

AGENDA

NOTE: Members who wish to have items moved from the Consent to the Regular Agenda should contact the University Secretariat before the Senate meeting. Members may also request to have items moved when the Agenda is presented for approval.

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REPORT TO THE SENATE

FROM THE

EXECUTIVE COMMITTEE

Open Session (Consent Agenda)

1. Policy on Requests for Relief for Missed Academic Term Work – Winter Term 2022

On January 14, 2022, the Senate Executive Committee approved, on behalf of Senate, the establishment of the Policy on Requests for Relief for Missed Academic Term Work - Winter Term 2022 effective for the period of January 17, 2022 to April 30, 2022, to temporarily supersede the Policy on Requests for Relief for Missed Academic Term Work, as set out in the attached.

2. Sexual Violence Policy

On January 26, 2022, the Senate Executive Committee approved, on behalf of Senate and for recommendation to the Board of Governors, the proposed revisions to the Sexual Violence Policy, effective February 7, 2022.

SENATE: INFORMATION
February 9, 2022

Dear colleagues,

McMaster currently has a [Policy on Requests for Relief for Missed Academic Term Work](#) for students. The policy guides the use of the McMaster Student Absence Form (MSAF) that can be accessed by students through an online portal the first time (self-report) or through their associate dean's office for additional times or for extended absences (administrative report). The request is submitted upon a return to academic work and covers three calendar days of missed work.

Our current health and safety guidelines at McMaster for those who need to self-isolate due to symptoms or exposure to someone in the household who is COVID-19 positive are as follows. Students, faculty, and staff are to:

- Follow the [provincial government's current guidelines for isolation](#). For those fully vaccinated, the current isolation period is five days. View the province's [COVID-19 Self-assessment Tool](#) if you have been exposed or have symptoms of COVID-19 to learn if self-isolation is required. Specific instructions are included in the screening tool if you are required to self-isolate.

To align the period of time that is covered by the MSAF policy with the current guidelines for isolation due to COVID-19, we recommend the approval of the Policy on Requests for Relief for Missed Academic Term Work – Winter Term 2022. This modified policy changes the period of time that is covered by the MSAF from three days to five days. This policy will supersede the existing policy for only the Winter Term of 2022. After this time, we will return to the original policy.

The original policy did not originally go through Graduate Council, but I have consulted with Doug Welch, the Vice-Provost and Dean of Graduate Studies, and he is supportive. This policy did receive approval through the Undergraduate Council Executive committee.

Thank you for considering.

Best wishes,

Kim Dej

Kimberley Dej, PhD

(Acting) Vice Provost, Faculty
Associate Professor, School of Interdisciplinary Science
Office of the Provost and Vice-President (Academic)
McMaster University | University Hall, Room 203
1280 Main Street West, Hamilton, ON L8S 4K1

Complete Policy Title

Policy on Requests for Relief for Missed
Academic Term Work – Winter Term 2022

Policy Number (if applicable):

Approved by

Senate Executive

Date of Most Recent Approval

January 14, 2022, effective Winter Term 2022
from January 17, 2022 to April 30, 2022

Date of Original Approval(s)

Supersedes/Amends Policy dated

Responsible Executive

Provost and Vice-President (Academic)

Policy Specific Enquiries

[Provost and Vice-President \(Academic\)](#)

General Policy Enquiries

[Policy \(University Secretariat\)](#)

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by the policy owner, the written copy prevails.*

IMPORTANT NOTICE FOR WINTER TERM 2022

For the period of **January 17, 2022 to April 30, 2022**, this Policy will temporarily supersede
the *Policy on Requests for Relief for Missed Academic Term Work* (effective May 1, 2021).

The *Policy on Requests for Relief for Missed Academic Term Work* (effective May 1, 2021),
will be reinstated effective May 1, 2022.

PREAMBLE

1. The University recognizes that students periodically require relief from academic work for medical or other personal situations. This Policy aims to manage these requests by taking into account the needs and obligations of students, instructors and administrators. It is the prerogative of the instructor of the course to determine the appropriate relief for missed term work in their course. Any concerns regarding the granting of relief should be directed to the respective [Faculty/Program Office](#).
2. Requests for relief should be made with a commitment to academic integrity in mind. Requests that deviate from this commitment will be handled under the [Academic Integrity Policy](#) and/or [Code of Student Rights and Responsibilities](#), where appropriate.

Exclusions

3. This Policy cannot be used:
 - a) for academic work that has already been completed or work that has been attempted (which includes the viewing and/or partial completion of on-line assessments (quizzes, tests, etc.);
 - b) to seek an accommodation to meet religious, Indigenous or Spiritual Observances (see the [Policy on Academic Accommodation for Religious, Indigenous and Spiritual Observances](#));
 - c) to seek an accommodation related to a permanent or temporary disability, or a retroactive accommodation (see the policy [Academic Accommodation of Students with Disabilities](#)); or
 - d) to apply for relief for any final examination or its equivalent (see [Petitions for Special Consideration](#) in the Undergraduate Calendar).

McMaster Student Absence Form (MSAF)

4. The McMaster Student Absence Form (MSAF) is a Mosaic tool that, for the purpose of this Policy:
 - a) is used to allow students to submit Self-Report (Type A) requests for relief; and
 - b) is used by Faculty/Program Offices for Administrative Report (Type B) requests to:
 - (i) manage requests for relief; and
 - (ii) communicate with students and instructors about these requests.
5. The MSAF is available in the [MOSAIC](#) Student Center (in the drop-down menu under OTHER ACADEMICS).

REQUESTS FOR RELIEF: SELF-REPORT (TYPE A) - FOR WINTER TERM 2022 ONLY

6. Self Report (Type A) requests for relief are for:
 - a) missed academic work worth less than 25% of the final grade, resulting from medical or personal situations lasting up to ~~three~~ five (5) calendar days.
7. Students are expected to use the MSAF tool to make Self Report (Type A) requests, which:
 - a) may only be submitted once per Term;
 - b) requires no supporting documentation; and
 - c) applies only to work that is due within the period for which the request applies, i.e. the 35-day period that is specified in the MSAF; however, all work due in that period can be covered by one request.
8. An email will be sent to the course instructor(s) to inform them of the request.
9. The instructor will determine the appropriate relief for the Self-Report (Type A) request.
10. Students must immediately follow up with their instructor(s) after submitting the Self-Report (Type A) request. Failure to do so may negate the opportunity for relief.

REQUESTS FOR RELIEF: ADMINISTRATIVE REPORT (TYPE B) - FOR WINTER TERM 2022 ONLY

11. Administrative Report (Type B) requests for relief are for:
 - a) medical or personal situations lasting more than ~~three~~ five (5) calendar days; and/or
 - b) missed academic work worth 25% or more of the final grade; and/or
 - c) any request for relief in a Term where the MSAF tool has been used previously in that Term.
12. Students must report to their [Faculty/Program Office](#) to discuss their situation and will be required to provide appropriate supporting documentation (see Documentation Requirements below).
13. If warranted, the Faculty/Program Office will process the relief request and will notify the instructor(s) and the student.
14. The instructor will determine the appropriate relief for these Administrative Report (Type B) requests.
15. Students must immediately follow up with their instructor(s) after being notified their request has been processed. Failure to do so may negate the opportunity for relief.

Documentation Requirements - FOR WINTER TERM 2022 ONLY

16. If the reason for a request for relief is medical, the approved McMaster University Medical Form covering the relevant dates must be submitted. The student must be seen by a health care practitioner at the earliest possible date, normally on or before the date of the missed work and the health care practitioner must verify the duration of the illness.
17. If the reason is non-medical, appropriate documentation with verifiable origin covering the relevant dates must be submitted, **normally within ~~three~~ five (5) business days**.
18. In some circumstances, students may be advised to submit a [Petition for Special Consideration](#).

Privacy

19. All personal information, including supporting documentation (e.g. personal health information) requested by the University to facilitate relief requests shall be handled in accordance with the [Freedom of Information and Protection of Privacy Act](#).

Briefing Memo

Date: January 19, 2022

From: Associate Vice-President Equity and Inclusion

To: Senate and Board of Governors

Cc: President, Provost, University Secretary and University Counsel

Re: Sexual Violence Policy Revisions

As the Responsible Executive for McMaster's [Sexual Violence Policy](#), I am bringing your attention to and seeking your approval for proposed revisions to this Policy to take effect by March 1, 2022, in accordance with a recent Provincial directive.

The Rational for Revisions

Following student advocacy and stakeholder consultation, [on September 16, 2021, the provincial government announced](#) Ontario Regulation 646/21 to amend [Ontario Regulation 131/16](#), which stipulate provisions for Sexual Violence at Colleges and Universities under the Ministry of Training, Colleges and Universities Act.

The two amendments enacted through O. Reg. 646/21 s. 1 (1) and (2) are below:

(1) Subsection 2 (1) of Ontario Regulation 131/16 is amended by striking out “and” at the end of clause (d) and by adding the following clause:

(d.1) informs students that if they, in good faith, report an incident of, or make a complaint about, sexual violence, they will not be subject to discipline or sanctions for violations of the college's or university's policies relating to drug or alcohol use at the time the alleged sexual violence occurred; and

(2) Subsection 2 (2) of the Regulation is amended by adding the following paragraph:

14. A statement that students who disclose their experience of sexual violence through reporting an incident of, making a complaint about, or accessing supports and services for sexual violence, will not be asked irrelevant questions during the investigation process by the college's or university's staff or investigators, including irrelevant questions relating to the student's sexual expression or past sexual history.

The Proposed Revisions to McMaster's Policy

McMaster's Commitment (s. 9 – s. 14) to trauma-informed practice guides the university's sexual violence response in a manner that is already aligned with the new trauma-informed directives.

However, to make the practices more explicit, codification of the Provincial directives in the Policy is recommended by inserting the following two new clauses as s. 11 and s. 12. after existing clause s. 10 in the Commitments section. This language has been updated following the discussion at Senate on January 12, 2022, and now adopts directly the language of the Ontario Regulation, with the following adjustments:

1. capitalization of some words to be consistent with the McMaster Sexual Violence Policy, and
2. slight re-wording, e.g., changing 'report an incident' to 'reports an incident'.

Proposed new language:

11. A student who, in good faith, reports an incident of, or makes a Complaint about, Sexual Violence, will not be subject to discipline or sanctions for violations of the university's policies relating to drug or alcohol use at the time the alleged Sexual Violence occurred.

12. A student who discloses their experience of Sexual Violence through reporting an incident of, making a Complaint about, or accessing supports and services for Sexual Violence, will not be asked irrelevant questions during the investigation process by the university's staff or investigators, including irrelevant questions relating to the student's sexual expression or past sexual history.

Please see the attached copy of the Sexual Violence Policy with the proposed new language inserted.

Motion:

that the Senate Executive Committee approve, on behalf of the Senate and for recommendation to the Board of Governors, the proposed revisions to the Sexual Violence Policy, effective February 7, 2022.

Complete Policy Title:
Sexual Violence Policy

Policy Number (if applicable):

Approved by:
Senate Executive /
Executive and Governance Committee of
the Board of Governors

Date of Most Recent Approval:
January 26, 2022 /
February 7, 2022
effective February 7, 2022

Date of Original Approval(s):
December 14, 2016 / December 15, 2016
effective January 1, 2017

Supersedes/Amends Policy dated:
December 11, 2019 / December 12, 2019
effective January 1, 2020
December 14, 2016 / December 15, 2016
effective January 1, 2017

Responsible Executive:
Associate Vice-President, Equity and
Inclusion

Policy Specific Enquiries:
[Equity and Inclusion Office](#)

Reviewed for Compliance (OHSA):
June 21, 2021

General Policy Enquiries:
[Policy \(University Secretariat\)](#)

Non-Substantive Revisions
June 21, 2021 – title change

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SECTION I: INTRODUCTION

PURPOSE

1. All members of the University Community ("Community Members" see clause 5 below) have a right to study, work, and live in an environment that is free of [Sexual Violence](#).
2. The purpose of this Policy is to:
 - a) articulate McMaster University's commitment to Sexual Violence prevention and response;
 - b) identify services and resources related to **Sexual Violence** that are available to all members of the McMaster University Community ("University Community"); and
 - c) explain the complaint and reporting options, supports, and accommodations that are available to all members of the University Community who experience Sexual Violence.

SCOPE

3. **Sexual Violence**¹ means any sexual act or act targeting a person's sexuality, gender identity or gender expression, whether the act is physical or psychological in nature, that is committed, threatened or attempted against a person without the person's [Consent](#), and includes [Sexual Assault](#), [Sexual Harassment](#), stalking, indecent exposure, voyeurism and sexual exploitation.
4. This Policy prohibits all forms of Sexual Violence:
 - a) acts of [Sexual Assault](#), which fall under the broad definition of Sexual Violence, are considered a violation of this Policy and its procedures below shall apply; and
 - b) acts of [Sexual Harassment](#), which fall under the broad definition of Sexual Violence, may be considered violations of the [Discrimination & Harassment Policy](#) and its procedures may apply.
5. The Policy applies to:
 - a) **all Members of the University Community** ("Community Members") include: students (graduate, undergraduate, and continuing education), staff, faculty, medical residents, volunteers, visitors (including visiting professors), and institutional administrators and officials representing McMaster University; and
 - b) **all University-related activities**, which are activities ([authorized](#) and [non-authorized](#)) where there is a clear nexus to the working or learning environment at the University (on and off University premises).
6. When allegations of Sexual Harassment are to be processed under the *Discrimination & Harassment Policy*, there may be circumstances where the allegations in a Complaint necessitate following the procedures under both this Policy and the *Discrimination & Harassment Policy*.
7. Where a Complaint is filed that involves behaviour prohibited by this Policy, as well as behaviour more appropriately dealt with under the *Discrimination & Harassment Policy*, the Complaint may be processed under the *Discrimination & Harassment Policy*, without compromising the Complainant's right to access the specialized supports available through the Sexual Violence Prevention and Response Office. However, any proceedings related to the Complaint will determine if there has been a violation of the *Discrimination &*

¹ [Ministry of Training, Colleges and Universities Act, R.S.O. 1990, c. M.19](#)

Harassment Policy, in addition to any findings related to this Policy. The decision regarding which policy or policies are most appropriate will be made by the University.

