children.
SUBMITTED BY THE FACULTY OF HEALTH SCIENCES

THE AVERBUCH FAMILY MD BURSARY FOR NEW CANADIANS
Established in 2016 by Max and Wendy Averbuch. To be granted to a student enrolled in the Michael G. DeGroote School of Medicine, who is a permanent resident of Canada and demonstrates financial need. Preference will be given to students who are new to Canada. Applicants must declare their immigrant status.

THE CLINICAL EDUCATION LEADERS BURSARY FUND
Established in 2017 by clinical educators in the Niagara region. To be awarded to a student from the Niagara Regional Campus of the Michael G. DeGroote School of Medicine who demonstrates financial need.

Awards/Academic Grants/Bursaries Removed From the Undergraduate Calendar for Approval

THE RYAN B. CLARKE POLITICAL SCIENCE SCHOLARSHIP
THE HAMILTON TRANSPORTATION CLUB SCHOLARSHIP
THE MULTIMEDIA SENIOR THESIS PRIZE
THE SCIENCE CLASS OF ’97 LEGACY COMMUNITY CONTRIBUTION AWARD

THE MARK AND BEV TAYLOR FAMILY ACADEMIC GRANT

THE RACHEL BARSKY MEMORIAL BURSARY
THE RACHEL BARSKY II MEMORIAL BURSARY
THE MATT CASEY BURSARY
THE GUPTA FAMILY EMERGENCY BURSARY FUND
THE LABOUR STUDIES CLASS OF ’97 LEGACY BURSARY
THE MCFADGEN BURSARY
THE MCMASTER MBA ALUMNI ASSOCIATION BURSARIES
THE ALLEN AND MILLI GOULD FAMILY FOUNDATION BURSARIES
THE ROSS HAMMOND BURSARY
THE GARY JAMES MINNETT BURSARY
THE PHYSICIAN’S ASSISTANT BURSARY
THE ROTARY CLUB OF ANCASTER A.M. MURRAY FERGUSON BURSARY
THE ALBERT SNOW HAIR DESIGN BURSARY
REPORT TO UNDERGRADUATE COUNCIL  
FROM THE  
UNDERGRADUATE COUNCIL CERTIFICATES AND DIPLOMAS COMMITTEE  
FOR APPROVAL

I Senate Policy on Diplomas and Certificates (Attachment I)  
At its meeting of March 16, 2017, the Undergraduate Council Certificates and Diplomas Committee approved the Senate Policy on Diplomas and Certificates for recommendation to Undergraduate Council and Graduate Council. The policy revisions were undertaken by the Ad Hoc Committee to Review the Policy on Certificates and Diplomas. The new Policy, which replaces the existing Policy on Certificates and Diplomas, has been considerably reorganised, to introduce definitions of the types of credentials covered by the policy and of key terms used within the Policy. Graduate diplomas and certificates are now included in the Policy; however, it is clearly noted that graduate diplomas, although defined in the revised Policy, are approved through the process outlined in the Policy on Academic Program Reviews. A new type of undergraduate certificate has been introduced; the Concurrent Certificate will enable Faculties to launch certificate programs that include courses that overlap up to 100% with undergraduate degree courses. The Concurrent Certificate does not replace the existing certificate, which is now referred to as a Stand-Alone Certificate. The revised Policy also clarifies the reporting requirements for Certificates of Completion and Certificates of Attendance. Sample certificate/diploma and certificate of completion/attendance parchments have been appended to the Policy.

Graduate Council will review the Policy, for approval, at its meeting of Tuesday, April 18, 2017.

The Undergraduate Council Certificates and Diplomas Committee now recommends,

that Undergraduate Council approve for recommendation to Senate, the Senate Policy on Diplomas and Certificates, conditional on the approval of Graduate Council, as set out in Attachment I.

II Additional Recommendations following from Policy Review  
In addition to the revisions to the Policy above, the Ad Hoc Committee to Review the Policy on Certificates and Diplomas made a number of recommendations regarding matters that were outside the scope of the Policy. The Undergraduate Council Certificates and Diplomas Committee has endorsed the following for recommendation to Undergraduate Council:

i. Non-McMaster Credentials:  
There are a number of examples of programs or courses offered through and/or developed by McMaster University that lead to a non-McMaster credential. In some cases, the courses are degree courses that are recognised by an external institution and in other cases the courses are developed to be unique to the credential. Of particular concern are programs offered by organisations such as Coursera. These programs are massive open online courses (MOOCs)
and although the parchment issued to students who complete the program requirements
does not indicate that the program is a McMaster program, the programs themselves are
heavily marketed as created and offered by McMaster University.

The Undergraduate Council Certificates and Diplomas Committee now recommends,

that Undergraduate Council strike an ad hoc committee to the need for oversight of
programming at McMaster that leads to an external credential.

ii. Credit for a Single Course toward Multiple Credentials
The Ad Hoc Committee gave consideration to including, in the revised policy, a limit on
the number of times a course could count toward a credential at McMaster. However, it was
determined that establishing this limitation was beyond its mandate, as this would normally
fall under the General Academic Regulations, rather than this Policy.

The Undergraduate Council Certificates and Diplomas Committee now recommends,

that Undergraduate Council adopt, in the General Academic Regulations, a requirement
that a single course shall be permitted to be counted toward a maximum of two
credentials.

iii. Parchments Appended to the Policy
Parchments for McMaster Diplomas and academic Certificates, Certificates of Completion
and Certificates of Attendance have been approved by the Committee on University
Ceremonials and Insignia and generic versions are appended to the Senate Policy on
Diplomas and Certificates. The current parchment for Certificates of Completion and
Certificates of Attendance, however, are difficult to use and costly to print.

The Undergraduate Council Certificates and Diplomas Committee now recommends,

that new parchments for Certificates of Completion and Certificates of Attendance
are designed and submitted for approval to the Committee on University Ceremonials
and Insignia; once approved, generic versions of the new design(s) shall replace the
current version appended to the proposed Senate Policy on Diplomas and Certificates.

III Establishment of New Certificate and Diploma Programs

i. Diploma in Business of Golf and Resort Management Program (Attachment II)
At its meeting of March 16, 2017, the Undergraduate Council Certificates and Diplomas
Committee approved the establishment of a Diploma in Business of Golf and Resort
Management program. The program has been developed in consultation with the Golf
Management Institute of Canada (GMIC).

The Undergraduate Council Certificates and Diplomas Committee now recommends,
that Undergraduate Council approve for recommendation to Senate, the establishment of a Diploma in Business of Golf and Resort Management program, as recommended by the Centre for Continuing Education, effective September 1, 2017, as set out in Attachment II.

ii. Applied Clinical Research Certificate Program (Attachment III)
At the same meeting, the Undergraduate Council Certificates and Diplomas Committee approved the establishment of an Applied Clinical Research Certificate program. The program will enable clinical research associates to develop competencies identified by the Association of Clinical Research Professionals (ACRP).

The Undergraduate Council Certificates and Diplomas Committee now recommends,

that Undergraduate Council approve for recommendation to Senate, the establishment of an Applied Clinical Research Certificate program, as recommended by the Centre for Continuing Education, effective September 1, 2017, as set out in Attachment III.

iii. Certificate in Marketing Program (Attachment IV)
Also at the same meeting, the Undergraduate Council Certificates and Diplomas Committee approved the establishment of a Certificate in Marketing program. The program offers students an alternative to the existing Marketing Diploma program.

The Undergraduate Council Certificates and Diplomas Committee now recommends,

that Undergraduate Council approve for recommendation to Senate, the establishment of a Certificate in Marketing program, as recommended by the Centre for Continuing Education, effective September 1, 2017, as set out in Attachment IV.

iv. Canadian Health Studies Certificate Program (Attachment V)
Also at the same meeting, the Undergraduate Council Certificates and Diplomas Committee approved the establishment of a Canadian Health Studies Certificate program. The program includes health preparatory courses for students wishing to pursue further health-based programs.

The Undergraduate Council Certificates and Diplomas Committee now recommends,

that Undergraduate Council approve for recommendation to Senate, the establishment of a Canadian Health Studies Certificate program, as recommended by the Centre for Continuing Education, effective September 1, 2017, as set out in Attachment V.

IV Revisions to Existing Certificate and Diploma Programs

i. Business Administration Diploma Program – New Creative, Critical and Design Thinking Concentration (Attachment VI)
At its meeting of March 16, 2017, the Undergraduate Council Certificates and Diplomas Committee approved the establishment of a new Creative, Critical and Design Thinking
Concentration within the Business Administration Diploma program. The new concentration includes three new elective courses for Business Administration Diploma students.

The Undergraduate Council Certificates and Diplomas Committee now recommends,

that Undergraduate Council approve for recommendation to Senate, the establishment of a new Creative, Critical and Design Thinking Concentration within the Business Administration Diploma program, including three new elective courses, as recommended by the Centre for Continuing Education, effective September 1, 2017, as set out in Attachment VI.

ii. Marketing Diploma Program – New Digital Marketing Concentration (Attachment VII)
At the same meeting, the Undergraduate Council Certificates and Diplomas Committee approved the establishment of a new Digital Marketing Concentration within the Marketing Diploma program. The new concentration includes courses that are part of the existing Digital Marketing Certificate program.

The Undergraduate Council Certificates and Diplomas Committee now recommends,

that Undergraduate Council approve for recommendation to Senate, the establishment of a new Digital Marketing Concentration within the Marketing Diploma program, as recommended by the Centre for Continuing Education, effective September 1, 2017, as set out in Attachment VII.

iii. Marketing Diploma Program – New Elective, Design Thinking (Attachment VIII)
At the same meeting, the Undergraduate Council Certificates and Diplomas Committee approved a new elective, Design Thinking, within the Marketing Diploma program.

The Undergraduate Council Certificates and Diplomas Committee now recommends,

that Undergraduate Council approve for recommendation to Senate, a new elective, Design Thinking, within the Marketing Diploma program, as recommended by the Centre for Continuing Education, effective September 1, 2017, as set out in Attachment VIII.

FOR INFORMATION

V New Certificate of Completion Programs
At its meeting of March 16, 2017, the Undergraduate Council Certificates and Diplomas Committee reviewed for information two new Certificate of Completion programs:

a) Certificate of Completion in Creative, Critical and Design Thinking (Attachment IX)
b) Certificate of Completion in Epidemiology and Pathophysiology (Attachment X)

Undergraduate Council
April 18, 2017
Complete Policy Title: Senate Policy on Diplomas and Certificates

Policy Number (if applicable): 

Approved by: Senate

Date of Most Recent Approval: 

Date of Original Approval(s): May 12, 1997

Supersedes/Amends Policy dated: Policy on Certificates and Diplomas, March 10, 2010

Responsible Executive: Vice-Provost (Faculty)

Enquiries: University Secretariat

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1. INTRODUCTION
This document provides criteria and procedures for the evaluation, approval and monitoring by Undergraduate Council and Graduate Council of undergraduate and graduate certificate and undergraduate diploma programs. It provides a framework which will enable better quality control and unambiguous communication to students and prospective students regarding the nature of each credential and the academic value of certificates and diplomas.

The intention is to provide minimum academic criteria which must be met if programs are to be approved as McMaster certificates and diplomas. With the minima clearly set, program designers will be free to build creatively around them to provide programs appropriate to their constituencies. The academic criteria proposed are intended to maintain the high academic standards of McMaster and enable certificates and diplomas to continue their traditional functions of providing studies complementary to degree programs, professional preparation or upgrading, and bridging into degree programs.

These criteria and procedures are also designed to make it straightforward for McMaster to mount new, innovative certificate and diploma programs. The number of criteria has been kept to a minimum and the procedures have been streamlined in order to allow program developers to move quickly with initiatives while subjecting them to clear, rigorous academic scrutiny. These criteria and procedures are intended to engender speed, flexibility, quality and clarity.

McMaster's diploma and academic certificate programs are operated in accordance with normal academic regulations as outlined in the Undergraduate Calendar or Graduate Calendar (as applicable). For example, students are issued a student number, student records (including grades) are kept by the Office of the Registrar, classes are scheduled within sessional dates, and part-time student fees are charged. Further, university approved certificates and diplomas will be issued by the academic unit offering the program to the student upon completion of all academic requirements of a program.

2. TERMS AND DEFINITIONS
2.1 Credential
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.

2.2 Academic Credit Course
A course of an academic calibre consistent with those offered in undergraduate or graduate degree programs at McMaster. The most common kind of academic credit course is that included in the curricula of undergraduate or graduate degree programs. These provide a benchmark against which other academic credit courses can be evaluated. (See Section 3)

2.3 McMaster Diplomas
2.3.1 Undergraduate Diploma
A McMaster Undergraduate Diploma is a program of study involving a significant body of academic work coherently organized around clear learning objectives. Undergraduate Diplomas (which include post-baccalaureate diplomas) may be focused primarily upon academic or professional development objectives, but all must include academic content equivalent to a minimum of 24 units of undergraduate-level course work. Undergraduate
Diplomas serve such functions as: study complementary to degree programs, professional preparation or upgrading, and bridging into undergraduate degree programs. The word Diploma must be included in the program name. (See Section 4)

2.3.2 Graduate Diploma
McMaster Graduate Diplomas are based on Graduate Degree Level Expectations (see Appendix 1 of the Quality Assurance Framework) and will prepare students for employment requiring sound judgment, personal responsibility and individual initiative, in complex and unpredictable professional environments. Graduate Diplomas must include academic content equivalent to a minimum of four graduate courses at McMaster. Graduate Diplomas are defined in this Policy; however, the review and approval process falls under the Policy on Academic Program Reviews. There are three types of Graduate Diplomas. (See Section 5)

2.3.2.1 Master's Level Diploma (Type 1)
Master’s Level Type 1 Graduate Diploma programs require students to develop a conceptual understanding of fundamental aspects of the discipline. Some programs require students to demonstrate Master's-level analytical, interpretative, methodological and expository skills through course-specific applications, and some may also require students to demonstrate these skills in applied activities.

2.3.2.2 Master’s and Doctoral Level Diploma (Type 2)
Master’s Level Type 2 Graduate Diplomas are offered in conjunction with a Master’s or doctoral degree and represent an additional, usually interdisciplinary, qualification. Programs require students to develop a conceptual understanding of fundamental aspects of the discipline(s) and appropriate levels of analytical, interpretative, methodological and expository skills through course-specific applications, and some may require students to demonstrate these skills in applied activities.

2.3.2.3 Master’s and Doctoral Level Diploma (Type 3)
These stand-alone, direct-entry Graduate Diploma programs require students to develop a conceptual understanding of fundamental aspects of the discipline. Programs require students to demonstrate the appropriate level of analytical, interpretative, methodological and expository skills through course-specific applications, and some may require students to demonstrate these skills in applied activities.

2.4 McMaster Academic Certificates

2.4.1 Undergraduate Certificate
A McMaster Undergraduate Certificate is a program of study coherently organized around clear learning objectives and having academic content equivalent to a minimum of half a year of full-time undergraduate study at McMaster (15 units). There are two types of McMaster Undergraduate Academic Certificates.

2.4.1.1 McMaster Stand-Alone Undergraduate Certificate
Stand-Alone Undergraduate Certificates (which include Post-Baccalaureate Certificates) may be focused primarily upon academic or professional development.
objectives, but all must meet the minimum criterion of academic content. Stand-Alone Certificates serve such functions as bridging into undergraduate degree programs, professional preparation or upgrading, and study complementary to degree studies. (See Section 6)

2.4.1.2 McMaster Concurrent Undergraduate Certificate
A Concurrent Undergraduate Certificate shall be focused primarily upon academic development objectives and must meet the minimum criterion of academic content. This type of Certificate sets out a plan of study complementary to degree studies and will provide added value to degree studies. (See Section 7)

2.4.2 Graduate Certificate
A McMaster Graduate Certificate is a program of study coherently organized around clear learning objectives and having academic content equivalent to a minimum of three graduate courses at McMaster. (See Section 8)

2.5 Non-Academic Programs
These are distinct and differentiated from Certificates and Diplomas. The term “Certificate” shall only be used by McMaster courses and programs within the guidelines of this Policy. There are two types of non-academic programs.

2.5.1 Certificate of Completion
Certificates of Completion may be provided for non-academic programs that include a minimum of 30 contact hours and evaluation of the student’s learning. Certificates of Completion may include academic content if the course or courses have been approved for credit toward another credential. (See Section 9)

2.5.2 Certificate of Attendance
Certificates of Attendance may be provided for programs that have no academic content and for which there is no evaluation of learning. (See Section 10)

2.6 Non-McMaster Certificates
McMaster collaborates with other organisations or institutions to offer programming toward a credential that is issued by that other entity. Such externally issued credentials are outside the scope of this Policy.

3. ACADEMIC CREDIT FOR DIPLOMA AND CERTIFICATE COURSES
Diploma and certificate programs include courses which are determined by Undergraduate Council or Graduate Council, as appropriate, to be of an academic calibre consistent with courses offered in undergraduate or graduate degree programs. While credit for courses in degree programs is normally given in blocks of three or six units, credit can be at the one, two, three or any other unit level. This provides a flexibility appropriate for programs which often have professional development as well as academic goals.

To receive approval as an academic credit course, a course which is not part of a degree program must:
(i) Be at a level of intellectual rigour comparable to that found in undergraduate or graduate degree program courses in the same or similar fields. Academic credit courses are vetted by the Faculty offering the course or that is most relevant to the content of the course.  
(ii) Evaluate student performance by the methods normally used in degree courses such as tests, essays, reports and other assignments.  
(iii) Include a systematic student evaluation of the course using such methods as multiple-choice questionnaires, narrative responses and/or interviews.

3.1 Transfer between Credentials  
Academic credits can be applied to another credential. Examples include, but are not limited to, transfer of credit from a certificate to a degree or from a degree to a diploma. Normally credits can be applied to a maximum of two credentials.

Up to 100% of the academic credit courses completed toward undergraduate diploma and certificate programs may be used for credit toward another credential at the discretion of and in accordance with the normal academic rules specified by academic unit offering the subsequent credential.

In some specific cases, courses taken for credit as part of a graduate diploma program may be considered for credit toward a subsequent Master's degree program.

3.2 Academic Approval Criteria  
When approving a program as a McMaster Diploma or Certificate, Undergraduate Council or Graduate Council (as appropriate) must ensure that the program proposal appropriately fulfills all of the following criteria. It has:  
(i) a well-defined program objective(s);  
(ii) well-defined program learning outcomes;  
(iii) curriculum to meet the program learning outcomes; and  
(iv) admission requirements (as applicable).

Additional criteria for program proposals are set out in Section 11.

4. McMaster Undergraduate Diploma  
4.1 Academic Program Requirements  
All McMaster Undergraduate Diplomas must include academic credit courses equivalent to at least 24 units of undergraduate study at McMaster. In addition to their academic content, Undergraduate Diploma programs may include courses and other forms of learning which are not suitable for academic credit. The maximum overlap with degree courses is 70% of the requirement for the diploma. For example, the maximum overlap for a diploma program consisting of 24 units is 15 units.

4.2 Admission Requirements  
There are two sets of admission requirements:  
an. General Undergraduate Diploma Admission Requirements. Students who wish to enter a McMaster Undergraduate Diploma program must have at least one of: (i) an Ontario Secondary School Diploma or equivalent; (ii) be a mature student as defined in the Undergraduate Calendar of McMaster University; (iii) be deemed an exceptional case by the admissions committee for
the Undergraduate Diploma. These requirements ensure that students have the basic capabilities necessary to deal with the academic credit courses in Undergraduate Diploma programs and take into account the bridging function that some diplomas perform.

b. **Diploma Specific Admission Requirements.** Any particular diploma program may have other admission requirements which are appropriate to its learning objectives. These requirements may include prerequisite courses or degrees specific to the particular diploma.

5. **McMaster Graduate Diploma**
The minimum requirements for Graduate Diplomas are set out below. For submission and approval requirements, please see the [Policy on Academic Program Reviews](#).

5.1 **Academic Course Requirements**
All McMaster Graduate Diplomas must include academic credit courses equivalent to at least four courses at the graduate level at McMaster.

5.2 **Admission Requirements**
There are two sets of admission requirements:

a. **General Graduate Diploma Admission Requirements.** Students who wish to enter a McMaster Graduate Diploma program must meet the admission requirements of a Master's level program. These requirements ensure that students have the basic capabilities necessary to deal with the academic credit courses in Graduate Diploma programs.

b. **Diploma Specific Admission Requirements.** Any particular Graduate Diploma program may have other admission requirements which are appropriate to its learning objectives. These requirements may include prerequisite courses or degrees specific to the particular diploma.

6. **McMaster Stand-Alone Undergraduate Certificate**

6.1 **Academic Course Requirements**
All McMaster Stand-Alone Undergraduate Certificates must include academic credit courses equivalent to at least 15 units (half a year) of undergraduate study at McMaster. In addition to their academic content, Stand-Alone Certificate programs may include courses and other forms of learning which are not suitable for academic credit. The maximum overlap with degree courses is 60% of the requirement for the Stand-Alone Certificate. For example, the maximum overlap for a Stand-Alone Certificate program consisting of 15 units is 9 units.

6.2 **Admission Requirements**
There are two sets of admission requirements:

a. **General Undergraduate Stand-Alone Certificate Admission Requirements.** Students who wish to enter a McMaster Undergraduate Stand-Alone Certificate program must have at least one of: (i) an Ontario Secondary School Diploma or equivalent; (ii) be a mature student as defined in the Undergraduate Calendar of McMaster University; (iii) be deemed an exceptional case by the admissions committee for the certificate. These requirements ensure that students have the basic capabilities necessary to deal with the academic credit courses in Undergraduate Certificate programs and take into account the bridging function that some certificates perform.
b. **Certificate Specific Admission Requirements.** Any particular Undergraduate Stand-Alone Certificate program may have other admission requirements which are appropriate to its learning objectives. These requirements may include prerequisite courses or degrees specific to the particular certificate.

7. **McMASTER CONCURRENT UNDERGRADUATE CERTIFICATE**
   7.1 Academic Course Requirements
   All McMaster Concurrent Undergraduate Certificates must include academic credit courses equivalent to at least 15 units (half a year) of undergraduate study at McMaster. In addition to their academic content, concurrent certificate programs may include courses and other forms of learning which are not suitable for academic credit. Up to 100% of the requirement for the concurrent certificate may overlap with degree courses.

   7.2 Admission Requirements
   Students who wish to enter a McMaster Concurrent Undergraduate Certificate program must be enrolled in an undergraduate degree program at McMaster University. Any particular concurrent Undergraduate Certificate program may have other admission requirements, such as prerequisite courses, which are appropriate to its learning objectives.

8. **McMASTER GRADUATE CERTIFICATE**
   8.1 Academic Course Requirements
   All McMaster Graduate Certificates must include academic credit courses equivalent to at least three courses at the graduate level at McMaster. Up to 100% of the certificate course requirements may overlap with graduate degree courses. (Courses may or may not be unique to the certificate.)

   8.2 Admission Requirements
   There are two sets of admission requirements:
   a. **General Graduate Certificate Admission Requirements.** Students who wish to enter a McMaster Graduate Certificate program must meet the admission requirements of a Master's level program. These requirements ensure that students have the basic capabilities necessary to deal with the academic credit courses in Graduate Certificate programs.

   b. **Certificate Specific Admission Requirements.** Any particular Graduate Certificate program may have other admission requirements which are appropriate to its learning objectives. These requirements may include prerequisites courses or degrees specific to the particular certificate.

9. **CERTIFICATE OF COMPLETION**
   A Certificate of Completion issued by McMaster University acknowledges that an individual has completed a course or program at McMaster that does not have the status of an academic program. A Certificate of Completion can be issued when a course or program includes a minimum of 30 contact hours and there is evaluation of the student's learning. The student must demonstrate competency in the material as determined by evaluation methods which may include an exam, paper, project, presentation, etc. This will normally be recorded as a pass or fail and records will be kept by the unit offering the program.
This category will be suitable for various types of life-long learning courses and programs. The Certificate of Completion is not an academic certificate and as such shall not be categorized as undergraduate or graduate level.

9.1 Admission Requirements
Normally, there are no specific admission requirements.

9.2 Credit Toward Another Credential
Normally, there is no credit granted towards degree program studies, unless the course or courses making up the Certificate of Completion have been approved for credit as part of degree, diploma or certificate.

A series of Certificates of Attendance cannot make up the components of a Certificate of Completion.

9.3 Approval Criteria
Although administrative and academic units at McMaster do not need permission from Undergraduate Council to issue Certificates of Completion, they are required, at minimum, to report new Certificates of Completion and revisions to existing Certificate of Completion programs to Undergraduate Council on an annual basis.

However, if fees are being charged to students, the Faculty proposing the Certificate of Completion program must follow the process for approval of academic certificates and diplomas, as set out in Section 11 below.

It is expected that Certificates of Completion will be granted only when the activities are of benefit and/or interest to the community and are consistent with the objectives of McMaster University.

9.4 Guidelines and Limitations
Clarity and the protection of the McMaster certificate brand are paramount. Thus, any courses or programs that issue a Certificate of Completion shall not use the term Certificate in their title, unless it is part of the term “Certificate of Completion.” Exceptions may occur when a program is provided as contract training to a company (i.e., not a public program) and the program name is determined jointly with the client.

The course description should include the credit or non-credit status of the course, that there will be student evaluation, how the student shall be graded (i.e., pass/fail or a letter grade), and that a “Certificate of Completion” will be awarded for successful completion.

10. CERTIFICATE OF ATTENDANCE
A Certificate of Attendance issued by McMaster University acknowledges that an individual has participated in a set of activities at McMaster that does not have the status of an academic program. Such activities are designed to meet the interests and objectives of participants who may want to acquire general knowledge or training for general interest purposes, but who neither require nor seek any form of professional or academic recognition, and as such a Certificate of Attendance shall not be categorized
as undergraduate or graduate level. This category will be suitable for various types of life-long learning courses and programs.

10.1 Admission Requirements
Normally, there are no specific admission requirements.

10.2 Credit Toward Degree or Other Program Studies
There is no credit granted toward additional credentials.

10.3 Approval Criteria
Although administrative and academic units at McMaster do not need permission from Undergraduate Council to issue Certificates of Attendance, they are required, at minimum, to report new Certificates of Attendance and revisions to existing Certificate of Attendance programs to Undergraduate Council on an annual basis.

However, if fees are being charged to students, the Faculty proposing Certificate of Attendance program must follow the process for approval of academic certificates and diplomas, as set out in Section 11 below.

It is expected that Certificates of Attendance will be granted only when the activities are of benefit and/or interest to the community and are consistent with the objectives of McMaster University.

10.4 Guidelines and Limitations
Clarity and the protection of the McMaster certificate brand are paramount. Thus, any courses or programs that issue a Certificate of Attendance shall not use the term Certificate in their title, unless it is part of the term “Certificate of Attendance.”

11. PROCEDURES FOR THE APPROVAL OF CERTIFICATE AND DIPLOMA PROGRAMS AND ACADEMIC CREDIT COURSES
The Faculty or Centre for Continuing Education will present proposal for undergraduate diplomas, undergraduate academic certificates and undergraduate-level academic credit courses to the Undergraduate Council Certificates and Diplomas Committee. Such proposals do not need to be approved by the Undergraduate Council Curriculum Committee. Once approved, the Certificates and Diplomas Committee will then make a recommendation to Undergraduate Council. In the case of graduate certificates and graduate-level academic courses, the Faculty will present proposals to Graduate Council. Undergraduate Council or Graduate Council in turn will make its recommendations to Senate. The academic unit is responsible for providing a complete proposal. In addition to the program proposal, the complete submission must include a statement of academic merit from the office of the Dean, as described below.

Graduate Diplomas are approved through the process outlined in the Policy on Academic Program Reviews.

The approval and reporting processes for Certificates of Completion and Certificates of Attendance are outlined in Sections 9 and 10 above.
11.1 Statement of Academic Merit

The statement of academic merit is normally an attestation from a Faculty, at McMaster University, confirming that the Faculty has vetted the proposed program and found that it meets the criteria for the designation proposed. That statement will also include a general description of how the academic merit of the proposal was evaluated, including such things as which academic departments were involved and the procedures used.

Proposals for new academic credit courses, which are intended to be part of a certificate or diploma program, and which are not to be part of any degree program, will include the following:

(i) a paragraph-long course description along with a statement of the number of units of academic credit provided by the course.
(ii) a statement of how the course contributes to the learning objectives of the program(s) of which it will be a part.

11.2 Financial Viability and Resource Implications

The financial viability of a certificate and diploma program is evaluated through other mechanisms within the University. All programs should follow these approval processes and ensure they are complying with financial policies, which may include returning a portion of revenue to the University.

Diploma and academic certificate programs, as well as non-academic certificates for which fees are charged, must submit fee proposals to the University Student Fees Committee for approval. Normally, this approval should be sought prior to submission of the academic proposal to Undergraduate Council or Graduate Council. Please note that fees are approved by the Board of Governors for the subsequent academic year, so approvals should be sought in sufficient time to launch programs as planned.

Following approval by Undergraduate Council or Graduate Council (as applicable), the completed Financial Viability and Resource Implications template for new certificate and diploma programs must be reviewed by the Executive Director Finance and Administration (Academic) and Vice-Provost (Faculty) or Vice-Provost and Dean of Graduate Studies prior to submission of the business case to the University Planning Committee, as per the Academic Revenue Activity Policy for Revenue Generating Certificate and Diploma Programs Administered through a Faculty.

It is expected that additional fees will not be charged for Undergraduate Concurrent Certificates and Graduate Certificates and that such programs will not generate additional revenue for the University, and therefore do not normally require approval from the University Planning Committee.
APPENDIX A: SAMPLE PARCHMENTS

The Chancellor and Senate of
McMaster University
awarded
Firstname Lastname
the graduate diploma in
Advanced Neonatal Nursing
Dated this 20th day of November, 2015 in Hamilton, Ontario.

Certificate of Completion

McMaster University

Firstname Lastname

Project Management Program

delivered by <Faculty/Dept>
<enter optional information re.awards>
## A. Department & Program Information (Complete all fields):

<table>
<thead>
<tr>
<th>Academic Designation:</th>
<th>Diploma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Name:</td>
<td>Business of Golf and Resort Management</td>
</tr>
<tr>
<td>Name of Representative:</td>
<td>Daniel Piedra, Assistant Director, Centre for Continuing Education</td>
</tr>
<tr>
<td>Proposed Date/Term of Program Start:</td>
<td>September 2017</td>
</tr>
<tr>
<td>Date of Submission:</td>
<td>March 28, 2017</td>
</tr>
</tbody>
</table>

## B. Faculty Statement (Required):

Emad Mohammed, Associate Dean, DeGroote School of Business

## C. Academic Merit (Complete all fields; write “not applicable” as needed):

i. Program Overview:

The Business of Golf and Resort Management program will consist of 10 3-unit courses. Program content is based on common areas of knowledge and skills for those working in the golf and resort industry as identified the Golf Management Institute of Canada (GMIC).

Program learning objectives and specific course outcomes will align with competencies as established by the GMIC and consultations with other experts from industry.

Each course will bridge theory and practical experience through a combination of experiential learning (i.e. case studies, discussions, and presentations) and more traditional teaching methods. Emerging trends and practices will be incorporated into coursework to ensure that all content is current and relevant.

All program instructors will be practitioners in the field and will emphasize the knowledge and skills required for success in the field.
The program will be delivered in an online format. There are no pre-requisites for this program.

### ii. Learning Objectives:

- Outline key retail management practices
- Describe characteristics of entrepreneurship and industry key success factors
- Develop a comprehensive business plans
- Describe club governance, committee dynamics and their strategic impact on decision making
- Conduct typical financial analyses such as cost volume profit analysis, ratio analysis, performance measures and benchmarking
- Apply principles of human resource management within the golf industry
- Apply legal foundations and principles in operating a golf resort
- Describe the framework of food and beverage operations in general and specific to the golf/resort industry
- Identify legal compliance and controls in food and beverage management
- Apply core design principals in golf course architecture

### iii. Meeting Learning Objectives:

The Business of Golf and Resort Management 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.

### iv. Program Admission Requirements:

Prospective students may register in the program without any application.

In compliance with the Certificate and Diploma admission policy from Undergraduate Council, students who wish to enter the Business of Golf and Resort Management Diploma should meet the following requirements based on their education and work experience:
1) Equivalent academic experience, such as a university degree/college diploma with relevant coursework in social work, sociology, health care or gerontology with a minimum cumulative GPA of C-, or better;
2) OR, relevant professional experience (a minimum of 2 years), or related professional certification in the field of case management;
3) OR, 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. Prospective students must contact the Program Manager for consultation and evaluation of past education and professional experience).

There are no specific program pre-requisites.

<table>
<thead>
<tr>
<th>vi. Program Completion Requirements:</th>
<th>Students must complete all 10 courses (30 units) in order to qualify for the Diploma in Business of Golf and Resort Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>viii. Program Delivery Format:</td>
<td>All program courses in the diploma will be delivered fully online. Delivery activities will include instructor lecture and/or presentations, readings, group discussions, and practical application activities.</td>
</tr>
<tr>
<td>ix. Student Evaluations (Grading Process):</td>
<td>Each course will include several evaluation components. The evaluations will consist of assignments, case studies, presentations, individual or group projects, class participation, or a combination thereof. Where appropriate, evaluations will be structured to evaluate participants’ level of competency in achieving overall learning objectives.</td>
</tr>
<tr>
<td>x. Course Evaluation:</td>
<td>For each course, students will complete an evaluation to assess content, delivery, materials, method of evaluation and instruction.</td>
</tr>
<tr>
<td>xi. Course Instruction:</td>
<td>Instructors for courses will be selected from a pool of qualified external professionals. In compliance with McMaster’s Senate and Undergraduate Council Guidelines for Certificates and Diplomas, selection will be based on academic background and/or experience within the field. Instructors must have a Master’s Degree (or equivalent) and significant professional experience and teaching within the field.</td>
</tr>
<tr>
<td>xii. Credit Towards Degree Programme Studies:</td>
<td>The academic credit courses included in a diploma program can be used for credit towards degree programme studies in accordance with the normal academic rules specified by the Faculty offering the degree.</td>
</tr>
</tbody>
</table>
xiii. Program Advanced Standing: 

Upon enrolment to the program, a student may receive up to a maximum of 9 units of advanced credit. The courses used for such credit must be equivalent to the McMaster courses that they replace; specifically,

- Courses must have an 80% content/curricula overlap and a similar number of equivalent to classroom hours;
- Courses must be listed on an official transcript from an accredited academic institution with a grade; and,
- Courses must be taken within the last 5 years

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 and supplementary fees (MAPS). Expenses are typical and include significant up front development and marketing costs, as well as typical ongoing delivery costs (such as payment of facilitators, honoraria for other guest facilitators, materials, advertising and administration).

*Lorraine Carter, Director, Centre for Continuing Education, March 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; courses are taught according to program requirements and standards
- Marketing and Promotions

*The 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.
<table>
<thead>
<tr>
<th>Course Name</th>
<th>Required/Elective</th>
<th>Academic Units</th>
<th>Proposed Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail Management in Golf Operations</td>
<td>Required</td>
<td>3.0 units</td>
<td>Fall 2017</td>
</tr>
<tr>
<td>Entrepreneurship in the Golf Industry</td>
<td>Required</td>
<td>3.0 units</td>
<td>Fall 2017</td>
</tr>
<tr>
<td>Golf Club Governance</td>
<td>Required</td>
<td>3.0 units</td>
<td>Winter 2018</td>
</tr>
<tr>
<td>Finance for Non-Financial Managers in the Golf Industry</td>
<td>Required</td>
<td>3.0 units</td>
<td>Winter 2018</td>
</tr>
<tr>
<td>Strategic Management in Golf Operations</td>
<td>Required</td>
<td>3.0 units</td>
<td>Winter 2018</td>
</tr>
<tr>
<td>Human Resources Management in Golf Operations</td>
<td>Required</td>
<td>3.0 units</td>
<td>Winter 2018</td>
</tr>
<tr>
<td>Business Law for Golf Managers</td>
<td>Required</td>
<td>3.0 units</td>
<td>Spring 2018</td>
</tr>
<tr>
<td>Marketing Management in Golf Operations</td>
<td>Required</td>
<td>3.0 units</td>
<td>Spring 2018</td>
</tr>
<tr>
<td>Hospitality Management</td>
<td>Required</td>
<td>3.0 units</td>
<td>Spring 2018</td>
</tr>
<tr>
<td>Golf Course Design &amp; Construction - Turf Management</td>
<td>Required</td>
<td>3.0 units</td>
<td>Spring 2018</td>
</tr>
</tbody>
</table>

Notes: Courses may be taken in any order:

- Retail Management in Golf Operations
- Entrepreneurship in the Golf Industry
- Golf Club Governance
- Finance for Non-Financial Managers in the Golf Industry
- Strategic Management in Golf Operations
- Human Resources Management in Golf Operations
- Business Law for Golf Managers
- Marketing Management in Golf Operations
Course Descriptions:

**Diploma Required Courses:**

**Retail Management in Golf Operations**

This course focuses on the successful management of a golf shop as an integral component of a golf facility's overall operation. Topics such as seasonality, inventory management, customer identification and service, display techniques and promotional ideas for generating additional revenues for the pro shop will be addressed.

Students will acquire knowledge of retail merchandising principles and understand the differences of the various target markets that frequent a typical golf retail operation (both private and public facilities). Formulating buying plans for both hard and soft goods, establishing pricing strategies and inventory controls, and developing merchandising strategies through effective advertising and promotional strategies are covered.

**Entrepreneurship in the Golf Industry**

This course introduces students to the concept of entrepreneurship and assesses their potential as future entrepreneurs in the golf industry. Students will be encouraged to explore their business ideas and learn how to conduct a feasibility study.

The curriculum includes identification of opportunities and development of strategies by recognizing the environmental factors that affect all businesses. Organizing a business idea into a
concrete business plan, based on relevant entrepreneurial concepts, will be explored.

**Golf Club Governance**

This course explores the dynamics of boards and committees in a golf facility and their importance in ensuring effective operation. Board structures in a private course setting will be discussed. Decision-making processes and board and committee dynamics will also be covered. Club strategy and policy matters will be explored as well as the role of golf associations in the golf industry. Concepts associated with effective club management will be examined.

**Finance for Non-Financial Managers in the Golf Industry**

Finance for Non-Financial Managers in the golf industry enables decision-makers in the golf industry to understand and properly use financial data. Topics examined include how to identify the financial information required to address specific management issues and problems, assessing short- and long-term financial impacts of resource allocation decisions, and accurate interpretations of a golf operation’s financial statements. The manager’s role in budgeting and forecasting will be explored using cases, annual reports, and industry research.

**Strategic Management in Golf Operations**

Successful managers integrate and synthesize the many facets of management, leadership, finance and human relations into their management decisions. This course teaches aspiring managers how to develop operating strategies for all aspects of a golf operation. As key decision-makers,
students will be expected to develop and implement product, pricing, promotion, and human resource strategies, and analyze the impacts of their decisions on the organization.

**Human Resources Management in Golf Operations**

This course focuses on the professional application of human resource management practices as they pertain to the golf industry. All aspects of people management will be covered, including hiring, compensation, training and development, health and safety, performance management, and employment law.

**Business Law for Golf Managers**

Legal issues affecting the golf industry including the law of contracts, torts, occupational health and safety, environmental protection, food and liquor liability, and general negligence will be covered in this course. Different forms of business organizations will also be discussed. The legal responsibilities of the golf course owner to protect his/her employees, the public, and the golf course itself will also be examined. Students will be given opportunities to discuss and debate these issues.

**Marketing Management in Golf Operations**

Participants will apply the basic components of marketing and marketing research in the development of a marketing plan for a golf facility. Various strategies required to ensure a successful marketing environment will be introduced (segment and positioning, product, distribution, pricing and promotion strategies). Students will learn to analyze and segment markets, identify target markets, and design and develop a strategic plan.
marketing plan that meets the needs of the specified target market. Through cases and examples, students will develop an appreciation for trends and issues in today’s marketing environment. The significance of sponsorship and endorsements in marketing a special sports event will be covered.

**Hospitality Management**

This course provides an overview of the foundations for hospitality management in the golf industry. The course provides students with the opportunity to learn about specific areas of a food and beverage operation, including product knowledge, service, financial management, purchasing, and control systems. In addition, students will perform practical and applicable exercises and projects related to managing a successful hospitality management operation.

**Golf Course Design & Construction - Turf Management**

This course addresses golf course design principles and turf management practices. How the golf course architect designs the golf course throughout all phases of development will be considered. In addition to the design of a new facility, topics include how to renovate and/or expand an existing facility. The processes of obtaining permits and dealing with local authorities about environmental issues associated in golf course development are discussed. The fundamentals of golf course maintenance are also addressed. Topics such as grass and soil identification, drainage systems, equipment use in maintenance procedures, and establishment and implementation of a turf management program
will be covered. An introduction to pesticides and fertilizers is included.
March 9, 2017

To: Certificate and Diploma Committee, Undergraduate Council and Senate

From: Dr. Emad Mohammad, Associate Dean (Academic)

RE: Proposal for Business of Golf and Resort Management Diploma

I have reviewed the Business of Golf and Resort Management Diploma program submission presented by the Centre for Continuing Education. I have determined that it meets all the criteria set out by the Undergraduate Council in its guidelines for certificates and diplomas and we, therefore, endorse this submission with the support of the DeGroote School of Business.

I have had the proposal reviewed by Dr. Nick Bontis, Chair, Strategic Management DeGroote School of Business. His conclusion is that the objectives of the proposed program are viable, that the courses included in it will fulfill the stated objectives and meet Undergraduate Council’s criteria for the designation of “Certificate” and “Diploma”. I concur with this assessment.

The DeGroote School of Business is pleased to have a high quality program such as the Business of Golf and Resort Management diploma to meet the needs of people wanting to work in these fields. We support this CCE program as their academic affiliates, providing both the initial submission review and overview of ongoing curriculum issues. Additionally, we have provided CCE with the guidelines needed by their students for possible use of the advanced standing rules for students entering our degree programs using credit from completion of this program.

Sincerely,

[Signature]

Dr. Emad Mohammad
Associate Dean
DeGroote School of Business

Cc: Lorraine Carter, Director, CCE
    Dan Piedra, Assistant Director, CCE
DATE: March 9, 2017

TO: Dr. Emad Mohammad, Associate Dean Academics

FROM: Dr. Nick Botnis, Associate Professor, Strategic Management

SUBJECT: Evaluation of Business of Golf and Resort Management Diploma Proposal for the Centre for Continuing Education (CCE)

I have reviewed the proposal for the new Business of Golf and Resort Management Diploma to be offered through the Centre for Continuing Education (CCE). I have examined the program’s structure and the course descriptions. It is my finding that the program’s requirements meet the standards necessary to be an academic program with courses 30 units of advanced credit value as indicated in the academic submission document.

My examination of course descriptions, proposed topics, learning outcomes, and the teaching and testing methods, concurs that the proposed courses are of the intellectual rigor comparable to that found in undergraduate degree courses. The academic submission indicates that the courses will be taught by qualified individuals (possessing a master’s degree or equivalency), as defined by Undergraduate Council Certificate and Diploma requirements. The students taking the program will meet the minimum requirements set out in the Policy on Certificates and Diplomas for Undergraduate Council.

Since the program meets all these criteria as set out in the Policy on Certificates and Diplomas for Undergraduate Council, I have arrived at the conclusion stated above.

Sincerely,

Dr. Nick Bontis
Chair, Strategic Management
DeGroote School of Business

Cc: Dr. Emad Mohammad, Associate Dean, Academics
Lorraine Carter, CCE Director, Dan Piedra, Assistant Director
### A. Department & Program Information (Complete all fields):

<table>
<thead>
<tr>
<th>Academic Designation:</th>
<th>Certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Name:</td>
<td>Applied Clinical Research</td>
</tr>
<tr>
<td>Name of Representative:</td>
<td>Cathy Emick, Program Manager</td>
</tr>
<tr>
<td>Proposed Date/Term of Program Start:</td>
<td>Winter 2018 (January 2018)</td>
</tr>
<tr>
<td>Date of Submission:</td>
<td>March 28, 2017</td>
</tr>
</tbody>
</table>

### B. Faculty Statement (Required):

See attached Associate Dean Letter.

### C. Academic Merit (Complete all fields; write “not applicable” as needed):

**i. Program Overview:**

The Applied Clinical Research certificate program will consist of five, three (3) unit courses (15 units). Program content is based on common areas of knowledge and skills for clinical research associates and managers as identified by a North American Advisory Board and the competencies of the Internationally-focused Association of Clinical Research Professionals (ACRP).

Upon successful completion of the required five courses, participants will receive the McMaster University Certificate in Applied Clinical Research. Students are given a three-year period to complete all required components of the certificate program. This requirement is based on the need to remain current with legal, regulatory and ethical considerations in the field of work.

Program learning objectives and specific course outcomes align with the Association of Clinical Research Professionals (ACRP) eight knowledge domains:

1. Operations/GCP (Good Clinical Practice)
2. Communication & Teamwork
3. Data Management & Informatics
Each course will bridge theory and practical experience through a combination of experiential learning (i.e. case studies, discussions, and presentations) and traditional teaching methods. There will be considerable emphasis on the application of content in each course to ensure students are well prepared for employment in this field. In addition, students will complete a capstone project/practicum placement as the final course in the program, which provides a concentrated opportunity to apply the clinical research methods, techniques and strategies to a real-world situation/case. Emerging trends, theories and practices will be incorporated into coursework to ensure that program content is current and relevant.

Development subject matter experts and program instructors will be researchers and practitioners in the field and will emphasize the knowledge and skills required for employment in the fields of clinical research as an associate or manager.

The program will be delivered in an online format.

### ii. Learning Objectives:

The Applied Clinical Research program provides an opportunity for individuals seeking to enter into the field of clinical research to enhance their knowledge and skills required for employment.

Program objectives are based primarily on ACRP’s eight knowledge domains. Specifically, successful participants will be able to:

1. Describe GCP (Good Clinical Practice) requirements and explain the legal and regulatory issues in clinical research (Bloom’s: Understanding)
2. Construct a clinical research protocol and critique flawed and exemplary studies (Bloom’s: Evaluate and Creating)
3. Differentiate the key elements of successful study and site management (Bloom’s: Analyze)
4. Examine ethical issues in clinical research and select appropriate approaches strategies to navigate (Bloom’s: Analyze)
5. Practice the leadership and communication skills needed in a clinical research setting. (Bloom’s: Apply)

The following objectives will be threaded within each course:
Students will be able to:
- Demonstrate an awareness of ethical practices and professional standards applicable to the field of clinical research
- Exemplify the skills, attitudes and behaviours required to effectively communicate with various stakeholder groups engaged in clinical trials
- Demonstrate personal management, leadership and project management skills

<table>
<thead>
<tr>
<th>iii. Meeting Learning Objectives:</th>
<th>The Applied Clinical Research 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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>iv. Program Admission Requirements:</td>
<td>In compliance with the Certificates and Diploma, admission policy from Undergraduate Council, students who wish to enter the Certificate in Applied Clinical Research should meet the following requirements based on their education and work experience:</td>
</tr>
<tr>
<td></td>
<td>1) Equivalent academic experience, such as a university degree/college diploma with relevant coursework in science, health science, nursing, or other relevant education with a minimum cumulative GPA of C-, or better;</td>
</tr>
<tr>
<td></td>
<td>2) OR, relevant professional experience (a minimum of 5 years), or related professional certification in the field of clinical research;</td>
</tr>
<tr>
<td></td>
<td>3) OR, 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. Prospective mature students must contact the Program Manager for consultation and evaluation of past education and professional experience.</td>
</tr>
<tr>
<td>Program Pre-requisites:</td>
<td>In order to ensure that learners have the basic capabilities necessary to be successful in the program’s academic courses, it is recommended that learners have the following pre-requisite knowledge, skills, or course completion:</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>- Knowledge and skills in statistics, and mathematical literacy;</td>
<td></td>
</tr>
<tr>
<td>- Proficiency with computer program applications, such as Excel</td>
<td></td>
</tr>
<tr>
<td>- 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</td>
<td></td>
</tr>
<tr>
<td>v. Program Pre-requisites (if applicable):</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>vi. Program Completion Requirements:</td>
<td>Students must complete all 5 courses (15 units) in order to qualify for the Certificate in Applied Clinical Research</td>
</tr>
<tr>
<td>viii. Program Delivery Format:</td>
<td>All program courses in the Certificate will be delivered fully online. Delivery activities will include instructor lecture and/or presentations, readings, group discussions, and practical application activities. Where possible, simulation activities will be used to enhance experiential education. The final practicum course will permit students to work independently in a clinical setting.</td>
</tr>
<tr>
<td>ix. Student Evaluations (Grading Process):</td>
<td>Each course will include several evaluation components. The evaluations will consist of assignments, case studies, presentations, laboratory application activities, individual or group projects, class participation, or a combination thereof. Where appropriate, evaluations will be structured to evaluate participants’ level of competency in achieving overall learning objectives.</td>
</tr>
<tr>
<td>x. Course Evaluation:</td>
<td>For each course, students will complete an evaluation to assess content, delivery, materials, method of evaluation and instruction.</td>
</tr>
<tr>
<td>xi. Course Instruction:</td>
<td>Instructors for courses will be selected from a pool of qualified external professionals. In compliance with McMaster’s Senate and Undergraduate Council Guidelines for Certificates and Diplomas, selection will be based on academic background and/or experience</td>
</tr>
</tbody>
</table>
within the field. Instructors must have a Master’s Degree (or equivalent) and significant professional experience and teaching within the field.

| xii. Credit Towards Degree Programme Studies: | The academic credit courses included in a certificate programme can be used for credit towards degree programme studies in accordance with the normal academic rules specified by the Faculty offering the degree. |
| xiii. Program Advanced Standing: | No advanced standing or transfer credit will be given. |

**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 and supplementary fees (MAPS). Expenses are typical and include significant up front development and marketing costs, as well as typical ongoing delivery costs (such as payment of facilitators, honoraria for other guest facilitators, materials, advertising and administration).

*Lorraine Carter, Director, Centre for Continuing Education, January 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, with the exception of the first year of the program, when the start-up will be subsidized by CCE.

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

*The Faculty of Health Sciences*

The Faculty of Health Sciences 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 Faculty of Health Sciences will receive an annual stipend at the end of each fiscal year during which the program records a surplus.
F. Listing of Courses (complete the chart to provide suggested course title, required/elective, number of academic units, proposed hours, and estimated term offering):

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Required/Elective</th>
<th>Academic Units</th>
<th>Proposed Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Clinical Research</td>
<td>Required</td>
<td>3.0 units</td>
<td>Winter 2018</td>
</tr>
<tr>
<td>Clinical Trial Design</td>
<td>Required</td>
<td>3.0 units</td>
<td>Winter 2018</td>
</tr>
<tr>
<td>Research Ethics</td>
<td>Required</td>
<td>3.0 units</td>
<td>Spring 2018</td>
</tr>
<tr>
<td>Clinical Trial Management</td>
<td>Required</td>
<td>3.0 units</td>
<td>Fall 2018</td>
</tr>
<tr>
<td>Practicum</td>
<td>Required</td>
<td>3.0 units</td>
<td>Fall 2018</td>
</tr>
</tbody>
</table>

Notes: Courses may be taken in any order; however, the following order is recommended:

- Principles of Clinical Research should be the first course completed;
- Clinical Trial Design, Research Ethics and Clinical Trial Management may be taken at the same time;
- Students may enrol in the Practicum course while completing their fourth and final course.

Course Descriptions:

ACR 101: Principles of Clinical Research
This introductory course explores the terminology, as well as roles and responsibilities involved in a clinical research project. Good Clinical Practice (GCP) procedures will be examined, as well as an overview of legal considerations of clinical trials. Emphasis will be placed on the foundational skills needed for successful trial management including project management and communication skills.

ACRP Domains: Topics in the course are selected to meet the following competencies:
1. Operations/GCP
2. Teamwork and communication
3. Thread of Ethical considerations
4. Medicines Development and Regulation

Possible Topics:
- Terminology used in clinical trials
- Roles and responsibilities of key positions in clinical trials
- Procedural, documentation, and oversight requirements of PI’s, sponsors, contract research organizations (CROs), and regulatory authorities related to the conduct of a clinical trial
- Overview of the clinical trials process
- Principles of GCP – Good Clinical Practice
- Health Canada and FDA guidelines
• Brief overview of drug approval process
• Principles and practice of Project Management as a common approach to clinical research
• Communication and Interpersonal skills for clinical research:
  ▪ understand personal effectiveness
  ▪ organizational conflict and resolution methods
  ▪ communication skills for dealing with difficult people
  ▪ communication skills for communicating with different audiences
  ▪ role of ethics in communication

ACR 102: Clinical Trial Design
Scientific and statistical concepts related to the design and analysis of clinical trials will be examined, as well as the regulatory framework and guidelines that govern clinical trials. Emphasis will be placed on the concepts in the design of a clinical trial including the development of a protocol and effective use of Case Report forms.

ACRP Domains: Topics in the course are selected to meet the following competencies:
  1. Scientific Concepts and Research Design
  2. Data Management & Informatics
  3. Medicines Development and Regulation

Possible Topics:
Statistical Concepts
• Sample size calculations
• Randomization procedures
• Other concepts as appropriate

Trial Design:
• Study and Protocol Design: selection criteria, study size, study duration, limiting bias, etc
• Types of clinical trial designs
• Planning of a clinical trial
• Evaluate the design conduct and documentation of clinical trials as required for compliance with GCP guidelines
• Ethics of research design
• Diversity in medical research
• Review of exemplary and flawed studies
• Effective protocol and case report form development

Legal requirements
• Treatment/decision making
• Confidentiality/disclosure
Recruitment and remuneration
Introduction to Privacy Legislation
Identify the legal responsibilities, issues, liabilities, and accountabilities that are involved in the conduct of a clinical trial

ACR 103: Research Ethics
Professional guidelines and codes of ethics that apply to the conduct of clinical research will be analyzed. Situations presenting ethical dilemmas including vulnerable populations will be explored as well as scientific integrity, and the responsibilities of the clinical investigation team as defined by GCP guidelines.

ACRP Domains: Topics in the course are selected to meet the following competencies:
1. Ethical & Participant Safety Considerations

Possible Topics:
- Professional guidelines and codes of ethics that apply to the conduct of clinical research
- Vulnerable populations
- Effect of cultural diversity and the need for cultural competency
- Situations presenting ethical dilemmas in clinical research
- Ethical issues involved when dealing with vulnerable populations and the need for additional safeguards
- Methods of distributing and balancing risk and benefit through selection and management of clinical trial subjects
- Tools for ethical analysis used in clinical practice
- Roles and responsibilities of the clinical investigation team as defined by GCP guidelines
- Describe the roles and purpose of clinical trial audits
- Human subjects and medical research
- Informed consent; Scientific integrity; Misconduct

ACR 104: Clinical Trials Management
Strategies for conducting and managing clinical trials, as well as operational issues of a clinical research project will be examined. Effective methods for organizing data and quality assurance will be explored as well as end of trial practices, safety reporting, and the preparation of scientific documents. Topics in leadership will also be examined including management of resources, risk and professional conflicts.

ACRP Domains: Topics in the course are selected to meet the following competencies:
1. Data Management & Informatics
2. Study & Site Management
3. Scientific Concepts and Research Design
4. Leadership & Professionalism

Possible Topics:

Data Management
- Typical flow of data throughout a clinical trial and strategies for organizing
data quality assurance systems and standard operating procedures
- GCP requirements for data correction and queries
- Case Report Form (CRF) and eCRF completion
- Privacy and data

Study Management
- Content required at the site level to run a study (financial and personnel aspects).
  Includes site and study operations (not encompassing regulatory/GCPs).
- Strategies for conducting and managing clinical trials, monitoring and quality assurance
- Operational issues that exist in the conduct of a clinical research project
- Managing types of adverse events (AEs) that occur during clinical trials
- Identification process for Adverse Events
- Process and requirements for reporting serious adverse events

Research Study Practices
- Communication strategies for writing in a research environment
- Strategies for closing out a clinical trial
- Methods by which safety issues are identified and managed during the development and post-marketing phases of clinical research
- Safety reporting requirements of regulatory agencies post-approval

Leadership & Professionalism
- Operational elements: Administrative: HR, Budget
- Procedures for managing the ethical and professional conflicts that are associated with the conduct of clinical research
- Management of the financial, timeline, and personnel resources
- Management of risk in the conduct of a clinical research study

ACR105 Clinical Research Practicum
This course is designed to offer students the opportunity to apply the theoretical knowledge and skills gained from the Applied Clinical Research program to a practical setting. Students will apply their learning in the areas of clinical research protocols, and study and site management principles. Participants will also be expected to demonstrate a solid grasp of competencies in leadership, and communication skills that are also needed to ensure a successful clinical trial.

Students will develop a set of personal learning objectives in conjunction with the course
instructor/practicum coordinator, and will agree on a learning plan.

Pre-Requisite for Practicum
In order to fully benefit from the practical experience, students will need to have a number of courses completed prior to the start of this course. Students in the Certificate program must have completed four courses (ACR 101, 102, 103 and have completed or be enrolled in ACR 104) prior to enrolling in ACR 105.

Students must also fulfill the requirements of their host organization. Students are responsible to investigate, and fulfill, these requirements before commencing the Practicum course.

Students completing the Practicum course are covered by McMaster University’s Blanket Accident Insurance Plan and Liability Insurance Plan. A Certificate of Insurance can be provided upon request.

ACRP Domains: Topics in the course are selected to meet the following competencies:
1. Operations/GCP
2. Communication & Teamwork
3. Medicines Development and Regulation
4. Data Management & Informatics
5. Ethical & Participant Safety Considerations
6. Leadership & Professionalism
7. Scientific Concepts & Research Design
8. Study & Site Management
March 13, 2017

To: Certificate and Diploma Committee, Undergraduate Council

From: Del Harnish
3M Fellow
Associate Dean, Undergraduate Education
Faculty of Health Sciences

RE: Proposal for Applied Clinical Research Program

I have reviewed the *Applied Clinical Research* program submission presented by the Centre for Continuing Education. I have determined that it meets all the criteria set out by the Undergraduate Council in its guidelines for certificates and diplomas and we, therefore, endorse this submission with the support of the Faculty of Health Sciences.

I have had the proposal reviewed by Kristina Trim, PhD, Chair, Student Research Committee, HiREB. Her conclusion is that the objectives of the proposed program are viable, that the courses included in it will fulfill the stated objectives and meet Undergraduate Council’s criteria for the designation of “Certificate of Applied Clinical Research”. I concur with this assessment.

The Faculty of Health Sciences is pleased to have a high quality program such as the Applied Clinical Research program to meet the needs of people wanting to work in these fields. We support this CCE program as their academic affiliates, providing both the initial submission review and overview of ongoing curriculum issues. Additionally, we have provided CCE with the guidelines needed by their students for possible use of the advanced standing rules for students entering our degree programs using credit from completion of this program.

Cc: Lorraine Carter, Director, CCE
    Carolyn McEwen, Assistant Director, CCE
DATE: March 10, 2017

TO: Delsworth Harnish, PhD, Associate Dean, Undergraduate Education

FROM: Kristina Trim

SUBJECT: Evaluation of Applied Clinical Research Program Proposal for the Centre for Continuing Education (CCE)

At your request, I have reviewed the proposal for the Applied Clinical Research program to be offered through the Centre for Continuing Education (CCE). I have examined the proposed courses and my finding is each course meets the standards necessary to be an academic course with 3.0 units of advanced credit value as indicated in the proposal.

My examination of the material and content covered in each course, as well as the teaching and testing methods, concurs that the proposed courses are of the intellectual rigour comparable to that found in undergraduate degree courses. The academic submission indicates that the courses will be taught by qualified individuals (possessing a master’s degree or equivalency), as defined by Undergraduate Council Certificate and Diploma requirements. The students taking the courses will meet the minimum requirements set out in the Policy on Certificates and Diplomas for Undergraduate Council.

Since the courses meet all these criteria as set out in the Policy on Certificates and Diplomas for Undergraduate Council, I have arrived at the conclusion stated above.

Sincerely,

Kristina Trim, PhD, RSW
Chair, Student Research Committee, HiREB
Instructor, Bachelor of Health Sciences Program
MDCL 3308, McMaster University,
Hamilton, ON, L8S 4S3
905 525 9140 ext. 22303
Cell: 905 531 3350
### A. Department & Program Information (Complete all fields):

<table>
<thead>
<tr>
<th>Academic Designation</th>
<th>Certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Name</td>
<td>Marketing</td>
</tr>
<tr>
<td>Name of Representative</td>
<td>Todd Rich, Program Manager</td>
</tr>
<tr>
<td>Proposed Date/Term of Program Start</td>
<td>Fall 2017 (September 2017)</td>
</tr>
<tr>
<td>Date of Submission</td>
<td>March 28, 2017</td>
</tr>
</tbody>
</table>

### B. Faculty Statement (Required):

(pending)

### C. Academic Merit (Complete all fields; write “not applicable” as needed):

#### i. Program Overview:

This proposal is to establish a five course Certificate in Marketing within the existing Marketing Diploma offered through the Centre of Continuing Education. The Diploma in Marketing was approved by the University in the fall of 2007.

Students will complete the existing five core marketing diploma courses to earn the certificate. The courses are:

Core (complete all five courses):

- Introduction to Marketing* (3 units)
- Consumer Behaviour (3 units)
- Marketing Plans and Implementation (3 units)
- Integrated Marketing Communications (3 units)
- Business Foundations (3 units)

*Pre-requisite for the marketing courses.

Upon successful completion of the five courses, students will receive the McMaster University Certificate in Marketing. The five core marketing courses are available in person or online.
### ii. Learning Objectives:

The marketing core courses align with the already approved marketing diploma outcomes.

Specifically, students will:
- gain an introduction to marketing principles and concepts;
- learn general business administration concepts;
- develop an understanding of marketing strategies;
- understand the role of marketing from a business and consumer perspective;
- analyze marketing problems leading to actionable plans;
- learn how external factors, such as the economy, competition, suppliers, distribution and price affect marketing functions; and
- learn strategies and skills to create consistent marketing communications.

### iii. Meeting Learning Objectives:

The Certificate in Marketing is a series of courses targeting the stated program objectives. Individual course objectives are mapped to the overall program objectives for the diploma in marketing. Delivery formats and teaching methods are structured to have a maximum effect on achievement of the learning objectives.

### iv. Program Admission Requirements:

The Certificate in Marketing is an open-enrolment program. No application is required.

In compliance with the Certificates and Diploma admission policy from Undergraduate Council, students who wish to enrol in the Certificate in Marketing should meet the following requirements:
- Ontario Secondary School Diploma or equivalent; mature student as defined in the Undergraduate Calendar of McMaster University; or be deemed an exceptional case by the Centre for Continuing Education.
- If English is not a student’s first language, he/she must meet the University’s English language proficiency requirements.

### v. Program Pre-requisites (if applicable):

n/a

### vi. Program Completion

Students must complete all 5 courses (15 units) in order to qualify.
### Requirements:

for the Certificate in Marketing.

| viii. Program Delivery Format: | The five core marketing diploma core courses will be delivered in person or online.  

Online delivery activities will include instructor presentations, group discussions, online resources (articles and videos), and practical application activities. Course content is delivered over 13 weeks. On average, each week will consist of three hours of content. |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ix. Student Evaluations (Grading Process):</td>
<td>Each course will include several evaluation components. Evaluation strategies will include assignments, case studies, presentations, individual or group projects, class participation, and other assignments in line with the learning objectives for the course. Where appropriate, evaluations will be structured to evaluate participants’ level of competency in achieving overall learning objectives.</td>
</tr>
<tr>
<td>x. Course Evaluation:</td>
<td>For each course, students will complete an evaluation to assess content, delivery, materials, method of evaluation, and instruction.</td>
</tr>
<tr>
<td>xi. Course Instruction:</td>
<td>Instructors for courses will be selected from a pool of qualified external professionals. In compliance with <em>McMaster’s Senate and Undergraduate Council Guidelines for Certificates and Diplomas</em>, selection will be based on academic background and/or experience within the field. Instructors must have a Master’s Degree (or equivalent) and significant professional experience and teaching within the field.</td>
</tr>
<tr>
<td>xii. Credit Towards Degree Programme Studies:</td>
<td>The academic credit courses included in a 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.</td>
</tr>
<tr>
<td>xix. Program Advanced Standing:</td>
<td>Students will be permitted to receive up to 3 units of advanced standing toward the Certificate in Marketing.</td>
</tr>
</tbody>
</table>

### 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 and supplementary fees (MAPS). Expenses are typical and include significant up front development and marketing costs, as well as typical ongoing delivery costs (such as payment of facilitators, honoraria for other guest facilitators, materials, advertising and administration).