8. Unless otherwise specified in this Policy, the Policy and its provisions apply where the University has the jurisdiction to pursue, adjudicate, or take steps to safeguard the University community.

MCMASTER'S COMMITMENT

9. Notwithstanding the limits of confidentiality, described below, the University recognizes that enabling confidential disclosures of experiences of Sexual Violence enhances individual and community safety. The University is committed to creating an environment in which Community Members feel able to disclose experiences of Sexual Violence and access support, accommodations and information on complaint and reporting options under the [Sexual Violence Response Protocol](#).
10. The University recognizes that making a [Disclosure](#), filing a [Complaint](#), or being the focus of allegations of Sexual Violence may be difficult. The University is committed to ensuring that all individuals making disclosures or who are parties to a complaint, be they [Complainants](#) or [Respondents](#), will be treated with dignity and respect, will be guaranteed due process and procedural fairness, will be afforded privacy and confidentiality within its reasonable limits, and will have access to appropriate support and assistance throughout.
11. A student who, in good faith, reports an incident of, or makes a Complaint about, Sexual Violence, will not be subject to discipline or sanctions for violations of the university's policies relating to drug or alcohol use at the time the alleged Sexual Violence occurred.
12. A student who discloses their experience of Sexual Violence through reporting an incident of, making a Complaint about, or accessing supports and services for Sexual Violence, will not be asked irrelevant questions during the investigation process by the university's staff or investigators, including irrelevant questions relating to the ~~individual~~ student's sexual expression or past sexual history.
13. When a University complaint process is initiated, the University is committed to providing an intake, investigation, and adjudication process that is trauma-informed, timely, and follows the principles of procedural fairness.
14. The University is committed to addressing Sexual Violence in a manner that is informed by current knowledge, scholarship and best practices in understanding how Sexual Violence intersects with other forms of violence and social inequities.
15. The University recognizes that the experience of Sexual Violence can be traumatic, having negative immediate and/or longer-term effects on an individual's physical, mental, emotional, spiritual, and social health and wellbeing. The University is committed to providing appropriate trauma-informed support, accommodations, resources and referrals.
16. The University recognizes that socially marginalized individuals (on the basis of factors such as race, disability, Indigeneity, sexual orientation, gender identity and gender expression, religion, spirituality, age, citizenship and socio-economic status) experience disproportionately higher incidences of sexual and other forms of violence. The University is committed to ensuring culturally respectful and relevant supports and services that are attuned to systemic social inequities. The University recognizes that individuals from diverse communities who face systemic barriers and discrimination may be reluctant to disclose Sexual

Violence to institutional authorities. The University is committed to examining and eliminating individual bias and institutional barriers in the organization and delivery of its services and supports.

POLICY REVIEW

17. The Policy will be reviewed annually for compliance with the *Occupational Health & Safety Act*. The Policy will be reviewed every three years in accordance with the *Sexual Violence and Harassment Plan Act* in a process inclusive of input from students, key University constituencies, women's organizations and other community partners with expertise in Sexual Violence.
18. Student participation in the three-yearly policy review process will be coordinated by the [Equity and Inclusion Office](#) in collaboration with the McMaster Student Union, and the McMaster Graduate Student Association, and will include a diverse cross-section of campus partners with experience and expertise related to Sexual Violence prevention and response.

TERMS AND DEFINITIONS

19. A full glossary of terms and definitions may be found in [Appendix A](#).
20. 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) Directors, members of the Administration, and Decision-Makers in this Policy may, where appropriate, delegate their authority;
 - c) **AVP Equity and Inclusion** means the Associate Vice-President, Equity and Inclusion;
 - d) **Chief Human Resources Officer** means the Assistant Vice-President & Chief Human Resources Officer;
 - e) **Dean of Students** means the Associate Vice-President (Students and Learning) and Dean of Students;
 - f) **Director (ELR)** means the Executive Director, Employee & Labour Relations;
 - g) **Director (HRDR)** means the Director, Human Rights & Dispute Resolution Program;
 - h) **Director (SVPRO)** means the Director, Sexual Violence Prevention and Response Office;
 - i) **Director (SSCM)** means the Director, Student Support & Case Management Office;
 - j) **Hearing Procedures** means the Hearing Procedures for the Board-Senate Hearing Panel for Discrimination, Harassment, and Sexual Violence;
 - k) **Provost** means the Provost and Vice-President (Academic);
 - l) **Tenure and Promotion Policy** means the McMaster University Revised Policy and Regulations with Respect to Academic Appointment, Tenure and Promotion; and
 - m) **Security Services** means McMaster University Security and Parking Services.

SECTION II: OPTIONS AND SUPPORTS

OPTIONS

21. Community Members who believe there has been a violation of the Policy have a number of options available to them: **Disclosure, Reporting** (under the Policy and includes filing a Complaint, and/or Voluntary Resolution), making a **Criminal Report**, or **Other External Options**.
22. Prior to pursuing one of the options below, [Community Members](#) should read [Section III: Confidentiality](#). It is important to be aware that, **depending on the circumstances and nature of the incident disclosed**, the University may be obliged to:
 - a) conduct a triage of violence risk;
 - b) initiate a University-led Investigation of the incident regardless of whether or not the individual making the disclosure chooses to participate in the process; and/or
 - c) notify Hamilton Police Services of the allegation and name of the individual who is the subject of the allegation and/or contact other relevant agencies to fulfill legal obligations.
23. Individuals are encouraged to consult with the Director (SVPRO), who will provide holistic support for disclosures, assistance with requests for accommodation, and advice on options, at any point in time, regardless of how the individual chooses to proceed.
24. While encouraged to contact the [Director \(SVPRO\)](#) for disclosure support, complaint intake, and reporting options, Community Members who experience Sexual Violence may choose to contact any one of the [Intake Offices](#) to make a Complaint pursuant to the Sexual Violence Policy.
25. Disclosing an experience of Sexual Violence is a separate decision from making a report. Each decision will result in different levels of University involvement and action.

DISCLOSURE

26. A Disclosure is made when an individual informs a Community Member about an experience of Sexual Violence because they wish to access support, accommodations and/or information about their options, under the [Sexual Violence Response Protocol](#).

REPORTING

27. A Report occurs when an individual determines that they wish to pursue an official Complaint through one or more of the following avenues: a Complaint to the University under this Policy, Voluntary Resolution under this Policy, a Criminal Report through the justice system, or other reporting options external to this Policy. Reporting options are not mutually exclusive.
28. Individuals who file a Report may ultimately be required to attend/participate in a hearing, either internal to the University, or external through arbitration, or criminal court, etc.

Complaint

29. A Complaint is made when an individual submits an Incident Report to their Supervisor, or a written statement of [Complaint](#) to the Director (SVPRO) or an Intake Office making an allegation of Sexual Violence because they wish to initiate a formal University process, which may require an Investigation into the allegations and finding of facts.

Voluntary Resolution

30. In certain circumstances, a Complainant and Respondent may be interested in attempting a resolution of a Complaint at any time before the completion of an Investigation.
31. The following conditions must be present before considering if Voluntary Resolution is a viable option:
- a) the University is able to meet its responsibilities pursuant to the *Occupational Health & Safety Act*; and
 - b) the Complainant and the Respondent both agree to:
 - (i) attempt to reach a resolution in good faith;
 - (ii) the methods to be used to seek resolution; and
 - (iii) the terms of what would constitute resolution.
32. A meeting between the Complainant and the Respondent will **not** be a requirement for Voluntary Resolution.
33. A Voluntary Resolution may be facilitated by an [Intake Office](#), and the methods may include fact-finding discussions, clarification of the issues, facilitated conversations, mediation, coaching, voluntary no contact agreements, reconciliation, restoration processes, workplace restoration processes.

CRIMINAL REPORT

34. A Criminal Report is made when an individual files a report of Sexual Violence with a police service or with [Security Services](#). Filing a Criminal Report with Security Services will result in a report to [Hamilton Police Service](#).

OTHER EXTERNAL OPTIONS

35. Individuals may exercise other University options external to this Policy (e.g. the grievance provisions of applicable collective agreements) or other options external to the University (e.g. through civil litigation or *Ontario Human Rights Code* provisions).

OPTIONS CHART

Central Sexual Violence Complaint Intake Office

[Sexual Violence Prevention and Response Office](#), Equity and Inclusion Office (All Community Members)

Additional Complaint Intake Offices

[Human Rights & Dispute Resolution Program](#), Equity and Inclusion Office (All Community Members)

[Student Support & Case Management Office \(SSCM\)](#), Student Affairs (Students)

[Employee and Labour Relations \(ELR\)](#), Human Resources Services (Faculty and Staff members)

[Faculty of Health Sciences \(FHS\) Professionalism Office](#) (FHS Community Members)

DISCLOSURE

Informing someone in the University community about an experience of Sexual Violence because they wish to access support, accommodations and/or information about their options.

CRIMINAL REPORT

When an individual files a report of Sexual Assault with a police service or with [Security Services](#). Filing a report with Security Services will result in a report to Hamilton Police Services.

COMPLAINT

A Complaint can be initiated through completion of an Incident Report submitted to a Supervisor, or through submitting a written Complaint with the [Sexual Violence Prevention and Response Office](#) or through one of the Intake Offices (listed above) making an allegation of Sexual Violence because they wish to initiate a University process, which may require an investigation and finding of facts.

OTHER EXTERNAL OPTIONS

Options external to the University (e.g. civil litigation or Ontario Human Rights Code provisions) or other options external to this Policy (e.g. grievance provisions of applicable collective agreements)

VOLUNTARY RESOLUTION

Attempting a resolution of a Complaint at any time *before* the completion of an Investigation.

SECTION III: CONFIDENTIALITY

CONFIDENTIALITY (LIMITATIONS)

36. The University recognizes the importance of confidentiality both for individuals coming forward to Disclose or Report an experience of Sexual Violence and for individuals who are the subject of a Complaint, and will take steps to protect the confidentiality of both parties to the extent permitted by its legal obligations outlined below.
37. The University and its employees and agents will protect personal information and handle records in accordance with the *Freedom of Information and Protection of Privacy Act* and the *Personal Health Information Protection Act*, where applicable in the circumstances, with the provisions of applicable collective agreements and, in the case of health care providers, in keeping with any professional obligations.
38. When making a Disclosure or Report to any University office, individuals shall receive clear and transparent information about the level of, and limits to, confidentiality that apply.
39. The University recognizes that confidentiality is a crucial consideration in creating an environment in which individuals feel able to [Disclose](#) incidents of [Sexual Violence](#) and to access [Support](#), [Accommodations](#), and information. The University will share identifying information only in circumstances where it is necessary in order to administer this Policy, to address safety concerns, or to satisfy a legal reporting requirement. In such circumstances, the minimum amount of information needed to allow such concerns to be addressed, or to meet such requirements, will be disclosed. Such circumstances include those where:
 - a) an individual is at risk of harm to self;
 - b) an individual is at risk of harming others;
 - c) there are reasonable grounds to be concerned about risk of future violence or the safety of the University and/or broader community;
 - d) disclosure is required by law, for instance, suspected abuse of someone under the age of 16, reports of intimate partner/domestic violence, or to comply with legislation, such as the *Occupational Health and Safety Act* the *Workplace Safety and Insurance Act*, or with human rights legislation; and/or
 - e) to comply with the reporting requirements of regulatory bodies and/or professional licensing bodies.
40. Where there are reasonable grounds to be concerned about risk of future violence or the safety of the broader community or the public, or where the University is otherwise obligated to do so, the University may report the incident to Hamilton Police Services. In these situations:
 - a) the relevant [Decision-Maker](#) will be responsible for making the decision to disclose information to Hamilton Police Services;
 - b) the name of the Respondent, if known, will be shared; and
 - c) the name of the Complainant will not be shared without their consent, unless doing so would address a reporting obligation or mitigate a safety risk.

41. Some offices and Community Members have additional limitations to confidentiality because of their particular reporting requirements or professional obligations. For example:
 - a) all regulated health professionals are obligated to report suspected sexual abuse of a patient by a regulated health professional to that professional's governing body if this information is acquired during the course of their practice; and
 - b) Special Constables in [Security Services](#) are required to investigate reports of abuse of someone under the age of 16 and reports of intimate partner/domestic violence and to lay charges in all cases when there are reasonable grounds to believe a criminal offence has been committed, regardless of whether the target of the violence wishes to have further involvement with the legal process.
42. As part of the University's responsibility to maintain an environment free from Sexual Violence, information may be shared on a need-to-know basis.
43. Procedural limits to confidentiality may also occur if the University is subject to legal proceedings that, in the opinion of the Provost or the Vice-President (Operations and Finance), require the disclosure of information.
44. The importance of preserving the confidentiality of Complaints and any related proceedings will be explained to all parties as a necessary measure to protect the integrity of the proceedings.

SECTION IV: PROCEDURAL GUIDELINES

ADVISOR / SUPPORT PERSON

45. An Individual who is a party to a Complaint may be accompanied by an [Advisor](#), a [Support Person](#) or legal counsel at any stage of any of the procedures outlined in this Policy. Any costs of accompaniment or representation are to be borne by the individual.

TIME LIMITATIONS FOR BRINGING FORWARD A COMPLAINT

46. There are no time limitations on bringing forward a [Complaint](#). However, individuals are encouraged to report a Complaint at the earliest opportunity, as the longer the time lapse between the incident and the Complaint, the more difficult it becomes to investigate effectively. Once a Complaint is received, it will be dealt with as expeditiously as possible.

REPRISAL

47. The University prohibits reprisal or threats of reprisal against any person who, sincerely and in good faith, makes use of this Policy or participates in any process held under its jurisdiction. Any individual who is concerned that they are the subject of reprisals or threats should report their concerns to an Intake Office. Where appropriate, sanctions under the relevant policy (including this Policy, [Discrimination & Harassment Policy](#), and/or the [Code of Student Rights and Responsibilities](#)) legislation or contract, may be applied against the individual(s) responsible for the reprisal.