Lorraine Carter, Director, Centre for Continuing Education, March 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

The 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 (complete the chart to provide suggested course title, required/elective, number of academic units, proposed hours, and estimated term offering):

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Required/Elective</th>
<th>Academic Units</th>
<th>Proposed Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Marketing</td>
<td>Required</td>
<td>3.0 units</td>
<td>ongoing</td>
</tr>
<tr>
<td>Consumer Behaviour</td>
<td>Required</td>
<td>3.0 units</td>
<td>ongoing</td>
</tr>
<tr>
<td>Marketing Plans &amp; Implementation</td>
<td>Required</td>
<td>3.0 units</td>
<td>ongoing</td>
</tr>
<tr>
<td>Integrated Marketing Communications</td>
<td>Required</td>
<td>3.0 units</td>
<td>ongoing</td>
</tr>
<tr>
<td>Business Foundations</td>
<td>Required</td>
<td>3.0 units</td>
<td>ongoing</td>
</tr>
</tbody>
</table>

Notes: Intro to Marketing is a pre-requisite for the marketing core courses.

Course Descriptions: The Marketing diploma course descriptions were approved by the
University in the fall of 2007.

**Diploma in Marketing (core courses)**

**Introduction to Marketing**

Marketing impacts every aspect of our lives. Where we shop, how we eat, what we drive and even where we live, can be influenced by marketing. **Introduction to Marketing** is a survey course that introduces learners to the basic concepts of marketing, viewed within a corporate framework. During the course we study the modern marketplace and discuss the impact of the environmental factors that shape marketing and influence the type of products that companies market. Topics include the development of new products, identifying market segments and targeting consumer groups, pricing strategies, brand equity, distribution channel and promotional activities. Lecture notes are interspersed with photos of marketing materials to provide current examples of the topics under discussion.

**Consumer Behaviour**

Consumer Behaviour pertains to the study of why and how consumers make decisions related directly or indirectly to a consumption event. All of us being consumers, consumer behaviour is omnipresent in our lives even if we are not consciously aware of it. As such, the study of consumer behaviour has great significance not only for marketing but for public policy as well. For marketers, understanding the field of consumer behaviour is perhaps the most important tool for commercial success. This is not an easy task because the field draws from multiple disciplines including psychology, economics, sociology, and anthropology. Its complexity also derives from the heterogeneity of cultures in this age of expanding globalization because meanings and interpretations are not necessarily portable across cultural boundaries when they exist. This has given rise to the need for a sophisticated marketing professional with a strong grasp on consumer behaviour issues. At the same time more and more questions are being raised about ethical practices, requiring this marketers to become aware of the ethical and social responsibility factors as they think through their marketing strategy.

**Marketing Plans & Implementation**

A company’s Marketing Plan is a document that outlines the overall marketing strategy, specific actions to be undertaken and the logic underlying the recommendations. As such, it is the culmination of a detailed analysis of the company’s marketing situation and is a vital resource in a competitive market. An effective marketing plan is often an outcome of a group effort and not only focuses on the appropriate marketing strategy for the company, but is also sensitive to the implementation challenge given time and resource constraints. At the same time, the effectiveness of any marketing plan is often a function of how convincingly the plan has been presented to the stakeholders.

This course builds on the introductory marketing course and will teach the basics of creating and communicating effective Marketing Plans by covering different aspects of such a plan like marketing audits, market analysis, marketing strategy, tactics and implementation tools. It will do so with a combination of lectures, case studies, assignments, a practical project, role
plays, discussions and student presentations.

**Integrated Marketing Communications**
This course will focus on the important marketing topic of communication. We will examine the strategy of communication and the effective use of communication elements: advertising, sales promotion, personal selling, public relations, and media. Learning experiences will incorporate lecture, discussion, group project and presentations, and case study methodology.

**Business Foundations**
During the course, we will examine material related to all the functional areas of management including finance, personnel, marketing, operations and general management. The environment in which most Canadian businesses operate will also be examined including, the economic, legislative, technological and social contexts. The integration of the topics and concepts will receive emphasis via a decision-making model, the planning concepts presented early in the course, and an ongoing group business plan project. These concepts provide a framework which aid one’s understanding of the relationships between the various topics. Students will be exposed to a variety of learning activities including, group problem solving tasks, case studies, discussion sessions, role-plays, and simulations.
A. Department & Program Information (Complete all fields):

<table>
<thead>
<tr>
<th>Field</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Name:</td>
<td>Canadian Health Studies Certificate</td>
</tr>
<tr>
<td>Name of Representative:</td>
<td>Nancy McQuigge, Program Manager</td>
</tr>
<tr>
<td>Effective Date:</td>
<td>May 1, 2017</td>
</tr>
<tr>
<td>Date of Submission:</td>
<td>March 28, 2017</td>
</tr>
</tbody>
</table>

B. Faculty Statement (Required):

Refer to the Faculty letter from Dr. Alan Neville

C. Academic Merit (Complete all fields; write “not applicable” as needed):

i. Program Overview:

The proposal is to establish a new Certificate program for the Centre for Continuing Education’s health preparatory courses. This program combines 3-unit courses previously approved by McMaster University’s Senate as part of the Health Information Management and Health Informatics programs. A new course in epidemiology is included with this certificate for approval. Students must complete 15 units of study for the Certificate.

The program courses include:

- Understanding the Canadian Health Care System (3 units)
- Anatomy and Physiology (3 units)
- Medical Terminology (3 units)
- Pathophysiology I (3 units)
- Pathophysiology II (3 units)
- Foundations in Epidemiology (3 units)

These academic courses are bundled together to offer individuals with no, or limited study in health care with a foundational certificate program. These courses offer a basis for future studies in health based programs. The program may be promoted to internationally trained professionals who require
some Canadian health care education. There is potential to attract individuals who require academic upgrading, or refreshing of past courses in health care. In addition, applicants to CCE’s Health Information Management and Health Informatics diploma programs may pursue the certificate as part of the required pre-requisites for admission.

### ii. Learning Objectives:

Upon completion of all three courses, students will be able to:

- Describe the Canadian health care system; its governance, its regulation and operation, its current trends and issues.
- Identify structural units of the body including cells, tissues, organs and systems.
- Apply medical abbreviations and acronyms used in health care documentation.
- Analyze common diagnostic interventions to determine a normal or abnormal result.
- Understand the role of risk factors in health and disease.
- Demonstrate knowledge of the course of a pathological condition.
- Investigate methods used in public health surveillance and disease outbreak investigation.
- Explore research design involving descriptive, analytical, and intervention approaches to disease.

The following objectives will be threaded within each course:

Students will be able to:

- Demonstrate an awareness of ethical practices and professional standards applicable to the field of health care;
- Exemplify the skills, attitudes and behaviours required to work and collaborate with people and develop personal management skills;
- Employ effective communication practices

### iii. Meeting Learning 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
<table>
<thead>
<tr>
<th><strong>iv. Program Admission Requirements:</strong></th>
<th>This will be an open enrolment program.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>v. Program Pre-requisites (if applicable):</strong></td>
<td>Students should complete a course in Anatomy/Physiology before enrolling in Pathophysiology I. Completion of Pathophysiology I is required prior to the start of Pathophysiology II.</td>
</tr>
<tr>
<td><strong>vi. Program Completion Requirements:</strong></td>
<td>To receive the Certificate, students must complete 5, 3-unit courses; 15 units of study.</td>
</tr>
<tr>
<td><strong>viii. Program Delivery Format:</strong></td>
<td>All courses will be delivered online using McMaster University’s Learning Management System.</td>
</tr>
<tr>
<td><strong>ix. Student Evaluations (Grading Process):</strong></td>
<td>Each course will include several evaluation components. The evaluations will consist of quizzes, assignments, case studies, presentations, individual or group projects, class participation, or a combination thereof. Where appropriate, evaluations will be structured to evaluate participants’ level of competency in achieving overall learning objectives.</td>
</tr>
<tr>
<td><strong>x. Course Evaluation:</strong></td>
<td>For each course, students will complete an evaluation to assess content, delivery, materials, method of evaluation and instruction.</td>
</tr>
<tr>
<td><strong>xi. Course Instruction:</strong></td>
<td>Instructors for courses will be selected from a pool of qualified external professionals. In compliance with <em>McMaster’s Senate and Undergraduate Council Guidelines for Certificates and Diplomas</em>, selection will be based on academic background and/or experience within the field. Instructors must have a Master’s Degree (or equivalent) and significant professional experience and teaching within the field.</td>
</tr>
<tr>
<td><strong>xii. Credit Towards Degree Programme Studies:</strong></td>
<td>The academic credit courses included in this Certificate of Completion programme can be used for credit towards degree programme studies in accordance with the normal academic rules specified by the Faculty offering the degree.</td>
</tr>
</tbody>
</table>
| **xiii. Program Advanced Standing:** | A maximum of one (1) transfer credit will be accepted for this program. Requirements include:  
  - 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; a final grade of “C-” or better

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 and supplementary fees (MAPS). Expenses are typical and include significant up front development and marketing costs, as well as typical ongoing delivery costs (such as payment of facilitators, honoraria for other guest facilitators, materials, advertising and administration).

Lorraine Carter, Director, Centre for Continuing Education, March 2017

E. Statement of Administrative Responsibilities:

The human and systems infrastructure to support the following functions already exists within CCE. Costs will be fully covered by tuition, with the exception of the first year of the program, when the start-up will be subsidized by CCE.

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

The Faculty of Health Sciences

The Faculty of Health Sciences will act as academic liaison and is charged with the responsibility of ongoing academic review and assessment of curriculum.

F. Listing of Courses

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Academic Units</th>
<th>Scheduled Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding the Canadian Health Care System</td>
<td>3 units</td>
<td>Spring 2017</td>
</tr>
<tr>
<td>Anatomy and Physiology</td>
<td>3 units</td>
<td>Spring 2017</td>
</tr>
</tbody>
</table>
Medical Terminology | 3 units | Spring 2017  
Pathophysiology I | 3 units | Fall 2017  
Pathophysiology II | 3 units | Winter 2018  
Foundations in Epidemiology | 3 units | Fall 2017/Winter 2018  

Course Descriptions:

I) **HTH 100: Understanding the Canadian Healthcare System**  
*Course Description:*  
This course presents an overview of the Canadian health care system in terms of its history, health care governance and related provincial and federal regulations and legislation. The course will examine how Canada’s healthcare system is organized, regulated, and managed. The course will present the different levels of care found in the health care system, and discuss how information is used and shared within the different levels. Application activities will provide students with the opportunity to analyze the various components of the health care system, and develop an understanding how different professional roles fit within this large and complex system. This course is geared towards individuals with no previous health education, or professional experience within the Canadian health care sector.

II) **Medical Terminology**  
*Course Description:*  
This course is designed to familiarize the student with the relevant clinical terminology to work successfully as part of the health care team. By completion of this course, the student will gain the requisite knowledge of medical terminology commonly used in the health care environment. Specific topics of focus include the origins and composition of medical words (roots, prefixes, suffixes, abbreviations) as they relate to major body systems, common disease terms, diagnostic tests and clinical procedures. This course is geared towards individuals with no previous health education, or professional experience within the Canadian health care sector. This course is designed for individuals with limited, or no, educational background in the healthcare sector, or study of anatomy, physiology and pathology.

III) **Anatomy & Physiology**  
*Course Description:*  
This comprehensive course provides students with an understanding of the anatomy and physiology of the human body. Topics include an overview of the human body in health and disease, Skeletal System, Muscular System, Cardiovascular System, Lymphatic and Immune System, Respiratory System, Digestive System, Urinary System,
Nervous System, Special Senses, Integumentary System, Endocrine System, Reproductive System. This course is designed for individuals with limited, or no, educational background in anatomy, physiology and pathology.

IV) HTH 116 Pathophysiology I

Course Description:
This course provides an overview of disease processes and the effect on different body systems. The etiology, clinical manifestations, diagnostic tests and therapeutic interventions for various disorders are studied. The course builds on students’ experience with anatomy and physiology.
Pre-requisite: Anatomy & Physiology
Topics include:
  • Introduction to pathophysiology
  • Introduction to basic pharmacology and other therapies
  • Medical disorders related to the skin, respiratory system, digestive system, sensory organs, blood and circulatory systems, and cardiovascular system

V) HTH 117 Pathophysiology II

Course Description:
A continuation of Pathophysiology I course, the course provides an overview of disease processes and the effect on different body systems. The etiology, diagnostic tests and therapeutic interventions for various disorders are studied. Pre-requisite: Pathophysiology I
Topics include:
  • Environmental Factors and Pathophysiology
  • Pain and immunity
  • Medical disorders related to lymphatic system, nervous system, endocrines system, musculoskeletal system, and reproductive system

VI) Foundations in Epidemiology

Course Description:
This course provides an introductory overview of epidemiology concepts in terms of the distribution and determinants of diseases, health conditions and health issues within specific populations. Students will focus on foundational concepts within epidemiology in order to build an understanding of its application within public health and health research.
Topics include:
  • Epidemiological definitions and common terms
• Practical disease concepts
• Strategies and statistical methods in descriptive epidemiology
• Population health indicators
• Strategies and statistical methods in analytical epidemiology
• Studies in epidemiology
• Chronic disease epidemiology
• Clinical epidemiology
DATE: March 15, 2017

TO: Certificate and Diploma Committee, Undergraduate Council and Senate

FROM: Dr. Alan Neville, Associate Dean, Health Professional Education, Faculty of Health Sciences

RE: Proposal for Certificate in Canadian Health Studies, Centre for Continuing Education

I have reviewed the Canadian Health Studies certificate program submission presented by the Centre for Continuing Education. I have determined that it meets all the criteria set out by the Undergraduate Council in its guidelines for certificates and diplomas and we, therefore, endorse this submission with the support of the Faculty of Health Sciences.

The proposal was reviewed by Dr. Lynn Martin, Assistant and Teaching Professor, School of Nursing. Dr. Martin’s conclusion is that the objectives of the proposed program are viable, the courses included in it will fulfill the stated objectives, and the program meets Undergraduate Council’s criteria for the designation of a “Certificate”. I concur with this assessment.

The Faculty of Health Sciences is pleased to have a quality program such as the Canadian Health Studies certificate to meet the needs of people wanting to pursue studies and work in this field. We support this CCE program as their academic affiliates, providing both the initial submission review and overview of ongoing curriculum issues. Additionally, we have provided CCE with the guidelines needed by their students for possible use of the advanced standing rules for students entering our degree programs using credit from completion of this program.

Yours sincerely,

Dr. Alan J. Neville BMed Biol (Path), MBChB, MEd FRCP (Lond), FRCPC Professor, Department of Oncology Associate Dean, Health Professional Education Faculty of Health Sciences McMaster University

Cc: Lorraine Carter, Director, CCE
Dan Piedra, Assistant Director, CCE
# Centre for Continuing Education
## Program Approval

### A. Department & Program Information (Complete all fields):

<table>
<thead>
<tr>
<th>Field</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Designation:</td>
<td>Diploma</td>
</tr>
<tr>
<td>Program Name:</td>
<td>Business Administration with a Creative, Critical, and Design Thinking Concentration</td>
</tr>
<tr>
<td>Name of Representative:</td>
<td>Todd Rich, Program Manager</td>
</tr>
<tr>
<td>Proposed Date/Term of Program Start:</td>
<td>Fall 2017 (September 2017)</td>
</tr>
<tr>
<td>Date of Submission:</td>
<td>March 28, 2017</td>
</tr>
</tbody>
</table>

### B. Faculty Statement (Required):

(pending)

### C. Academic Merit (Complete all fields; write “not applicable” as needed):

#### i. Program Overview:

#1 - This proposal is to establish a new concentration within the existing the Business Administration Diploma offered through the Centre of Continuing Education (approved Fall 2010). The new concentration would be in Creative, Critical, and Design Thinking (pending University approval - March 2017). Current Business Administration concentrations exist in Finance, Risk Management, Marketing, Human Resources, and Management.

Students will complete the five core courses from the existing business administration diploma plus three courses from the Creative, Critical, and Design Thinking Certificate of Completion.

#2 – This proposal is to establish a series of new electives courses within the general business administration diploma program. Courses will come from the Concentration in Creative, Critical, and Design thinking concentration.
The courses are:

Core (complete all five courses):
- Introduction to Marketing (3 units)
- Business Foundations (3 units)
- Business Communications (3 units)
- Foundations in Business Finance (3 units)
- Organizational Behaviour (3 units)

Concentration (complete three courses)
- Cultivating Creative Thinking (3 units)
- Critical Thinking for Problem Solving (3 units)
- Design Thinking (3 units)

Notes: The Creative, Critical, and Design Thinking courses should be completed in the order listed above but they are all standalone courses and can be taken in any order as general electives.

Upon successful completion of the eight courses, students will receive the McMaster University Business Administration Diploma with a Creative, Critical, and Design Thinking Concentration.

The five core business administration courses are available in person or online. The Creative, Critical, and Design Thinking courses are only available online.

### ii. Learning Objectives:

The business administration core courses align with the already approved business administration diploma outcomes and the Creative, Critical, and Design Thinking concentration courses align with the Creative, Critical, and Design Thinking Certificate of Completion outcomes (pending University approval).

*To help you become more familiar with the Creative, Critical, and Design Thinking program...please see the program description and program outcomes below.*

As the world continues to change at a rapid pace, thinking creatively, critically, and with a design process to solve complex
problems are important skills in business, government, healthcare, IT, the arts, marketing, etc. Creative, critical, and design thinking processes involve systematic and human-centred processes to empathize with people, identify and frame problems, seek different viewpoints, identify alternative explanations, generate and test ideas, and take actions that add value to others and promote positive outcomes and opportunities.

Specifically, successful students will be able to:

1. Develop competencies in critical, creative, and design thinking to investigate an idea and transform it into meaningful action.

2. Apply divergent and convergent thinking tools to situations within a variety of fields and settings.

3. Examine principles and models of creative, critical, and design thinking to effectively solve problems for users and stakeholders.

4. Practice using the tools, frameworks and processes needed to develop solutions to real-world problems and complex situations.

5. Construct and execute innovative strategies in relation to problems and complex situations.

6. Become aware of and leverage the role(s) they play in creative processes and teams.

7. Reflect on and meaningfully communicate their experiences of creating, problem solving and designing.

8. Recognize how to identify, participate in, and support communities of practice committed to sustainable change.

<table>
<thead>
<tr>
<th>iii. Meeting Learning Objectives:</th>
<th>The Business Administration Diploma with a Creative, Critical, and Design Thinking Concentration is a series of courses targeting the stated program objectives. Individual course objectives are mapped to the overall program objectives for the diploma in marketing and the digital marketing certificate respectively. Delivery formats and teaching methods are structured to have a maximum effect on achievement of the learning objectives.</th>
</tr>
</thead>
</table>
| iv. Program Admission Requirements: | The Business Administration Diploma with a Creative, Critical, and Design Thinking Concentration will be open enrolment. No application is required. In compliance with the Certificates and Diploma admission policy from Undergraduate Council, students who wish to enrol in the Business Administration Diploma with a Creative, Critical, and Design Thinking Concentration should meet the following requirements:  
• Ontario Secondary School Diploma or equivalent; mature student as defined in the Undergraduate Calendar of McMaster University; or be deemed an exceptional case by the Centre for Continuing Education.  
• If English is not a student’s first language, he/she must meet the University’s English language proficiency requirements. |
| v. Program Pre-requisites: | n/a |
| vi. Program Completion Requirements: | Students must complete all 8 courses (24 units) in order to qualify for the Business Administration Diploma with a Creative, Critical, and Design Thinking Concentration. |
| viii. Program Delivery Format: | The five core business administration core courses will be delivered in person or online.  
The three Creative, Critical, and Design Thinking elective courses will be delivered solely online through Avenue to Learn. Online delivery activities will include instructor presentations, group discussions, online resources (articles and videos), and practical application activities. Course content is delivered over 13 weeks. On average, each week will consist of three hours of content. |
| ix. Student Evaluations (Grading Process): | Each course will include several evaluation components. Evaluation strategies will include assignments, case studies, presentations, individual or group projects, class participation, and other assignments in line with the learning objectives for the course. Where appropriate, evaluations will be structured to evaluate participants’ level of competency in achieving overall learning objectives. |
x. Course Evaluation:  For each course, students will complete an evaluation to assess content, delivery, materials, method of evaluation, and instruction.

xi. Course Instruction:  Instructors for courses will be selected from a pool of qualified external professionals. In compliance with McMaster’s Senate and Undergraduate Council Guidelines for Certificates and Diplomas, selection will be based on academic background and/or experience within the field. Instructors must have a Master’s Degree (or equivalent) and significant professional experience and teaching within the field.

xii. Credit Towards Degree Programme Studies:  The academic credit courses included in a diploma program can be used for credit towards degree program studies in accordance with the normal academic rules specified by the Faculty offering the degree.

xii. Program Advanced Standing:  Students will be permitted to receive up to 6 units of advanced standing toward the Business Administration Diploma with a Creative, Critical, and Design Thinking Concentration.

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 and supplementary fees (MAPS). Expenses are typical and include significant up front development and marketing costs, as well as typical ongoing delivery costs (such as payment of facilitators, honoraria for other guest facilitators, materials, advertising and administration).

Lorraine Carter, Director, Centre for Continuing Education, March 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

The 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 Faculty of Health Sciences will receive an annual stipend at the end of each fiscal year during which the program records a surplus.

F. Listing of Courses (complete the chart to provide suggested course title, required/elective, number of academic units, proposed hours, and estimated term offering):

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Required/Elective</th>
<th>Academic Units</th>
<th>Proposed Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Marketing</td>
<td>Required</td>
<td>3.0 units</td>
<td>ongoing</td>
</tr>
<tr>
<td>Business Foundations</td>
<td>Required</td>
<td>3.0 units</td>
<td>ongoing</td>
</tr>
<tr>
<td>Business Communications</td>
<td>Required</td>
<td>3.0 units</td>
<td>ongoing</td>
</tr>
<tr>
<td>Foundations of Business Finance</td>
<td>Required</td>
<td>3.0 units</td>
<td>ongoing</td>
</tr>
<tr>
<td>Organizational Behaviour</td>
<td>Required</td>
<td>3.0 units</td>
<td>ongoing</td>
</tr>
<tr>
<td>Cultivating Creative Thinking</td>
<td>Elective</td>
<td>3.0 units</td>
<td>Winter 2018</td>
</tr>
<tr>
<td>Critical Thinking for Problem Solving</td>
<td>Elective</td>
<td>3.0 units</td>
<td>Spring 2018</td>
</tr>
<tr>
<td>Design Thinking</td>
<td>Elective</td>
<td>3.0 units</td>
<td>Fall 2018</td>
</tr>
</tbody>
</table>

Notes: The Creative, Critical, and Design Thinking courses should be completed in the order listed above but they are all standalone courses and can be taken in any order as general electives in the business administration diploma.

Course Descriptions: The Business Administration diploma course descriptions were approved by the University in the fall of 2010. The Creative, Critical, and Design Thinking course descriptions are pending University approval (March 2017).

Business Administration (core courses)

Introduction to Marketing
Marketing impacts every aspect of our lives. Where we shop, how we eat, what we drive and even where we live, can be influenced by marketing. Introduction to Marketing is a survey course that introduces learners to the basic concepts of marketing, viewed within a corporate framework. During the course we study the modern marketplace and discuss the impact of the environmental factors that shape marketing and influence the type of products that companies market. Topics include the development of new products, identifying market segments and targeting consumer groups, pricing strategies, brand equity, distribution channel and promotional activities. Lecture notes are interspersed with photos of marketing materials to provide current examples of the topics under discussion.

more and more questions are being raised about ethical practices, requiring this marketers to
become aware of the ethical and social responsibility factors as they think through their marketing strategy.

**Business Foundations**
During the course, we will examine material related to all the functional areas of management including finance, personnel, marketing, operations and general management. The environment in which most Canadian businesses operate will also be examined including, the economic, legislative, technological and social contexts. The integration of the topics and concepts will receive emphasis via a decision-making model, the planning concepts presented early in the course, and an ongoing group business plan project. These concepts provide a framework which aid one’s understanding of the relationships between the various topics. Students will be exposed to a variety of learning activities including, group problem solving tasks, case studies, discussion sessions, role-plays, and simulations.

**Foundations of Business Finance**
An understanding of financial literacy is essential to anyone who is tasked with reviewing or analyzing financial data to make business decisions. This practical course covers the basic concepts and applications in financial accounting, managerial accounting and managerial finance, and it is geared toward people whose primary responsibility is managerial in nature (non-financial). The interpretation of financial information rather than the steps to generate it, will guide the students’ learning.

**Business Communications**
This course focuses on the knowledge and skills associated with clearly receiving, transmitting and communicating information within the business environment. Using communication theory and practical application, students will develop effective writing, speaking, and presentation skills required to convey a business communication strategy. Issues such as diversity, ethics and technology will be discussed within the context of business communication. Independent and group work activities will be incorporated into the learning environment in order to apply the students’ communication skills and knowledge to the topics of teamwork, customer relations and leadership.

**Organizational Behaviour**
This course provides an overview of the structure and function of human behaviour in organizations. Students will study the behavioural influences that affect productivity, organizational effectiveness, and efficiency. Topics include perception, motivation, communication, job and organizational design, decision-making, organizational politics, and leadership. Individual and group exercises and the analysis of case material will be used to develop a practical understanding of theoretical concepts.

**Certificate of Completion in Creative, Critical, and Design Thinking**

**Cultivating Creative Thinking**
This course focuses on the use of creative thinking skills to discover fresh and original ways to
solve real life problems. It provides opportunities to compile a toolkit of creative thinking techniques to generate, evaluate, and select new ideas and solutions. Topics explored in the course include the right and left sides of the brain, thinking hats, creative principles/models, and creative strategies that impact thinking, relating, and performing/acting in the workplace, at home, and in society.

**Critical Thinking for Problem Solving**
In this course, students will learn ways to think critically in order to identify and create solutions to difficult problems. This course also provides opportunities to examine the stages and processes of critical thinking as well as multiple problem solving models. Practical activities will enhance students’ critical thinking skills for working and living in today’s complex world.

**Design Thinking**
This course will enable students to use design thinking methodology to assess problems and challenges, discover and use relevant data, develop design solutions, and construct prototypes for validation. Students will also learn how design thinking is a valuable tool in today’s global and mobile world with applicability in diverse fields and how it is a ‘go to’ tool for innovators and creators.

Strategies for employing data to digital marketing will be covered. May include a summary project incorporating skills and knowledge from previous four courses.
DATE: March 20, 2017

To: Certificate and Diploma Committee, Undergraduate Council and Senate

From: Dr. Emad Mohammad

RE: Proposal for Business Administration Diploma with a Creative, Critical and Design Thinking concentration

I have reviewed the Business Administration Diploma with a Creative, Critical and Design Thinking concentration program submission presented by the Centre for Continuing Education. Based on the recommendation of Dr. Del Harnish for the Creative, Critical and Design Thinking portion of the proposal, I have determined that it meets all the criteria set out by the Undergraduate Council in its guidelines for certificates and diplomas and we, therefore, endorse this submission with the support of the Faculty of Business.

The DeGroote School of Business is pleased to have a high quality program such as the Business Administration Diploma with a Creative, Critical and Design Thinking concentration to meet the needs of people wanting to work in these fields. We support this CCE program as their academic affiliates, providing both the initial submission review and overview of ongoing curriculum issues. Additionally, we have provided CCE with the guidelines needed by their students for possible use of the advanced standing rules for students entering our degree programs using credit from completion of this program.

Sincerely,

[Signature]

Dr. Emad Mohammad, Associate Dean, DeGroote School of Business

Cc: Lorraine Carter, Director, CCE  
Dan Piedra, Assistant Director, CCE
### A. Department & Program Information (Complete all fields):

<table>
<thead>
<tr>
<th>Academic Designation:</th>
<th>Diploma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Name:</td>
<td>Marketing with a Digital Marketing Concentration</td>
</tr>
<tr>
<td>Name of Representative:</td>
<td>Todd Rich, Program Manager</td>
</tr>
<tr>
<td>Proposed Date/Term of Program Start:</td>
<td>Fall 2017 (September 2017)</td>
</tr>
<tr>
<td>Date of Submission:</td>
<td>March 28, 2017</td>
</tr>
</tbody>
</table>

### B. Faculty Statement (Required):

(pending)

### C. Academic Merit (Complete all fields; write “not applicable” as needed):

#### i. Program Overview:

This proposal is to establish a Diploma in Marketing with a Digital Marketing concentration within the existing Marketing Diploma offered through the Centre of Continuing Education.

Students will complete the five core courses from the existing marketing diploma courses plus four of five courses from the existing digital marketing certificate. The courses are:

**Core (complete all five courses):**

- Introduction to Marketing (3 units)
- Consumer Behaviour (3 units)
- Marketing Plans and Implementation (3 units)
- Integrated Marketing Communications (3 units)
- Business Foundations (3 units)

**Concentration (complete four courses):**

- Fundamentals of Digital Marketing (3 units) (required)
- Digital Marketing Strategy (3 units)
- Search Engine Optimization, Search Engine Marketing, and...
| Digital Advertising (3 units)  
| - Content Management (3 units)  
| - Data Management (3 units) |

Notes: Intro to Marketing is a pre-requisite for the core marketing courses. Fundamentals of Digital Marketing is a pre-requisite for the digital marketing electives. It is strongly recommended that students complete the core marketing courses before enrolling in the digital marketing elective courses.

The Diploma in Marketing was approved by the University in the fall of 2007. The Digital Marketing Certificate was approved by the University in the winter of 2016.

Upon successful completion of the nine courses, students will receive the McMaster University Diploma in Marketing with a Digital Marketing Concentration.

The five core marketing courses are available in person or online. The digital marketing courses are only available online.

### ii. Learning Objectives:

The marketing core courses align with the already approved marketing diploma outcomes and the digital marketing concentration courses align with the already approved digital marketing certificate outcomes.

The Diploma in Marketing is designed to develop and/or enhance the marketing knowledge and skills required to function within a marketing role.

Specifically, students will:
- gain an introduction to marketing principles and concepts;
- learn general business administration concepts;
- develop an understanding of marketing strategies;
- understand the role of marketing from a business and consumer perspective;
- analyze marketing problems leading to actionable plans;
- learn how external factors, such as the economy, competition, suppliers, distribution and price affect marketing functions; and
• learn strategies and skills to create consistent marketing communications.

The Digital Marketing program provides an educational and professional development opportunity for individuals seeking to develop and/or enhance their knowledge and skills required for the field of marketing and related sectors. Specifically, graduates will be able to:

• Integrate traditional marketing theories and principles with technological skills using basic and advanced web tools and technologies
• Develop best practices for e-commerce, social media, mobile, email marketing, and online advertising
• Understand concepts, theories, and practices around search engine marketing, and search engine optimization
• Understand theories and practices around content management
• Research and propose creative and critical solutions that align with the professional roles of a digital marketer
• Apply ethical, legal and professional standards and conduct applicable to the field of digital marketing
• Understand the skills, attitudes and behaviours required to work and collaborate with people and develop personal management skills.
• Employ professional visual, written and oral communication skills in a variety of mediums

### iii. Meeting Learning Objectives:

The Marketing Diploma with a Digital Marketing concentration is a series of courses targeting the stated program objectives. Individual course objectives are mapped to the overall program objectives for the diploma in marketing and the digital marketing certificate respectively. Delivery formats and teaching methods are structured to have a maximum effect on achievement of the learning objectives.

### iv. Program Admission Requirements:

The Marketing Diploma with a Digital Marketing concentration will be open enrolment. No application is required.

In compliance with the Certificates and Diploma admission policy
from Undergraduate Council, students who wish to enrol in the Diploma in Marketing with a Digital Marketing concentration should meet the following requirements:

- Ontario Secondary School Diploma or equivalent; mature student as defined in the Undergraduate Calendar of McMaster University; or be deemed an exceptional case by the Centre for Continuing Education.

- If English is not a student’s first language, he/she must meet the University’s English language proficiency requirements.

| v. Program Pre-requisites (if applicable) | n/a |
| vi. Program Completion Requirements: | Students must complete all 9 courses (27 units) in order to qualify for the Marketing Diploma with a Digital Marketing concentration. |
| viii. Program Delivery Format: | The five core marketing diploma core courses will be delivered in person or online. The five digital marketing elective courses will be delivered solely online through Avenue to Learn. Online delivery activities will include instructor presentations, group discussions, online resources (articles and videos), and practical application activities. Course content is delivered over 12 weeks. On average, each week will consist of three hours of content. |
| ix. Student Evaluations (Grading Process): | Each course will include several evaluation components. Evaluation strategies will include assignments, case studies, presentations, individual or group projects, class participation, and other assignments in line with the learning objectives for the course. Where appropriate, evaluations will be structured to evaluate participants’ level of competency in achieving overall learning objectives. |
| x. Course Evaluation: | For each course, students will complete an evaluation to assess content, delivery, materials, method of evaluation, and instruction. |
| xi. Course Instruction: | Instructors for courses will be selected from a pool of qualified external professionals. In compliance with *McMaster’s Senate and Undergraduate Council Guidelines for Certificates and Diplomas*, selection will be based on academic background and/or experience. |
within the field. Instructors must have a Master’s Degree (or equivalent) and significant professional experience and teaching within the field.

| xii. Credit Towards Degree Programme Studies: | The academic credit courses included in a diploma program can be used for credit towards degree program studies in accordance with the normal academic rules specified by the Faculty offering the degree. |
| xix. Program Advanced Standing: | Students will be permitted to receive up to 6 units of advanced standing toward the Marketing Diploma with a Digital Marketing concentration. |

**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 and supplementary fees (MAPS). Expenses are typical and include significant up front development and marketing costs, as well as typical ongoing delivery costs (such as payment of facilitators, honoraria for other guest facilitators, materials, advertising and administration).

*Lorraine Carter, Director, Centre for Continuing Education, March 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

*The 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

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Required/Elective</th>
<th>Academic Units</th>
<th>Proposed Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Marketing</td>
<td>Required</td>
<td>3.0 units</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumer Behaviour</td>
<td>Required</td>
<td>3.0 units</td>
<td>n/a</td>
</tr>
<tr>
<td>Marketing Plans &amp; Implementation</td>
<td>Required</td>
<td>3.0 units</td>
<td>n/a</td>
</tr>
<tr>
<td>Integrated Marketing Communications</td>
<td>Required</td>
<td>3.0 units</td>
<td>n/a</td>
</tr>
<tr>
<td>Business Foundations</td>
<td>Required</td>
<td>3.0 units</td>
<td>n/a</td>
</tr>
<tr>
<td>Fundamentals of Digital Marketing</td>
<td>Elective</td>
<td>3.0 units</td>
<td>n/a</td>
</tr>
<tr>
<td>Digital Marketing Strategy</td>
<td>Elective</td>
<td>3.0 units</td>
<td>n/a</td>
</tr>
<tr>
<td>Search Engine Optimization, Search Engine Marketing, and Digital Advertising</td>
<td>Elective</td>
<td>3.0 units</td>
<td>n/a</td>
</tr>
<tr>
<td>Content Management</td>
<td>Elective</td>
<td>3.0 units</td>
<td>n/a</td>
</tr>
<tr>
<td>Data Management</td>
<td>Elective</td>
<td>3.0 units</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Notes: Intro to Marketing is a pre-requisite for the core marketing courses. Fundamentals of Digital Marketing is a pre-requisite for the digital marketing electives. It is strongly recommended that students complete the core marketing courses before enrolling in the digital marketing elective courses.

**Course Descriptions:** The Marketing diploma course descriptions were approved by the University in the fall of 2007. The Digital Marketing course descriptions were approved by the University in the winter of 2016.

**Diploma in Marketing (core courses)**

**Introduction to Marketing**
Marketing impacts every aspect of our lives. Where we shop, how we eat, what we drive and even where we live, can be influenced by marketing. Introduction to Marketing is a survey course that introduces learners to the basic concepts of marketing, viewed within a corporate framework. During the course we study the modern marketplace and discuss the impact of the environmental factors that shape marketing and influence the type of products that companies market. Topics include the development of new products, identifying market segments and targeting consumer groups, pricing strategies, brand equity, distribution channel and promotional activities. Lecture notes are interspersed with photos of marketing materials to provide current examples of the topics under discussion.
Consumer Behaviour

Consumer Behaviour pertains to the study of why and how consumers make decisions related directly or indirectly to a consumption event. All of us being consumers, consumer behaviour is omnipresent in our lives even if we are not consciously aware of it. As such, the study of consumer behaviour has great significance not only for marketing but for public policy as well. For marketers, understanding the field of consumer behaviour is perhaps the most important tool for commercial success. This is not an easy task because the field draws from multiple disciplines including psychology, economics, sociology, and anthropology. Its complexity also derives from the heterogeneity of cultures in this age of expanding globalization because meanings and interpretations are not necessarily portable across cultural boundaries when they exist. This has given rise to the need for a sophisticated marketing professional with a strong grasp on consumer behaviour issues. At the same time more and more questions are being raised about ethical practices, requiring this marketers to become aware of the ethical and social responsibility factors as they think through their marketing strategy.

Marketing Plans & Implementation

A company's Marketing Plan is a document that outlines the overall marketing strategy, specific actions to be undertaken and the logic underlying the recommendations. As such, it is the culmination of a detailed analysis of the company's marketing situation and is a vital resource in a competitive market. An effective marketing plan is often an outcome of a group effort and not only focuses on the appropriate marketing strategy for the company, but is also sensitive to the implementation challenge given time and resource constraints. At the same time, the effectiveness of any marketing plan is often a function of how convincingly the plan has been presented to the stakeholders.

This course builds on the introductory marketing course and will teach the basics of creating and communicating effective Marketing Plans by covering different aspects of such a plan like marketing audits, market analysis, marketing strategy, tactics and implementation tools. It will do so with a combination of lectures, case studies, assignments, a practical project, role plays, discussions and student presentations.

Integrated Marketing Communications

This course will focus on the important marketing topic of communication. We will examine the strategy of communication and the effective use of communication elements: advertising, sales promotion, personal selling, public relations, and media. Learning experiences will incorporate lecture, discussion, group project and presentations, and case study methodology.

Business Foundations

During the course, we will examine material related to all the functional areas of management including finance, personnel, marketing, operations and general management. The environment in which most Canadian businesses operate will also be examined including,
the economic, legislative, technological and social contexts. The integration of the topics and concepts will receive emphasis via a decision-making model, the planning concepts presented early in the course, and an ongoing group business plan project. These concepts provide a framework which aid one’s understanding of the relationships between the various topics. Students will be exposed to a variety of learning activities including, group problem solving tasks, case studies, discussion sessions, role-plays, and simulations.

Certificate in Digital Marketing Courses

Fundamentals of Digital Marketing
This course incorporates the foundational principles of marketing, with the best practices, theories and experiential activities relevant to the digital space. These principles form the basis for knowledge and skills threaded through program courses. The importance of strategic digital marketing, including social media and mobile practices, email marketing, analytics, search engine marketing and search engine optimization, and content management will be examined through the components of visual and text communications. Application activities involving digital marketing tools, such as Google Analytics, platforms such as Facebook & Twitter, PPC samples, and a focus on optimizing all digital platforms will form the basis of this course. (Required course; pre-requisite for remaining courses in the program)

Digital Marketing Strategy
This course will focus on the strategic planning and execution of digital marketing as introduced in the Fundamentals of Digital Marketing course. An exploration and study into the development of strategic analysis, e-Commerce, management of CRM, basic analytics practices, and managing public relations online will occur through experiential learning practices. Exercises are designed for students to critique different web sites and campaigns in order to understand the connection between design, strategy, accessibility, operations, maintenance and results.

Search Engine Optimization, Search Engine Marketing, and Digital Advertising
From the foundations of digital marketing presented in the program’s first course, this course will delve further into specific tools, standards and practices in conjunction with application activities and project to build effective campaigns involving search engine marketing. Specific topics will build upon the fundamentals of Google algorithm, measurement, search engine optimization analysis, and PPC.

Content Management
Building on the Digital Marketing I course contents, this course will present advanced practices of content management for marketing online. Activities allow students to expand on their knowledge and skills in writing for the web, video and image marketing, writing press
releases, channel distribution, and managing and evaluating the performance of your content. Examining the interaction of new media with marketing practices will be presented in terms of developing the student’s awareness of emerging trends that will affect the role of the digital marketer.

**Data Management**

The expansion of ecommerce, web analytics and business analysis drives the need to stay current and relevant on theories and principles of the management of digital data. This course will examine not only technologies in data management, but also processes around data management and analysis for decision making. Theories and examples of predictive analytics and Big Data and the impact on business, business intelligence systems, and strategies for employing data to digital marketing will be covered. May include a summary project incorporating skills and knowledge from previous four courses.
DATE: March 20, 2017

To: Certificate and Diploma Committee, Undergraduate Council and Senate

From: Dr. Emad Mohammad, Associate Dean, DeGroote School of Business

RE: Proposal for Marketing Diploma with a Digital Marketing Concentration

I have reviewed the Marketing Diploma with a Digital Marketing Concentration program submission presented by the Centre for Continuing Education. I have determined that it meets all the criteria set out by the Undergraduate Council in its guidelines for certificates and diplomas and we, therefore, endorse this submission with the support of the DeGroote School of Business.

I have had the proposal reviewed by Dr. Manish Kacker, Associate Professor. His conclusion is that the objectives of the proposed program are viable, that the courses included in it will fulfill the stated objectives and meet Undergraduate Council’s criteria for the designation of “Certificate” and “Diploma”. I concur with this assessment.

The DeGroote School of Business is pleased to have a high quality program such as the Marketing Diploma with a Digital Marketing Concentration to meet the needs of people wanting to work in these fields. We support this CCE program as their academic affiliates, providing both the initial submission review and overview of ongoing curriculum issues. Additionally, we have provided CCE with the guidelines needed by their students for possible use of the advanced standing rules for students entering our degree programs using credit from completion of this program.

Cc: Lorraine Carter, Director, CCE
    Dan Piedra, Assistant Director, CCE
DATE: March 17, 2017

TO: Dr. Emad Mohammad, Associate Dean (Academic)

FROM: Dr. Manish Kacker, Associate Professor

SUBJECT: Evaluation of Marketing Diploma with a Digital Marketing Concentration Proposal for the Centre for Continuing Education (CCE)

I have reviewed the proposal for the new concentration in digital marketing to be offered through the Centre for Continuing Education (CCE). I have examined the academic submission document. In my judgment, this program’s requirements meet the standards necessary to be a McMaster diploma program (based on information provided in the academic submission document).

The academic submission indicates that the five core courses and the five concentration courses (from which students complete four courses) included in the proposed Marketing Diploma with a Digital Marketing Concentration are previously approved courses that are currently offered through the CCE. The five concentration courses reflect the Digital Marketing theme of the proposed concentration. The academic submission indicates that the courses will be taught by qualified individuals (possessing a master’s degree or equivalency), as defined by Undergraduate Council Certificate and Diploma requirements. The students taking the program will meet the minimum requirements set out in the Policy on Certificates and Diplomas for Undergraduate Council.

Since the program meets all these criteria as set out in the Policy on Certificates and Diplomas for Undergraduate Council, I have arrived at the conclusion stated above.

Sincerely,

[Signature]

Dr. Manish Kacker, Associate Professor

Cc: Dr. Emad Mohammad, Associate Dean, Academics, Lorraine Carter, CCE Director, Todd Rich, CCE Program Manager
DATE: March 21, 2017

To: Certificate and Diploma Committee, Undergraduate Council and Senate

From: Dr. Emad Mohammad, Associate Dean, DeGroote School of Business

RE: Proposal for new elective in the Marketing Diploma

I have reviewed the submission to add a new elective in Design Thinking to the Marketing Diploma submission presented by the Centre for Continuing Education. I have determined that it meets all the criteria set out by the Undergraduate Council in its guidelines for certificates and diplomas and we, therefore, endorse this submission with the support of the DeGroote School of Business.

I have had the course proposal reviewed by Dr. Manish Kacker, Associate Professor. His conclusion is that the new course aligns with the current trends in marketing and that the course will fulfill the stated objectives and meet Undergraduate Council’s criteria for the designation of “Certificate” and “Diploma”. I concur with this assessment.

The DeGroote School of Business is pleased to have a high quality course such as Design Thinking to meet the current needs of people wanting to work in this field. We support this CCE course addition as their academic affiliates, providing both the initial submission review and overview of ongoing curriculum issues. Additionally, we have provided CCE with the guidelines needed by their students for possible use of the advanced standing rules for students entering our degree programs using credit from completion of this program.

Cc: Lorraine Carter, Director, CCE
    Dan Piedra, Assistant Director, CCE
DATE: March 17, 2017

TO: Dr. Emad Mohammad, Associate Dean (Academic)

FROM: Dr. Manish Kacker, Associate Professor

SUBJECT: Evaluation of new elective course in the Marketing Diploma offered through the Centre for Continuing Education (CCE)

I have reviewed the proposal for the new Design Thinking elective course to be offered through the Centre for Continuing Education (CCE). I have examined the submission documents and it is my finding that new elective course is appropriate for inclusion in the program.

I have examined the content covered in the course, as well as the teaching and testing methods. My understanding is that the course will be primarily based on the course Innovation by Design (HTH SCI 4IDO3) that is currently being taught. Based on this, I concur that the proposed course is of the intellectual rigor comparable to that found in undergraduate degree courses. The academic submission indicates that the course will be taught by qualified individuals (possessing a master’s degree or equivalency), as defined by Undergraduate Council Certificate and Diploma requirements. The students taking the course will meet the minimum requirements set out in the Policy on Certificates and Diplomas for Undergraduate Council.

In conclusion, I support the inclusion of the proposed new elective course in the Marketing Diploma offered through the Centre for Continuing Education (CCE).

Sincerely,

[Signature]

Dr. Manish Kacker, Associate Professor

Cc: Dr. Emad Mohammad, Associate Dean, Academics, Lorraine Carter, CCE Director, Todd Rich, CCE Program Manager.
## Centre for Continuing Education
### Program Approval

#### A. Department & Program Information (Complete all fields):

<table>
<thead>
<tr>
<th>Academic Designation:</th>
<th>Certificate of Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Name:</td>
<td>Creative, Critical, and Design Thinking</td>
</tr>
<tr>
<td>Name of Representative:</td>
<td>Todd Rich, Program Manager</td>
</tr>
<tr>
<td>Proposed Date/Term of Program Start:</td>
<td>Winter 2018 (January 2018)</td>
</tr>
<tr>
<td>Date of Submission:</td>
<td>March 28, 2017</td>
</tr>
</tbody>
</table>

#### B. Faculty Statement (Required):

Attached.

#### C. Academic Merit (Complete all fields; write “not applicable” as needed):

**i. Program Overview:**

The Creative, Critical, and Design Thinking Certificate of Completion program will consist of three, 3-unit courses (9 units in total). The program is interdisciplinary in nature and will be valuable for persons from diverse professional backgrounds including business, health, social services, education, and community work.

Upon successful completion of the required three courses, students will receive the McMaster University Certificate of Completion in Creative, Critical, and Design Thinking.

Program learning objectives and specific course outcomes derive from the current literature including research findings, best practices and promising emergent practices.

Each course will bridge theory and practice through a combination of experiential learning (i.e., case studies, simulations, discussions, and projects) and more traditional teaching methods. Students will complete a project at the end of each course. The projects will provide opportunity to apply critical-creative-design thinking.
methods, tools, techniques and strategies to real-world situations/cases. Emerging trends, theories, and practices will be incorporated within coursework to ensure that program content is current and relevant.

Development subject matter experts and program instructors will be researchers and practitioners in the field who will guide students in cultivating the knowledge and skills required for creative-critical-design thinking.

The program will be delivered in an online format. Instructors will facilitate the online program through Avenue to Learn.

<table>
<thead>
<tr>
<th>ii. Learning Objectives:</th>
</tr>
</thead>
<tbody>
<tr>
<td>As the world continues to change at a rapid pace, thinking creatively, critically, and with a design process to solve complex problems are important skills in business, government, healthcare, IT, the arts, marketing, etc. Creative, critical, and design thinking processes involve systematic and human-centred processes to empathize with people, identify and frame problems, seek different viewpoints, identify alternative explanations, generate and test ideas, and take actions that add value to others and promote positive outcomes and opportunities.</td>
</tr>
<tr>
<td>Specifically, successful students will be able to:</td>
</tr>
<tr>
<td>1. Develop competencies in critical, creative, and design thinking to investigate an idea and transform it into meaningful action.</td>
</tr>
<tr>
<td>2. Apply divergent and convergent thinking tools to situations within a variety of fields and settings.</td>
</tr>
<tr>
<td>3. Examine principles and models of creative, critical, and design thinking to effectively solve problems for users and stakeholders.</td>
</tr>
<tr>
<td>4. Practice using the tools, frameworks and processes needed to develop solutions to real-world problems and complex situations.</td>
</tr>
<tr>
<td>5. Construct and execute innovative strategies in relation to problems and complex situations.</td>
</tr>
</tbody>
</table>
6. Become aware of and leverage the role(s) they play in creative processes and teams.

7. Reflect on and meaningfully communicate their experiences of creating, problem solving and designing.

8. Recognize how to identify, participate in, and support communities of practice committed to sustainable change.

The following objectives will be threaded within each course:

Students will be able to:

- Demonstrate an awareness of ethical practices and professional standards applicable to the field of creative, critical, and design thinking;
- Exemplify the knowledge, skills, attitudes, and behaviours required to work and collaborate with people;
- Employ effective communication practices.

<table>
<thead>
<tr>
<th>iii. Meeting Learning Objectives:</th>
<th>The Creative, Critical, and Design Thinking program is a series of courses targeting the stated program objectives. Individual course objectives are mapped to the overall program objectives. Delivery formats and teaching methods are structured to have a maximum effect on achievement of the learning objectives.</th>
</tr>
</thead>
</table>
| iv. Program Admission Requirements: | The Creative, Critical, and Design Thinking program will be open enrolment. No application is required. In compliance with the Certificates and Diploma admission policy from Undergraduate Council, students who wish to enrol in the Certificate of Completion in Creative, Critical, and Design Thinking should meet the following requirements:

- Ontario Secondary School Diploma or equivalent; mature student as defined in the Undergraduate Calendar of McMaster University; or be deemed an exceptional case by the Centre for Continuing Education.

- If English is not a student’s first language, he/she must meet the University’s English language proficiency requirements. |
<table>
<thead>
<tr>
<th>v. Program Pre-requisites</th>
<th>n/a</th>
</tr>
</thead>
<tbody>
<tr>
<td>vi. Program Completion Requirements:</td>
<td>Students must complete all 3 courses (9 units) in order to qualify for the Certificate of Completion in Creative, Critical, and Design Thinking.</td>
</tr>
<tr>
<td>viii. Program Delivery Format:</td>
<td>All courses will be delivered online through Avenue to Learn. Online delivery activities will include instructor presentations, group discussions, online resources (articles and videos), and practical application activities. Course content will be delivered over 11-12 weeks with a project in each course. On average, each week will consist of three hours of content.</td>
</tr>
<tr>
<td>ix. Student Evaluations (Grading Process):</td>
<td>Each course will include several evaluation components. Evaluation strategies will include assignments, case studies, presentations, individual or group projects, class participation, and other assignments in line with the learning objectives for the course. Where appropriate, evaluations will be structured to evaluate participants’ level of competency in achieving overall learning objectives.</td>
</tr>
<tr>
<td>x. Course Evaluation:</td>
<td>For each course, students will complete an evaluation to assess content, delivery, materials, method of evaluation, and instruction.</td>
</tr>
<tr>
<td>xi. Course Instruction:</td>
<td>Instructors for courses will be selected from a pool of qualified external professionals. In compliance with <em>McMaster’s Senate and Undergraduate Council Guidelines for Certificates and Diplomas</em>, selection will be based on academic background and/or experience within the field. Instructors must have a Master’s Degree (or equivalent) and significant professional experience and teaching within the field.</td>
</tr>
<tr>
<td>xii. Credit Towards Degree Programme Studies:</td>
<td>The academic credit courses included in a 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.</td>
</tr>
<tr>
<td>xiii. Credit Towards Existing CCE Diploma Programs:</td>
<td>• The three Creative, Critical, and Design Thinking courses (Cultivating Creative Thinking, Critical Thinking for Problem Solving, and Design Thinking) can be taken as individual elective courses in the Business Administration Diploma program.</td>
</tr>
<tr>
<td>xix. Program Advanced Standing:</td>
<td>Students will not be permitted to receive advanced standing toward the Creative, Critical, and Design Thinking Certificate of Completion. To earn the Certificate, students must complete all three courses through the Centre for Continuing Education.</td>
</tr>
</tbody>
</table>

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**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 and supplementary fees (MAPS). Expenses are typical and include significant up front development and marketing costs, as well as typical ongoing delivery costs (such as payment of facilitators, honoraria for other guest facilitators, materials, advertising and administration).

*Lorraine Carter, Director, Centre for Continuing Education, March 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, with the exception of the first year of the program, when the start-up will be subsidized by CCE.

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
The Faculty of Health Sciences
The Faculty of Health Sciences 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 Faculty of Health Sciences will receive an annual stipend at the end of each fiscal year during which the program records a surplus.

F. Listing of Courses (complete the chart to provide suggested course title, required/elective, number of academic units, proposed hours, and estimated term offering):

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Required/Elective</th>
<th>Academic Units</th>
<th>Proposed Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultivating Creative Thinking</td>
<td>Required</td>
<td>3.0 units</td>
<td>Winter 2018</td>
</tr>
<tr>
<td>Critical Thinking for Problem Solving</td>
<td>Required</td>
<td>3.0 units</td>
<td>Spring 2018</td>
</tr>
<tr>
<td>Design Thinking</td>
<td>Required</td>
<td>3.0 units</td>
<td>Fall 2018</td>
</tr>
</tbody>
</table>

Notes: Courses may be taken in any order; however, the following order is recommended:

Course Descriptions:

I) Cultivating Creative Thinking (3 units)

This course focuses on the use of creative thinking skills to discover fresh and original ways to solve real life problems. It provides opportunities to compile a toolkit of creative thinking techniques to generate, evaluate, and select new ideas and solutions. Topics explored in the course include the right and left sides of the brain, thinking hats, creative principles/models, and creative strategies that impact thinking, relating, and performing/acting in the workplace, at home, and in society.

Topics include:
- Four P’s of Creativity (Person, Process, Product, Press)
- Seven Qualities of Creative Thinking
- Divergent and Convergent Thinking Tools
- Leonardo Da Vinci’s Seven Creative Principles
- Edward de Bono’s Six Thinking Hats, and Lateral Thinking
- Ned Hermann’s Brain Dominance Model of Creativity
- Theories and practices from the expressive and performing arts
II) Critical Thinking for Problem Solving (3 units)

In this course, students will learn ways to think critically in order to identify and create solutions to difficult problems. This course also provides opportunities to examine the stages and processes of critical thinking as well as multiple problem solving models. Practical activities will enhance students’ critical thinking skills for working and living in today’s complex world.

Topics to be covered:
- The Literature of Critical Thinking, learning and reflection
- Critical Thinking Across Diverse Professions and Disciplines
- Levels of Critical Problem Solving
- Complexity and wicked problems
- Creative Problem Solving Process (CPS) – (facilitate, imagine the future, find the questions, generate ideas, craft solutions, explore acceptance, plan for action)
- Problem Solving Methods and hindrances
- Solution and resourced-focused approaches to problem solving
- Thinking Skills Model and Tools
- Min Basadur’s Simplex Model

III) Design Thinking (3 units)

This course will enable students to use design thinking methodology to assess problems and challenges, discover and use relevant data, develop design solutions, and construct prototypes for validation. Students will also learn how design thinking is a valuable tool in today’s global and mobile world with applicability in diverse fields and how it is a ‘go to’ tool for innovators and creators.

Topics to be covered:
- Strategic Foresight and Modelling
- The framework and phases of Design Thinking including empathy, ideation, prototyping and evaluating
- Teamwork and group process
- 4 C`s of Creativity (creativity, critical thinking and problem solving, collaboration and communication)
- Creative Tools of Design including visualization, mapping, and brainstorming
- Transformational Change
March 13, 2017

To: Certificate and Diploma Committee, Undergraduate Council

From: Del Harnish,  
    3M Fellow  
    Associate Dean, Undergraduate Education  
    Faculty of Health Sciences

RE: Proposal for Certificate of Completion in Creative, Critical and Design Thinking

I have reviewed the Creative, Critical and Design Thinking program submission developed by the Centre for Continuing Education. I have determined that it meets all the criteria set out by the Undergraduate Council in its guidelines for certificates and diplomas and we, therefore, endorse this submission with the support of the Faculty of Health Sciences.

I have had the proposal reviewed by Sean Park Ph.D., Health Sciences. His conclusion is that the objectives of the proposed program are viable, that the courses included in it will fulfill the stated objectives and meet Undergraduate Council’s criteria for the designation of “Certificate of Completion”. I concur with this assessment.

The Faculty of Health Sciences is pleased to have a high quality program such as the Certificate of Completion in Creative, Critical and Design Thinking to meet societal needs. We support this CCE program as their academic affiliates, providing both the initial submission review and overview of ongoing curriculum issues. Additionally, we have provided CCE with the guidelines needed by their students for possible use of the advanced standing rules for students entering our degree programs using credit from completion of this program.

Cc: Lorraine Carter, Director, CCE  
    Carolyn McEwen, Assistant Director, CCE
At your request, I have reviewed the proposal for the Creative, Critical, and Design Thinking program to be offered through the Centre for Continuing Education (CCE). I have examined the program submission document of proposed courses and my finding is that the Certificate of Completion program meets the standards necessary to deliver academic courses of 3-units value as indicated in the proposal.

My examination of the program’s requirements and content covered in each course, as well as the teaching and testing methods, concurs that the proposed courses are of the intellectual rigour comparable to that found in undergraduate degree courses. The academic submission indicate that the courses will be taught by qualified individuals (possessing a master’s degree or equivalency), as defined by Undergraduate Council Certificate and Diploma requirements. The students taking the courses will meet the minimum requirements set out in the Policy on Certificates and Diplomas for Undergraduate Council.

Since the courses meet all these criteria as set out in the Policy on Certificates and Diplomas for Undergraduate Council, I have arrived at the conclusion stated above.

Sincerely,

Sean Park

Cc: Lorraine Carter, Director Centre for Continuing Education
    Todd Rich, Program Manager, Centre for Continuing Education
Centre for Continuing Education  
Program – Information Purposes

<table>
<thead>
<tr>
<th>A. Department &amp; Program Information:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Name: Pathophysiology &amp; Epidemiology</td>
</tr>
<tr>
<td>Program Designation: Certificate of Completion</td>
</tr>
<tr>
<td>Name of Representative: Nancy McQuigge</td>
</tr>
<tr>
<td>Effective Date: May 1, 2017</td>
</tr>
<tr>
<td>Date of Submission: March 28, 2017</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Faculty Statement (Required):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refer to attached letter from Faculty Reviewer, Dr. Lynn Martin.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. Academic Merit (Complete all fields; write “not applicable” as needed):</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Program Overview: This program is a Certificate of Completion program that consists of three, 3-unit academic courses. McMaster University’s Senate has approved the two-pathophysiology courses as part of the Health Information Management program. The Foundations in Epidemiology course will be submitted for approval as part of a new Certificate program. The courses are:</td>
</tr>
<tr>
<td>• Pathophysiology I (3 units)</td>
</tr>
<tr>
<td>• Pathophysiology II (3 units)</td>
</tr>
<tr>
<td>• Foundations in Epidemiology (3 units)</td>
</tr>
<tr>
<td>These courses will be packaged together for individuals with some health studies education who require specific education in pathophysiology and/or epidemiology. The program may be promoted to internationally trained professionals who require some Canadian health care education. There is potential to attract individuals who require academic upgrading, or refreshing of past courses in health care.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ii. Learning Objectives: Upon completion of all three courses, students will be able to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Identify structural units of the body including cells, tissues, organs and systems.</td>
</tr>
<tr>
<td>• Analyze common diagnostic interventions to determine</td>
</tr>
</tbody>
</table>
- Understand the role of risk factors in health and disease.
- Demonstrate knowledge of the course of a pathological condition.
- Investigate methods used in public health surveillance and disease outbreak investigation.
- Explore research design involving descriptive, analytical, and intervention approaches to disease.

The following objectives will be threaded within each course:

Students will be able to:

- Demonstrate an awareness of ethical practices and professional standards applicable to the field of health care;
- Exemplify the skills, attitudes and behaviours required to work and collaborate with people and develop personal management skills;
- Employ effective communication practices

<table>
<thead>
<tr>
<th>iii. Meeting Learning Objectives:</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>iv. Program Admission Requirements:</td>
<td>Courses will be open enrolment.</td>
</tr>
<tr>
<td>v. Program Pre-requisites (if applicable):</td>
<td>Students should complete a course in Anatomy/Physiology before enrolling in Pathophysiology I. Completion of Pathophysiology I is required prior to the start of Pathophysiology II.</td>
</tr>
<tr>
<td>vi. Program Completion Requirements:</td>
<td>To earn a Certificate of Completion, students must complete three courses; 9 units of study.</td>
</tr>
<tr>
<td>viii. Program Delivery Format:</td>
<td>All courses will be delivered online using McMaster University’s Learning Management System.</td>
</tr>
<tr>
<td>ix. Student Evaluations (Grading Process):</td>
<td>Each course will include several evaluation components. The evaluations will consist of quizzes, assignments, case studies, presentations, individual or group projects, class participation, or a combination thereof. Where appropriate, evaluations will</td>
</tr>
</tbody>
</table>
be structured to evaluate participants’ level of competency in achieving overall learning objectives.

x. Course Evaluation: For each course, students will complete an evaluation to assess content, delivery, materials, method of evaluation and instruction.

xi. Course Instruction: Instructors for courses will be selected from a pool of qualified external professionals. In compliance with McMaster’s Senate and Undergraduate Council Guidelines for Certificates and Diplomas, selection will be based on academic background and/or experience within the field. Instructors must have a Master’s Degree (or equivalent) and significant professional experience and teaching within the field.

xii. Credit Towards Degree Programme Studies: The academic credit courses included in this Certificate of Completion programme can be used for credit towards degree programme studies in accordance with the normal academic rules specified by the Faculty offering the degree.

xiii. Program Advanced Standing: Transfer credits are not accepted for this program.

D. Listing of Courses

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Academic Units</th>
<th>Scheduled Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTH 116 Pathophysiology I</td>
<td>3 units</td>
<td>Fall 2017</td>
</tr>
<tr>
<td>HTH 117 Pathophysiology II</td>
<td>3 units</td>
<td>Winter 2018</td>
</tr>
<tr>
<td>Foundations in Epidemiology</td>
<td>3 units</td>
<td>Fall 2017</td>
</tr>
</tbody>
</table>

Course Descriptions:

I) HTH 116 Pathophysiology I

Course Description:
This course provides an overview of disease processes and the effect on different body systems. The etiology, clinical manifestations, diagnostic tests and therapeutic interventions for various disorders are studied. The course builds on students’ experience with anatomy and physiology. Pre-requisite: Anatomy & Physiology

Topics include:
- Introduction to pathophysiology
- Introduction to basic pharmacology and other therapies
- Medical disorders related to the skin, respiratory system, digestive system, sensory organs, blood and circulatory systems, and cardiovascular system
II) HTH 117 Pathophysiology II

Course Description:
A continuation of Pathophysiology I course, the course provides an overview of disease processes and the effect on different body systems. The etiology, clinical manifestations, diagnostic tests and therapeutic interventions for various disorders are studied. Pre-requisite: Pathophysiology I

Topics include:
- Environmental Factors and Pathophysiology
- Pain and immunity
- Medical disorders related to lymphatic system, nervous system, endocrines system, musculoskeletal system, and reproductive system

III) Foundations in Epidemiology

Course Description:
This course provides an introductory overview of epidemiology concepts in terms of the distribution and determinants of diseases, health conditions and health issues within specific populations. Students will focus on foundational concepts within epidemiology in order to build an understanding of its application within public health and health research.

Topics include:
- Epidemiological definitions and common terms
- Practical disease concepts
- Strategies and statistical methods in descriptive epidemiology
- Population health indicators
- Strategies and statistical methods in analytical epidemiology
- Studies in epidemiology
- Chronic disease epidemiology
- Clinical epidemiology
DATE: March 7, 2017
TO: Certificate & Diploma Committee
FROM: Dr. Lynn Martin, Assistant and Teaching Professor, School of Nursing
RE: Evaluation of the Foundations of Canadian Health Care, Certificate of Completion Program

I have reviewed the submission document for the Epidemiology & Pathophysiology, Certificate of Completion program to be offered as part of the professional development offerings for the Centre for Continuing Education (CCE).