INTERIM MEASURES AND ONGOING SUPPORT OF ALL PARTIES

48. At any stage in proceedings under this Policy it may be necessary to take Interim Measures in order to safeguard the environment of Community Members who are involved or may be affected. Interim Measures shall not be construed as evidence of either guilt or a finding of violation of this Policy, or as an affirmation of innocence/finding of non-violation of this Policy.
49. The authority to approve Interim Measures will rest with the relevant [Decision-Maker](#) in line with the Respondent's reporting structure.
50. Interim Measures will be reviewed on an ongoing basis by the Director of the appropriate [Intake Office](#) throughout the process to ensure the measures remain necessary and appropriate in the circumstances. Interim Measures are temporary and do not extend beyond the final resolution of a Complaint.
51. Interim Measures may include, but are not limited to, the rearrangement of academic/employment responsibilities or oversight, an administrative leave of absence, the rearrangement of residence location (where possible), adjustments in University activities (e.g. attendance at guest lectures, social events), issuance of a no contact order, or implementation of a [persona non grata](#) declaration.
52. In the event an [Employee](#) is directed to take an administrative leave as an Interim Measure, the conditions of the administrative leave shall accord with the terms of any applicable collective agreement. In the absence of an applicable collective agreement (e.g. where the employee is faculty or The Management Group (TMG)), the leave shall be without loss of pay or benefits. It is understood that an administrative leave as an Interim Measure is non-disciplinary and is designed to separate a person from a situation or another

person until the matter has been resolved. During such period, the person can continue to access relevant University [Support Services](#).

53. Should an Investigation extend beyond six months, there will be a full review by the [Response Team](#) in consultation with the Decision-Maker to assess progress, to consider fairness to all parties, thoroughness, timeliness, and confidentiality, and to consider any necessary next steps.

DATA GATHERING & RECORD KEEPING

54. The [Director \(SVPRO\)](#) is responsible for: maintaining and reporting data relating to Sexual Violence consultations and disclosures as well as prevention education and response training initiatives and programs.
55. The [Equity and Inclusion Office](#) is responsible for collecting and reporting annual anonymized, aggregate data on Consultations, Disclosures, Complaints, Investigations, and all Outcomes and Sanctions, to the Senate and the Board of Governors.
56. Data for the annual report is collected and maintained by the Equity and Inclusion Office and includes data collected from the Sexual Violence Prevention and Response Office, the Human Rights and Dispute Resolution Program, Employee & Labour Relations, the Student Support & Case Management Office, the Faculty of Health Sciences Professionalism Office, and Security Services. The purpose of the annual report is to inform education and training initiatives.
57. In developing the annual report, the utmost care will be taken to ensure that individuals' identities remain confidential and that data gathering does not discourage individuals who wish to disclose from coming forward.
58. All notes, materials, Investigation reports, and decisions, pertaining to Complaints will be kept by the relevant Intake Office for seven years. These records may be retained longer, subject to the discretion of the appropriate Director.

SECTION V: ROLES AND RESPONSIBILITIES

SENIOR ADMINISTRATION

59. The Senior Administration has overarching responsibility for maintaining a University environment in which Sexual Violence is unacceptable, for providing the resources required to support such an environment, and for ensuring the timely development and review of relevant policies through Senate and Board of Governors procedures.
60. In addition, the Senior Administration is responsible for enabling Community Members to function with the highest standards of integrity, accountability, and responsibility. Activities may include disseminating information about the University's expectations and providing education to all Community Members on issues related to Sexual Violence.

ASSOCIATE VICE-PRESIDENT, EQUITY AND INCLUSION

61. The [AVP Equity and Inclusion](#) oversees the Equity and Inclusion Office, which houses the Sexual Violence Prevention and Response Program and the Human Rights and Dispute Resolution Program, both of which play roles in campus sexual violence prevention and response.
62. The AVP Equity and Inclusion is accountable for leading a coordinated campus sexual violence prevention and response effort in collaboration with campus partners, including convening a working group, representative of McMaster's diverse student, faculty and staff populations, to advise on the effectiveness of campus sexual violence prevention and response efforts.

DIRECTOR, SEXUAL VIOLENCE PREVENTION AND RESPONSE OFFICE

63. The [Director \(SVPRO\)](#), is responsible for establishing the Office as a central University resource for any Community Member who has experienced any form of Sexual Violence, including sexual assault, sexual harassment, and intimate partner violence, or any Community Member seeking information or consultation on issues related to trauma-informed response and support or prevention education and response training.

Inclusive, Trauma-Informed Response and Support

64. Community Members who Disclose an experience of Sexual Violence to a member of the Sexual Violence Prevention and Response Office, can expect that the Office will:
 - a) provide trauma-informed response and support;
 - b) consider safety measures that may be necessary;
 - c) make a referral for medical services as needed;
 - d) actively and empathically listen to individual needs and concerns without judgment;
 - e) share reporting options available;
 - f) clarify commitments to Confidentiality and its Limits;
 - g) explain the difference between Disclosure and Reporting;
 - h) make a referral to police if the individual chooses that option;
 - i) conduct a Complaint intake if the individual chooses that option;
 - j) assist the individual to navigate any relevant University systems and procedures;

- k) facilitate workplace, academic, and/or residence accommodations;
 - l) consider differing cultural needs and offer/refer to culturally relevant supports;
 - m) provide information about and referral to campus and community services;
 - n) liaise with relevant partners to ensure coordinated response and support; and
 - o) facilitate ongoing assessment, planning and case management.
65. The Director (SVPRO) is responsible for providing guidance to Community Members who consult on Disclosures they receive, providing information on how to support the individual and facilitate a referral, and assessing whether the limits of confidentiality apply.

Prevention Education and Response Training

66. The [Director \(SVPRO\)](#) is responsible for overseeing a prevention education and training response program, including:
- a) promoting the [Health & Safety Training](#) Program's *Violence & Harassment Prevention* training that is coordinated by Environmental & Occupational Health Support Services;
 - b) educational initiatives for the campus community that are attuned to the broader social context in which Sexual Violence occurs and includes topics such as: addressing sexual violence myths and misconceptions, promoting healthy masculinity, creating a culture of consent; and
 - c) training initiatives for frontline campus community and student-facing service providers, and for those with particular responsibilities related to this Policy, that integrate an intersectional anti-oppressive trauma-informed analysis of Sexual Violence. Training will include skill-building related to receiving Disclosures and providing appropriate support and referral to University and external resources for community members.
67. The University Secretary, in consultation with the Director (SVPRO) will ensure that the members of the [Board-Senate Hearing Panel for Discrimination, Harassment, and Sexual Violence](#) receive appropriate education and training on Sexual Violence.

INTAKE OFFICES

68. While encouraged to contact the Director (SVPRO) for disclosure support, complaint intake, and reporting options, Community Members who experience Sexual Violence may alternatively choose to file an incident report with their Supervisor (in the case of staff) or make a Complaint to one of the following Intake Offices:
- a) [Human Rights & Dispute Resolution Program \(HRDR\)](#), Equity and Inclusion Office (All Community Members)
 - b) [Student Support & Case Management Office \(SSCM\)](#), Student Affairs (Students)
 - c) [Employee and Labour Relations \(ELR\)](#), Human Resources Services (Faculty and Staff members)
 - d) [Faculty of Health Sciences \(FHS\) Professionalism Office](#) (FHS Community Members)
69. Intake Coordinators are responsible for ensuring the Complainant fully understands the procedures of the Policy and what may result from the decision to file a Complaint, and for consulting with the Director (SVPRO) to ensure a trauma-informed and intersectional approach.

70. The statement of Complaint will be reviewed by the respective Intake Office [Director](#), in consultation with the [Director \(HRDR\)](#), to determine the applicability of this Policy, the *Discrimination & Harassment Policy*, and/or other University policies.
71. The Director of the relevant Intake Office will review any Interim Measures on an ongoing basis throughout the process to ensure they remain necessary and appropriate in the circumstances.

DIRECTOR, HUMAN RIGHTS & DISPUTE RESOLUTION

72. The [Director \(HRDR\)](#) is responsible for assessing every Complaint received and making a determination as to the applicability of the Sexual Violence Policy, the *Discrimination & Harassment Policy*, or other University policies, in consultation with the [Director \(SVPRO\)](#) and with the respective Director(s) of the relevant Intake Offices(s). The Director (HRDR) is responsible for activating the Response Team, as required.
73. The Director (HRDR) is responsible for working in close partnership with individuals and offices involved in administering this Policy, including but not limited to: the Response Team, Investigators, Intake Offices, Decision-Makers, Senior Administrators, the University Secretariat, and University Counsel, to ensure the effective administration of this Policy and the *Discrimination & Harassment Policy*.
74. The Director (HRDR) will, in collaboration with the Director (SVPRO) and other relevant Intake Office Directors, consider [Interim Measures](#) as they relate to the parties involved in the matter and recommend them to the relevant Decision-Maker; recommend and/or facilitate any further safety planning and accommodations; and consider other University responses that may be necessary.

RESPONSE TEAM

75. The Response Team is activated by the [Director \(HRDR\)](#), where a case potentially presents community risk and/or requires consultation with multiple partners for a coordinated response.
76. The Response Team will be chaired by the Director (HRDR) and will include the Director (SVPRO), as a consultant, and, as appropriate in the circumstances, the Directors of other relevant campus partners.
77. As necessary the Director (HRDR) may draw upon representatives of other key services and/or departments (e.g. Director of Housing and Conference Services, Director of the Student Wellness Centre, etc.), disclosing identities only on a need-to-know basis in order to appropriately respond to the matter.
78. When the allegations include the potential for an ongoing/further risk of violence, the Director (HRDR) may, on behalf of the Response Team, consult with the Director of Security Services, disclosing identities on a need-to know basis.

INVESTIGATORS

79. All Investigators, whether internal or external to the University, will have training and expertise in the area of Sexual Violence and in using an intersectional, anti-oppressive, trauma-informed approach to investigation processes. Investigators will follow the mandate and scope of the Investigation as determined by the University.

DECISION-MAKERS FOR INTAKE AND INVESTIGATIONS

80. The Decision-Makers are, as applicable, the:
 - a) Assistant Vice President & Chief Human Resources Officer for staff Respondents;
 - b) Associate Vice-President (Students and Learning) & Dean of Students for student Respondents;
 - c) Provost and Vice-President (Academic) for faculty Respondents; and
 - d) Executive Vice-Dean & Associate Vice-President (Academic) for faculty Respondents in the Faculty of Health Sciences.
81. More than one Decision-Maker may be involved in cases where a Respondent has more than one type of relationship with the University (such as a student who also holds a staff appointment).
82. When the Respondent is a Community Member but is not currently a student, staff, or faculty member, the Investigation report will be reviewed by the Decision-Maker related to the Respondent's area of activity at the University.
83. Decision-Makers are responsible for reviewing and responding to Investigation Reports (see [Investigation Procedures](#)), and authorizing appropriate Interim Measures.
84. When the line of authority is unclear, the Provost or the Vice-President (Operations and Finance), as appropriate, will determine the appropriate individual in the line of authority.
85. Should there be a conflict of interest with a Decision-Maker, the appropriate Vice-President shall assume the responsibilities of the Decision-Maker. Similarly, if that Vice-President is in a conflict then another Vice-President or the President shall act.
86. Decision-Makers are responsible for determining whether Hamilton Police Services need to be notified and for authorizing that notification, as specified in clauses 38 - 39.

SECURITY SERVICES SPECIAL CONSTABLES

87. All Special Constables will receive training on intersectional, anti-oppressive, and trauma-informed response to Disclosures and Reports of Sexual Violence.
88. [Security Services](#) will respond to Community Member Disclosures and Reports, as follows:
 - a) if the Community Member elects only to make a Disclosure or a Complaint under this Policy, Security Services will record the matter in their internal reports, refer the person to the [Director \(SVPRO\)](#) and will then take no further action (subject to clause 39);
 - b) if the Community Member elects to make a Criminal Report, Security Services will report the incident to Hamilton Police Services, liaise with the person and police, and refer the individual to the Director (SVPRO) for ongoing support, accommodations that may be required, and for assessing whether the limits of confidentiality apply and a response may be required by the University.
89. Security Services will investigate all reports of Sexual Assault that:
 - a) originate from a call received by a Special Constable to attend the scene of a reported Sexual Assault;

- b) result from a Complainant electing to make a Criminal Report of Sexual Assault to a Special Constable; and/or
- c) arise from a Special Constable observing, disrupting or arresting an individual in the act of committing a Sexual Assault.

SUPERVISORS

90. Within the University Community it is recognized that there are various types of supervisors: [Academic Supervisors](#), [Academic Administrators](#), and [Workplace Supervisors](#). All such supervisors are responsible for:
- a) modeling acceptable standards of behavior;
 - b) supporting any employee or student who, in good faith, reports a potential violation of the Policy;
 - c) contacting one of the Intake Offices for guidance and advice to address the matter as appropriate in the circumstances, and cooperating with Intake Offices during Investigations, and/or in the implementation of Interim Measures, and/or sanctions; and
 - d) completing all required training and ensuring that the people they are supervising are trained appropriately on the Policy and [RMM 300 Health and Safety Training Program](#).

EMPLOYEES

91. [Employees](#) are required to complete initial and periodic refresher training in Violence and Harassment Prevention, in accordance with the [Health & Safety Training Program](#).
92. Employees have additional legal obligations when they become aware of incidents of [Workplace Harassment](#) and [Workplace Violence](#) as follows:
- a) in accordance with the *Occupational Health and Safety Act*, all employees of the University must report any incident of Workplace Harassment and/or Workplace Violence, which includes Sexual Violence, to their Supervisor or to an Intake Office. Any immediate or urgent incidents should also be reported to [Security Services](#).
 - b) Workplace Supervisors must take every reasonable precaution to protect the safety of an employee. Supervisors are expected to follow the *Sexual Violence Response Protocol*, and to consult with either the [Director \(SVPRO\)](#) or [Employee and Labour Relations \(ELR\)](#) office when they receive a Disclosure, receive an incident report of Sexual Violence, or otherwise become aware of an incident of Sexual Violence in the workplace. Any immediate or urgent incidents should be reported to Security Services.