My examination of the program overview document, course descriptions, instructional and evaluation methods indicate that the program’s components are of appropriate intellectual rigor for a 3-unit, undergraduate course. The students taking the program will meet the minimum requirements set out in the Policy on Certificates and Diplomas for Undergraduate Council – Certificate of Completion.

Sincerely,

Dr. Lynn Martin, BScN, MScN, EdD

Cc: Lorraine Carter, Director, Centre for Continuing Education
    Dan Piedra, Assistant Director, Centre for Continuing Education
    Dr. Alan J. Neville, Associate Dean, Education, Faculty of Health Sciences
Certificate in **Business Technology Management (BTM)**

Submitted by:
Dr. Brian Detlor
Chair, Information Systems Area
DeGroote School of Business
McMaster University
detlorb@mcmaster.ca
x23949
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Introduction

The purpose of this document is to present a proposal for a new certificate entitled “Business Technology Management” (BTM) open strictly to Honours Commerce students and designed in a way where students complete certificate requirements through course electives in the Honours Commerce program.

This certificate aligns with the Business Technology Management (BTM) movement in Canada and takes advantage of the space left vacant by the recent closing down of McMaster’s “Business Informatics” program offered by the Department of Computing and Software in the Faculty of Engineering.

The proposed certificate also aligns with the strategic direction of the DeGroote School of Business in digital transformation outlined in DSB’s Strategic Plan 2015 – 2020 document. The strategic plan’s vision statement calls for DSB to be a global leader in research, teaching and community-building in the “management of digital innovation” and outlines an action plan that includes the creation of new and revised courses in the Bachelor of Commerce program that teach digital transformation.

Importantly, the certificate will leverage current Commerce courses offered by the DSB, as well as current courses in the Bachelor of Technology’s “Software Engineering Technology” program in the W Booth School of Engineering Practice and Technology.¹ No new courses or resources are required for this certificate.

About the BTM Initiative

In 2009, the Canadian Coalition for Tomorrow’s ICT Skills (CCICT) – now called ITAC Talent following a merger with ITAC on May 1, 2014 – launched the BTM initiative to revitalize and rebrand the Information Systems (IS) field, as well as improve the quality and quantity of students who choose it. With active industry involvement, CCICT developed the Business Technology Management (BTM) learning outcomes and competency standards, designed to develop technology educated business leaders.

Currently 19 universities across Canada offer undergraduate BTM degrees, specializations, or certificates, with 24 more on the way (see Appendix 1). Although not all universities have chosen to use the BTM branding for their program at this time, all programs are aligned with BTM Learning Outcomes and Competency Standards². The elements covered by most BTM programs are: Business (e.g., Marketing, Finance, Operations Management, HR Management); Technology (e.g., Information Technology, Systems Architecture, Network Design and Management); Technology in Business (e.g., Business Change Management, Business Process Analysis, Managing the IT and Business Interface; IT

¹ Agreement “in-principle” has been made with the W Booth School of Engineering Practice and Technology (Faculty of Engineering) to include courses from the “Software Engineering Technology” program.

Governance); **Project Skills** (e.g., Risk Management, Project Management, Quality Assurance, Business Analysis); and, **Personal and Interpersonal Skills** (e.g., Presentation Skills, Communication Skills, Leadership, Negotiation)

**BTM-Related Programs @ McMaster**

There are a variety of educational programs/offerings at McMaster that focus on business and information technology. These are listed below.

1) **Business Informatics** (4-year UG degree that was offered by the Department of Computing and Software, Faculty of Engineering) – *this program is being phased out as admission to Level II Honours Business Informatics was last offered in September 2016.*
   - This program is most similar to a typical BTM program offered at competitor schools. Students take computer science courses offered by the Department of Computing and Software throughout the entire program, and starting in Year 2 of the program take a broad range of Commerce courses offered by the DeGroote School of Business.
   - In total, students take 9 (3-unit) Commerce courses from the School of Business.
   - Currently students in this program take only 2 courses offered by the IS Area: 4KF3 (Project Management) and 4KH3 (Management Issues in Electronic Business).
   - When compared to the BTM program elements, this program sufficiently covers the Business (non-IS) and Technology (CS) components. *The remaining areas of “Technology in Business” (~IS), “Processes, Projects and Change”, “Personal and Interpersonal” and “Integrative” (capstone) areas are lacking.*

2) **Bachelor of Technology (BTech) in Software Engineering Technology** (McMaster-Mohawk Partnership; degree completion program; Faculty of Engineering). The BTech degree completion program in Software Engineering Technology is distinct from the proposed BTM specialization in that the B-Tech in Software Engineering Technology program trains students in information technology, but students do not take a large number of business courses (e.g., courses in Finance, Accounting, Marketing, Human Resources, Organizational Behaviour, Operations Management).

3) **Minor in Information Systems** (Undergraduate Minor offered in the UG program offered by the DeGroote School of Business).
   - This Minor is not open to students registered in Commerce or Engineering & Mgmt.
   - The number of students allowed to take this Minor traditionally has been capped to a small number (e.g., 30 students).

4) **MSc in eHealth** (A master’s program in health informatics offered between the Faculties of Health Sciences, Engineering and Business)
5) **Executive MBA in Digital Transformation** (New MBA program launched in August 2016)

6) **PhD in Business Administration** (Information Systems Field)

**Learning Objectives**

The learning objectives of the BTM certificate match BTM Learning Outcomes and Competency Standards (see [http://itactalent.ca/BTM-Learning-Outcomes](http://itactalent.ca/BTM-Learning-Outcomes)).

BTM Learning Outcomes and Competency Standards identify 3 Area Types and 6 Knowledge Areas that any BTM-aligned program or specialization or certificate should incorporate.

The diagram shows the Area Types and Knowledge Areas:

- **Area Types:** Integrative, Core, Foundation
- **Knowledge Areas:** Integrative, Processes, Projects and Change, Technology in Business, Innovation, Business, Technology, Personal and Interpersonal

BTM Learning Outcomes contain 70 Learning Outcomes in 7 broad competency areas described below.

1) **Integrative (I1):** This knowledge area contains learning outcomes that integrate the competencies developed in the following six knowledge areas. It produces a “deliverable” of direct relevance to employers.

2) **Personal and Interpersonal (F1):** The ability to make a meaningful contribution depends upon one’s self-knowledge and ability to have constructive, long term, interactions with others. Successful leaders have strong personal and interpersonal competencies.

3) **Business (F2):** To be effective in the workplace one must have both the broad context of business – its role and place in society – and a working knowledge of how business operates.

4) **Technology (F3):** BTM graduates must understand information and communications technologies, their current capabilities, and future trends.
5) Innovation (F4): BTM graduates are expected to be innovative in the workplace. Innovators should be able to identify new opportunities, validate and resource them.

6) Technology in Business (C1): This knowledge area is designed to synthesize the knowledge and competencies gained in the foundational knowledge areas and create an additional competency in understanding: the potential (economic, personal, societal), the risks of, and the governance, acquisition, and management of ICTs in and for business.

7) Processes, Project and Change (C2): BTM graduates will gain the foundations that enable them to help create well-designed business processes, well-managed projects, and support for the individuals and groups undergoing change.

In fact, BTM learning objectives contain more than 70 learning outcomes (see the figure below):

A detailed description of BTM learning outcomes and competency areas can be found in the 73-paged document entitled **BTM Learning Outcomes and Competency Standards: Baccalaureate Programs 2.0** published in 2016.

By matching the learning objectives of the certificate with the BTM learning objectives described above, the certificate can become officially “BTM Accredited”. BTM accreditation will raise the value, importance and attractiveness of the certificate to both students and employers. When the certificate
becomes BTM Accredited, it means that certificate has received national recognition of its quality, promotes "best practices" in education, directly involves faculty and staff in self-assessment and continuous quality improvement processes, and is based on learning outcomes rather than on teaching inputs.

**Rationale for the Certificate**

*The certificate is being offered for three important reasons.* First, as described above, the certificate aligns with the strategic direction of the DeGroote School of Business in digital transformation outlined in DSB’s Strategic Plan 2015 – 2020 document. The strategic plan’s vision statement calls for DSB to be a global leader in research, teaching and community-building in the “management of digital innovation” and outlines an action plan that includes the creation of new and revised courses in the Bachelor of Commerce program that teach digital transformation.

Second, BTM jobs are in demand. According to a 2016 report produced by the Brookfield Institute for Innovation + Entrepreneurship³ in conjunction with a number of key industry partners, the technology sector was directly responsible for $117 billion or 7.1 percent of Canada’s economic output, greater than that of the finance and insurance industry. Across Canada, the need for workers is currently so great that a number of employers and industry organizations have banded together with the Canadian government to launch Go North Canada⁴; this initiative is an attempt to lure some of the more than 350,000 Canadians⁵ who work in Silicon Valley (as well as Canadians in other parts of the US) back home. The Information and Communications Technology Council (ICTC), a Canadian not-for-profit national center of expertise for the digital economy, in its 2016 report entitled Digital Talent: Road to 2020 and Beyond⁶, advocates the training of youth in digital skills as part of a national strategy for Canada. The ICTC report describes how the growth in digital jobs in Canada has outpaced the overall economy in the last two years by over 4 to 1, leading to a strong demand of 182,000 skilled ICT workers by 2019⁷.

Third, the BTM certificate will increase exposure and raise potential interest about DeGroote’s Honours Commerce program among high school students. This is because, as a “BTM Accredited” offering, the certificate will be listed with ITAC Talent⁸ (the Information Technology Association of Canada’s Talent Division) and promoted by this association in their marketing initiatives to high school students. ITAC Talent does outreach campaigns to high schools that aim to attract incoming first-year undergraduate students to BTM programs and certificates.

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⁴ [http://gonorthcanada.ca/](http://gonorthcanada.ca/)
List of Courses

In total, Honours Commerce students must take 9 courses outlined below to obtain the BTM certificate. All 9 courses are currently offered within the DSB’s Honours Commerce program and the Software Engineering Technology Program within the W Booth School of Engineering Practice and Technology. No new courses are proposed. Appendix 2 provides recommendations on how these 9 courses would be taken within the Honours Commerce program.

There are seven required courses in the proposed BTM certificate:

- COMMERCE 3KD3 – Database Design Management & Applications
- COMMERCE 3KE3 – Management of Enterprise Data Analytics
- COMMERCE 4KF3 – Project Management
- COMMERCE 4KG3 – Data Mining and Business Intelligence
- COMMERCE 4KH3 – Management Issues in Electronic Business
- SFWR TECH 3NI3 – Networking Principles
- SFWR TECH 3PR3 – Procedural and Object Oriented Programming Concepts

Students are also required to take any two of the following courses:

- COMMERCE 3KA3 – Systems Analysis & Design
- COMMERCE 4KI3 – Implementation of IS for Small & Medium Sized Enterprises
- COMMERCE 4BK3 – Management of Technology
- COMMERCE 4MH3 – Electronic Marketing
- SFWR TECH 3CS3 – Computer Security
- SFWR TECH 3OS3 – Operating Systems
- SFWR TECH 3RQ3 – Software Requirements and Specification
- SFWR TECH 4NI3 – Advanced Networking Infrastructure
- SFWR TECH 4SD3 – Software Design
- SFWR TECH 4WP3 – Advanced Web Programming – NEW course to be offered in 2017/18

The following is a description of the above courses. More information about the courses can be found in McMaster’s Undergraduate Calendar. Full course outlines can be obtained on the DeGroote School of Business website and the W Booth School of Engineering Practice and Technology website.

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9 All SFWR TECH courses are offered “synchronously” online and run weekday evenings from 6:30 to 9:30 pm.
10 An earlier draft of the proposed certificate description was sent to Gina van Dalen, Senior Program Manager, ITAC Talent, Information & Technology Association of Canada. She in turn sent it to Dr. Stephane Gagnon, the Chair of the BTM Accreditation Council (http://itactalent.ca/talent-initiatives/btm/BTMAccreditation), who replied that it looked like an “excellent program” and that the BTM-related courses meet most, if not all, BTM learning objectives.
11 This course will appear in the undergraduate calendar in 2017-2018.
12 The title of this course will be changed in the undergraduate calendar in 2017-2018 to “Strategies for Electronic and Mobile Business”
COMMERCE 3KA3 – Systems Analysis & Design

This course examines the role of the system analyst in today’s business environment. Traditional and modern approaches to systems analysis and design will be covered. Students participate in a hands-on team project for a real-world business application. This course provides three units of academic credit.

COMMERCE 3KD3 – Database Design Management & Applications

This course is designed to introduce the basic concepts of database design, implementation and management. Students will gain hands on experience through assignments and a team project. This course provides three units of academic credit.

COMMERCE 3KE3 – Management of Enterprise Data Analytics

This course provides students with an overview of enterprise data analytics and an introduction to the concepts which underlie its effective deployment and management. The course encompasses managerial, technical and statistical perspectives, demonstrating how each area is dependent on the other to make enterprise analytics work. This course incorporates a variety of teaching and learning methods including lectures, assignments, case studies, group work, presentations, and readings. This course provides three units of academic credit.

COMMERCE 4BK3 – Management of Technology

This course provides an introduction to the innovative management of technology including the integration of the firm and technology strategy, external sourcing of technology and the internationalization of technology management. This course provides three units of academic credit.

COMMERCE 4KF3 – Project Management

Topics covered in this course include: project selection, project organization structures, life cycles, planning, estimation, budgeting, resource allocation, contracting, project management software, reporting and controlling issues and conflict management. This course provides three units of academic credit.

COMMERCE 4KG3 – Data Mining and Business Intelligence

Business intelligence (BI) is a technology-driven process for analysing data and presenting actionable information to help corporate executives, business managers and other end users make more informed business decisions. The course is designed for students in multiple business areas. Students will learn the concepts, techniques, and applications of data mining for business intelligence through lectures, class discussions, hands-on assignments, and term paper presentations. This course provides three units of academic credit.
**COMMERCE 4KH3 – Management Issues in Electronic Business**

This course covers the issues that the modern business manager must deal with in making strategic decisions concerning the choice, implementation and execution of electronic business solutions. This course provides three units of academic credit.

**COMMERCE 4KI3 – Implementation of IS for Small & Medium Sized Enterprises**

This course enables students to learn about the methodologies used in business process management and related information technologies in support of process innovation. These techniques are learned through hands-on practice with SAP ByDesign software and ARIS software simulation targeted to small and medium size enterprises. This course provides three units of academic credit.

**COMMERCE 4MH3 – Electronic Marketing**

The purpose of this course is to explore cutting edge marketing strategies in a dynamic e-commerce environment. Students will cover a wide range of issues including online consumer behaviours, website analytics, search engine marketing, online CRM, online channel and pricing strategies, social media marketing, and mobile marketing. This course is taught primarily through the case method and lectures but also includes readings, videos, workshops, guest speakers and assignments. This course provides three units of academic credit.

**SFWR TECH 3CS3 – Computer Security**

This course covers network and software security, cryptography algorithms, firewalls, vulnerabilities, policies and best practices, attack and defense strategies. Learning outcomes include the ability to: i) communicate technical and non-technical concepts effectively in verbal and written forms; ii) apply cryptographic algorithms to various scenarios to ensure data confidentiality and integrity; iii) construct firewall policies restricting the flow of network traffic to protect a host or network; iv) identify and analyze weaknesses in systems by performing security audits and policy review; and v) design holistic security solutions based on the application of all security concepts in the course. This course provides three units of academic credit.

**SFWR TECH 3NI3 – Networking Principles**

This course introduces students to the OSI Model layers 1-4 including Ethernet, IP addressing, subnetting, routing, VLANs, Spanning-Tree protocol, network device configuration and an introduction to network security. Learning outcomes include the ability to: i) communicate technical and non-technical concepts effectively in written forms; ii) analyze the operation of various network and application layer protocols; iii) design a structured IP addressing scheme for a network of any size; iv) analyze the operation of network isolation, redundancy, and routing protocols; v) configure a variety of wired and wireless network devices to interoperate in a LAN environment; and vi) troubleshoot network-related problems at all layers of the OSI and TCP/IP stack. This course provides three units of academic credit.
**SFWR TECH 3OS3 – Operating Systems**

This course covers processes, threads and concurrency, process scheduling, memory management, protection, access and authentication and file system organization and access methods. Learning outcomes include the ability to: i) describe the organization and behavior of operating system components; ii) describe the overall structure of modern operating systems; iii) analyze the behavior of common scheduling algorithms; iv) implement a simple algorithm using multithreading; and v) implement a scheduling simulation to compare different types of scheduling algorithms. This course provides three units of academic credit.

**SFWR TECH 3PR3 – Procedural and Object Oriented Programming Concepts**

This course covers procedural and object oriented programming fundamentals. Concepts are exemplified with C++ and Java programming languages. Learning objectives include the ability to: i) identify the differences between C++ basic data types, select types appropriate to a purpose, and select correct and appropriate C++ identifier names; ii) construct and use functions: write correct function prototypes, definitions, and calls to the function; select the appropriate method to pass values or references; differentiate between void and valued functions; identify the scope of automatic, static and global variables; iii) use input/output methods correctly for different data types and formats; iv) properly use *if*, *if...else* and *switch* decision making operators, as well as select the appropriate type and implement the looping mechanisms *for*, *while*, and *do...while*; v) declare, initialize, and manipulate one-dimensional and two-dimensional arrays and use arrays as function parameters; vi) use object oriented programming to write programs in C++; vii) employ advanced programming procedures based on inheritance and polymorphism; and viii) apply overloading techniques to increase the performances of existing methods and classes. This course provides three units of academic credit.

**SFWR TECH 3RQ3 – Software Requirements and Specification**

This course covers requirements elicitation, analysis and negotiation, object-oriented requirement analysis techniques, prototyping, and requirements tracking, verification, validation and management. Furthermore, this course covers software project cost and resource estimation, as well as the role of information and business rules in the software requirements and specification process. Learning objectives include the ability to: i) elicit software requirements from system stakeholders and address common challenges of the elicitation process; ii) specify and analyze software requirements using industry standard techniques such as UML; iii) understand the effect of requirements on software project resource estimation and success; iv) negotiate software requirements; v) specify requirements that are verifiable, traceable, measurable and testable; vi) verify that specified software requirements are accurate, unambiguous, complete and consistent; vii) produce software specification (communicate software requirements through written documents and oral presentations); and viii) understand the relationship between business rules, and software requirements. This course provides three units of academic credit.
**SFWR TECH 4NI3 – Advanced Networking Infrastructure**

This course provides an understanding and deployment of wireless networking and infrastructure, and Software-Defined Networking (SDN) infrastructure concepts and applications for managing corporate networks. Learning objectives include the ability to: i) deploy a WLAN controller, access points, and establish connectivity; ii) design and implement a WLAN; iii) identify and explain the most suitable technology for a given problem; iv) analyze the impact of technology selection on system design; v) explain the differences between the traditional networks and SDN; vi) define and explain the internal architecture of network devices and how they are related to the operations of SDNs; and vii) explain, set up and use applications and network operations implemented in hypervisors such as VMware vSphere, Microsoft Hyper-V, and the open source KVM project. This course provides three units of academic credit.

**SFWR TECH 4SD3 – Software Design**

This course provides an introduction to software design and the main techniques and approaches commonly used in the business requirements and design phases within the system development life cycle. Topics include the software life-cycle, quality attributes, decomposition and interface design, specification, the design of software modules, the design of patterns, design documentation, implementation, reviews, inspections and testing. Learning outcomes include the ability to: i) design and develop use cases, and use case diagrams; ii) design and develop use case descriptions; iii) design and develop activity diagrams; iv) design and develop sequence diagrams; v) design and develop state charts; vi) design and develop class diagrams; and vii) design and develop databases based on class diagrams. This course provides three units of academic credit.

**SFWR TECH 4WP3 – Advanced Web Programming**

This course provides an introduction to advanced technologies for web development, apps for mobile, desktop and operating systems, and the deployment of WebAPI for communication and hardware devices. Learning outcomes include the ability to: i) use advanced HTTP and new features of HTML5 and security features; ii) develop web applications using Document Object Model (DOM); iii) create modern web apps using the latest web technologies; iv) develop and test web pages for PDAs and smart clients; v) deploy Web APIs including WebAPI, websockets and application frameworks; vi) use SVG, WebGL, MathML and TinyURL; and vii) compare the use of a service provider to hosting your own web site. This course provides three units of academic credit.
Total Unit Value

The total unit value of the academic credit courses in the certificate is 27 units (i.e., students are required to take nine 3-unit courses).

Admission Requirements

Only students enrolled in the Honours Commerce program are eligible to complete the certificate. Thus admission requirements are the same as those applicable to Honours Commerce students.

Credit Toward Degree Studies

The courses comprising the BTM certificate will count as elective courses towards the Honours Commerce program.

Financial Viability

Costs to administer the certificate will fall within the current operating budget of the Honours Commerce Program.

Administrative Responsibility

Operational administration of the certificate program would fall under the responsibility of the Manager of Student Experience – Academic (Commerce) at the DeGroote School of Business. Academic matters pertaining to the certificate (e.g., changes, additions, deletion to the certificate structure) would be the responsibility of the Chair of the Information Systems Area in the DeGroote School of Business. He or she would follow the same procedures for courses changes and additions (i.e., first vetted by the IS Area, then forwarded to the DSB’s Undergraduate Curriculum and Policy Committee, then forwarded to the Faculty of Business, then forwarded to Undergraduate Council and/or its Certificates and Diplomas Committee). Changes and additions with respect to courses offered within the Software Engineering Technology program would be handled by the W Booth School of Engineering Practice and Technology.
# Appendix 1: A List of BTM-Related Programs in Canada

The following is a list of 19 BTM-related programs currently offered in business schools across Canada.

<table>
<thead>
<tr>
<th></th>
<th>Program Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Acadia University Bachelor of Business Administration (BBA) program with a Business Technology Management major</td>
</tr>
<tr>
<td>2</td>
<td>Athabasca University Program details coming soon.</td>
</tr>
<tr>
<td>3</td>
<td>BCIT Information Technology Management</td>
</tr>
<tr>
<td>4</td>
<td>Concordia University (John Molson School of Business) Bachelor of Commerce (Bcomm) with Business Technology Management (BTM) Major</td>
</tr>
<tr>
<td>5</td>
<td>Laval University Bachelor of Business Administration (BBA)</td>
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<tr>
<td>6</td>
<td>Red River College Diploma in Business Technology Management (BTM)</td>
</tr>
<tr>
<td>7</td>
<td>Ryerson University Business Technology Management</td>
</tr>
<tr>
<td>8</td>
<td>Sherbrooke University Bachelor of Business Technology Management (BTM)</td>
</tr>
<tr>
<td>9</td>
<td>Simon Fraser University (Beedie School of Business) Business Administration with Certificate in Business Technology Management (BTM)</td>
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<tr>
<td>10)</td>
<td>Université du Québec à Montréal</td>
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<td>11)</td>
<td>Université du Québec à Rimouski</td>
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<tr>
<td>12)</td>
<td>University of Alberta</td>
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<tr>
<td>13)</td>
<td>University of British Columbia (Sauder School of Business)</td>
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<tr>
<td>14)</td>
<td>University of Calgary</td>
</tr>
<tr>
<td>15)</td>
<td>University of Toronto – Mississauga</td>
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</tbody>
</table>
| 16) | University of Waterloo | The University of Waterloo and Wilfrid Laurier University jointly offer the Bachelor of Business Administration and Bachelor of Computer Science Double Degree (BBA/BCS) program.  
• [Explore University of Waterloo program](#) |
| 17) | UQO | UQO- Université du Québec en Outaouais |
| 18) | The University of Waterloo and Wilfrid Laurier University jointly offer the Bachelor of Business Administration and Bachelor of Computer Science Double Degree (BBA/BCS) program.  
  
  - [Explore Wilfrid Laurier program](#) |
| 19) | Bachelor of Business Administration (BBA) or International Bachelor of Business Administration (IBBA) with Operations Management and Information Systems (OMIS) Specialization |
Appendix 2: Recommendation of How the Courses Would Be Taken

There is no specific order in which Commerce students must take the above list of courses to obtain the certificate. However, the following is presented as a recommendation of how an Honours Commerce student would normally take the courses within the structure of the Honours Commerce program. Courses meeting the requirements of the BTM certificate are highlighted in yellow.

YEAR 1 (mimics the existing B. Commerce Year 1 program)  
Total: 30 units

Required: 18-24 units

- Commerce 1AA3 – Financial Accounting I
- Commerce 1BA3 – Organizational Behaviour
- Commerce 1DE0 – Business I Orientation
- Commerce 1E03 – Business Environment and Organization
- Economics 1B03 – Introductory Microeconomics
- Economics 1BB3 – Introductory Macroeconomics
- 3 units from: Math 1A03, Math 1LS3, Math 1M03
- Math 1F03 (for students without Gr. 12 Calculus & Vectors U or equivalent)
- Statistics 1L03 (for Grade 12 students without Mathematics of Data Management U or equiv)

Electives: 6-12 units (to bring total to 30 units)

YEAR 2 (includes all required courses in the B. Commerce Year 2 program; however elective courses are pre-defined)  
Total: 30 units

24 units

- 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 2OC3 - Operations Management
- COMMERCE 2QA3 - Applied Statistics for Business
- COMMERCE 3FA3 - Managerial Finance

6 units

- SFWR TECH 3IT3 – Networking Principles
- SFWR TECH 3PR3 – Procedural and Object Oriented Programming Concepts

YEAR 3  
Total: 30 units

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13 All SFWR TECH courses are offered “synchronously” online and run weekday evenings from 6:30 to 9:30 pm.
9 units
- COMMERCE 3MC3 – Applied Marketing Management
- COMMERCE 3QA3 – Management Science for Business
- COMMERCE 3S03 – Management Skills Development

6 units from
- COMMERCE 3KD3 – Database Design Management & Applications
- COMMERCE 3KE3 – Management of Enterprise Data Analytics – NEW

3 units from one of the elective courses for the BTM certificate

6 units of other Level III or IV level Commerce Courses

6 units of electives from non-Commerce courses

YEAR 4

Total: 30 units

15 units
- COMMERCE 4KH3 – Management Issues in Electronic Business
- COMMERCE 4KF3 – Project Management
- COMMERCE 4KG3 – Data Mining and Business Intelligence
- COMMERCE 4PA3 – Business Policy: Strategic Management
- COMMERCE 4SA3 – International Business

3 units from one of the elective courses for the BTM certificate

12 units of electives from non-Commerce courses

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14 A change request to add this course to the undergraduate calendar is currently under consideration.
15 A change request is under consideration to modify the title of this course to “Strategies for Electronic and Mobile Business”
PROPOSAL FOR A CONCURRENT CERTIFICATE IN INTERNATIONAL ENGAGEMENT

1 Certificate Overview

Experiential education and internationalization are key aspects of *Forward with Integrity*. This Certificate recognizes students’ efforts to gain meaningful experiences outside the classroom while promoting the concept of international engagement through an emphasis on the development of linguistic and cultural awareness. The Certificate recognizes both academic and co-curricular efforts on the part of the student to gain an international perspective and to increase his or her knowledge of what it means to be a global citizen. An international educational experience, through relevant experiences at home or abroad, is an essential part of the Certificate.

Two features of this Certificate are noteworthy: recognition of formal exchange abroad or an ‘international engagement at home’ experience, and a capstone project in the final year. The ‘international engagement at home’ component recognizes a volunteer experience at home (equivalent to a one-term (3 units) commitment) which promotes a deeper understanding of cross-cultural issues and the development of a global perspective in the Canadian context. The capstone course allows students to analyze, synthesize and reflect upon their experiences in a summative digital portfolio that they share with the university community.

2 Academic Merit

2.1 Learning Objectives

Students completing the concurrent Certificate in International Engagement will

- develop a personalized program of study with an international focus
- develop a deep understanding of cultural and linguistic differences through academic and co-curricular experiences
- develop new communicative skills in one or more languages other than English
- recognize the importance of developing intercultural competencies
- connect personal, academic and co-curricular experiences to specific, student-determined objectives within the theme of international engagement

2.2 Certificate Requirements

The Certificate is open to any student enrolled in an undergraduate program at the University and complements any undergraduate degree. Students may declare the Certificate in International Engagement at the time of graduation, and upon completion of the following courses.

Requirements (18 units)
• 12 units of a language other than English or 6 units in each of two languages other than English. Students are encouraged to consider the diversity of language offerings at McMaster, including Indigenous languages
• 3 units of international experience at home or abroad*
  o Credit received from an International Exchange Program (‘XCH’)
  o International Engagement at Home (INTL 2A03)
• 3 units – International Engagement Capstone (INTL 3A03)

*3 units of pre-approved, alternative relevant study abroad experience may replace this requirement. This may include independent study abroad experiences, approved on Letter of Permission, or existing placement coursework, such as in HISTORY 3GH3. Previously approved experiential courses may also be substituted for the ‘International Engagement at Home’ requirement, where deemed to have met appropriate learning objectives.

No more than 6 units of the Certificate can come from non-McMaster courses.

2.3 New Courses

INTL 2A03 INTERNATIONAL ENGAGEMENT AT HOME
This course recognizes a local volunteer experience (a minimum of 100 hours) which promotes a deeper understanding of cross-cultural issues and linguistic diversity in the Canadian context. Students participate in defining learning goals and experiences. Graded on a Pass/Fail basis.
3 units; may be taken as single or multi-term course
Prerequisite(s): Registration in Level II or above
Students must contact the Humanities Academic Advising Office, CNH-107, for details on the application process.
Permission of the Associate Dean of the Faculty of Humanities is required.

INTL 3A03 INTERNATIONAL ENGAGEMENT CAPSTONE
Students will integrate and reflect upon aspects of their experiences within the Certificate in International Engagement, culminating in a final project (digital portfolio) and presentation (digital/poster). This course is to be completed under the supervision of an appropriate faculty member. Graded on a Pass/Fail basis.
3 units; one term
Prerequisite(s): 3 units of INTL 2A03 or XCH credit
Students must contact the Humanities Academic Advising Office, CNH-107, for details on the application process.
Permission of the Associate Dean of the Faculty of Humanities is required.

3 Statement of Administrative Responsibility

The Faculty of Humanities (Dean’s Office) will oversee the administration of the Certificate in International Engagement. The processes for approving experiences abroad or at home will be parallel to the processes currently in place for approving Applied Humanities courses (student-specific proposal, including learning objectives and evaluation criteria), independent study courses, and study abroad experiences.

Formal approval for the Certificate in International Engagement was granted by the Faculty of Humanities’ Academic Planning Committee on October 30, 2014.
1 Certificate Overview

The concurrent Certificate in Essential French will fill a need for formal recognition of the course work completed and the skills mastered by students who have taken the Beginner’s, Basic and Advanced Introductory French courses at McMaster: FRENCH 1Z06, 2Z06 and 2M06. This coherent set of French course represents over 230 hours of French instruction. Students seek a certificate acknowledging their functional understanding of written and spoken French. Currently, students without adequate high school preparation face a ‘dead end’ with French 1Z06 and 2Z06, since the two courses are not part of any degree options (Hons BA, BA, minor) in French. 1

The proposed Certificate provides students with formal recognition of competencies – competencies that can be translated into internationally recognized language benchmarks – when applying for positions in which employers and others consider knowledge of essential French an advantage.

2 Academic Merit

2.1 Learning Outcomes

Upon completion of the concurrent Certificate in Essential French, students

- will have achieved a solid foundation in essential French;
- will have developed a good knowledge of receptive linguistic skills in French (listening, reading, comprehension);
- will have developed limited but fundamental productive communication skills (speaking, writing);
- will have the ability to describe their competencies in the language of internationally recognized benchmarks.

2.2 International benchmarks

Upon completion of the concurrent Certificate in Essential French, students will have achieved proficiency levels in the following recognized ranges.

- CEFR/CEF (Common European Framework) level A2-B1
- DELF Certification A2-B1 (Diplôme d’Études en Langue Française)
- ILR Level 2 (Interagency Language Roundtable scale; US, Foreign Service)
- CLB Levels 5-6 (Canadian Language Benchmarks)

---

1 The pathway for any degree option in French begins with French 1A06/2M06, which presupposes the highest level of preparation for French as a second language coming from secondary school.
2.3 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 in French.2

Requirements (18 units)

    FRENCH 1Z06: BEGINNER INTENSIVE FRENCH I
    FRENCH 2Z06: BEGINNER INTENSIVE FRENCH II
    FRENCH 2M06: INTRODUCTION TO FRENCH STUDIES: ADVANCED*

*Students may replace French 2M06 with equivalent language courses taken during the summer through the Explore program, or with other pre-approved exchange or study abroad courses. No more than 6 units of the Certificate, however, can come from non-McMaster courses.