COMMUNITY MEMBERS

93. All [Community Members](#) are responsible for contributing to an environment that is free of Sexual Violence, and for participating in relevant education and training programs.
94. All Community Members are expected to be familiar with the [Sexual Violence Response Protocol](#), and to act in accordance with the guidelines provided for supporting an individual who makes a Disclosure.

SECTION VI: INVESTIGATIONS

INTAKE AND INITIATION OF COMPLAINTS

95. If an individual wishes to file a [Complaint](#) of Sexual Violence for the University to address, they are encouraged to contact the [Director \(SVPRO\)](#) in the central **Sexual Violence Prevention and Response Office** for disclosure support, complaint intake, and reporting options; however, individuals may alternatively choose to file an Incident Report with their Supervisor or contact an Intake Coordinator in any one of the [Intake Offices](#) (refer to page 6).
96. Any Community Member who is the subject of an allegation under the Policy will be assisted by the Director (SVPRO) or another Intake Office Director who will ensure that they receive support and guidance and are in receipt of relevant information, services and supports relating to the Policy.
97. The Director (SVPRO) and all Intake Coordinators are responsible for:
 - a) ensuring that Complainants are aware of the options available to them in seeking a response;
 - b) assisting Complainants in understanding what may be involved in, and what may result from, each of the options; and
 - c) assisting a Complainant who wishes to move forward with completing a **Complaint Intake Form**, which includes a description of: what happened; who was involved in the incident; when and where the incident occurred; who (if anyone) saw or heard the incident, or saw or heard something of relevance prior to or after the alleged incident(s) of Sexual Violence;
 - d) individuals who contact an Intake Office and wish to file a Criminal Report will be assisted with contacting [Security Services](#) in order to file the report.
98. All Complaint Intake Forms are sent to the [Director \(HRDR\)](#), who will review and assess the Complaint, in consultation with the [Director \(SVPRO\)](#) and relevant Intake Office Director(s) on an immediate and priority basis in order to, as appropriate:
 - a) confirm that it fits within the scope of the Policy;
 - b) consider requirements pursuant to the *Occupational Health and Safety Act*;
 - c) consider whether the parties are interested in voluntary resolution, and whether it is feasible/appropriate in the circumstances;
 - d) determine if an Investigation is required, and, if so, set parameters accordingly, in consultation with the appropriate Decision-Maker (including, for example, which University office will be involved; internal or external investigator; timelines, mandate and scope for the Investigation);
 - e) convene, at their discretion, the [Response Team](#), to provide consultation;
 - f) consider and coordinate appropriate Accommodations and/or Interim Measures as they relate to all parties involved in the matter; and
 - g) as necessary, draw upon representatives of relevant services or departments in order to appropriately respond to the matter.
99. At any time during proceedings under this Policy, the Response Team, when convened, may determine it is necessary to disclose identities on a need-to know basis in order to administer the Policy.

Decision to Not Investigate

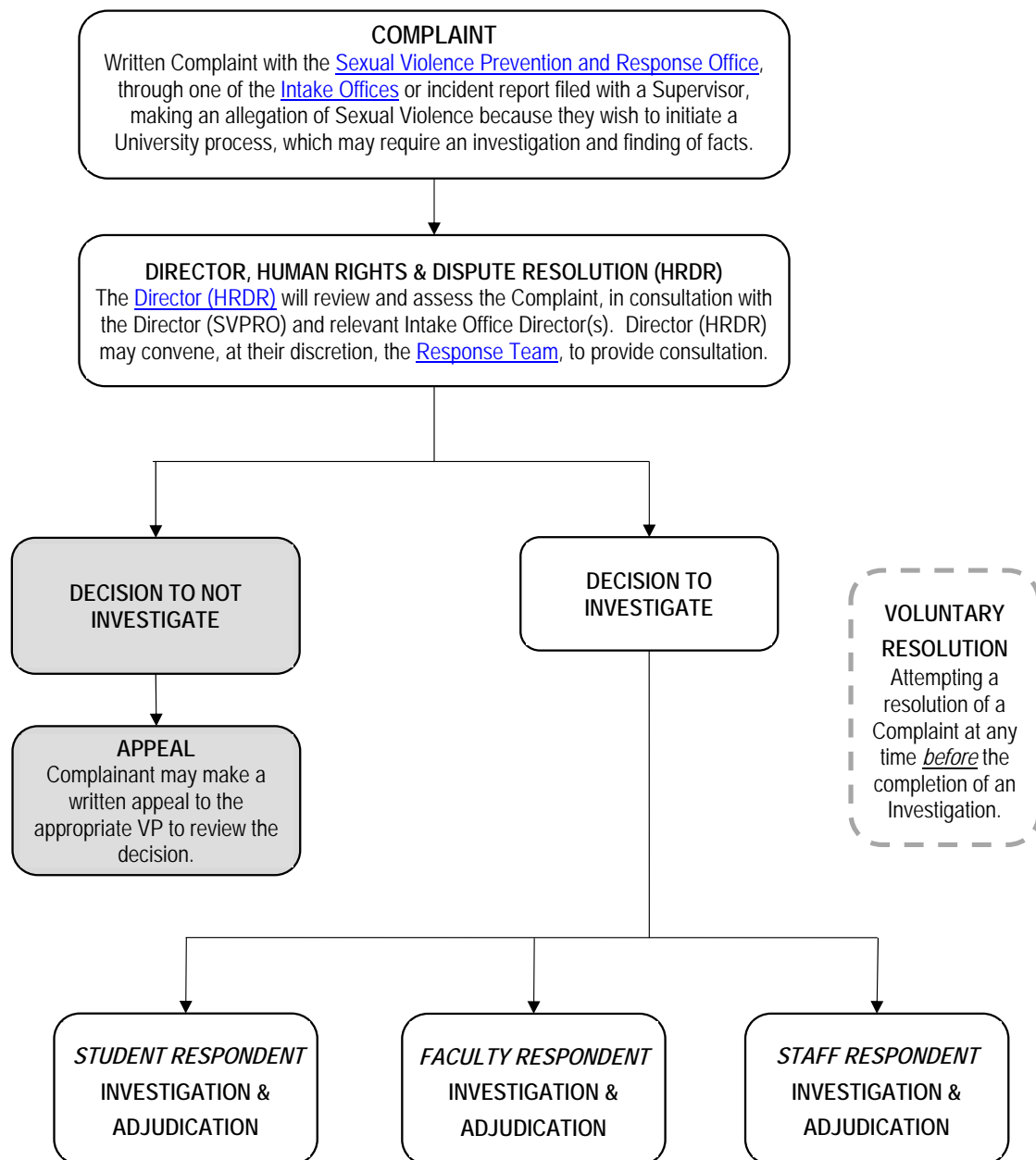
100. In some circumstances a decision may be made to not investigate. The decision will be communicated in writing, with reasons, to the Complainant by the relevant Decision-Maker. The Complainant will be informed of their right to make a written request for review of the decision to the Vice-President to whom the Decision-Maker reports.

UNIVERSITY INITIATED INVESTIGATION

101. The University may become aware of situations where a University-initiated Investigation may be warranted, including, but not limited to circumstances where:
- a) allegations are made about the conduct of a Community Member by an individual who is not, or is no longer, a Community Member;
 - b) one or more individuals disclose experiences of Sexual Violence involving one individual or multiple individuals within a group/organizational environment;
 - c) the University has a duty to investigate pursuant to the *Occupational Health and Safety Act*;
 - d) the power differential in the alleged incident indicates the potential for a pattern of repeated Sexual Violence; and/or
 - e) situations reveal broader issues to be addressed, including concerns for a Poisoned Environment.
102. The Director (HRDR), in collaboration with the appropriate Intake Office Director(s), will consult with the appropriate Decision-Maker(s) to determine whether an Investigation is warranted, on the basis of both the circumstances and nature of the allegations.
103. Individuals have the right not to participate as a Complainant in any University-Initiated Investigation that may occur.

INVESTIGATION PROCEDURES

104. Respondents have the right to know the case against them, and to produce any relevant documentation, evidence, or other information, and identify witnesses to the Investigator in response to any allegations.
105. The Investigator will impartially collect evidence and interview those witnesses they deem relevant in relation to the Complaint. The Investigator may request that the appropriate authority at the University adjust the scope and the manner in which the Investigation will be conducted in order to ensure a thorough and fair investigation process.
106. All Community Members are expected to meet with the Investigator if requested to do so and to participate in good faith.
107. Complainants and Respondents have the option of being accompanied by a Support Person or Advisor.
108. All those who meet with an Investigator are required to keep confidential the Investigation and any information shared, to ensure the integrity of the proceedings. Failure to do so could be considered a breach of privacy and could be subject to a sanction under the relevant University policy.
109. An individual who was not previously identified as a Respondent but who, during the course of an Investigation, is identified as a potential Respondent (by the Investigator and with the approval of the University) will be notified and given an opportunity to meet with the Investigator and to respond to any allegations.



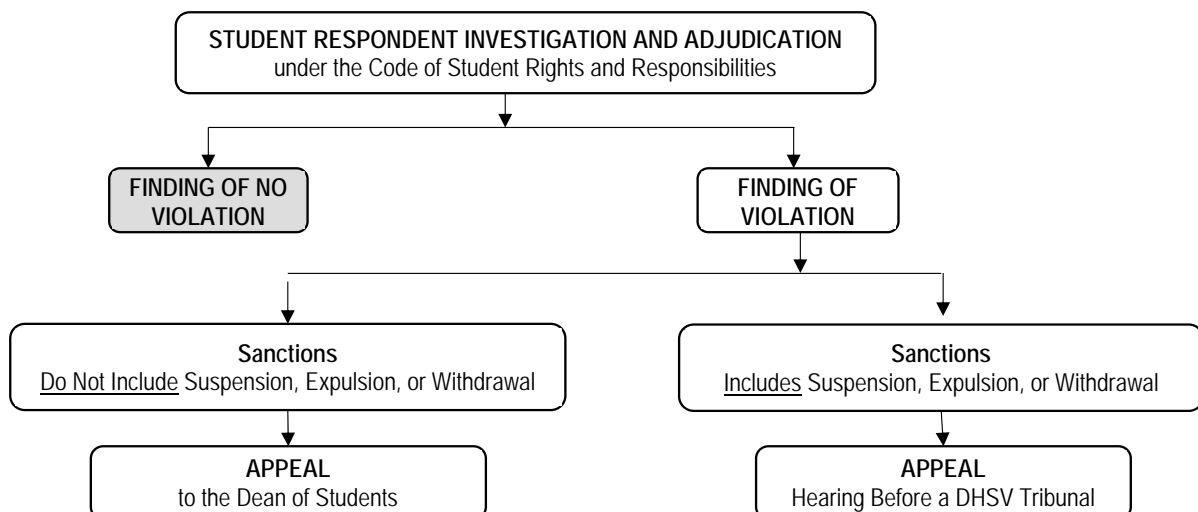
SECTION VII: ADJUDICATION AND DECISIONS

ADJUDICATION

110. Decision-Makers shall decide, on a balance of probabilities, whether the alleged Violation of the Policy has occurred.
111. Where a Respondent has more than one type of relationship with the University (such as a student who also holds a staff appointment) the relevant Decision-Makers may decide to adjudicate the matter jointly and any sanctions and remedies may be administered under one or both of the processes relevant to the Respondent's status.

STUDENT RESPONDENT

112. The Investigation Report will be provided to the [Director \(SCCM\)](#) or [Dean of Students](#) as appropriate, to consider and decide upon the findings and recommendations contained in the report and adjudicate the outcome.
113. Sanctions and remedies will be processed in accordance with the procedures in the [Code of Student Rights and Responsibilities](#) ("the Code").
114. In matters where the sanctions **do not include** suspension, expulsion, or withdrawal (voluntary or involuntary), the Respondent may appeal the outcome to the Dean of Students. When the Decision-Maker is the Dean of Students, the appeal will be to the Provost.
115. In matters where the sanctions **include** a suspension, expulsion, or withdrawal (voluntary or involuntary), the Respondent may appeal the decision made by the Dean of Students to the Board-Senate Hearing Panel for Discrimination, Harassment, and Sexual Violence. (see [Hearing Procedures](#)).

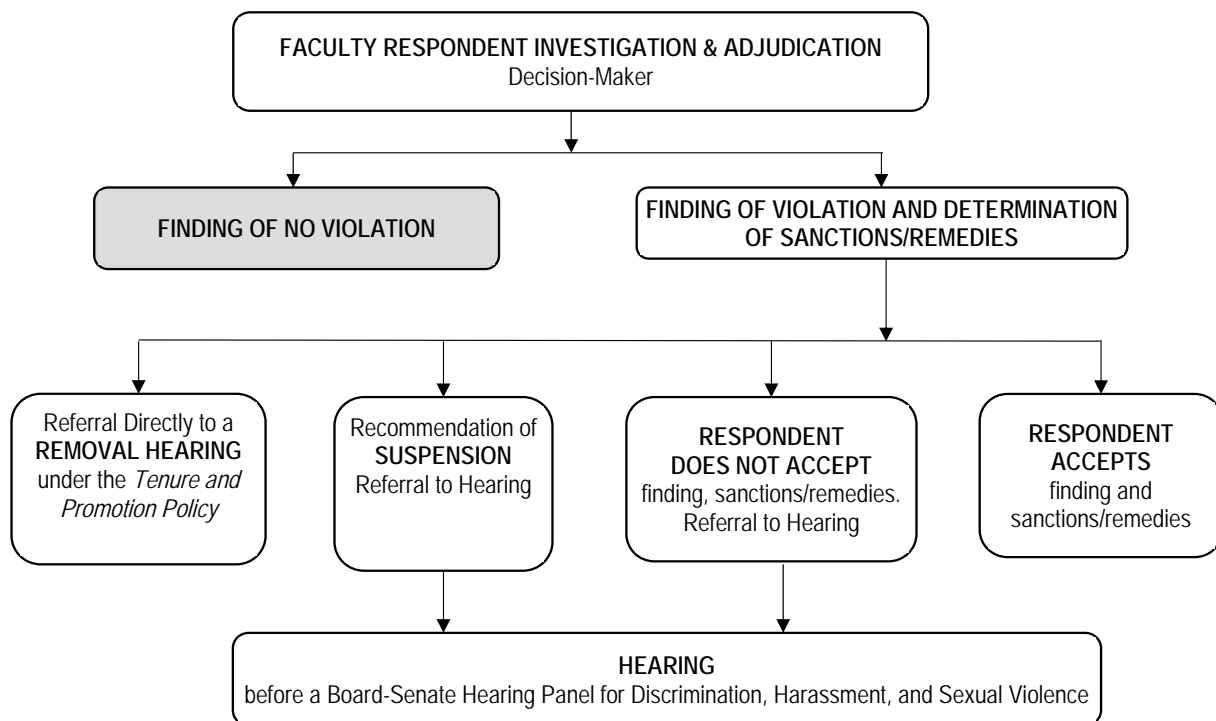


FACULTY RESPONDENT

116. The Investigation Report will be provided to the Decision-Maker (the Provost or the Executive Vice-Dean & Associate Vice-President (Academic) as appropriate) to consider the findings and recommendations contained in the report.
117. When considering the findings and recommendations, the Decision-Maker may consult with relevant offices (e.g. the Equity and Inclusion Office, Employee & Labour Relations, etc.) to ensure that outcomes are consistently applied, and are appropriate to relevant legislation, professional standards and regulations, and/or licensing bodies.
118. If the Decision-Maker makes a finding of violation of the Policy, the Decision-Maker will recommend the appropriate sanctions and/or remedies.
119. If the Respondent accepts the findings and the sanctions and/or remedies recommended by the Decision-Maker, the sanctions and/or remedies will be implemented, and the matter will be closed.

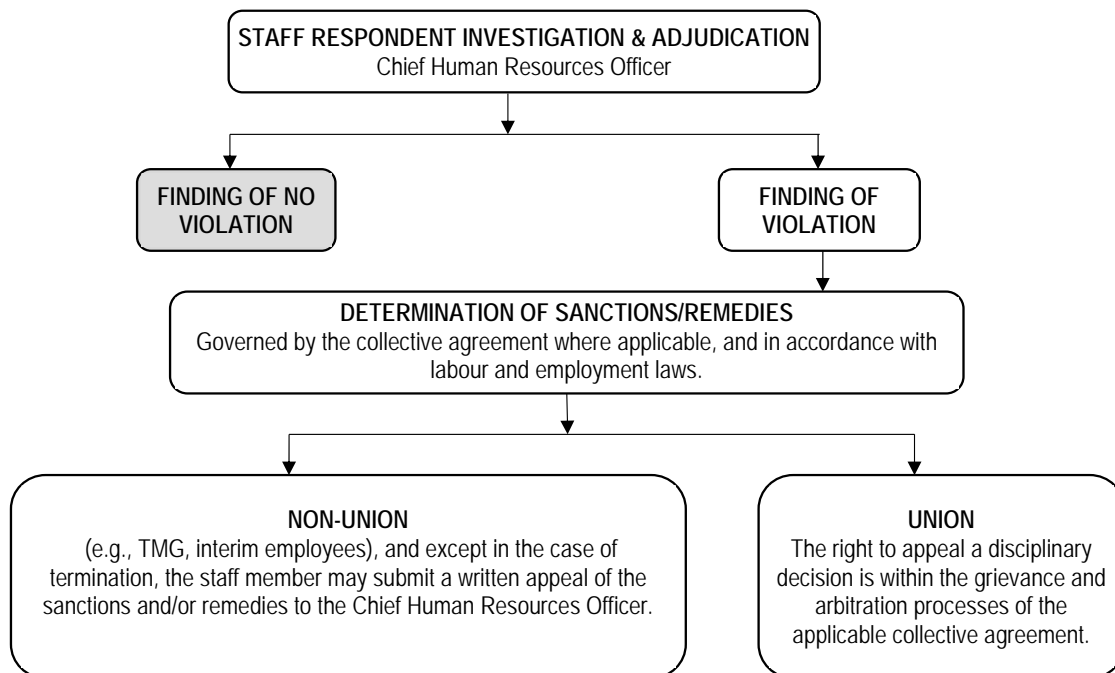
Referral to Hearing

120. If the Respondent does not accept the recommendations, or the Decision-Maker believes that suspension from the University is the appropriate sanction, the matter will be referred to a [DHSV Tribunal](#) for a hearing.
121. If it is determined by the Decision-Maker that Removal Proceedings should be initiated, the matter will be referred directly to the Procedures for Removal under the [Tenure and Promotion Policy](#).



STAFF RESPONDENT

122. The Investigation Report will be provided to the Chief Human Resources Officer to consider the findings and recommendations contained in the report.
123. If the Chief Human Resources Officer makes a finding of violation of the Policy, the matter will be referred to the [Director \(ELR\)](#) to support the [Workplace Supervisor](#) in the processes to determine appropriate remedies and/or sanctions to ensure that outcomes are consistently applied, and are appropriate to relevant legislation, professional standards and regulations, collective agreements and/or licensing bodies.
124. In the case of a staff member who is a member of a union, the right to appeal the remedies and/or sanctions is within the grievance and arbitration processes of the collective agreement, as may be applicable.
125. In the case of a staff member who is not a member of a union (e.g., members of The Management Group, interim employees), and except in the case of termination, the staff member may submit a written appeal of the remedies and/or sanctions imposed by the Workplace Supervisor to the Chief Human Resources Officer.
126. In the case where the Respondent's reporting line is through to the Chief Human Resources Officer, the appeal will be made to the Vice-President (Operations and Finance).



COMMUNITY MEMBER RESPONDENT

127. When the Respondent is a [Community Member](#) but is **not** currently a student, staff, or faculty member, the relevant [Decision-Maker](#) (related to the Respondent's area of activity at the University) will consider the findings and recommendations contained in the report.
128. If the Decision-Maker makes a finding of violation of the Policy, the Decision-Maker will decide on the appropriate sanctions/remedies.

NOTIFICATION OF OUTCOME**Respondent**

129. Respondents will receive a written decision from the relevant Decision-Maker, that will include:
- a) the decision with respect to a **Finding or No Finding** of Violation of the Policy;
 - b) reasons for the decision;
 - c) a summary outlining the findings;
 - d) if the outcome is *no finding of violation* of the Policy the matter will be closed;
 - e) if the outcome is a *finding of violation* of the Policy, the Respondent will be informed of the process by which sanction(s) and/or remedies will be recommended or ordered (as per the relevant adjudication process related to the Respondent); and
 - f) where relevant, confirmation of any Interim Measures that will remain in place until sanctions are imposed.

Complainant

130. If the matter has been referred to a Hearing the Complainant will be informed of the referral.
131. Within the constraints of relevant legislation, the Complainant will be informed of the findings and reasons that are directly related to their complaint.
132. In all cases, information about any sanctions/remedies that have direct relevance to the Complainant will be provided to them.

Regulatory / Professional Licensing Bodies

133. Where required by a regulatory / professional licensing body, the relevant findings will be communicated to that professional licensing body.

Affected parties

134. Other affected parties will be informed about the findings and/or any sanctions/remedies that have a direct impact on them, within the constraints of relevant legislation.

SYSTEMIC AND PREVENTIVE INTERVENTIONS

135. Investigations may reveal broader systemic issues to be addressed as a future preventative measure, regardless of whether or not there has been a finding of Sexual Violence. In such instances, appropriate intervention measures may be recommended by Decision-Makers and /or the AVP Equity and Inclusion.

SECTION VIII: SANCTIONS AND REMEDIES

SANCTIONS

136. Sanctions shall be proportional to the severity of the offence, considering any aggravating, mitigating and/or contextual factors. Previous findings of a violation of this Policy or a related violation of the *Discrimination & Harassment Policy* will be taken into account when sanctions are determined, and the severity of sanctions may be greater as a result. Sanctions may be used independently or in combination for any single violation and may be varied and depending on the nature of the Respondent's relationship with the University may be administered under more than one process.
137. **Sanctions** may include, but are not limited to:
- a) written reprimand;
 - b) inclusion of the decision, or summary of the decision as appropriate to comply with confidentiality requirements, in a specified file (e.g. Tenure & Promotion Dossier) of the Respondent, for a specified period of time;
 - c) the exclusion of the Respondent from, or oversight during, one or more designated University activities or duties;
 - d) a **No Contact Order**, which may include restrictions on: registration for specific classes, other academic/non-academic activities, attendance at specific meetings or events; direct or indirect contact (including but not limited to in person, by phone, email, text, social media, through a third party etc.) with a specific individual or group of individuals;
 - e) a **Persona Non Grata (PNG)** declaration, which is undertaken when an individual is denied the privilege of entering designated portion(s) of the University's buildings or grounds. If individuals issued a PNG are found or seen in the area they are denied, they may be subject to a charge by Security Services under the *Trespass to Property Act*;
 - f) for Student Respondents, all sanctions in the [Code of Student Rights and Responsibilities](#) for findings of Sexual Violence, including but are not limited to: behavioural contract/bond, suspension, expulsion; and for Residence students, residence probation, room transfer, denial of readmission, eviction;
 - g) for staff or faculty, **Suspension or Recommendation for Suspension**, as applicable, suspension involves relieving the Respondent of their University duties and denying them access to University facilities and services for a stated period of time and may be with or without pay and/or benefits. A recommendation for suspension of a **faculty** Respondent shall be dealt with in accordance with Section V of the [Tenure and Promotion Policy](#) and the common law where applicable; and/or
 - h) for staff or faculty, **Dismissal or Recommendation for Removal**, as applicable. A recommendation for removal of a **faculty** Respondent shall be dealt with in accordance with Section VI of the [Tenure and Promotion Policy](#) and the common law where applicable.

REMEDIES

138. **Remedies** may include but are not limited to:
- a) mandated counselling;
 - b) training or coaching; and/or
 - c) [Restoration Processes](#) / [Workplace Restoration Processes](#).

APPENDIX A: DEFINITIONS

All definitions in this Policy include, but are not limited to, the definitions articulated in the [Ontario Human Rights Code](#) and described in the [Occupational Health and Safety Act](#).

Accommodations under this Policy are adjustments to individuals' academic, workplace, or residence arrangements made to support them and/ or enhance their safety (e.g. a change in assignment deadlines or tutorial group, a change in supervisory arrangements, a change in residence location).

Advisor: A person of the individual's choice who acts in an advisory role during the complaint and investigation process (e.g. friend, family member, union representative, legal counsel), but is not a witness or potential witness in the matter. The Advisor may be present during Investigation interviews but may not participate as a representative. The Advisor may assist the individual at a Hearing before a Tribunal of the Board-Senate Hearing Panel for Discrimination, Harassment, and Sexual Violence.

Agent: Anyone hired by the University or working on behalf of the University such as an external investigator or a physician or other health care professional.

Balance of Probabilities is the test to be met to show, by the weight of the evidence presented, that all of the facts necessary to make a determination that a violation of the Policy has occurred, have a greater likelihood of being true than not.

Community Members include, but are not limited to: students (graduate, undergraduate, and continuing education), staff, faculty, medical residents, volunteers, visitors (including visiting professors), and institutional administrators and officials representing McMaster University.

Complainant: The individual who files a Complaint alleging a violation of the Policy for the University's response.

Complaint: A Complaint is made when an individual notifies an Intake Coordinator of an allegation under the Policy or files an incident report with their Supervisor and seeks the University's response.

Confidentiality: Refers to the obligation of an individual or organization to safeguard entrusted information. The practice of confidentiality includes obligations to protect information from unauthorized access, use, disclosure, modification, loss or theft. Confidentiality differs from anonymity in that the identity of the person making the Disclosure is known to the person receiving the Disclosure.

Consent² in the context of sexual activity, is the voluntary agreement of an individual to engage in the sexual activity in question. **The law also says that there is NO CONSENT where:**

- the agreement is expressed by the words or conduct of a person *other* than the individual;
- the individual is incapable of consenting to the activity;
- the person induces the individual to engage in the activity by abusing a position of trust, power or authority;
- the individual expresses, by words or conduct, a lack of agreement to engage in the activity;
- the individual, having consented to engage in sexual activity, expresses, by words or conduct, a lack of agreement to continue to engage in the activity;
- the individual may be bodily harmed or is threatened with bodily harm; or

² Source: Criminal Code of Canada

- the individual is under the age of consent.

Criminal Report: Occurs when a person reports an experience of Sexual Violence to the police or to McMaster Security Services. Filing a report with Security Services will result in a report to Hamilton Police Service.

Disclosure: When an individual informs someone in the University community about an experience of Sexual Violence because they wish to access support, accommodations and/or information about their options.

Dismissal: Dismissal/termination proceedings for staff Respondents shall be dealt with in accordance with the established policies and procedures and by the terms of existing contracts of employment or collective agreements and the common law where applicable.

DHSV Tribunal: A Tribunal of the Board-Senate Hearing Panel for Discrimination, Harassment, and Sexual Violence.

Employee: Where applicable, employee is used to refer to staff (see below) and faculty (see below).

Event (Authorized): Authorized events are University scheduled or University approved activities, occurring on or off University premises, e.g. public lectures, performances, placements (co-op or clinical), athletic events, work or study-related conferences/training sessions, etc. These events can include work or study-related travel. Events that are approved under the [Policy on Students Groups \(Recognition, Risk Assessment and Event Planning\)](#) are also authorized events.

Event (Non-authorized): Non-authorized events are events that are not scheduled or approved by the University and may occur on or off University premises e.g. group trips that have not been approved under the [Policy on Students Groups \(Recognition, Risk Assessment and Event Planning\)](#), drinking games in residence, house parties, etc.

Expulsion applies to student Respondents and is the loss of all academic privileges at the University for an indefinite period.

Faculty are defined as academic teaching staff, clinical faculty, and senior academic librarians who are members of the "teaching staff". Teaching staff as defined in the McMaster University Act means the employees of the University or of a college affiliated with the University who hold the academic rank of professor, associate professor, assistant professor or lecturer.

Incident Report: An [incident report](#) is a report completed by a Community Member and signed by their Supervisor when an incident/injury occurs in their working environment while they are engaged in University-related activities.