The Department of French strongly recommends that an immersion experience be part of the work towards the certificate.

2.3.1 Alternate Pathway to Certificate

A few students begin their French Studies at McMaster with French 2Z06. In order to avoid excluding such students from being able to complete the concurrent Certificate in Essential French, we have created the following pathway. The competencies achieved through this pathway are consistent with the proficiency ranges (2.2 International benchmarks) listed above.

Requirements (15 units)

    FRENCH 2Z06: BEGINNER INTENSIVE FRENCH II
    FRENCH 2M06: INTRODUCTION TO FRENCH STUDIES: ADVANCED*
    3 units Level II French

*Students may replace French 2M06 with equivalent language courses taken during the summer through the Explore program, or with other pre-approved exchange or study abroad courses. No more than 6 units of the Certificate, however, can come from non-McMaster courses.

The Department of French strongly recommends that an immersion experience be part of the work towards the certificate.

3 Statement of Academic Responsibility

The Department of French and the Faculty of Humanities will oversee the administration of the concurrent Certificate in Essential French. The Department of French will review, evaluate and approve any non-McMaster French courses, as is currently the practice.

Various certificates in French competencies have been in discussion since 2014-15, and have been approved in principle in the Department of French and in the Faculty of Humanities.

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2 Students completing a degree program in French (Hons BA, BA, minor) are not eligible for the concurrent Certificate in Essential French.
Overview of the Policy Review for the Development of the Proposed ‘Academic Accommodations of Students with Disabilities’ Policy

In May 2015, the Academic Accommodations Working Group (AWWG) was struck. Reporting to the AVP Students & Learning, Dean of Students, AAWG’s objective has included conducting a landscape scan, a review of the University’s current practices and to examine and propose ways by which the University’s policies, procedures and practices reflect: (a) the changes in the law; (b) adequately respond to the needs of students with disability on our campus (e.g. mental health disability is the primary disability being accommodated on our campus; whereas in previous years it was physical disabilities), and; (c) adapt to the highly varied ways in which education is occurring (e.g. experiential learning).

The Working Group did not review specific situations, but rather examined university policies, procedures and practices as they relate to providing accommodations to students with disabilities on our campus, in both an academic and experiential learning setting.

Membership of the Academic Accommodations Working Group (AAWG) included:

<table>
<thead>
<tr>
<th>Committee Members:</th>
<th>Key Consultants:</th>
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</thead>
<tbody>
<tr>
<td>Sue Baptiste, Chair</td>
<td>Experiential Learning</td>
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<tr>
<td>McMaster Students Union, VP Education</td>
<td>Ombuds Office</td>
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<tr>
<td>Graduate Students Union, VP Student Services</td>
<td>FHS, Professionalism Office</td>
</tr>
<tr>
<td>Allison Drew-Hassling, Student Affairs</td>
<td>Graduate Studies</td>
</tr>
<tr>
<td>Raihanna Khalfan, Human Rights &amp; Equity Services</td>
<td>University Secretariat Office</td>
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<tr>
<td>Alan Neville, Health Science</td>
<td>McMaster Accessibility Council</td>
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<tr>
<td>Bruce Newbold, Geography and Earth Science</td>
<td>McMaster Association of Part Time Students</td>
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<tr>
<td>Greg Rombough, School of Business</td>
<td>Registrar’s Office</td>
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<td>Tim Nolan, Student Accessibility Services</td>
<td>Academic Integrity Office</td>
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<tr>
<td>Geraldine Voros, Social Science</td>
<td>Associate Dean’s Group (ADG)*</td>
</tr>
<tr>
<td>Jan Young, Student Wellness Centre</td>
<td>University Secretariat’s Office *</td>
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</table>

*Second phase of Consultation Process
1) During the development of the policy, special consideration included:
   a) A landscape review to incorporate accepted ‘best practices’ into both policy development and overall recommendations.
   b) Balancing the University's legal obligation to offer reasonable accommodations to students with disabilities while upholding and maintaining academic integrity.
   c) Balancing the obligation to accommodate in clinical and experiential settings, with academic requirements and the standards of professions and community partners.

2) The consultation process included:
   a) **Community Consultation**: Members of the Consultation Group (Appendix A) were asked to provide feedback during a think tank in May 2016 and on multiple drafts of the policy.
   b) **University Secretariat Review of Policy**: The Secretariat has provided helpful guidance and input on three draft versions of the policy to date.
   c) **Think Tank**: AAWG identified several areas of the policy that required thoughtful consideration and the Think Tank offered an open space to voice a range of perspectives from across the campus community. (See Appendix B: Think Tank Overview).

3) During the development of the policy, the landscape of Academic Accommodations within Post-Secondary settings changed considerably, with a letter from the Ontario Human Rights Commission, which articulated expectations for all universities to align their approaches to medical documentation and accommodation with the Ontario Human Rights Code and their Policy on Preventing Discrimination Based on Mental Health Disabilities and Addictions (see Mental Health Policy at ohrc.on.ca)

Further to this, the letter from the Commission included a checklist for all Universities to comply with by September 2016. The six expectations were articulated as follows:
   a) Do not require students to disclose their mental health disability diagnosis to register with Student Accessibility Services, or receive accommodations or supports
   b) Make it clear that students may request interim accommodations for mental health disabilities pending receipt of medical documentation;
   c) Make it clear that both temporary and permanent mental health disabilities will be accommodated. All disabilities that give rise to functional limitations that impair academic functioning should be accommodated;
   d) Do not state or imply that request for accommodation after a deadline, test or course completion (i.e. retroactive accommodation) will not be considered. Establish a process to meaningfully consider requests for retroactive accommodation, or if a process already exists, provide clear information to students, faculty and staff about that process.
e) Do not require students to reveal their private medical information to, or seek accommodation directly from, their professors, instructors, teaching assistants, etc. Students should not be requested to deliver accommodation letters directly to professors, instructors or teaching assistants. Offices, such as SAS, should communicate with professors, instructors and teaching assistants about academic accommodations; and,

f) Communicate to students, faculty and staff about the documentation guidelines, forms and procedures (e.g. include information about academic accommodations on all course syllabi distributed to students.

4) On September 20th, 2016, a draft of the Academic Accommodations for Students with a Disability Policy was reviewed by Graduate Council. Graduate Council requested edits to the document, of which have been embedded in this current version.

During this time, consultation with other stakeholders on campus was solicited, beyond the initial 'key consultant group', including: members of the Associate Deans Group, Assistant Deans, the Ombuds, the Secretariat Office, Andrea Thyret-Kidd from the Office of the Provost and the School of Social Work, Graduate Studies). This version of the policy has changed both in appearance and content from the earlier version presented to Graduate Council. Key changes include:

a) Improved readability and flow
Changes to the arrangements of sections within the body of the policy and inclusion of Sections to the policy. Sections now include: Introduction, Roles and Responsibilities, Guidelines & Procedures, Appeals, Appendix A: Related Policies and Legislation, Appendix B: Essential Requirements and Off-Site Placements.

b) Refined Key Definitions
The roles and responsibilities section has been heavily edited and pared down to articulate roles in more general terms rather than taking a prescriptive, procedural approach.

“Campus Accommodation Teams” have been changed to “academic accommodation teams” (AT) with the purpose of minimizing confusion that these are “Campus-wide” teams, rather the academic accommodation teams are described as informal, decentralized networks of individuals who assist Associate/Assistant Deans with the implementation of the policy.

Greater emphasis has been put on the role of the Associate/Assistant Deans and the ‘academic accommodation teams (AT).

Three types of accommodation requests have been articulated on page 9 and referenced throughout the document, in accordance with the Ontario Human Rights Commission: Permanent Disability, Retroactive Accommodation and Temporary Disability.

Retroactive Accommodation definition has been refined to be applicable to students with undiagnosed and/or not previously accommodated by Student Accessibility Services with articulated procedures for how a student may request a retroactive accommodation.
Temporary Disability definition has been articulated with clearly articulated procedures for how a student may request a temporary disability request.

5) Implementation Plan:
   a) Education and Training: A Policy implementation plan is currently being developed, led by the AVP, Dean of Students. This plan will include educational material to ensure that students, staff and faculty are aware of the new policy highlighting new responsibilities and key changes to the policy; along with the creation of information sessions for key stakeholders in the policy (e.g. Associate Deans).
   b) Petition for Special Consideration: In order to align the procedures as outlined in the draft policy with current practices across the campus, a modification will need to be made to the Petitions for Special Consideration in the Undergraduate and Graduate Calendars in order to reflect retroactive accommodations for disability.
Appendix B: AAWG Think Tank Agenda

The Think Tank invitation was distributed to members of AAWG and the Consultation Group. Each recipient of the invitation was encouraged to invite other colleagues to also participate in the Think Tank discussion. The Think Tank occurred on May 10th, 2016 from 8:30-12:30.

Attendees Included: Alan Neville (FHS); Allison Drew-Hassling (Student Affairs); Joseph Ameil (Social Work); Anne Niec (FHS); Bernadette Belan; Blake Oliver (MSU); Bruce Newbold (Geography, AAWG); Cathy Oudshoorn (FHS); Finola Foley (Student Wellness Centre); Geraldine Voros (Social Science; Helen Ayre (Secretariat Office); Henriette Silman (SAS); Janice Young (Student Wellness Centre); Lori Letts (Rehab Science); Mark Castrodale (MIETL); Mary Fletcher (Student Wellness Centre); Meaghan Ross (EIO); Mei-Ju Shih (SAS); Michelle Bennett, (Secretariat Office); John Miller (FHS); Tim Nolan (SAS); Vilma Rossi (EIO); Mile Komlen (EIO); Raihanna Khalfan (EIO)

Purpose: During our recent AAWG meetings, several areas of policy content have been identified as needing thoughtful consideration before putting into the narrative of the policy. This Think Tank is being held in order that these highlighted topics and concepts can be the foci of a modified Open Space process. There will be small cluster groups set up for attendees to join for 45 minute time periods at which the discussion will be facilitated by the AAWG member (topic champion) for whom the topic is of particular importance.

Topics Included:

- Linkages between other policies and the incoming Accommodations policy
- The continuum from “Fit to Study” to “Too Sick to be in School”
- Transition between the Medical and Social models of health and disability
- Documentation
- Temporary/Short Term accommodations
- Informal accommodations
- Routes for developing accommodations in addition to SAS?
- Communication pathways
- Accountability/responsibility in off-site learning experiences

Following the Think Tank, the recommendations and feedback obtained during the various group discussions was compiled and distributed to the participants. The recommendations was also considered for the further development of the policy.
Appendix C: Policy Development Process

Review & Development Process

AAWG = Academic Accommodations Working Group
Complete Policy Title: Academic Accommodation of Students with Disabilities (Draft 20)

Approved by: Senate
Date of Original Approval(s): February 14, 2001

Responsible Executive: Provost
Enquiries: University Secretariat

DISCLAIMER: If there is a Discrepancy between this electronic policy and the written copy held by the policy owner, the written copy prevails.
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SECTION I: INTRODUCTION

PREAMBLE AND SCOPE

1. McMaster University is committed to excellence in teaching and learning. The University strives to ensure every student is afforded an academic environment that is dedicated to the advancement of learning and is based on the principles of equitable access and individual dignity. At McMaster we nurture and support a culture of acceptance, inclusion and the celebration of diversity. Creating a learning environment that is accessible to all students is a value embedded within the University’s fabric as well as our policies, services and practices.

2. Academic Accommodation is a shared responsibility. It is a highly collaborative process requiring engagement and full participation of multiple stakeholders, each playing a vital role in shaping a student’s Academic Accommodation. The provision of accommodations for students with disabilities requires students, instructors and administrative staff to exercise creativity and flexibility in crafting solutions that meet the needs of the students, as well as to preserve the academic requirements of the University’s courses/programs.

3. Disability is a concept that encompasses varied definitions including medical, socio-cultural and social definitions. Up to the present, the system at large, including at McMaster University, has relied on the definition of disability provided in the Policy and Guidelines on Disability and the Duty to Accommodate (2000), from the Ontario Human Rights Commission [OHRC]. This approach is built upon a medical model of understanding disability. An alternate view is that of a social disability model that is exemplified within the definition of disability articulated by the World Health Organization (WHO). It is our institutional aspiration to work towards a campus community that adopts the social definition of disability by responding with the creation of universal design for instruction in accessible classrooms and the need for on-going consultation with people with lived experience with disability to guide the design of buildings and instructional resources. However, this Policy acknowledges, upholds, and aligns itself with the medical definition of disability to be in accordance with the OHRC’s definition of disability and accompanying policies and statements.

4. The University recognizes that barriers to participation exist and adjustments to policies and practices of the University are required. This is accomplished through the prevention, identification and removal of barriers (such as a physical, architectural, technological, information or communication barrier, an attitudinal barrier or learning barrier, or a policy or practice) within the University systems, structures and policies.

5. This policy applies to all McMaster University students [any individual recorded by the University Registrar as enrolled in an educational course of study recognized by the Senate and for whom the University maintains education records (graduate, undergraduate, continuing education students, and students in shared institutional programs e.g. Mohawk College and Conestoga combined programs where they are registered as a McMaster student)].

DEFINITIONS

6. For the purpose of interpreting this document:
   a) words in the singular may include the plural and words in the plural may include the singular;
   b) for graduate students, the relevant Associate/Assistant Dean of their Faculty, is their Associate Dean in the School of Graduate Studies;
   c) for students in degree programs not offered by a Faculty (e.g., the Arts and Science program), the Program Director is equivalent to the Associate/Assistant Dean of a Faculty, and the Chair of the Program Hearings Committee is equivalent to the Faculty Dean;
d) for students in Senate-approved certificate or diploma programs offered by the Centre for Continuing Education, the Director of the Centre is equivalent to the Associate/Assistant Dean of a Faculty, the program co-ordinator is equivalent to the Department Chair, and the Provost is equivalent to the Dean of the Faculty; and

e) for students in the Faculty of Health Sciences, the Assistant Dean of the Program is equivalent to the Associate/Assistant Dean of a Faculty.

7. All definitions in this Policy include, but are not limited to, the definitions articulated in the Ontario Human Rights Code.

8. Disability includes:
   a) any degree of physical disability, infirmity, malformation or disfigurement that is caused by bodily injury, birth defect or illness and, without limiting the generality of the foregoing, includes diabetes mellitus, epilepsy, a brain injury, any degree of paralysis, amputation, lack of physical co-ordination, blindness or visual impediment, deafness or hearing impediment, muteness or speech impediment, or physical reliance on a guide dog or other animal or on a wheelchair or other remedial appliance or device;
   b) a condition of mental impairment or a developmental disability;
   c) a learning disability, or a dysfunction in one or more of the processes involved in understanding or using symbols or spoken language; and
   d) a mental health disorder/illness, or
   e) an injury or disability for which benefits were claimed or received under the insurance plan established under the Workplace Safety and Insurance Act.

9. An Academic Accommodation for a disability is an individual arrangement that reduces or removes barriers that limit the ability of students with disabilities to participate in formal post-secondary education. Academic Accommodations are developed based on the functional limitation of the student as it relates to the academic environment. For example, a student may have a functional limitation that affects their ability to remain focused for prolonged periods. An Academic Accommodation is recognition that individuals may require adjustments in order to support their performance in a practice-based context or in the classroom and are intended to provide access for students with disabilities; they do not guarantee or predict outcomes. Appropriate Academic Accommodation results in equitable opportunity to attain the same level of performance; or, to enjoy the same level of benefits and privileges experienced by others; or, if it is proposed or adopted for the purpose of achieving equitable opportunity, and meets the individual’s disability-related needs. Accommodation is not a courtesy or a favour, neither is it a lowering of standards. Academic Accommodations are based only on functional limitations, not on individual preferences.

10. Accessible Learning Environment: The degree to which individuals with and without disabilities, can access the academic learning environment without encountering barriers.

11. Barrier refers to barriers such as a physical barrier, an architectural barrier, information or communication barriers, an attitudinal barrier, a technological barrier, a learning barrier, or a policy or practice, in relation to the academic learning environment.

12. Interim Academic Accommodation: An interim Academic Accommodation can be enacted on behalf of a student requesting an Academic Accommodation and implemented ‘in good faith’ pending receipt of supporting documentation for requests that related to a disability as defined in Section II.
13. **Functional Limitation**: A health condition that impairs/limits a student's academic functioning as a learner and/or access level. A functional limitation includes an impairment/limitation in the following areas: cognitive skills/ability; physical skills/ability; social-emotional skills/ability; fieldwork skills/ability.

**GUIDING PRINCIPLES**

14. This Policy acknowledges, upholds, and aligns itself with the medical definition of disability to be in accordance with the Ontario Human Rights Commission's definition of disability.

15. It is our institutional aspiration to work towards a campus community that adopts the social definition of disability by responding with the creation of universal design for instruction in accessible classrooms and the need for on-going consultation with people with lived experience with disability to guide the design of buildings and instructional resources.

16. The University will strive to nurture and support all students to be as healthy as they can be and to reach their potential. Mental health and wellbeing are understood as key components to health. We will achieve this outcome through our ongoing commitment to creating an inclusive, supportive, and healthy educational environment ([Student Mental Health & Well-Being Strategy](#))

17. This Policy incorporates the principles of the [Policy on Ableism and Discrimination Based on Disability](#) and position paper [OHRC Policy Position on Medical Documentation](#) which include the following statements:

- A disability may be the result of combinations of impairments and environmental barriers, such as attitudinal barriers, inaccessible information, an inaccessible built environment or other barriers that affect a student's full participation at the University.
- The duty to accommodate exists to the point of “undue hardship.” The Code only allows for three considerations when assessing whether an accommodation would cause undue hardship; these are: cost, outside sources of funding, and health and safety requirements. Accommodation may mean making rules, policies, practices or procedures more flexible to make sure that people with disabilities are able to participate. It may also mean making changes to the built environment to remove barriers for people with disabilities.
- Generally, the accommodation provider does not have the right to know a person's confidential medical information, such as the cause of the disability, diagnosis, symptoms or treatment, unless these clearly relate to the accommodation being sought, or the person's needs are complex, challenging or unclear and more information is needed.
- Overbroad requests for private medical information, such as diagnostic information, undermine the dignity and privacy of people with disabilities. The ongoing stigma associated with many disabilities, especially and including mental health disabilities, means that requests for diagnostic information may pose a barrier to a person with disabilities proceeding with their accommodation request.
- Where more information about a person's disability is needed, the information requested must be the least intrusive to the person's privacy while still giving the organization enough information to make an informed decision about the accommodation.
- To implement appropriate accommodations that respect the dignity and privacy interests of people with disabilities, the focus should always be on the functional limitations associated with the disability, rather than a person's diagnosis.
18. The provision of an accommodation is based on three principles:
   a) **Dignity**: Students with disabilities have the right to receive educational services in a manner that is respectful of their dignity. Human dignity encompasses individual self-respect and self-worth. It is concerned with physical and psychological integrity and empowerment. Dignity is harmed when individuals are marginalized, stigmatized, ignored or devalued.
   b) **Individualization**: Each student's needs are unique. At all times, the emphasis must be on the individual student and not on the category of disability. Two students with the same disability may have very different needs; for example, while some students with visual impairments read Braille, many do not. Different effects of a disability and different learning styles will or may call for different approaches.
   c) **Inclusion and Full Participation**: Inclusion is exemplified by policies, programs, services and activities designed inclusively with the needs of all students in mind. Inclusivity in design emphasizes full participation and recognizes that all students have varying abilities and needs.

19. All personal information, including supporting documentation (e.g. personal health information) requested by the University to facilitate the Academic Accommodation process, shall be handled in accordance with the *Freedom of Information and Protection of Privacy Act* and the *Personal Health Information Protection Act*. 
SECTION II: ROLES & RESPONSIBILITIES

STUDENTS

20. Students must meet University and program/degree requirements, including participation in classes, labs, clinical or practicum placements, tutorials, etc.

21. Students seeking an Academic Accommodation are required to participate fully in the Academic Accommodations process. This participation includes:
   a) when the student is aware of their disability and the need for Academic Accommodation, contacting Student Accessibility Services before classes or academic work begins;
   b) providing the information required so that Student Accessibility Services can assess the duty to accommodate and develop Accommodation Plans;
   c) after the approval of the Accommodation Plan, should the student have any questions they may choose to speak with their instructor, SAS advisor or Faculty Office to review steps for the implementation of the Accommodation Plan;
   d) notifying Student Accessibility Services of any changes that may impact already established Accommodation Plans in a timely fashion.

INSTRUCTORS AND CHAIRS

22. Instructors (and Chairs when courses are taught by sessional instructors) are responsible for implementing the approved Accommodation Plan, as applicable, by:
   a) referring all accommodation requests related to disability (that have not been previously accommodated) to Student Accessibility Services;
   b) implementing the Accommodation Plan requests with the support of Student Accessibility Services and their academic units, and participating where appropriate in the development of Accommodation Plans.
   c) working collaboratively with Student Accessibility Services, the student, and the Associate/Assistant Dean to find a satisfactory resolution in those instances where the Instructor believes that an Accommodation Plan puts at risk the student’s ability to meet course/program requirements (see Appendix B: Essential Requirements and Appendix C: Off-Site Placements).

23. Instructors, in collaboration with the MacPherson Institute, should consider instructional elements of their course that minimize the need for accommodations.

STUDENT ACCESSIBILITY SERVICES

24. Student Accessibility Services is the central resource for disability advising and the development of Accommodation Plans for students with disabilities. Student Accessibility Services is responsible for coordinating the Academic Accommodations process, which includes:
   a) obtaining and storing relevant disability related information (e.g. documentation related to any functional limitation);
   b) assessing the University’s duty to accommodate; and
   c) working collaboratively with Faculty Offices, Instructors, students and academic units to inform accommodation decisions and develop Accommodation Plans.
ASSOCIATE/ASSISTANT DEANS

25. Associate/Assistant Deans have a key leadership role within academic units and are responsible for:
   a) working with the pertinent Accommodation Team and Student Accessibility Services to develop, refine,
      and implement Accommodation Plans as necessary.
   b) working with the academic unit and Instructors to define the academic requirements of programs and
      courses;
   c) consulting with the Faculty Dean, where necessary, on resources required for accommodations;
   d) working with Chairs and Directors to ensure Instructors are implementing Accommodation Plans as
      specified; and
   e) working with the Accommodation Team and Student Accessibility Services to make informed decisions
      related to complex or retroactive accommodations, as well as appeals.

ACADEMIC ACCOMMODATION TEAMS

26. The Academic Accommodation Teams (“Accommodation Teams”) are informal networks of individuals within
     academic units who have the knowledge and expertise required to inform decisions related to Academic
     Accommodations. Accommodation Teams complement the expertise residing centrally in Student
     Accessibility Services and support the Associate/Assistant Deans in the consideration of complex and/or
     retroactive Academic Accommodation decisions and appeals. In some areas there may be Accommodation
     Teams specific to the departments and professions within that Faculty.

EQUITY AND INCLUSION OFFICE

27. The Equity and Inclusion Office is responsible for providing education and training on the duty to
     accommodate, accessibility and broader human rights, equity, and inclusion matters for staff, students and
     faculty. The Equity and Inclusion Office is an intake office for any complaints related to harassment and/or
     discrimination based on disability. When there has been a failure to accommodate, a failure to accommodate
     reasonably, or a failure to consider a retroactive accommodation, Equity and Inclusion Office staff will work
     with complainants to identify appropriate avenues of recourse as per the policy Discrimination, Harassment &
     Sexual Harassment: Prevention and Response.

CAMPUS STORE

28. The Campus Store is responsible for implementing the terms of any agreed upon Accommodation Plan, as
     applicable, by:
     a) accessing required learning resources in formats appropriate to individual student need;
     b) making every reasonable effort to provide students registered through Student Accessibility Services
        equal access to information; and
     c) providing publisher information to Library Accessibility Services (LAS) in Mills Library for students who
        may require textbooks in a different format (e.g. audio, Braille, large print, etc.).

LIBRARY

29. The Library is responsible for making every reasonable effort to provide equal access to information for
     students with disabilities, and implementing the terms of any agreed upon Accommodation Plan, as
     applicable, by:
a) accessing required learning resources in formats appropriate to individual student need;
b) obtaining e versions and converting file formats of learning materials e.g. required texts, course websites, A2L posts, course-packs, supplementary materials, etc.;
c) closed captioning media used in the classroom and online; and
d) helping students with disabilities navigate and access Library services and supports.

OFFICE OF THE REGISTRAR

30. The Office of the Registrar is responsible for implementing the terms of any agreed upon Accommodation Plan, as applicable, by:
   a) scheduling and coordinating accommodated exams;
   b) providing special timetabling or classroom use;
   c) ensuring that University admissions policies and procedures are inclusive and accessible;
   d) making special arrangements for students with disabilities at convocation ceremonies; and
   e) working closely with Student Accessibility Services to ensure that the accommodated exams are scheduled and executed effectively, while also ensuring that Academic Integrity standards are met.

31. The MacPherson Institute will provide assistance and support to Instructors that facilitate the academic success of students with disabilities. Areas of focus include providing educational opportunities, resources and support for instructors that encourage application of pedagogical methods that support accommodations and encourage overall accessibility, e.g. universal design; identification of essential requirements.

ADMINISTRATION

32. The term “Administration”, as used in this Policy, refers to individuals and groups responsible for the University’s academic programs and academic support services and includes the: Provost; Associate Vice-President (Students & Learning) and Dean of Students; Vice-Provost (Faculty); Vice-Provost (Teaching & Learning) and Director of the MacPherson Institute; Deans; Associate Deans/Assistant Deans; Department Chairs; and Directors of Schools and Programs. Members of the Administration shall ensure that:
   a) students with disabilities who have been approved for accommodation under this Policy, are accommodated in line with this Policy and as per their Accommodation Plans; and
   b) staff and instructors are familiar with this Policy, and have the knowledge and resources necessary to implement Accommodation Plans.

ASSOCIATE VICE-PRESIDENT (STUDENTS & LEARNING) AND DEAN OF STUDENTS

33. The Associate Vice-President (Students & Learning) and Dean of Students (“Dean of Students”), is responsible for the oversight of the Policy and for monitoring progress and addressing issues that arise in its execution. To inform this process, the Dean of Students will coordinate meetings at least once per year with key stakeholders, including Associate/Assistant Deans, Student Accessibility Services, and the Equity and Inclusion Office.
SECTION III: GUIDELINES AND PROCEDURES

GUIDELINES

34. The following guidelines apply to all requests for Academic Accommodations:

   a) students are not required to seek accommodation directly from their professors, instructors, and/or teaching assistants. Accommodation requests should be directed to Student Accessibility Services;
   
   b) students are not required to reveal their private medical information, such as the cause of the disability, diagnosis, symptoms or treatment (unless these clearly relate to the accommodation being sought - see Documentation) to register with Student Accessibility Services, or receive accommodations or supports;
   
   c) students may request interim accommodations for disabilities (this includes mental health disabilities) pending receipt of medical documentation;
   
   d) both Temporary and Permanent disabilities will be accommodated;
   
   e) requests for accommodation should be submitted in a prompt and timely manner. Requests made after a deadline has passed may be considered Retroactive Accommodations;
   
   f) students who make an accommodation request directly to an Instructor, prior to having an accommodation plan in place, should be informed by the Instructor that they must submit their request to Student Accessibility Services.

TYPES OF ACCOMMODATION REQUESTS

35. **Permanent Disability** is where a functional limitation will occur for more than one academic term or as defined by a regulated health professional.

36. **Temporary Disability** may be a short-term injury or illness (such as mononucleosis, a broken limb or concussion) or an episodic condition (e.g. mental illness) where a functional limitation generally occurs within one academic term or less or as defined by a regulated health professional.

37. A **Retroactive Accommodation** may be for either a Permanent or Temporary Disability when the request is made after-the-fact (e.g. after a course has been completed), as the result of the discovery or diagnosis of an existing disability of which the student was previously unaware.

DOCUMENTATION

38. The University complies with the *Policy on Ableism and Discrimination Based on Disability*, Section 8.7, "Medical information to be provided," which sets out the type and scope of medical information to be provided to support an accommodation request.

39. Requests for information and/or supporting documentation will, where possible, be limited to the nature of the limitation or restriction, in order to assess needs and make an appropriate academic accommodation. Requests for information and/or supporting documentation may include:

   a) that the student has a disability (without disclosure of the medical diagnosis);
   
   b) the functional limitations or needs associated with the disability;
   
   c) whether the student can perform the course/program/degree requirements, with or without accommodation, including participation in classes, labs, clinical/practicum placements, tutorials, etc.
   
   d) the type of accommodation(s) that may be needed to allow the student to fulfill course/program/degree requirements.
40. Students are required to provide documentation that supports their accommodation request before a decision or Academic Accommodation plan is developed. Supporting documentation does not require the disclosure of a medical diagnosis but must be sufficient to allow the University to determine appropriate accommodation measures and/or explore reasonable alternatives.

41. An interim Academic Accommodation may be enacted on behalf of a student requesting an Academic Accommodation and implemented ‘in good faith’ pending receipt of supporting documentation.

42. For Temporary Disability accommodation requests, the Associate/Assistant Dean may determine that while documentation was requested, it may not always be necessary and students may be accommodated in ‘good faith’ for a temporary disability.

43. Documentation will only be considered if completed and signed by a registered and regulated health professional (i.e. medical doctor, registered psychologist, registered occupational therapist, registered speech and language pathologist, etc.) or a recognized and credible expert (e.g. McMaster University’s Sexual Assault Response Coordinator).

44. The University may make inquiries to request documentation, as appropriate, to confirm the need for and/or type of Academic Accommodation required. The University may initiate a detailed request for supportive documented information, tailored to the particular accommodation request. The University reserves the right to seek additional assessments or opinions about the nature of the functional limitation(s) as it relates to the student’s disability.

PROCEDURES

Timeliness of Submissions

45. Student Accessibility Services requires adequate time to review requests and coordinate needed arrangements. Some accommodations take longer to arrange than others (e.g. sign language interpreters and transcriptions), and students with these types of requests should be particularly cognizant of the timing of their requests. Failure to make a request or supply the required documentation in a timely manner may delay the approval and/or implementation of the requested accommodation.

46. New students and transfer students are encouraged to contact Student Accessibility Services and submit their accommodation request as soon as possible after they receive their offers of admission, or by August 1st of the academic year, whichever comes first.

47. Students whose circumstances change or who develop difficulties after the aforementioned dates should contact Student Accessibility Services and their designated faculty contact immediately, to initiate a review of their Accommodation Plan.

Submitting an Academic Accommodation Request

48. Student Accessibility Services and the Faculty Offices work collaboratively and share information in order to facilitate academic accommodation requests. This includes transferring the facilitation of a request between offices where appropriate (e.g. a Temporary Disability accommodation may require the scheduling of rooms or invigilators, which is the responsibility of Student Accessibility Services; or the accommodation requires deadline extensions that the Faculty Office is able to arrange with the Instructor).
49. Students must submit an Academic Accommodation Request Form with the appropriate documentation (see Documentation above) to either the Faculty Office or Student Accessibility Services in order to request an Academic Accommodation.

50. Student Accessibility Services and the Faculty Offices work collaboratively and share information in order to facilitate academic accommodation requests. This includes transferring the facilitation of a request between offices where appropriate (e.g. a Temporary Disability accommodation may require the scheduling of rooms or invigilators, which is the responsibility of Student Accessibility Services; or the accommodation requires deadline extensions that the Faculty Office is able to arrange with the Instructor).

51. Student Accessibility Services or other Intake Offices (e.g. Faculty Office) may refer the request to another office, as deemed appropriate in order to review the Academic Accommodation request.

   a) Student Accessibility Services is responsible for all PERMANENT DISABILITY requests. Students may elect to drop off the Academic Accommodation Request Form to their Faculty Office; however dropping the form off at the Faculty Office may delay the facilitation of the request.

   b) Student Accessibility Services or the Faculty Office may process Temporary Disability requests and Retroactive Accommodation requests.

   **Intake Meeting with a Program Coordinator regarding PERMANENT DISABILITY**

52. Students requesting Academic Accommodation for Permanent Disability must meet with a Program Coordinator in Student Accessibility Services

53. At the meeting the Program Coordinator will review with the student the following:

   a) the request, including documentation, and academic program information;

   b) the need for accommodation and other supports; and

   c) the process for the activation of Academic Accommodations.