Interim Measures: Steps that are taken in order to safeguard the environments of individuals disclosing Sexual Violence and of individuals whose conduct is being questioned. Interim measures shall not be construed as evidence of either guilt or a finding of Sexual Violence, or as an affirmation of innocence or finding that no Sexual Violence occurred.

No Contact Order: Includes restrictions on: registration for specific classes, other academic or non-academic activities, or attendance at specific meetings or events; direct or indirect contact (including but not limited to in person, by phone, email, text, social media, through a third party etc.) with a specific individual or group of individuals.

Persona Non Grata (PNG): An official declaration that an individual is denied the privilege of entering designated portion(s) of the University's buildings or grounds. If individuals issued a PNG are found or seen in the area they are denied, they will be subject to a charge by Security Services under the *Trespass to Property Act*.

Poisoned Environment means an environment where harassing and/or discriminatory conduct, on the basis of a person's sexuality, gender identity or gender expression, is found to be sufficiently severe, intimidating, hostile, offensive, and/or pervasive to cause significant and unreasonable interference to a person's study or work environment. A Poisoned Environment can interfere with and/or undermine work or academic performance and can cause emotional and psychological stress for some employees or students not experienced by other employees or students. As such, it results in unequal terms and conditions of employment or study and prevents or impairs full and equal enjoyment of employment or educational services, benefits, or opportunities. Although a person may not be the target of the conduct, a person may feel the effects of certain harassing or discriminatory conduct at their place of work or study.

Recommendation for Removal: A recommendation for removal of a faculty Respondent will be dealt with in accordance with Section VI of the Tenure and Promotion Policy and the common law where applicable.

Respondent: Those about whom allegations have been made in a Complaint process.

Restoration Processes: Processes focusing on restoring the losses suffered by Complainants, holding Respondents accountable for the harm they have caused, and building peace within communities. Restoration Processes are premised on the voluntary and cooperative participation of all parties in the resolution process. This process, which may not be appropriate or viable in all cases, can be facilitated by an Intake Office.

Senior Administration: For the purposes of this Policy, Senior Administration refers to the President, Provost and Vice-President (Academic), and Vice-President (Operations and Finance).

Sexual Assault³ is an assault committed in circumstances of a sexual nature such that the sexual integrity of an individual is violated, and it includes, but is not limited to, any unwanted, non-consensual, sexual activity, such as unwanted kissing, fondling, sexual grabbing, and/or intercourse/rape.

Sexual Harassment⁴ means engaging in a course of vexatious comment or conduct against an individual because of sex, sexual orientation, gender identity or gender expression, where the course of comment or conduct is known or ought reasonably to be known to be unwelcome, or making a sexual solicitation or advance to an individual where the person making the solicitation or advance is in a position to confer, grant or deny a benefit or advancement to the individual and the person knows or ought reasonably to know that the solicitation or advance is unwelcome.

Sexual Violence⁵ means any sexual act or act targeting a person's sexuality, gender identity or gender expression, whether the act is physical or psychological in nature, that is committed, threatened or attempted against a person without the person's consent, and includes sexual assault, sexual harassment, stalking, indecent exposure, voyeurism and sexual exploitation.

³ Source: Criminal Code of Canada

⁴ Source: Government of Ontario, [Human Rights Code](#), 2019

⁵ Source: [Ministry of Training, Colleges and Universities Act, R.S.O. 1990, c. M.19](#)

Staff: Employees of the University including, but not limited to: The Management Group (TMG), unionized employees, temporary employees, casual employees, non-teaching staff⁶, Sessional Faculty, Post-doctoral Fellows, and Teaching Assistants.

Student: A student is any individual recorded by the University Registrar as enrolled in an educational course of study recognised by the Senate and for whom the University maintains education records.

Supervisor: there are various types of supervisors within the University Community, which include the following:

- **Academic Supervisor** who oversees the academic work of a student, the most common example being a faculty member overseeing a graduate student's academic work;
- **Academic Administrator** is any faculty or staff member acting in their capacity as supervisor/administrator within a Faculty, Academic Department, etc., which includes, but is not limited to, Department Chairs, Deans, or other supervisors who oversee the work of a [Community Member](#) (e.g. a faculty member overseeing a Post-Doctoral fellow / technician / undergraduate or graduate student performing research in the faculty member's laboratory).
- **Workplace Supervisor** is "a person who has charge of a workplace or authority over a [Worker](#)" (*Occupational Health and Safety Act*). Supervisors are responsible for knowing the *Duties of Supervisors* under the Act.

Support: The provision of resources appropriate to the individual and the circumstances. This may include access to the Student Wellness Centre, Employee Family Assistance Program, and/or McMaster Students Union (MSU). Support resources do not include the provision of legal counsel.

Support Person: A person of the individual's choice who acts in a supportive role but is not an active participant in the process (e.g. friend, Elder, parent, religious advisor). The Support Person may be present during Investigation interviews but may not participate as a representative.

Suspension involves relieving a faculty or staff Respondent of their University duties and denying them access to University facilities and services for a stated period of time, which may be with or without pay and/or benefits. A recommendation for suspension of a faculty member will be dealt with in accordance with Section V of the Tenure and Promotion policy and the common law where applicable. Suspensions of staff members will be dealt with in accordance with established policies and procedures and by the terms of existing contracts of employment or collective agreements and the common law where applicable. For a student Respondent, suspension is the loss of all academic privileges at the University for a specified period of time and/or until imposed conditions are met. The student is eligible to return after this time but may be required to fulfill specified non-academic conditions upon return.

Tenure and Promotion Policy: The McMaster University Revised Policy and Regulations with Respect to Academic Appointment, Tenure and Promotion.

Voluntary Resolution: Steps taken (e.g. arrangement of academic, work or living environment / conditions) to resolve or remedy a Complaint, with which both the Complainant and Respondent have agreed.

⁶ "non-teaching staff" means the employees of the University and of a college affiliated with the University who are not members of the teaching staff –The McMaster University Act, 1976

Workplace Harassment⁷ means engaging in a course of vexatious comment or conduct against a worker in a workplace that is known or ought reasonably to be known to be unwelcome; or workplace sexual harassment.

Workplace Restoration is the establishment or re-establishment of harmonious working relationships between individuals and within a team, group or unit.

Workplace Sexual Harassment⁸ means engaging in a course of vexatious comment or conduct against a worker in a workplace because of sex, sexual orientation, gender identity or gender expression, where the course of comment or conduct is known or ought reasonably to be known to be unwelcome; or making a sexual solicitation or advance where the person making the solicitation or advance is in a position to confer, grant or deny a benefit or advancement to the worker and the person knows or ought reasonably to know that the solicitation or advance is unwelcome.

Workplace Violence⁹ means: the exercise of physical force by a person against a worker, in a workplace, that causes or could cause physical injury to the worker; an attempt to exercise physical force against a worker, in a workplace, that could cause physical injury to the worker; a statement or behaviour that it is reasonable for a worker to interpret as a threat to exercise physical force against the worker, in a workplace, that could cause physical injury to the worker.

Worker: a person who performs work or supplies services for monetary compensation; and a person who performs work or supplies services for no monetary compensation under a program approved by a college of applied arts and technology, university or other post-secondary institution. Unpaid students, learners and trainees who are workers under the Occupational Health and Safety Act have the same duties and rights as paid workers. Placement employers have the same duties to protect the health and safety of unpaid students, learners or trainees who are workers under the Occupational Health and Safety Act as they do to protect their paid workers. The definition of “worker” does not include a volunteer who works for no monetary payment of any kind.

⁷ Occupational Health and Safety Act

⁸ Government of Canada [Restoring The Workplace Following A Harassment Complaint: A Manager's Guide](#)

⁹ Occupational Health and Safety Act

APPENDIX B: RESOURCES

The [*Sexual Violence Response Protocol*](#) is an information resource for all Community Members making or receiving Disclosures of Sexual Violence. Additional resources include, but are not limited to:

Support for the University Community

- Sexual Violence Prevention and Response Office, Equity and Inclusion Office
- Human Rights & Dispute Resolution Program, [Equity and Inclusion Office](#)
- [Faculty of Health Sciences Professionalism Office](#)
- [Security Services](#)
- [Chaplaincy Centre](#)

Additional Support for Students

- [Student Wellness Centre](#) (personal counselling and medical services)
- [Student Support & Case Management](#) (support and guidance about the Code of Student Rights and Responsibilities)
- [Indigenous Student Services](#) (community support and resources for Indigenous students)
- [Women and Gender Equity Network, McMaster Student Union](#) (peer support and resources)
- [Graduate Students Association Health & Dental Plans](#) (health benefits include access to psychological counselling in the community)

Additional Support for Staff and Faculty

- [Union or Association](#)
- [Employee & Labour Relations](#)
- [Employee Health Services](#)
- [Employee and Family Assistance Program](#) (access to professional counsellors, legal guidance and other supportive services available to staff and faculty)

Support in the Broader Community

- [Good2Talk](#) (24/7 phone support for students offered by professional counsellors)
- [Sexual Assault Centre Hamilton & Area](#) (SACHA) (24/7 phone support, counselling, accompaniment)
- [Sexual Assault/Domestic Violence Care Centre](#)
- [Hamilton Police Services – Victim Services Branch](#)
- [John Howard Society](#) or [Elizabeth Fry Society](#) (for individuals in conflict with the law)

Guidance about a Policy and/or Procedures

- [Equity and Inclusion Office](#)
- [Employee & Labour Relations](#)
- [Student Support & Case Management](#)
- [University Secretariat](#)

Independent Resource

- [Ombuds Office](#) provides an independent, impartial, and confidential process through which students may pursue a just, fair and equitable resolution of a University related concern.

APPENDIX C: JURISDICTION

1. Complaints may be made, or Investigations initiated about any alleged violation of this Policy involving any Community Member, including members of recognized groups, teams and clubs. The Policy may extend to incidents that occur off campus where there is a clear nexus to the working and/or learning environment at the University and recognizes that social media conduct may give rise to a violation of the Policy.
2. Nothing in this Policy is meant to supersede the terms and conditions of any collective agreement, or any other contractual agreement, entered into by the University and its employee groups. In the event that the provisions of this Policy contradict any such collective or contractual agreement, the collective or contractual agreement governs, to the extent of the contradiction.
3. To the extent that this Policy affects the terms and conditions of employment of faculty of the University, it may be subject to discussion and/or approval in accordance with the University policy entitled, *The Joint Administration/Faculty Association Committee to Consider University Financial Matters and to Discuss and Negotiate Matters Related to Terms and Conditions of Employment of Faculty*, revised by the Board of Governors on October 20, 1988 (the 'Joint Administration/Faculty Association' policy).
4. Should a Complainant, with respect to the subject matter of a Complaint dealt with under this Policy and/or the [Discrimination & Harassment Policy](#), seek redress under the [Ontario Human Rights Code](#), the [Criminal Code](#), the [Occupational Health and Safety Act](#), the provisions of an applicable collective agreement, or through civil litigation, or any other forum external to the University, the appropriate Decision-Maker, in consultation with the [Director \(HRDR\)](#), and/or relevant Intake Office Director, will determine whether proceedings under this Policy will be initiated.
5. If proceedings under this Policy and/or the [Discrimination & Harassment Policy](#) have already been initiated, the appropriate Decision-Maker, in consultation with the Director (HRDR), and/or relevant Intake Office Director, will determine in the circumstances whether or not the proceedings under this Policy will:
 - a) be permanently discontinued;
 - b) be disallowed; or
 - c) be suspended until proceedings in the external or other forum are concluded, although Interim Measures may be put in place to safeguard the environments of the parties involved.
6. If a jurisdictional issue arises between the University and an affiliate, off-site entity or other third party, a senior officer of the affiliate/third party, and the University Provost or Dean and Vice-President (Health Sciences) or relevant Decision-Maker in conjunction with the University Vice-President (Operations and Finance), will attempt a resolution, which may include a joint Investigation or an agreement to share the findings and/or other relevant outcomes with the other party. In the absence of any agreement to the contrary, the University will proceed with the Investigation according to University policy and procedures.
7. This Policy is not intended to supersede or interfere with the criminal justice system; all persons have the right to pursue legal avenues.
8. Respondents in a Complaint procedure must be Community Members. If a person alleged to have engaged in Sexual Violence is not currently a Community Member, the University has no jurisdiction to pursue or adjudicate the incident. However, the University reserves the right to take whatever steps it considers appropriate to safeguard the University Community.
9. As part of the University's commitment to a Discrimination and Harassment free working, studying and living environment, all external agencies, third-party service providers, and independent contractors who do business on the University and are considered agents of the University will be informed of the existence of this Policy and of the University's expectation that these external entities shall govern themselves accordingly while doing business with the University. Information to this effect will be included in all contracts.

APPENDIX D: RELATED POLICIES AND LEGISLATION

This Policy is to be read in conjunction with the following policies, statements, and collective agreements. Any question of 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 of Students with Disabilities](#)
- [Academic Freedom, Statement \(SPS E1\)](#)
- [Accessibility – University Policy on](#)
- [Code of Conduct for Faculty and Procedures for Taking Disciplinary Action](#)
- [Code of Student Rights and Responsibilities](#)
- [Complaint Resolution Procedure for TMG](#)
- [Conflict of Interest Guidelines- Undergraduate Studies and Graduate Studies](#)
- [Discrimination & Harassment Policy](#)
- [Employee & Labour Relations – Collective Agreements](#)
- ~~Faculty General Grievance Procedure~~ [Faculty Grievance Policy](#)
- [Freedom of Information and Protection of Privacy Act](#)
- [Hearing Procedures for the Board-Senate Hearing Panel for Discrimination, Harassment and Sexual Violence](#)
- [Ministry of Training, Colleges and Universities Act](#)
- [Ontario Human Rights Code](#)
- [Occupational Health and Safety Act](#)
- [Personal Health Information Protection Act](#)
- [Professional Behavior Code for Graduate Learners, Health Sciences](#)
- [Professional Behavior Code for Undergraduate Learners, Health Sciences](#)
- [Senate Resolutions re Group Conflict](#)
- [Senate Mediation Procedures](#)
- [Sexual Violence Response Protocol](#)
- [Statement on Building an Inclusive Community with a Shared Purpose](#)
- [Inclusive Communications, Policy Statement and Guidelines on](#)
- [Students Groups \(Recognition, Risk Assessment and Event Planning\), Policy on](#)
- [Tenure and Promotion Policy \(McMaster University Revised Policy and Regulations with Respect to Academic appointment, Tenure and Promotion\)](#)
- [Trespass to Property Act](#)
- [Violence in the Workplace, Policy on](#)
- [Workplace Accommodation, Policy on](#)
- [Workplace & Environmental Health and Safety Policy](#)

February 2, 2022

TO: Dr. David Farrar
Senate Chair

FROM: Andrea Thyret-Kidd
University Secretary

SUBJECT: Response to an Enquiry at Senate

The following information is in response to an enquiry raised at the Senate meeting on January 12, 2022. The enquiry was regarding approval of item 10.b., the Discrimination and Harassment Policy, at the December 11, 2019 meeting of the Senate. I have reviewed the information available for how the item was approved and consulted with the 2019 review group and relevant offices to generate this response.