   **Review of Request**

54. The office facilitating the request (Student Accessibility Services or the Faculty Office where appropriate) shall review the request for Academic Accommodations and determine whether the request meets the criteria for Academic Accommodation under this Policy. The office may consult with the Equity and Inclusion Office, or other relevant resources throughout the process.

55. In complex situations, once documentation is received, Student Accessibility Services and the Faculty Office will consult with each other, the Accommodation Team, and the student, as appropriate before a decision or accommodations plan is made:

   a) greater consultation may be required when there are concerns related to a practicum or placement, in cases where there are challenges in meeting accommodation requirements, or in cases related to the student's ability to fulfill the requirements of the course/program;

   b) Student Accessibility Services and the Faculty Office will work to coordinate the request and assist with the provision of the accommodation, including exploring alternative forms of accommodation when the student may not be able to fulfill the requirements of the course/program without accommodation;

   c) Should further guidance be required, the Faculty Office and/or Student Accessibility Services may consult with the appropriate senior administrator, and other offices as appropriate, including the Equity and Inclusion Office, the Student Wellness Centre, and the Student Support and Case Management Office.
56. Student Accessibility Services/the Faculty Office shall:
   a) inform the student in writing that the request has been:
      (i) denied and provide the reasons for denying the request; or
      (ii) accepted and provide next steps for the development of the accommodation plan.
   b) send a copy of the letter to the other office (Student Accessibility Services/Faculty Office).

Developing the Accommodation Plan

57. Student Accessibility Services will work with the student to develop a proposed accommodation plan based on
   the student's needs (as determined by Student Accessibility Services after consultation with the student,
   review of the documentation, and in consultation with the Faculty Office, including the instructor where
   appropriate) and any available course/program information and requirements.

58. Throughout the development of an Accommodation Plan, all parties should review the plan and are
   encouraged to discuss openly the needs and special considerations necessary in order to prepare for
   implementation. Through the development process, if there are questions/concerns, all efforts will be made to
   resolve the matter informally.

59. If, at any time during the development of an Academic Accommodation plan, the Chair, the Associate Dean
   and/or the Faculty Dean believe that there are substantial financial implications to granting the requested
   accommodation, the Accommodation Plan should be forwarded directly to the Provost. The Provost shall
   review the plan and work with the Associate/Assistant Dean to implement an appropriate plan.

60. If there are concerns about the Accommodation Plan, outside of financial hardship, the person with the
    concerns shall notify the Associate/Assistant Dean, who shall consult with their Accommodation Team and
    Student Accessibility Services, as appropriate. In exceptional circumstances and where further guidance is
    required, other offices and administrators may be consulted (Vice-Provost (Faculty), Dean of Students, Equity
    and Inclusion Office, Student Wellness Centre, and/or the Student Support and Case Management Office.

61. In some circumstances, SAS may request permission to consult with the student's health care provider to
    seek further information or clarification, in order to assist with the development of the Academic
    Accommodation plan.

62. In some cases SAS may need to seek independent consultation (such as the Regional Assessment Resource
    Centre, an independent Occupational Therapist, etc.) in order to assist with the development of the academic
    accommodation plan.

63. Once the Accommodation Plan has been finalized, if the student agrees with the Accommodation Plan, the
    coordination for the implementation of the plan will commence as quickly as possible.

64. If the student does not agree with the finalized Accommodation Plan they may request a Re-Assessment (see
    clauses 82-84)

Implementation of the Accommodation Plan

65. New accommodation plans are communicated electronically to instructors or at the discretion of the student,
    SAS can provide a print form of the accommodation plan, in order for the student to hand-deliver the letter.
66. Returning students should confirm with SAS that the Accommodation Plan is still accurate and to confirm their preference for communicating the Accommodation Plan to instructors. Returning students can choose to have their plan communicated electronically to instructors or to opt for a print form of the accommodation plan.

67. At any time, a student may request a printed copy of their Academic Accommodation Plan from SAS, should they wish to have hard copy to discuss with their instructor(s).

68. Student Accessibility Services will provide notice to the Office of the Registrar for examination accommodation or classroom accommodation. A minimum of 10 business days is normally necessary to make special arrangements for examinations.

69. Student Accessibility Services will notify the Library and Campus Store for accommodations relating to specialized literature in appropriate formats for the student. The student must contact the Library and/or the Campus Store, with any additional requirements they may need to facilitate the request.

**Duration and Review of Accommodation Plan**

70. Once the accommodation has been approved, the Accommodation Plan for a Permanent Disability remains active and does not need to be renewed during the student's University academic career.

71. Should circumstances change that may require a revision of the Accommodation Plan (Permanent/Temporary Disability) or an extension of the Accommodation Plan (Temporary), an expedited review will occur in compliance with clauses 57-64 Developing the Accommodation Plan, to develop an Accommodation Plan to meet current needs.

72. Where need for accommodation review is warranted a review can occur at any time and may be initiated by the student, Student Accessibility Services, or the Faculty Office. Any such review may require a review of documentation and request for an updated assessment.

**Student Participation**

73. If the student does not participate or denies any need for accommodation, the University reserves the right to document the conversation with the student and/or obtain written acknowledgement from the student that an accommodation is not desired. Failure to follow through with organized accommodations without advising Student Accessibility Services and/or the Faculty/School in a timely manner may result in the University being unable to fulfill the Academic Accommodation requirement for that particular situation.

**RETROACTIVE ACCOMMODATIONS**

74. An Academic Accommodation for either a Permanent or Temporary Disability is considered retroactive when the request is made after-the-fact (e.g. after the end of an academic term), as the result of the discovery or diagnosis of an existing disability that the student was previously unaware of.

75. Retroactive accommodation requests will be assessed upon the unique factors for each case, which may include:

   a) timeliness of the request (e.g. when did the student know about the disability, how much time has passed between making the request and the time period that the request is for, etc.)

   b) nature of the accommodation requested;

   c) supporting documentation provided;
d) amount of course work completed during the term; and

e) the student’s academic record.

76. When a retroactive accommodation is granted, the University may request further documentation and/or assessments to determine the student's readiness to return to studies, and/or to determine whether additional, and in some cases Permanent Academic Accommodations are necessary.

77. If granted, the Faculty Office will work with the appropriate individuals or offices to facilitate the accommodation. The decision will be communicated to the student in writing.

**DATA GATHERING & RECORD KEEPING**

78. Student Accessibility Services is responsible for collecting data on Academic Accommodations at the University. The data shall be kept and maintained by Student Accessibility Services and includes data provided to that office by the Faculty Offices.

79. Student Accessibility Services shall maintain a confidential record for all Academic Accommodation requests. These records are property of the University and will normally be destroyed 7 years after last use.

80. Instructors should retain any accommodation documents for the same period of time that they must retain marked coursework. When that time lapses, that material shall be destroyed, with that marked coursework.

81. The Accommodation Team should forward any accommodation documents to the Faculty Office, as appropriate.
SECTION IV: APPEALS

RE-ASSESSMENT OF THE ACCOMMODATION PLAN

82. The student may request a Re-Assessment of the Accommodation Plan by submitting, in writing, an explanation as to why the plan is not adequate and what accommodation they seek, to the Director of Student Accessibility Services.

83. The Director of Student Accessibility Services, upon receipt of the request, will notify the Faculty Office to discuss the Accommodation Plan; the explanation submitted by the student; and, a review of the requirements of the course and/or program to make a recommendation for next steps related to an Accommodation Plan.

84. If the Faculty Office decides that the request for Reassessment is approved and the Accommodation Plan will be revised to grant the proposed accommodation, they will notify Student Accessibility Services in writing and the coordination for the implementation of the plan will commence as quickly as possible. A copy of this letter shall be sent to the student, appropriate instructor(s), and the Chair of the student’s Department.

85. If the Faculty Office decides the request for Reassessment is denied and the Accommodation Plan will be not revised, they will notify Student Accessibility Services in writing and will provide the reasons for the decision. A copy of this letter shall be sent to the student, appropriate instructor(s), and the Chair of the student's Department.

APPEAL OF THE RE-ASSESSMENT DECISION

86. Students may appeal the Re-Assessment decision not to revise the Accommodation Plan, when they believe that there has been a procedural error in the application of the Policy. The appeal must be filed within 3 weeks of receipt of the decision, to the Senate Board for Student Appeals as outlined in the Student Appeal Procedures.

HUMAN RIGHTS COMPLAINT

87. If the student believes that a decision may be a violation of their human rights, such as when there has been a failure to accommodate (denial of the request) or a failure to accommodate reasonably (the student believes the Accommodation Plan does not provide reasonable accommodation) they should contact the Equity and Inclusion Office to identify appropriate avenues of recourse as per the policy Discrimination, Harassment & Sexual Harassment: Prevention and Response.

ACCOMMODATION PENDING REVIEW OR APPEAL

88. The University recognizes that decisions involving accommodations must be made expeditiously to assist students in their ongoing courses. Once the Faculty Office has approved an Accommodation Plan, it shall be implemented promptly. In the event that a student appeals the approved Accommodation Plan and the appeal is pending, the instructor, the Faculty Office, and Student Accessibility Services shall determine what portion, if any, of the plan is reasonable to implement immediately. Any such accommodations shall remain in place until there is a final disposition of all appeals.
APPENDIX A: RELATED POLICIES AND LEGISLATION

This Policy is to be read in conjunction with the following policies, statements, and legislation. Any question concerning the application of this Policy or related policies shall be determined by the Provost and Vice-President (Academic) or the Vice-President (Administration) as appropriate, and in conjunction with the administrator of the other policy or policies. The University reserves the right to amend or add to the University's policies and statements from time to time (this is not a comprehensive list):

- Academic Accommodation for Religious, Indigenous and Spiritual Observances (RISO)
- Academic Integrity Policy
- Accessibility – University Policy
- Code of Student Rights and Responsibilities
- Discrimination, Harassment & Sexual Harassment: Prevention and Response
- Freedom of Information and Protection of Privacy Act
- Graduate Course Outlines
- Ontario Human Rights Code
- Personal Health Information Protection Act
- Professional Behaviour Code for Graduate Learners, Health Sciences
- Professional Behaviour Code for Undergraduate Learners, Health Sciences
- Statement on Building an Inclusive Community with a Shared Purpose
- Statement and Guidelines on Inclusive Communications
- Employment Accommodation, Policy and Procedures on
- Research Integrity Policy
- Student Appeal Procedures
- Undergraduate Course Management Policies
APPENDIX B: ESSENTIAL REQUIREMENTS

ESSENTIAL REQUIREMENTS

1. The Ontario Human Rights Commission has noted that while courts and tribunals have provided little guidance on the definition or nature of essential requirements, terms that have been used include indispensable, vital and very important. "For example, it may likely be an essential requirement that a student master core aspects of a course or curriculum. It is much less likely that it will be an essential requirement to demonstrate that mastery in a particular format, unless mastery of that format (for example oral communication) is also a vital requirement of the program. Educators must provide accommodation, up to the point of undue hardship, to enable students to meet these essential requirements".  

2. In a university setting, the essential requirements of a course/program may include, but are not limited to, the knowledge and skills that must be acquired or demonstrated in order for a student to meet the learning objectives of the course/program successfully. Essential requirements are the expected learning outcomes of a program or course and involve the successful demonstration of specific knowledge, skills and abilities. Although there may be variations in the language used to describe an essential requirement within each program or course, the objective of outlining the essential requirements is to help students understand what they must be able to demonstrate at the end of the course or program.

3. Essential requirements can be defined by 2 factors: 1) a skill that must be necessarily demonstrated in order to meet the objectives of the course and 2) a skill that must be demonstrated in a prescribed manner. Conclusions about inability to perform essential requirements must not be reached without actually testing the ability of the student.

4. A particular challenge arises with managing accommodations for students in professional programs because of the need to separate the educational elements of the university curriculum from the perceived professional competencies of the practicing clinician. As Oakley et al. (2012) have reported, education is deemed a service under Human Rights Legislation even when students are participating in off-campus training programs in the clinical setting or in field placements. In these settings, students are entitled to the same type of accommodation as they would receive in the classroom. Clearly, however, some accommodations that are appropriate for the classroom will be inappropriate or inadequate in the clinical or practicum situation.

5. In this situation, SAS will liaise with the relevant Faculty to consider how the particular profession would normally accommodate individuals with such disabilities. In this way, the essential requirements related to the clinical tasks in the placement will be considered along with the academic requirements. Professional programs have distinct essential requirements outlined for undertaking the educational programs or curricula that will include expectations for functioning as a practicing professional in the

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2 Ibid
3 Ibid.
career that is the planned outcome for students in that program. Students may elect to complete the program if feasible but not to sit any certification examinations offered by the profession or to seek registration in regulatory bodies such as regulatory colleges. There may be occasions, particularly in a professional program where an accommodation contradicts an essential requirement. For example, providing extra time for a learner in a particular clinical setting might in fact impact on patient/client safety. However, it is incumbent upon the University to conduct a thorough task analysis of an essential requirement before developing an accommodation plan or denying an accommodation on the basis that the accommodation breaches the academic integrity of the education program.

6. Increasing application of the principles of universal design in educational programs may allow more students to meet the essential requirements of the learning environment without accommodation, although for some students, differential treatment may still be required to allow equal opportunity to enjoy the same level of benefits and privileges of success in the educational program.

7. Continuing advances in technology both in the classroom and in the clinical and practicum setting in professional programs necessitate close cooperation and liaison between SAS, Accommodation Team and resources, and students, in order to optimize accessibility of students to meet the essential requirements of courses and educational programs.
APPENDIX C: OFF-SITE PLACEMENTS

OFF-SITE PLACEMENTS

1. In order to engage in the academic accommodation process as it applies to the experiential learning setting, multiple stakeholders may need to be involved, including the fieldwork coordinator (the faculty member who organizes fieldwork), the on-site supervisor, the preceptor (University or clinical supervisor who oversees individual fieldwork experiences) and SAS.

2. The University's duty to accommodate exists independently from the placement entity. Ideally, all parties will collaborate on the development of an appropriate accommodation plan that meets the student's needs. However, in the event of a disagreement or misalignment of expectations (or where there is some conflicting third party policy etc.), we cannot force or impose a particular accommodation measure on a third party, without some contractual mechanism. Ultimately, in the circumstance where all parties cannot agree, the only appropriate accommodation that satisfies McMaster’s duty may be to explore another placement. Academic accommodation extends to off-campus coursework such as fieldwork, placement, internship and out-of-the classroom learning experiences.

3. In some Programs (such as the Bachelor of Social Work) graduation from an accredited program allow students to register with a regulatory college. Demonstrating readiness for practice is an essential requirement for graduation from these programs.

4. Notification of accommodation need for placement, fieldwork and practicum, is flexible according to individual student circumstances.

5. The vastness of placement/fieldwork and practicum settings and academic requirements for such activities is too extensive to easily detail in one procedure. However, regardless of the nature of the program or degree the following process will apply to all students and all requests for academic accommodations within a placement/fieldwork or practicum setting:

6. Regardless of the nature of the program or degree the following process will apply to all students and all request for academic accommodations within a placement/fieldwork or practicum setting:
   a) students will meet with SAS Program Coordinator to review the Academic Accommodation Plan in the context of an off-site placement.
   b) placement criteria for consideration may include: documentation, academic program information, placement evaluation criteria, need for accommodation and other supports for the learning environment and review process for activation of academic accommodations;
   c) the accommodation request is shared with the off-site learning placement location. The placement may or may not be able to accept the accommodation request on their site.
   d) SAS may need to consult with the Faculty Office before the accommodation is implemented;
   e) where necessary, SAS may request additional documentation or the ability to consult with a student's regulated health care provider(s) to seek further information regarding the student's functional limitations in order to make a determination of the most appropriate academic accommodation;
   f) in some cases, SAS may need to seek independent consultation before activating an academic accommodation;
g) notice to Faculty Office is then facilitated by or provided directly from SAS outlining the accommodation for the off-site learning environment;

h) if the accommodation plan is not accepted by the off-site learning placement location, the University will explore other off-site learning opportunities, within reason; and

i) where a need for accommodation review is warranted, this can occur at any time.
IQAP Policy Revisions Update  
March 2017

We have reviewed the IQAP policy and propose the following changes to our policy:

1. Minor editorial changes throughout.

2. Updated names/labels for consistency with guidebooks and templates
   a. Updated titles for Vice-Provost etc.

3. Created and updated templates and updated guidebooks where needed
   a. Plans to update flowcharts with sequence following new program approval and distribution of statement of intent
   b. Plans to update guidebooks with prompting questions on assessment, responding to the Strategic Mandate Agreement and institutional definition of experiential learning (when it becomes available).

4. Merged some sections (e.g. Resources, Quality Enhancement). Note that we did not change any of the criteria, just re-organized based on feedback we received.

5. Worked with the Registrar’s Office and with Quality Council to provide a better description, definition and examples of what constitutes New Programs v Major Modifications. Further clarified the process when the difference among a minor modification, a major modification or a new program is unclear.
   a. Moved reporting requirements for major modifications from section 7 to section 4

6. Modified language around the need for broad consultation when beginning new undergraduate and graduate programs (5.1 and 5.2).
   a. Included sharing Statement of Intent with Registrar’s Office and consulting with IRA and Fees

7. Included a provision in the external evaluation review team for the inclusion of one internal reviewer and additional reviewers where appropriate (5.4).

8. Revised the institutional approval process to match what we have been doing in practice, e.g. statement of intent; budget approvals earlier in the process (5.7).

9. Developed guidelines for advertising new programs to ensure consistency with Quality Council requirements (5.9).
   a. Included note that Ministry approval may also be required.

10. Updated the policy to reflect the new MTCU submission process (5.10).

11. Added new criteria to the New Program Proposal and the Self-study to emphasize consideration of the curriculum and current priorities (Section 5.3.4 and Section 7.1.3).
a. Added a provision for reference to the Strategic Mandate Agreement

12. Moved details of inclusion in chair’s and dean’s reports from the policy to the instructions and templates based on feedback we received.
   a. 7.2: Program Response Template

13. Clarified the institutional reporting process and institutional reporting bodies for program reviews (7.3 and 7.4)
   a. Updated that report comes from Quality Assurance Committee to UPC.
   b. Revised sequence of approvals such that University Fees precedes UGC/GC.

14. Provided further detail and clarity for the use of accreditation and other external reviews in the cyclical review process, including processes and reporting mechanisms.

15. Modified language in Review Team to indicate reviewers for professional and interdisciplinary programs

16. Clarified that joint reviews take the timeline of the earliest scheduled review
# POLICY ON ACADEMIC PROGRAM DEVELOPMENT AND REVIEW

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Appendix A: McMaster University’s Statement on Degree Level Expectations
1. PREAMBLE

McMaster University is widely recognized for innovation in teaching and learning and for the quality of its programs. Nevertheless, knowledge of our disciplines and the scholarship of teaching and learning are constantly evolving. It is clear that our reputation can only be maintained and improved if we, as academics and educators, critically review what we do and seek the opinion and advice from colleagues at McMaster and at other institutions.

Although the primary objective for these reviews is the improvement of our academic programs, the processes that we adopt also should be designed to meet our responsibility to the government on quality assurance: Every publicly assisted Ontario university that grants degrees and diplomas is responsible for ensuring the quality of all of its programs of study, including modes of delivering programs and those academic and student services that affect the quality of the respective programs under review, whether or not the program is eligible for government funding.

The process by which institutions meet this accountability to the government is outlined in the Quality Assurance Framework (QAF), developed by the Ontario Council of Academic Vice-Presidents (OCAV) and approved by Executive Heads in April 2010. Institutions’ compliance with the QAF is monitored by the Ontario Universities Council on Quality Assurance, also known as the Quality Council, which reports to OCAV and the Council of Ontario Universities (COU).

As part of the Quality Assurance Framework, McMaster was required to develop an Institutional Quality Assurance Process (IQAP), which is contained within this Policy. The guiding principles used for developing McMaster’s IQAP were:

• curriculum development and improvement is an ongoing, iterative process that is normally initiated, developed and controlled at the departmental level;
• McMaster’s IQAP incorporates input from all principal stakeholders; and,
• McMaster’s IQAP should be designed primarily to help improve programs and shape them to have characteristics that are most valued at our University, while also meeting the responsibility for quality assurance.

Thus, the goal of McMaster’s IQAP is to facilitate the development and continued improvement of our undergraduate and graduate academic programs, and to ensure that McMaster continues to lead internationally in its reputation for innovation in teaching and learning and for the quality of its programs. McMaster’s IQAP is intended to complement existing mechanisms for critical assessment and enhancement, including departmental reviews and accreditation reviews. The uniqueness of each program at McMaster will emerge in the IQAP self-study.

The IQAP is subject to approval by the Quality Council when it is initiated and thereafter, when it is revised. The Quality Council will audit the University on an 8-year cycle under the terms outlined in the Quality Assurance Framework.
2. CONTACT

The authority responsible for the IQAP is the Vice-Provost (Faculty). The authorities responsible for its application will be the Vice-Provost (Faculty) for undergraduate programs and the Vice-Provost and Dean of Graduate Studies for graduate programs. When undergraduate and graduate programs are reviewed concurrently, the Vice-Provost (Faculty) and the Vice-Provost and Dean of Graduate Studies will be jointly responsible for its application.

The person responsible for all contact between the University and the Quality Council is the Vice-Provost (Faculty).

Throughout this Policy, the Chair refers to the head of the academic unit (usually a Department, sometimes a School or an interdisciplinary group) that is proposing a new program or is responsible for an existing program, although we recognize that the official title of such person varies across programs and Faculties. Similarly, the Dean refers to the head of the Faculty or equivalent responsible for the program, again recognizing that the official title may vary.

In the case of joint academic programs (e.g., a combined honours program or a collaborative program with another educational institution), the relevant Chair and Dean shall be those at McMaster University who have the administrative responsibility for the program.

3. PURPOSE

This Policy on Academic Program Development and Review is meant to guide the development of new undergraduate and graduate programs (including for-credit graduate diploma programs), and to aid in the ongoing improvement of existing programs. It has been designed also to meet the University’s responsibility of ensuring the quality of such programs. It applies to all undergraduate and graduate programs offered at McMaster University, as well as programs offered in collaboration with other institutions that lead to McMaster University degrees or graduate diplomas.

4. DEFINITION OF NEW PROGRAMS AND MAJOR MODIFICATIONS

New Programs:
A new program is normally considered to be any new degree or degree program that has not been previously offered at McMaster University. In contrast to the normal evolution of academic programs, a new program will generally involve some combination of new courses, new learning outcomes, and new or re-allocated resources, and will be meant to provide students with an academic path that was previously not available to them.

Although not new, a program that has been offered at McMaster University without funding from the Ministry of Advanced Education and Skills Development (MAESD) and for which a request for funding is to be made, will follow the procedures for new programs that are outlined in Section 5.
Examples of what constitutes a ‘new program’ are included at:
http://oucqa.ca/guide/examples-of-new-programs/

Modifications to Existing Programs:

Revisions to an existing program will be classified as either a minor or a major modification to the program. In both cases, the program will continue to be subject to a cyclical program review as outlined in Section 7. Major modifications must be reported annually to the Quality Council, as outlined in Section 4.1.

Major modifications include the following program changes:

a) Requirements that differ significantly from those existing at the time of the previous cyclical program review. For undergraduate programs, it would be considered a major modification when more than 30% of the program requirements are being changed from one academic year to the next. For graduate programs, it would be considered a major modification when more than 50% of the program requirements (including requirements such as courses, major exams, and research) are being changed from one year to the next.

b) Significant changes to the program learning outcomes;

c) Significant changes lasting more than one academic year to the faculty engaged in delivering the program and/or to the essential physical resources as may occur, for example, where there have been changes to the existing mode(s) of delivery (such as different campus, online delivery and inter-institutional collaboration);

The addition of a new field to an existing graduate program is considered to be a major modification, but is subject to an Expedited Approval process. The inclusion of a new program of specialization where another with the same degree designation already exists will normally be considered a major modification.

Examples of what constitutes major modifications are included at:
http://oucqa.ca/guide/5-major-modifications-to-existing-programs/

In some cases major modifications may require additional steps in order to be completed. Programs should consult with the Vice-Provost (Faculty) for undergraduate programs or the Vice-Provost and Dean of Graduate Studies for graduate programs, where appropriate.

In situations where it is unclear or where disagreement exists on whether a planned change constitutes a minor modification, a major modification, or a new program, the determination will be made by the Vice-Provost (Faculty) for undergraduate programs or the Vice-Provost and Dean of Graduate Studies for graduate programs, in consultation with McMaster’s Quality Assurance Committee, where appropriate. A record of any decision will be kept with McMaster’s Quality Assurance Committee.
4.1 Reporting Requirements

Once per year, the Registrar’s Office will prepare a report of major modifications to existing programs and will submit the report to the Quality Council.

5. NEW GRADUATE AND UNDERGRADUATE PROGRAMS

The steps required for the approval of any new program include:

5.1. Beginning a New Program Proposal

Proponents of a new program may begin by preparing a Statement of Intent and acquiring endorsement from the relevant Dean(s) and Vice-Provost (Faculty) or, in the case of graduate programs, the Vice-Provost and Dean of Graduate Studies. The Statement of Intent should be circulated to the Registrar’s Office.

5.2. Broad Consultation

The Chair, in consultation with the Dean, is responsible for ensuring that there is broad consultation. Such consultation is especially important when proposing interdisciplinary programs as those initiators of the proposed plan may not know all the disciplines or individual faculty members who might potentially be interested, or have expertise. It will also be essential to have appropriate discussions with other institutions when the proposed programs are to be offered in collaboration with those institutions.

Whenever faculty members from several departments will be involved in a proposed program, these proponents must have the opportunity to discuss the proposal with their respective Dean(s) and Chair(s). Similarly, if there is a proposal to cross-list a course, or to recommend or require students in the new program to take existing courses, the teaching Department(s) must be consulted and agreement obtained, in writing, from the appropriate Chair/Dean. Approvals of the relevant Curriculum Committees are required.

Discussions should be held with central support units such as, but not limited to, the Library, the Registrar, University Technology Services and the MacPherson Institute for Leadership, Innovation and Excellence in Teaching and Learning, Institutional Research, and Analysis, University Student Fees Committee, as well as with Faculty-based support units, to assess the impact of the introduction of the new program. Input also should be sought from relevant groups of students for whom there is a potential impact of the proposal.

A proposal for a new interdisciplinary program must be presented to any related Faculty/Program to ensure that there is widespread awareness of the program and of its potential impact. If a new interdisciplinary program utilizes or cross-lists one or several new courses from other Departments, the Department(s) offering the course(s), rather
than the new interdisciplinary group, must submit those courses for approval. Prior written agreement also must be obtained from Chairs of participating Departments for teaching, graduate supervision and other resources required for interdisciplinary programs. Departments must be given adequate time to consider these requests. Faculties must include the proposed administrative and governance structures in interdisciplinary program proposals.

5.3. **New Program Proposal**

The Chair is responsible, in collaboration with relevant groups and/or individuals, for the preparation of a New Program Proposal that addresses the following criteria:

5.3.1. **Program**
- Description of the extent and method of the consultation process undertaken during the development of the proposal, including the groups and/or individuals who helped to prepare the proposal.
- Consistency of the program with the University’s mission and academic plans.
- Clarity and appropriateness of the program’s requirements and the Program Learning Outcomes in meeting the University’s Undergraduate Degree Level Expectations (UDLEs) or Graduate Degree Level Expectations (GDLEs), as outlined in Appendix A.
- Appropriateness of degree nomenclature.

5.3.2. **Admission requirements**
- Appropriateness of the program’s admission requirements for the Program Learning Outcomes established for completion of the program.
- Alternative requirements, if any, for admission into the program, such as minimum grade point average, additional languages or portfolios, along with how the program recognizes prior work or learning experience.

5.3.3. **Structure**
- Appropriateness of the administrative, governance, and communication processes proposed in support of the program.
- Appropriateness of the program's structure and regulations to meet specified Program Learning Outcomes and Degree Level Expectations.
- For graduate programs, a clear rationale for program length, which ensures that the program requirements can be reasonably completed within the proposed time period.

5.3.4. **Program content, curriculum, and teaching**
- Ways in which the curriculum addresses the current state of the discipline or area of study.
- Identification of any unique curriculum or program innovations or creative components.
- Appropriateness of the proposed mode(s) of delivery to meet the intended Program
Learning Outcomes and Degree Level Expectations and availability of the necessary physical resources.

- Ways in which the program addresses current institutional, faculty, or departmental priorities (e.g. experiential learning, diversity and inclusion, accessibility, community engagement, entrepreneurship, et cetera).
- Ways in which the program addresses the current Strategic Mandate Agreement.
- For research-focused graduate programs, clear indication of the nature and suitability of the major research requirements for degree completion.
- For graduate programs, verification that the courses included meet university requirements in terms of the minimum number of courses required, the level of courses required, and the appropriate inclusion of other required elements appropriate for the degree level (e.g., transfer exams, comprehensive exams). At least two thirds of the course requirements must be at the 700-level.

5.3.5. Assessment of teaching and learning

- Appropriateness of the proposed methods for the instruction and assessment of student achievement of the intended Program Learning Outcomes. The Program Learning Outcomes must meet the Degree Level Expectations.
- Completeness of plans for documenting and demonstrating the level of performance of students, consistent with the Degree Level Expectations.

5.3.6. Resources

For all programs:

- Adequacy of the administrative unit’s planned utilization of existing human, physical and financial resources, and any institutional commitment to supplement those resources, to support the program.
- Participation of a sufficient number and quality of faculty who are competent to teach and/or supervise in the program.
- Evidence that there are adequate resources to sustain the quality of scholarship produced by undergraduate students as well as graduate students’ scholarship and research activities, including library support, information technology support, and laboratory access.

For graduate programs:

- Evidence that full-time tenured/tenure-track/CAWAR faculty have the recent research and/or professional/clinical expertise needed to sustain the program, promote innovation, foster an appropriate intellectual climate, and provide excellent supervision of students in academic and research components of the program.
- Where appropriate to the program, evidence that financial assistance for students will be sufficient to ensure adequate quality and numbers of students.
- For programs with a research component, evidence that faculty research supervisors have current and ongoing research programs and funding, and space and relevant research infrastructure appropriate to support students’ research in the program.
- Evidence of how supervisory loads will be distributed, and the qualifications and
appointment status of faculty who will provide instruction and supervision.

- Evidence of prior experience in graduate teaching and research supervision for faculty participating in the program.

For undergraduate programs:

- Evidence of plans for adequate numbers of faculty and staff to achieve the goals of the program;
- Evidence of plans to provide the necessary resources in step with the implementation of the program;
- Planned/anticipated class sizes;
- Provision of supervision of experiential learning opportunities (if required); and,
- Role of adjunct and sessional faculty.

5.3.7. Quality and other indicators

- Definition and use of indicators that provide evidence of quality of the faculty (e.g., qualifications, research, innovation and scholarly record; appropriateness of collective faculty expertise to contribute substantively to the proposed program).
- Evidence of a program structure and faculty research that will ensure the intellectual quality of the student experience.

5.4. External Evaluation: Review Team

The Vice-Provost (Faculty) or, in the case of graduate programs, the Vice-Provost and Dean of Graduate Studies, in consultation with the Dean will select a team of reviewers to assess the proposal. The review team shall consist of at least one external reviewer for new undergraduate programs and two external reviewers for new graduate programs. The team may also include one internal reviewer selected by the Vice-Provost (Faculty) or, in the case of graduate programs, the Vice-Provost and Dean of Graduate Studies, in consultation with the Dean (or the Dean’s designate). Additional members may be added to the team if appropriate, for instance when evaluating professional programs or interdisciplinary programs.

External reviews of new graduate programs must incorporate an on-site visit. External reviews of new undergraduate program proposals will normally be conducted on-site, but may be conducted by desk audit, video-conference or an equivalent method if the external reviewer is satisfied that the off-site option is acceptable; exceptions to on-site visits for undergraduate program reviews will be determined by the Vice-Provost (Faculty), in consultation with the Dean, prior to the commencement of the review.

External members of the review team shall normally be individuals who are in the same discipline as the program under review (or across disciplines for interdisciplinary programs), shall not normally be from the same institution, and who are distinguished senior academics of broad experience, with an established commitment to higher
education. Non-traditional programs may consider non-academics with relevant expertise and experience. Reviewers must have an impartial, arms-length relationship to the program (for clarity, arms-length reviewers should not have been a research supervisor or student of members of the proposed program; and should not have collaborated with members of the proposed program within the past 6 years, or have made plans to collaborate with those individuals in the immediate future. There also should be no other potential conflicts of interest (e.g., personal or financial). Wherever possible the review team shall represent broad institutional categories and/or geographic regions.