Governance

The Senate meeting materials were posted one week in advance of the meeting, including the materials for the Discrimination and Harassment Policy item (10.b.). Senate meeting materials were updated before the meeting but there were no changes to this item. Senators were provided with a cover memo, a clean copy revised Discrimination and Harassment policy for approval, and the current version (2017) of the Policy on Discrimination and Harassment. A track change version of the revisions was not provided as significant formatting changes were being suggested. The cover memo provided to Senate detailed the individuals involved in the revisions and outlined the consultation process. A draft 7 version of the revisions was sent to MUFA, employee groups and select university offices for review and feedback. The final version, sent to the Senate for approval, incorporated the responses and comments received from those consultations.

The cover memo was primarily focused on the proposed changes to the Sexual Violence policy which was also being brought forward for approval, and which included a number of substantive revisions, as detailed in the memo. Although a brief note was included at the end of the memo in relation to the Discrimination and Harassment Policy, a more detailed summary of proposed revisions to that policy should have been detailed in the memo as well. Going forward, the Secretariat will ensure meeting materials include a cover memo that outlines at a high level the revisions that are being proposed. The standard practice for policy changes is to provide a track change version of the policy, however when the changes are extensive this becomes ineffective

and instead a clean copy and the current policy are provided. In such situations, the memo explaining the revisions is very important.

A track change version showing the changes between draft 7 and the final version is being prepared and will be shared with MUFA shortly.

Freedom of Expression

The enquiry at Senate was principally concerned with the removal of the words 'exceeding the bounds of freedom of expression' from this section of the policy:

This Policy expressly prohibits any discriminatory ~~and/or~~ harassing action and/or conduct, verbal or non-verbal, directed at or about one or more individuals or groups, that creates an ~~intimidating, hostile or offensive environment~~ (~~poisoned environment which~~); ~~or~~ interferes with academic or work performance, in a manner that exceeds ~~the bounds of freedom of expression and~~ academic freedom.*

The reference to "freedom of expression" was removed from this section of the policy as it could be interpreted as imposing a duty on the University which only applies to government under the Canadian Charter of Rights & Freedoms (the "Charter"). Courts in Ontario have been clear and consistent that the Charter does not apply to universities. In contrast, the preservation of academic freedom is clearly the responsibility of universities. Since 2019, the issue of freedom of expression on campus has evolved and further references to "freedom of expression" could be considered provided that due consideration is given to university autonomy, the potential limits of freedom of expression in the context of discrimination and/or harassment and reasonable qualifiers for the university context. Such questions could receive full consideration as part of the next regular review of the policy.

For the information of Senators, the policy includes a section called McMasters Commitment, a part of which reads:

10. The University upholds a fundamental commitment to freedom of expression and association for all its members and to academic freedom for faculty. In exercising those freedoms, all its members are required to respect the rights and freedoms of others, including the right to freedom from Discrimination and Harassment.

Operationalizing the Policy

While the policy has gone through several iterations (2015 *Policy on Discrimination, Harassment, Sexual Harassment: Prevention & Response*, 2017 *Policy on Discrimination & Harassment: Prevention & Response*, and 2019 *Discrimination & Harassment Policy*) the approach for assessing complaints has remained the same throughout. The Policy prohibits discrimination and harassment, as well as any discriminatory or harassing action and/or conduct, verbal or non-verbal, directed at or

*This is a track change version of the section.

about one or more individuals or groups, that creates a poisoned environment.

Upon receipt of a complaint, it is assessed (by the respective Intake Office Director or Response Team for complex cases) to determine whether a prima facie case exists. A prima facie case is one in which it reasonably appears on first impression that, the allegations, if investigated and found to be true, would amount to discrimination or harassment.

The framework for **discrimination** is the following: differential treatment of a person (or group) based on one or more protected human rights grounds resulting in an adverse impact on the person (or group).

The framework for **harassment** is the following: engagement in a course of vexatious comment or conduct that is known or ought reasonably to be known to be unwelcome. "Vexatious" comment or conduct is comment or conduct made without reasonable cause or excuse.

The framework for a **Poisoned Environment** is the following: an environment where harassing and/or discriminatory conduct is found to be sufficiently severe, intimidating, hostile, offensive, and/or pervasive to cause significant and unreasonable interference to a person's study or work environment.

The Intake Office Director or Response Team (comprising Directors of relevant Intake Offices as well as security services and legal counsel, where necessary) carefully assesses statements of complaint to determine whether a prima facie case exists and makes recommendations (to relevant Decision-Makers) regarding whether to investigate and apply any appropriate interim measures.

Academic freedom and freedom of expression are key principles in the context of our campus learning and working environment, as highlighted by the fundamental commitment contained in Clause 10 of the policy, which is noted above. While these principles do not influence the prima facie assessment of the allegations or determine whether legal thresholds of discrimination or harassment have been met (at the complaint intake stage), they are considered carefully once there is a better understanding of the context through information gathering and finding of fact (at the investigation stage), and they may influence the remedy or sanction recommended in the event a breach of policy is found to have occurred (at the sanction and remedy stage). The practice of considering the university's human rights commitments to freedom from discrimination and harassment and fundamental commitments to academic freedom and freedom of expression is informed by existing University statements or policies and applicable legislative guidance including precedent case law. This practice has not changed with the iterative updates in the Policy.

Senators may be interested in exploring McMaster's website dedicated to [freedom of expression](#). The website gathers in one place all of McMaster's relevant policies and

statements including the annual reports submitted to and reviewed by HEQCO (Higher Education Quality Council of Ontario) as required by the province.

Current Review of the Discrimination and Harassment Policy

The [Discrimination and Harassment Policy](#) is subject to 3-yearly reviews. Given that the last review was undertaken in 2019, a review will take place in 2022 and will be initiated shortly. Senators who are interested in participating or who have comments or suggestions are encouraged to email policy@mcmaster.ca.

Cc S. Tighe, Senate Vice-Chair



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REPORT TO SENATE
from the
GRADUATE COUNCIL

For Information

I. New Award

At its meeting on January 18th Graduate Council approved the following new award:

Name of Trust Fund: The Iranian Student Memorial Scholarship

Award terms: Established in honour of McMaster Faculty of Engineering PhD students Iman Aghabali and Mehdi Eshaghian, and a former Faculty of Health Science Post-Doctoral Fellow, who lost their lives on the downing of Ukrainian International Airlines Flight PS752. To be awarded by the School of Graduate Studies, on the recommendation of the Associate Deans responsible for graduate studies, to international graduate students from Iran who demonstrate academic excellence.

REPORT TO SENATE
from the
UNDERGRADUATE COUNCIL

FOR APPROVAL

I Establishment of Certificates & Diploma Programs

At its January 25, 2022 meeting, the Undergraduate Council received, for approval, the Committee of Continuing Education's plan to establish the Full-Stack Development Program.

The University Planning Committee also met on the morning of February 9, 2022, and received for approval the following items. Further details of the program are contained within the circulated report.

- a. **Full-Stack Development Diploma.**
- b. **Certificate of Professional Learning in User Experience and User Interface (UX/UI) Design.**
- c. **Certificate of Professional Learning in Front-End Development.**
- d. **Certificate of Professional Learning in Back-End Development.**

It is now recommended,

that Senate approve the establishment of the Full-Stack Development Diploma, as set out in the attached.

It is now recommended,

that Senate approve the establishment of the Certificate of Professional Learning in User Experience and User Interface (UX/UI) Design, the Certificate of Professional Learning in Front-End Development and the Certificate of Professional Learning in Back-End Development.

II Curriculum Revisions for Inclusion in the 2022-2023 Undergraduate Calendar

At the same meeting on January 25, 2022, Undergraduate Council approved, for recommendation to Senate, the following major curriculum revisions for inclusion in the 2022-2023 Undergraduate Calendar.

The University Planning Committee also met on February 9, 2022 and received for approval items a. and c.

**Arts & Science Program
Faculty of Health Sciences
Faculty of Science
Faculty of Social Sciences
Glossary, General Academic Regulations**

It is now recommended,

- a. that Senate approve the establishment of *the Combined Honours Program, Arts & Science and Sustainable Chemistry* for inclusion in the 2022-2023 Undergraduate Calendar, recommended by the Undergraduate Council and University Planning Committee, as set out in the attached.

It is now recommended,

- b. that Senate approve the move of the *Honours Biochemistry, Honours Biochemistry- Biomedical Research Specialization, Honours Biochemistry- Biomedical Research Specialization Co-op* programs from the Faculty of Science to the Faculty of Health Sciences, and the change in degree designation for the programs from *Honours B.Sc. to Honours B.H.Sc.*, for inclusion in the 2022-2023 Undergraduate Calendar, as recommended by the Undergraduate Council, as set out in the attached.

It is now recommended,

- c. that Senate approve the establishment of the *Honours Bachelor of Science in Biology – Physiology Core program, the Honours Bachelor of Science Molecular Biology and Genetics Core program, and Honours Bachelor of Science in Integrated Science with a Concentration in Sustainable Chemistry* for inclusion in the 2022-2023 Undergraduate Calendar, as recommended by the Undergraduate Council and University Planning Committee, as set out in the attached.

It is now recommended,

- d. that Senate approve the move of the *Honours Biochemistry, Honours Biochemistry – Biomedical Research Specialization, and the Honours Biochemistry – Biomedical Research Specialization Co-op* programs from the Faculty of Science to the

Faculty of Health Sciences, and the change in degree designation for the programs from *Honours B.Sc. to Honours B.H.Sc.*, for inclusion in the 2022-2023 Undergraduate Calendar, as recommended by the Undergraduate Council, as set out in the attached.

It is now recommended,

- e. that Senate approve the change in name of the *Honours Mathematics and Statistics – Mathematics Sub-plan* program to the *Honours Mathematics and Statistics – Mathematics Specialization*; the change in name of the *Honours Mathematics and Statistics – Mathematics Sub-plan Co-op* program to the *Honours Mathematics and Statistics – Mathematics Specialization Co-op*; the change in name of the *Honours Mathematics and Statistics – Statistics Sub-plan* program to the *Honours Mathematics and Statistics – Statistics Specialization*; and the change in name of the *Honours Mathematics and Statistics – Statistics Sub-plan Co-op* program to the *Honours Mathematics and Statistics – Statistics Specialization Co-op*, effective September 2023, as recommended by the Undergraduate Council, as set out in the attached.

It is now recommended,

- f. that Senate approve the change in name of the *Combined Honours Labour Studies and Another Subject* program to the *Combined Honours Work and Labour Studies and Another Subject* program; the change of name of the *Honours Labour Studies* program to the *Honours Work and Labour Studies* program, and the change in name of the *Labour Studies* program to the *Work and Labour Studies* program, effective September 2022, as recommended by the Undergraduate Council, as set out in the attached.

It is now recommended,

- g. that Senate approve revisions to the Glossary and General Academic Regulations, for inclusion in the 2022-2023 Undergraduate Calendar, as recommended by the Undergraduate Council, as set out in the attached.

The following omnibus motion will be presented at the Senate meeting held on February 9, 2022. This motion includes approval of items a. through g. above.

It is now recommended,

that the Senate approve all programs and major revisions for inclusion in the 2022-2023 Undergraduate Calendar.

FOR INFORMATION

III Policy on Requests for Relief for Missed Academic Term Work – Winter 2022 Term

On January 13th, 2022, the Undergraduate Council Executive Committee approved via electronic vote, and on behalf of Undergraduate Council, the Policy on Requests for Relief for Missed Academic Term Work – Winter 2022 Term, for inclusion in the General Academic Regulations and to temporarily supersede the Policy on Requests for Relief for Missed Academic Term Work, effective May 1st, 2021.

IV Terms of Award

At the same meeting, the Undergraduate Council received for approval: a) two new awards, b) four proposed new bursaries c) four changes to award terms and d) one award removal. Undergraduate Council also received 24 award value changes for information.

a) New Awards

The Dr. Robert Scott Engineering Academic Grant
The Dr. Ram Nath Gupta Scholarship

b) Proposed New Bursaries

The Betram Bursary
The Harry & Eileen Coates Bursary
The Future Undergraduate Nursing Bursary
The Social Sciences Black Student Bursary

c) Changes to Award Terms

The Createch Group Scholarship in Computer Science
The Robert John Morris Community Contribution Awards
The Ontario Professional Engineers Foundation for Education Entrance Scholarship
The Ontario Professional Engineers Foundation for Education Undergraduate Scholarship

d) Award Removal

The Columbia International College Community Leader Award

e) Award Value Changes

V Curriculum Revisions for Inclusion in the 2022-2023 Undergraduate Calander.

At the same meeting on January 25th, the Undergraduate Council reviewed for approval, minor curriculum revisions and addenda from the following:

a) Arts & Science Program

b) Faculty of Engineering

- c) **Faculty of Health Sciences**
- d) **Faculty of Humanities**
- e) **Faculty of Science**
- f) **Faculty of Social Sciences**
- g) **Office of the Registrar**

This included the following list of minors: the *Interdisciplinary Minor in Latin American and Latinx Studies*, the *Minor in Sustainable Chemistry* and the *Minor in Medical and Biological Physics*, as recommended by Undergraduate Council.