Reviewers will be selected from a list of at least six suggested individuals compiled by the Department and endorsed by the Dean. The list shall include, for each proposed external reviewer:
- name;
- rank and position;
- institution or company and current address, telephone and fax numbers, e-mail address, and URL if available;
- professional (including administrative) experience or expertise relevant to the Program under review;
- details of any previous or current affiliation with the University, and any association with individual members of the Program under review (e.g., co-author, previous student/supervisor, close relationship); and,
- for graduate programs, a description of research expertise, and a partial listing of recent scholarly publications.

The New Program Proposal, the McMaster’s Review Team Guidelines and other materials specific to the review will be provided to all members of the review team no less than two weeks prior to their visit.

5.5. Reviewers’ report

Excepting when contrary circumstances apply, the reviewers normally will provide, within four weeks of the review, a joint report that appraises the standards and quality of the proposed program, and addresses the criteria set out in Section 5.3, including the associated faculty and material resources. Reviewers also will be invited to acknowledge any clearly innovative aspects of the proposed program, together with recommendations on any essential or otherwise desirable modifications to the program.

5.6. Internal response

Responses to the reviewers’ report from both the Chair and the Dean, or their delegates, should be prepared, as per the New Program Response template, and attached to the reviewers’ report.

5.7. Institutional approval
In addition to the completion of the external review, approval of new program proposals by the following University bodies, normally in the order listed below, is required:

- The Vice-Provost (Faculty) or, in the case of graduate programs, the Vice-Provost and Dean of Graduate Studies, will review the New Program Proposal to ensure that the program is consistent with McMaster's principles and priorities and existing strengths of the University, the program is of high academic quality; there is convincing evidence of student demand and societal need for the program; and, sufficient financial support, infrastructure, and human resources can be made available to initiate and support the program either within the Faculty budget or based on the program being a full revenue generating program.
- The Faculty Curriculum Committee(s) reviews the New Program Proposal to ensure that the new program adds sufficient value to the programs already offered in the Faculty;
- The Faculty(ies) reviews the New Program Proposal to ensure that the program is consistent with the Faculty’s strategic plans and that the necessary resources are available if these are to be provided from within the Faculty’s envelope;
- The Executive Director of Finance and Planning reviews the Resource Implications and Financial Viability document to ensure that all potential University resource requirements are captured and the program is properly costed. In addition, for interdisciplinary or partnership programs, ensures that an MOU is properly completed.
- For Undergraduate programs, the Undergraduate Council Curriculum Committee reviews the New Program Proposal to assess the impact of the new program on students enrolled in other Faculties;
- The University Student Fees Committee reviews the proposed Program and Supplementary Fees and ensures that Ministry and University fee policies are adhered to, are reasonable relative to market and that fee collection can be properly administered within existing systems.
- Undergraduate Council or Graduate Council reviews the New Program Proposal to provide a venue for a broad discussion on the new program by elected faculty and student members with specific knowledge of and expertise in undergraduate or graduate programming, and ensure that the program is consistent with University-wide goals and criteria specifically related to undergraduate or graduate programming;
- University Planning Committee reviews the New Program Proposal and the Resource Implications and Financial Viability documents to understand the financial implications of the new program, evaluate the impact University-wide, and assess value-for-money for the intended student; and,
- Senate ensures that the program is consistent with the University’s general strategic plans with respect to academic programs.

These bodies should consider the criteria outlined in Section 5.3 when evaluating the proposal.

Normally, approvals by all of the above University bodies will take place before the
external review. However, in cases where the external reviewers recommend significant changes to the program proposal, it may have to return to these bodies for re-assessment.

Special considerations, such as collaboration agreements or non-standard distribution and full revenue generating programs should refer to the Academic Revenue Generating Activity Policy and other relevant University policies as may apply.

If any one of the bodies requires changes to the proposal, those changes may have to be subsequently provided to the other approving bodies for approval, depending on the nature of the changes.

Chairs of Departments named in the proposal should be informed by the University Secretariat of the schedule for presentations to Undergraduate Council, University Planning Committee and Senate, and of the decisions of these bodies with regard to the New Program Proposal. The School of Graduate Studies should inform Chairs of the schedule of presentations to Graduate Council, and of the decisions of this body with regards to the new program proposal.

5.8. Quality Council Secretariat

Once all approvals outlined in Section 5.7 are obtained, the institution will submit the New Program Proposal, together with the Reviewers’ Report and the internal response to the Report, to the Quality Council Secretariat. The submission template will require information on whether or not the proposed program will be a cost-recovery program. The same standards and protocols apply regardless of the source of funding.

5.9. Announcement of new programs

Following its submission to the Quality Council, the University may announce, per guidelines within the New Program Proposal Guidebook, its intention to offer the program, provided that clear indication is given that approval by the Quality Council is pending, and that no offers of admission will be made until the program has been approved by the Quality Council. Ministry approval may also be required.

5.10. Approved new programs

After a new program is submitted to the Quality Council, the University may seek Provincial funding for the program, which must begin within thirty-six months of the date of approval; otherwise, the approval will lapse. If program approval lapses, the program must begin the new program proposal process again.

The first cyclical review for any new program must be conducted no more than eight years after the date of the program’s initial enrolment.
Between eighteen and twenty-four months after onset of the program, the Chair will provide the Dean and Vice-Provost (Faculty) or, in the case of graduate programs, the Vice-Provost and Dean of Graduate studies, with a brief update on progress in the program, addressing any concerns from the initial program review, and highlighting any unanticipated changes in curriculum, resources, enrollment, funding mechanisms, or governance structure. If, after consultation with the Dean, the Vice-Provost (Faculty) or, in the case of graduate programs, the Vice-Provost and Dean of Graduate Studies, deems it appropriate, an informal internal assessment of the program may be undertaken, including interviews with current faculty, students, and staff, to determine if a more complete, early cyclical review is warranted.

6. EXPEDITED APPROVALS OF NEW PROGRAMS

The Protocol for Expedited Approvals applies when one or more of the following applies:

- an institution requests endorsement of the Quality Council to declare a new Field or to revise Fields in a graduate program (note: there is no requirement to declare fields in either master’s or doctoral programs);
- there is a proposal for a new collaborative specialization;
- there are proposals for new for-credit graduate diplomas; or,
- there are major modifications to existing programs, and the University requests approval.

The Expedited Approvals process requires all the approvals listed in Section 5.7 and the submission to the Quality Council of a New Program Proposal of the proposed program change/new program and the rationale for it. It does not require that external reviewers be involved in the approval process and provides for a faster turn-around on decisions by the Quality Council.

6.1. Expedited Proposal

The Expedited Proposal will describe the new graduate field, collaborative specialization, or graduate diploma or the significant changes being proposed (including, as appropriate, reference to Program Learning Outcomes, Degree Level Expectations, faculty and resource implications), provide a brief account of the rationale for the changes, and address the evaluation criteria.

6.2. Institutional Identification of Major Modifications to Existing Programs

Existing programs can be expected to routinely undergo revisions with the aim of quality enhancement. This includes, for example, the introduction or deletion of courses, major exam structures, change in emphases, options, minors, or mode of delivery. The revisions must be submitted through the normal curriculum approval process outlined in Section 5.7 (excluding the University Planning Committee, unless there are significant resource implications). These revisions will be assessed during the course of the next cyclical
review of the program.

There may be, however, situations where the changes to the program are of such significance that a more immediate review is desirable. This situation may occur, for example, where:

- the program’s revisions meet the definition of a major modification, as defined in Section 4;
- the fundamental objectives of the program change; or,
- there are significant changes to the faculty engaged in delivering the program and/or to the essential physical resources.

In such cases, the Department, the Faculty, Undergraduate Council or Graduate Council may, if it deems it advisable after consultation with the relevant Dean(s) and Vice-Provost (Faculty) and/or Vice-Provost and Dean of Graduate Studies, initiate a program review and request that the Quality Council review the major modification proposal. Normally, such review will occur through an Expedited Approval Process.

7. CYCLICAL PROGRAM REVIEWS

All academic programs are to be reviewed on an eight-year cycle. Combined programs do not require review if their constituting programs are reviewed separately. Emphases, Options and Minors do not require review. The list of programs that require review, and the schedule of such reviews, will be maintained by the Vice-Provost (Faculty) in consultation with the Vice-Provost and Dean of Graduate Studies.

Departments can choose to review undergraduate and graduate programs jointly or separately. If the reviews are done jointly, there can be additional subsections within the report to address different situations that apply to each program. Program reviews can also be done jointly with accreditation reviews, at the discretion of the Chair, in consultation with the Dean (see Section 7.5). Where programs seek to combine previously separate undergraduate and graduate reviews they shall adopt the timeline of the earliest scheduled program review.

The review consists of the following steps:

7.1. Self-study: Internal program perspective

The Chair is responsible, in collaboration with relevant groups and/or individuals, for preparing a self-study document that is broad-based, reflective, forward-looking and inclusive of critical analysis. It should identify any pertinent information deemed appropriate for inclusion. The self-study must address and document the consistency of the program’s learning outcomes with the University’s mission and Degree Level Expectations, and how its graduates achieve those outcomes.

The self-study should include criteria and quality indicators including:
7.1.1. Program Description and Overview

- Program is consistent with the University’s mission and academic plans.
- Program requirements and Program Learning Outcomes are clear, appropriate and align with the Degree Level Expectations.

7.1.2. Admission requirements

- Admission requirements are appropriately aligned with the Program Learning Outcomes established for completion of the program.

7.1.3. Curriculum

- How the curriculum reflects the current state of the discipline or area of study.
- Evidence of any significant innovation or creativity in the content and/or delivery of the program relative to other such programs.
- How the mode(s) of delivery are appropriate and effective at meeting the Program Learning Outcomes.
- Ways in which the program addresses current institutional, faculty, or departmental priorities (e.g. experiential learning, diversity and inclusion, accessibility, community engagement, entrepreneurship, et cetera) and the current Strategic Mandate Agreement.

7.1.4. Teaching and assessment

- Methods for assessing student achievement of the defined Program Learning Outcomes and Degree Level Expectations are appropriate and effective.
- Appropriateness and effectiveness of the means of assessment, especially in the students’ final year of the program, in clearly demonstrating achievement of the Program Learning Outcomes and the Degree Level Expectations.

7.1.5. Resources

- Appropriateness and effectiveness of the academic unit’s use of existing human, physical and financial resources in delivering and maintaining the quality of its program(s), in relation to the University’s priorities for and constraints on funding, space, and faculty allocation.

7.1.6. Quality indicators

- Information on the quality of the program under review. Standard quality indicators, outlined in the McMaster’s Self-Study Guidebook, are available to Chairs from the Office of Institutional Research and Analysis, the Office of the Registrar, the School of Graduate Studies, or from the departments themselves. Chairs will be expected to provide context and commentary on the data. When
possible and appropriate, Chairs will also refer to applicable professional standards.

Additional graduate program criteria:

- Evidence that students’ time-to-completion is both monitored and managed in relation to the program’s defined length and program requirements.
- Quality and availability of graduate supervision.
- Definition and application of indicators that provide evidence of faculty, student and program quality, for example:
  - Faculty: funding, honours and awards, and commitment to student mentoring;
  - Students: grade-level for admission, scholarly output, success rates in provincial and national scholarships, competitions, awards;
  - Program: evidence of a program structure and faculty research that will ensure the intellectual quality of the student experience, and commitment to development of professional and transferable skills; evidence of sufficient and regular graduate level course offerings to ensure that students will be able to meet university requirements in terms of the minimum number of courses required, the level of courses required, and the timely completion of other required elements appropriate for the degree level (e.g., transfer exams, comprehensive exams).

7.1.7. Quality enhancement

- Concerns and recommendations raised in previous reviews;
- Initiatives that have been undertaken to enhance the teaching, learning and/or research environments thus, the quality of the program, and how these will be sustained.
- Areas identified through the conduct of the self-study as requiring improvement;
- Areas that hold promise for continued enhancement.

7.1.8. System of governance

- Evidence that a consultative and inclusive system of governance has been used on an ongoing basis to assess the program and implement changes as appropriate.

7.1.9. Academic Services

- Academic services that directly contribute to the academic quality of each program under review.

7.1.10. Self-Study Participation

- Participation of program faculty, staff, and students in the self-study and how their views were obtained and taken into account, and who contributed to the development and writing of the self-study.
7.1.11. External Participation

- The input of others deemed to be relevant and useful, such as graduates of the program, representatives of industry, the professions, practical training programs, and employers may also be included.

It is the Chair’s responsibility to review and approve the self-study report to ensure that it meets the above criteria.

7.2. External evaluation: Review Team

The Vice- Provost (Faculty) or, in the case of graduate programs, the Vice- Provost and Dean of Graduate Studies, in consultation with the Dean (or the Dean’s designate), will select a team of reviewers to evaluate the program. The Review Team shall consist of at least one external reviewer for undergraduate programs and two external reviewers for either graduate programs or for concurrent reviews of undergraduate and graduate programs. The team will also include one internal reviewer selected by the Vice- Provost (Faculty) or, in the case of graduate programs, the Vice- Provost and Dean of Graduate Studies, in consultation with the Dean (or the Dean’s designate). Additional members may be added to the team if appropriate, such as when evaluating professional programs or interdisciplinary programs.

External members of the review team normally shall be individuals in the same discipline as the Program under review (or across disciplines for interdisciplinary programs) who are distinguished senior academics of broad experience, with an established commitment to higher education. Non-traditional programs may consider non-academics with relevant expertise and experience. They must have an impartial, arms-length relationship to the Program (as defined in Section 5.4). Wherever possible the review team shall represent broad institutional categories and/or geographic regions. They will be selected from a list of at least six suggested individuals compiled by the Program/Department under review and endorsed by the Dean. The list shall include, for each proposed external reviewer:

- name;
- rank and position;
- institution or company and current address, telephone and fax numbers, and e-mail address, and URL if available;
- professional (including administrative) experience or expertise relevant to the Program under review;
- details of any previous or current affiliation with the University, and any association with individual members of the Program under review (e.g., co-author, previous student/supervisor, close relationship); and,
- for graduate program or combined reviews, a description of research expertise, and a partial listing of recent scholarly publications.
The Self-Study, the Guidelines for Review Team, and other materials specific to the current review will be provided to all members of the Review Team no less than two weeks prior to their visit. If applicable, the results of the previous accreditation review also will be made available to the Review Team to provide them with the views of the relevant professional association(s). The Guidelines for Review Team describes the review process and the roles and obligations of the Review Team, which include:

- to identify and comment on the program’s notably strong and creative attributes;
- to describe the program’s respective strengths, areas for improvement, and opportunities for enhancement;
- to recommend specific steps to be taken to improve the program, distinguishing between those the program can itself take with existing resources and those that require external action;
- to recognize the University’s autonomy to determine priorities for funding, space, and faculty allocation; and,
- to respect the confidentiality required for all aspects of the review process.

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

- Chair or Director;
- Full-time faculty members (in groups);
- Part-time faculty members (in groups);
- Program students (units should encourage a broad cross section of students to participate in a meeting with the review team);
- Departmental/Program support staff;
- Associate Dean;
- Dean;
- for graduate programs, the Vice-Provost and Dean of Graduate Studies;
- for undergraduate programs, the Vice-Provost (Faculty); and,
- Provost and Vice-President (Academic), if available.

The Review Team will submit to the Vice-Provost (Faculty), or, in the case of graduate programs, the Vice-Provost and Dean of Graduate Studies, a joint report, including an Executive Summary, for the program(s) under review, normally within four weeks of the visit. The report will normally be written primarily by the external reviewer(s), with input from the internal reviewer. The Review Team’s report should address the substance of both the self-study report and the evaluation criteria set out in Section 7.1. The intent of these reports is to be formative and constructive. The reports are intended to provide counsel rather than prescriptive courses of action. The Vice-Provost (Faculty), or, in the case of graduate programs, the Vice-Provost and Dean of Graduate Studies, will circulate the Review Team’s report to the appropriate Chairs and Deans.

Responses to the reviewers’ report from both the Chair and the Dean, or their delegates, should be prepared, as per the Program Response template, and attached to the reviewers’ report.
7.3. Institutional perspective and report

All program reviews, including the self-study, reviewer’s report, and responses from the chair and dean, will be submitted to McMaster’s Quality Assurance Committee, a joint committee of Undergraduate and Graduate Councils. The Quality Assurance Committee will assess the review and will submit a Final Assessment Report to Undergraduate Council or Graduate Council that:

- identifies significant strengths of the program;
- addresses the appropriateness of resources for the success of the program;
- identifies opportunities for program improvement and enhancement;
- identifies and prioritizes the recommendations;
- may include a confidential section (e.g., where personnel issues may be addressed);
- may include additional recommendations or comments to the Provost and Vice-President (Academic). Recommendations could include, for example, requiring a detailed progress report that will describe progress towards addressing major concerns or scheduling an additional cyclical review sooner than specified by the normal 8-year cycle.

Undergraduate Council or Graduate Council will receive the Final Assessment Report from the Quality Assurance Committee and will consider whether it will provide its own recommendations or comments to the Provost and Vice-President (Academic). These will be communicated to the Chair, the Dean and the Vice-Provost (Faculty) or, in the case of graduate programs, to the Vice-Provost and Dean of Graduate Studies.

A report from the Quality Assurance Committee, along with any recommendations or comments, will be presented first to the University Planning Committee and then to Senate, which will consider whether they will make additional recommendations or comments to the Provost and Vice-President (Academic). These will be communicated to the Chair, the Dean and the Vice-Provost (Faculty) or, in the case of graduate programs, to the Vice-Provost and Dean of Graduate Studies.

Eighteen months after receiving the report from Undergraduate Council or Graduate Council, the Dean will meet with the Chair for an update on the program. The Dean will submit a progress report to the Quality Assurance Committee summarizing the status of any actions taken or being taken. The Quality Assurance Committee may, in some circumstances, choose to present progress reports to Undergraduate Council or Graduate Council.

7.4. Reporting requirements

The Final Assessment Reports will be posted on the Vice-President (Academic) section of the University’s website and copies of this information will be provided to the Quality Council.
7.5. Use of accreditation and other external reviews in the Institutional Quality Assurance Process

Programs that periodically undergo accreditation reviews may request that the associated accreditation documentation serve in place of an IQAP cyclical review self study. The program chair with support from the Dean of the program will submit a request form and all required supporting documentation to McMaster’s Quality Assurance Committee. When requested by the Dean and permitted by the accreditation authorities, the site visit by the external reviewers may be performed at the same time or by the same people as the accreditation reviewers.

The Quality Assurance Committee, will review the request and decide if an accreditation review can be substituted in whole or in part for a cyclical review. The program will be notified in writing of the committee’s decision. A record of substitutions or additions, and the grounds on which they were made, will be eligible for audit by the Quality Council. The Quality Assurance Committee’s decision is only applicable for the cyclical review year related to the request. The remaining steps in the cyclical review will then take place. Programs must participate in all reporting related to the cyclical review. If desired by the program, a request for accreditation substitution must be submitted for every subsequent cyclical review.
APPENDIX A
McMASTER UNIVERSITY’S STATEMENT
ON DEGREE LEVEL EXPECTATIONS

A McMaster education should enable students to develop sets of life and learning skills that promote a continuing ability and desire to learn, and a set of technical and professional skills that permit a range of career choices. Degree level expectations elaborate the intellectual and creative development of students and the acquisition of relevant skills that are usually widely, yet implicitly, understood.

McMaster University has adopted the following Undergraduate Degree Level Expectations (UDLEs) or Graduate Degree Level Expectations (GDLEs) that were developed by the Ontario Council of Academic Vice-Presidents and endorsed by the Council of Ontario Universities in December 2005. These degree level expectations are to be viewed as a minimum threshold for all degree programs at McMaster.

UNDERGRADUATE

<table>
<thead>
<tr>
<th><strong>Baccalaureate/bachelor’s degree</strong></th>
<th><strong>Baccalaureate/bachelor’s degree: honours</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>This degree is awarded to students who have demonstrated the following:</td>
<td>This degree is awarded to students who have demonstrated the following:</td>
</tr>
<tr>
<td>a) General knowledge and understanding of many key concepts, methodologies, theoretical approaches and assumptions in a discipline</td>
<td>a) Developed knowledge and critical understanding of the key concepts, methodologies, current advances, theoretical approaches and assumptions in a discipline overall, as well as in a specialized area of a discipline</td>
</tr>
<tr>
<td>b) Broad understanding of some of the major fields in a discipline, including, where appropriate, from an interdisciplinary perspective, and how the fields may intersect with fields in related disciplines</td>
<td>b) Developed understanding of many of the major fields in a discipline, including, where appropriate, from an interdisciplinary perspective, and how the fields may intersect with fields in related disciplines</td>
</tr>
<tr>
<td>c) Ability to gather, review, evaluate and interpret information relevant to one or more of the major fields in a discipline</td>
<td>c) Developed ability to:</td>
</tr>
<tr>
<td></td>
<td>i) gather, review, evaluate and interpret information; and</td>
</tr>
<tr>
<td></td>
<td>ii) compare the merits of alternate</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>2. Knowledge of methodologies</th>
<th>d) Some detailed knowledge in an area of the discipline</th>
<th>d) Developed, detailed knowledge of and experience in research in an area of the discipline</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>e) Critical thinking and analytical skills inside and outside the discipline</td>
<td>e) Developed critical thinking and analytical skills inside and outside the discipline</td>
</tr>
<tr>
<td></td>
<td>f) Ability to apply learning from one or more areas outside the discipline</td>
<td>f) Ability to apply learning from one or more areas outside the discipline</td>
</tr>
<tr>
<td>An understanding of methods of enquiry or creative activity, or both, in their primary area of study that enables the student to:</td>
<td>An understanding of methods of enquiry or creative activity, or both, in their primary area of study that enables the student to:</td>
<td>An understanding of methods of enquiry or creative activity, or both, in their primary area of study that enables the student to:</td>
</tr>
<tr>
<td></td>
<td>a) evaluate the appropriateness of different approaches to solving problems using well established ideas and techniques; and</td>
<td>a) evaluate the appropriateness of different approaches to solving problems using well established ideas and techniques; and</td>
</tr>
<tr>
<td></td>
<td>b) devise and sustain arguments or solve problems using these methods.</td>
<td>b) devise and sustain arguments or solve problems using these methods; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c) describe and comment upon particular aspects of current research or equivalent advanced scholarship.</td>
</tr>
<tr>
<td>3. Application of knowledge</td>
<td>The ability to review, present, and interpret quantitative and qualitative information to:</td>
<td>The ability to review, present and critically evaluate qualitative and quantitative information to:</td>
</tr>
<tr>
<td></td>
<td>a) develop lines of argument;</td>
<td>a) develop lines of argument;</td>
</tr>
<tr>
<td></td>
<td>b) make sound judgments in accordance with the major theories, concepts and methods of the subject(s) of study; and</td>
<td>b) make sound judgments in accordance with the major theories, concepts and methods of the subject(s) of study;</td>
</tr>
<tr>
<td>The ability to use a basic range of established techniques to:</td>
<td>c) apply underlying concepts, principles, and techniques of analysis, both within and outside the discipline;</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>a) analyze information;</td>
<td>d) where appropriate use this knowledge in the creative process; and</td>
<td></td>
</tr>
<tr>
<td>b) evaluate the appropriateness of different approaches to solving problems related to their area(s) of study;</td>
<td>The ability to use a range of established techniques to:</td>
<td></td>
</tr>
<tr>
<td>c) propose solutions; and</td>
<td>a) initiate and undertake critical evaluation of arguments, assumptions, abstract concepts and information;</td>
<td></td>
</tr>
<tr>
<td>d) make use of scholarly reviews and primary sources.</td>
<td>b) propose solutions;</td>
<td></td>
</tr>
<tr>
<td>4. Communication skills</td>
<td>c) frame appropriate questions for the purpose of solving a problem;</td>
<td></td>
</tr>
<tr>
<td>The ability to communicate accurately and reliably, orally and in writing to a range of audiences.</td>
<td>d) solve a problem or create a new work; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>e) to make critical use of scholarly reviews and primary sources.</td>
<td></td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>5. Awareness of limits of knowledge</th>
<th>An understanding of the limits to their own knowledge and how this might influence their analyses and interpretations.</th>
<th>An understanding of the limits to their own knowledge and ability, and an appreciation of the uncertainty, ambiguity and limits to knowledge and how this might influence analyses and interpretations.</th>
</tr>
</thead>
</table>
| 6. Autonomy and professional capacity | Qualities and transferable skills necessary for further study, employment, community involvement and other activities requiring:  
  a) the exercise of personal responsibility and decision-making;  
  b) working effectively with others;  
  c) the ability to identify and address their own learning needs in changing circumstances and to select an appropriate program of further study; and  
  d) behaviour consistent with academic integrity and social responsibility. | Qualities and transferable skills necessary for further study, employment, community involvement and other activities requiring:  
  a) the exercise of initiative, personal responsibility and accountability in both personal and group contexts;  
  b) working effectively with others;  
  c) decision-making in complex contexts;  
  d) the ability to manage their own learning in changing circumstances, both within and outside the discipline and to select an appropriate program of further study; and  
  e) and behaviour consistent with academic integrity and social responsibility. |
## GRADUATE

<table>
<thead>
<tr>
<th>Master’s degree</th>
<th>Doctoral degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>This degree is awarded to students who have demonstrated the following:</td>
<td>This degree extends the skills associated with the Master’s degree and is awarded to students who have demonstrated the following:</td>
</tr>
</tbody>
</table>

### 1. Depth and breadth of knowledge
- A systematic understanding of knowledge, including, where appropriate, relevant knowledge outside the field and/or discipline, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of their academic discipline, field of study, or area of professional practice;  
- A thorough understanding of a substantial body of knowledge that is at the forefront of their academic discipline or area of professional practice including, where appropriate, relevant knowledge outside the field and/or discipline.

### 2. Research and scholarship
- A conceptual understanding and methodological competence that:
  - Enables a working comprehension of how established techniques of research and inquiry are used to create and interpret knowledge in the discipline;  
  - Enables a critical evaluation of current research and advanced research and scholarship in the discipline or area of professional competence; and  
  - Enables a treatment of complex issues and judgments based on established principles and techniques; and,  
  - On the basis of that competence, has shown at least one of the following:
    - The ability to conceptualize, design, and implement research for the generation of new knowledge, applications, or understanding at the forefront of the discipline, and to adjust the research design or methodology in the light of unforeseen problems;  
    - The ability to make informed judgments on complex issues in specialist fields, sometimes requiring new methods; and  
    - The ability to produce original research, or other advanced scholarship, of a quality to satisfy peer review, and to merit publication.
<table>
<thead>
<tr>
<th>3. Level of application of knowledge</th>
<th>Competence in the research process by applying an existing body of knowledge in the critical analysis of a new question or of a specific problem or issue in a new setting.</th>
<th>The capacity to: a) Undertake pure and/or applied research at an advanced level; and b) Contribute to the development of academic or professional skills, techniques, tools, practices, ideas, theories, approaches, and/or materials.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Professional capacity/autonomy</td>
<td>a) The qualities and transferable skills necessary for employment requiring: i) The exercise of initiative and of personal responsibility and accountability; and ii) Decision-making in complex situations; b) The intellectual independence required for continuing professional development; c) The ethical behavior consistent with academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research; and d) The ability to appreciate the broader implications of applying knowledge to particular contexts.</td>
<td>a) The qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and largely autonomous initiative in complex situations; b) The intellectual independence to be academically and professionally engaged and current; c) The ethical behavior consistent with academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research; and d) The ability to evaluate the broader implications of applying knowledge to particular contexts.</td>
</tr>
<tr>
<td>5. Level of communications skills</td>
<td>The ability to communicate ideas, issues and conclusions clearly, orally and in writing, to a range of audiences.</td>
<td>The ability to communicate complex and/or ambiguous ideas, issues and conclusions clearly and effectively, orally and in writing, to a range of audiences.</td>
</tr>
<tr>
<td>Agenda Item IX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Awareness of limits of knowledge</td>
<td>Cognizance of the complexity of knowledge and of the potential contributions of other interpretations, methods, and disciplines.</td>
<td>An appreciation of the limitations of one’s own work and discipline, of the complexity of knowledge, and of the potential contributions of other interpretations, methods, and disciplines.</td>
</tr>
</tbody>
</table>
### McMASTER UNIVERSITY: SESSIONAL DATES 2018-2019

**Fall and Winter Terms 2018-2019**

<table>
<thead>
<tr>
<th></th>
<th>Fall Term (62 days)</th>
<th>Winter Term (62 days)</th>
<th>Courses Spanning both Terms (124 days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration begins</td>
<td></td>
<td>To be announced</td>
<td></td>
</tr>
<tr>
<td>Classes begin</td>
<td>Tuesday, September 4</td>
<td>Monday, January 7*</td>
<td>Tuesday, September 4</td>
</tr>
<tr>
<td>Last day for registration and changes in registration</td>
<td>Wednesday, September 12</td>
<td>Tuesday, January 15</td>
<td>Wednesday, September 12</td>
</tr>
<tr>
<td>Mid-Term Recess(es)</td>
<td>Monday, October 8 to Sunday, October 14</td>
<td>Monday, February 18 to Sunday, February 24</td>
<td>Monday, October 8 to Sunday, October 14 and, Monday, February 18 to Sunday, February 24</td>
</tr>
<tr>
<td>Last day for cancelling courses without failure by default</td>
<td>Friday, November 9</td>
<td>Friday, March 15</td>
<td>Friday, March 15</td>
</tr>
<tr>
<td>Good Friday: No classes or examinations</td>
<td>--</td>
<td>Friday, April 19</td>
<td>Friday, April 19</td>
</tr>
<tr>
<td>Assessment Ban (See Undergraduate Course Management Policies)</td>
<td>Thursday, November 29 to Thursday, December 6</td>
<td>Wednesday, April 3 to Wednesday, April 10</td>
<td>Wednesday, April 3 to Wednesday, April 10</td>
</tr>
<tr>
<td>Classes end</td>
<td>Wednesday, December 5</td>
<td>Tuesday, April 9</td>
<td>Tuesday, April 9</td>
</tr>
<tr>
<td>Mid-Term Tests Level (I)</td>
<td>--</td>
<td>--</td>
<td>Friday, December 7 to Thursday, December 20</td>
</tr>
<tr>
<td>Final Examinations 12 days</td>
<td>Friday, December 7 to Thursday, December 20</td>
<td>Thursday, April 11 to Monday, April 29</td>
<td>Thursday, April 11 to Monday, April 29</td>
</tr>
<tr>
<td>Deferred examinations</td>
<td>Tuesday, October 9 to Friday, October 12</td>
<td>Monday June 24 to Thursday June 27</td>
<td>Monday June 24 to Thursday June 27</td>
</tr>
</tbody>
</table>

*The University re-opens on Wednesday, January 2, 2019 after the December holidays; classes begin January 7.*
## 2019 Spring/Summer Term

<table>
<thead>
<tr>
<th></th>
<th>Spring Session (34 days)</th>
<th>Summer Session (33 days)</th>
<th>Full-Term Courses (67 days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes begin</td>
<td>Monday, May 6</td>
<td>Monday, June 24</td>
<td>Monday, May 6</td>
</tr>
<tr>
<td>Last day for registration and changes in registration</td>
<td>Monday, May 13</td>
<td>Tuesday, July 2</td>
<td>Monday, May 13</td>
</tr>
<tr>
<td>Victoria Day: No classes</td>
<td>Monday, May 20</td>
<td>--</td>
<td>Monday, May 20</td>
</tr>
<tr>
<td>Canada Day: No classes</td>
<td>--</td>
<td>Monday, July 1</td>
<td>Monday, July 1</td>
</tr>
<tr>
<td>Last day for cancelling courses without failure by default</td>
<td>Wednesday, June 5</td>
<td>Wednesday, July 24</td>
<td>Wednesday, July 24</td>
</tr>
<tr>
<td>Civic Holiday: No classes</td>
<td>--</td>
<td>Monday, August 5</td>
<td>Monday, August 5</td>
</tr>
<tr>
<td>Classes end</td>
<td>Friday, June 21</td>
<td>Friday, August 9</td>
<td>Friday, August 9</td>
</tr>
<tr>
<td>Final Examinations</td>
<td></td>
<td>As arranged by instructor in class time</td>
<td></td>
</tr>
<tr>
<td>Deferred Examinations</td>
<td></td>
<td>2019 Fall Mid-Term Recess Period</td>
<td></td>
</tr>
</tbody>
</table>