Documents detailing items for information are available for review on the [Secretariat's website](#).

Senate: FOR APPROVAL/ INFORMATION
February 9, 2022

December 17, 2021

RE: Proposal for Certificates of Professional Learning in Web Development and Design; Proposal for Diploma in Full-Stack Development

TO: Certificates & Diplomas Committee

I have reviewed the following program submissions presented by McMaster Continuing Education for the establishment of three Certificates of Professional Learning within the field of Web Development and Design. The specific program titles are as follows:

- Certificate of Professional Learning in User Experience/User Interface Design
- Certificate of Professional Learning in Front-End Development
- Certificate of Professional Learning in Back-End Development

I have determined that the proposed programs meet the criteria set out by the Undergraduate Council in its guidelines for certificates and diplomas. I, therefore, endorse these submissions with the support of the Faculty of Humanities.

At my request, these program proposals were reviewed by Dr. David Harris Smith. His conclusion is that the objectives of the proposed programs are viable. The courses included in each program fulfil the stated objectives, and the programs meet Undergraduate Council's criteria for the designation of a Certificate of Professional Learning. I concur with Dr. Smith's assessment.

I also agree with Dr. Smith's assessment that students who successfully complete the three Certificates of Professional Learning qualify for a Diploma in Full-Stack Development through McMaster Continuing Education.

The Faculty of Humanities is pleased to have these high-quality programs available for individuals to meet their academic and professional goals. As the academic affiliate for the programs, the Faculty of Humanities recognizes that we provide both review expertise of the initial submissions and overview of ongoing curriculum issues. Additionally, we have provided McMaster Continuing Education with the guidelines their students will need for possible use of the advanced standing rules should they wish to enter our degree programs using credit from the completion of the above programs.



Sincerely,
Dr. Sean Corner
Associate Dean
Faculty of Humanities

Cc: Lorraine Carter, Director, McMaster Continuing Education
Dan Piedra, Assistant Director
Nathan Cheney, Program Manager

BRIGHTER WORLD

Continuing Education Academic Program Submission – For Approval

Department & Program Information (complete all fields):	
Program Name:	Full-Stack Development
Academic Credential:	Diploma
Name of Representative:	Nathan Cheney, Program Manager
Effective Date:	2022-02-01
Date of Submission:	2022-01-11
Academic Merit (complete all fields; write “not applicable” as needed):	
Program Overview:	The proposed <i>Full-Stack Development</i> program is designed to prepare students with skills and knowledge to become full-stack developers for websites and online content. This program will provide training across three disciplines in the web design and development: UX/UI Design, Front-End Development and Back-End Development. Students will leave the program with a strong knowledge of the web development language JavaScript, HTML, design best practices and working as part of a development team. This program will highlight the core competencies and skillsets that every full-stack development professional needs in today's workforce.
Learning Objectives:	<p>Upon completion of this program, the students will demonstrate the skills in competencies in the following areas:</p> <p>UX/UI Design:</p> <ol style="list-style-type: none"> 1. Use the design thinking process to better support clients and users 2. Follow the design process to problem solve and develop new products/designs. 3. Work in major design programs like Adobe Creative Suite. 4. Work as part of a design team. 5. Develop mockups/storyboards for design problems 6. Demonstrate a basic understanding of HTML/CSS to work with developers throughout the design process.

	<p>7. Apply accessibility and WCAG guidelines for design.</p> <p>Front-End Development:</p> <ol style="list-style-type: none"> 1. Use HTML to develop the front-end of websites. 2. Develop proficiency in JavaScript coding. 3. Apply JavaScript frameworks. 4. Work as part of a development team. 5. Use source control software when developing websites. 6. Identify the role and tasks of a front-end developer as part of the design process. 7. Explain what an API is and how it is incorporated into website design. <p>Back-End Development:</p> <ol style="list-style-type: none"> 1. Demonstrate how a server interacts with a database. 2. Develop expertise in JavaScript coding. 3. Demonstrate how to use API software. 4. Critically analyze the future of full-stack development through the lens of AWS and Shopify. 5. Demonstrate how to run queries from a back-end database. 6. Identify the role and tasks of a back-end developer as part of the website development process. 7. Understand what an API is and how it is incorporated into website design. 8. Apply web development principles to build functioning back-end code. <p>The following additional objectives will be threaded within each course:</p> <ul style="list-style-type: none"> • Demonstration of awareness of ethical practices and professional standards applicable to a field of employment and/or academic study. • Exemplification of the knowledge, skills, attitudes and behaviours required to work and collaborate with people from different cultural backgrounds and to develop effective personal management skills.
Meeting Learning Objectives:	<p>All course learning outcomes in the program will be mapped to the overall program objectives. The delivery format and teaching methods are structured to have a maximum effect on achieving the learning objectives.</p>

Program Admission Requirements and Pre-requisites	<p>In compliance with the Certificates and Diploma, admission policy from Undergraduate Council, students who wish to enter the program should meet the following requirements based on their education and work experience:</p> <ol style="list-style-type: none"> 1. 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 2. English Language Proficiency requirements: Completion of TOEFL exam with a minimum acceptable IBT score of 86 overall with a minimum score of 20 on each of the four components (Reading, Writing, Speaking, Listening), valid for 2 years 3. Students are recommended to have some background in web design and development but it is not required.
Program Completion Requirements:	Students who complete all nine courses (27 units) will be granted a Diploma in Full-Stack Development.
Program Delivery Format:	Courses will be delivered online. The online delivery formats will include instructor lectures and/or presentations, group discussions, and individual and/or small group practical application activities. Each course will contain 39 hours of content delivered over 12 weeks.
Student Evaluations (Grading Process):	Student evaluation will be based on application activities, individual or group projects, tests/quizzes, class participation, or a combination thereof. Where appropriate, evaluations will be structured to evaluate participants' level of competency in achieving overall learning objectives.
Course Evaluation:	For each course, students will complete an evaluation to assess content, delivery, materials, method of evaluation and instruction.
Course Instruction:	Instructors for courses will be selected from a pool of qualified external professionals. In compliance with <i>McMaster's Senate and Undergraduate Council Guidelines for Certificates and Diplomas</i> , 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.
Program Advanced Standing:	Three transfer credits (3 units) will be accepted into this program, with no more than one transfer credit in each content area (UX/UI Design, Front-End Development, Back-End Development). Students will need to have obtained a minimum grade of C+ in each course transferred. The courses must have

	been taken at a recognized post-secondary institution in the last 5 years.		
Statement of Financial Viability:			
I have reviewed the business case and financial projections which include enrolment projections and costs. Sources of revenue for this program include tuition and supplementary fees (MAPS). Expenses are typical and include significant upfront 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).			
<i>Lorraine Carter, Director, McMaster Continuing Education</i>			
Statement of Administrative Responsibilities:			
Statement of Faculty Alignment:			
The staffing and systems infrastructure to support the following functions already exists within Continuing Education. Costs will be fully covered by tuition, except the first year of the program, when the startup will be subsidized by Continuing Education.			
Continuing Education program responsibilities:			
<ul style="list-style-type: none">• budget development and monetary responsibilities• program and course development• course registrations/administration• supervision of instructors to ensure all required policies and practices are adhered to and course are taught according to program requirements and standards• Marketing and Promotions			
The Faculty of Humanities will act as an academic liaison and is charged with the responsibility of ongoing academic review and assessment of the curriculum. The Faculty's letter of support is included at the end of this document.			
Listing of Courses:			
Course Name	Required/Elective	Unit Value	Term
Design Thinking	Required	3 units	Fall 2022
Course Description:			
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 mindset and model in today's global and mobile world and why it is quickly becoming an industry-accepted toolset.			
UX/UI Applications	Required	3 units	Winter 2023
Course Description:			
This application-based course enables students to work with design programs and applications to develop prototypes and mockups for different design challenges. With a focus on modern design tools, students will explore when to use specific programs and how programs can help solve design problems. They will also practice using the tools on real design problems. An introduction to HTML/CSS will prepare students to work within a development team.			

The Design Team	Required	3 units	Winter 2023
Course Description: This creative, critical thinking and problem-solving course challenges students to solve industry-related case studies as part of a design team. UX/UI designers consistently need to work as part of a larger team during the design process, product integration, usability and functionality. Students will navigate interpersonal challenges through team building and leadership activities while focussing on solving design issues and problems for the client and user.			
Website Development	Required	3 units	Fall 2022
Course Description: This course teaches the principles of designing a website to ensure the information is displayed in a relevant and user-friendly format. Focus is placed on the role of the front-end developer in the design process and on skill development with the tools of web development, such as HTML 5, Cascading Style Sheets (CSS) and JavaScript. Students will begin coding simple websites, learn the technical language and develop their skills related to front-end website development.			
HTML and CSS	Required	3 units	Winter 2023
Course Description: In this course, there is an in-depth focus on required knowledge and skills in HTML and CSS so that students will feel comfortable in their website development work. Students will learn and apply industry-recognized techniques to make a visually appealing, functional, and interactive website.			
Javascript and Frameworks	Required	3 units	Winter 2023 or Spring 2023
Course Description: The use of JavaScript and associated frameworks is the basis of this course so that students become proficient in the programming language. Students will develop a mobile-first design, add interactivity to a website, and make their websites functional for future use by adding key features to their pages, including e-commerce applications.			
Back-End Development	Required	3 units	Fall 2022
Course Description: In this course, students will learn about the purpose of back-end development and how servers, databases and the code that makes them drive web applications. Students will be given opportunities to apply their knowledge through case study scenarios which will enable development of their knowledge of the complex structure of a website. Students will also examine current development systems like Amazon Web Services and e-commerce sites to better understand how their systems align with the future of website development.			
Interactivity and Databases	Required	3 units	Winter 2023
Course Description:			

In this course, students will learn about the structure of database systems within a website and how their code will impact the interactivity with that database system. Students will learn how to set up and configure a database, how information is queried from the database, how systems work with the front-end of a website, the difference in database capability and the structured query language (SQL).

**Advanced Javascript
through Node.JS**

Required

3 units

Spring 2023

Course Description:

Students will deepen their understanding of the JavaScript system and apply their knowledge through developing the back-end of a website using Node.JS. During this course, students will learn to develop their application programming interfaces (APIs), Lambda, and apply their knowledge by developing foundational code that will allow users to take action on any website.



Dr. David Harris Smith
Associate Professor in Communication Studies & Media Arts
McMaster University
1280 Main Street West, Hamilton, ON, L8S 4L8
905-525-9140, ext. 23248 | Mobile (416) 274-2102

December 17, 2021

RE: Evaluation of the Full-Stack Development Program Proposals for McMaster Continuing Education including Certificates of Professional Learning and Diploma

TO: Dr. Sean Corner, Associate Dean, Faculty of Humanities

At your request, I have reviewed the academic submission documents for the Certificates of Professional Learning in User Experience/User Interface Design, Front-End Development and Back-End Development to be offered through McMaster Continuing Education. I have examined the structure of each submission and the proposed course descriptions. My finding is that each course meets the standards necessary to be an academic course with 3.0 units of advanced credit value.

Based on my examination of the content as well as the teaching and testing methods proposed for each course, my assessment is that the intellectual rigour of the courses is comparable to that found in undergraduate degree courses. The academic submission documents also indicate that the courses will be taught by qualified individuals (possessing a Master's degree or equivalency), as defined by the Undergraduate Council's Certificate and Diploma requirements. The students taking the courses will meet the minimum requirements set out in the Senate's Certificates and Diplomas Policy (2020) for Undergraduate Council.

I also support the option that, if a student successfully completes the three Certificates of Professional Learning, the student is eligible for a Diploma in Full-Stack Development.

Sincerely,

Dr. David Harris Smith
Associate Professor in the Department of Communication Studies & Multimedia
Faculty of Humanities

Cc: Lorraine Carter, Director, McMaster Continuing Education
Dan Piedra, Assistant Director
Nathan Cheney, Program Manager

Continuing Education Academic Program Submission – For Approval

Department & Program Information (complete all fields):	
Program Name:	User Experience and User Interface (UX/UI) Design
Academic Credential:	Certificate of Professional Learning
Name of Representative:	Nathan Cheney, Program Manager
Effective Date:	2022-02-01
Date of Submission:	2022-01-11
Academic Merit (complete all fields; write “not applicable” as needed):	
Program Overview:	The proposed <i>User Experience/User Interface Design Program (UX/UI)</i> is designed to prepare students with skills and knowledge to become designers of online content as identified by industry professionals and employers. This program will provide specialized training in design, highlighting the core competencies and skill sets that design professionals need in the digital workforce. The curriculum will cover the following competency areas and software training: design thinking and the iterative process (empathize, define, ideate, prototype and test); Adobe Creative Suite and other industry-recognized tools and technologies; developing mockups, frames and wireframes; an introduction to HTML/CSS and working as part of a design team on experiential projects.
Learning Objectives:	<ol style="list-style-type: none"> 1. Use the design thinking process to better support clients and users 2. Follow the design process to problem solve and develop new products/designs. 3. Work in major design programs like Adobe Creative Suite. 4. Work as part of a design team. 5. Develop mockups/storyboards for design problems 6. Demonstrate a basic understanding of HTML/CSS to work with developers throughout the design process. 7. Apply accessibility and WCAG guidelines for design. <p>The following additional objectives will be threaded within each course:</p>

	<ul style="list-style-type: none"> • Demonstration of an awareness of ethical practices and professional standards applicable to a field of employment and/or academic study • Exemplification of the knowledge, skills, attitudes, and behaviours required to work and collaborate with people from different cultural backgrounds and to develop effective personal management skills
Meeting Learning Objectives:	All course learning outcomes in the program will be mapped to the overall program objectives. The delivery format and teaching methods are structured to have a maximum effect on achieving the learning objectives.
Program Admission Requirements and Pre-requisites	<p>In compliance with the Certificates and Diploma admission policy from Undergraduate Council, students who wish to enter the program should meet the following requirements based on their education and work experience:</p> <ol style="list-style-type: none"> 1. Be a mature student as defined in the Undergraduate Calendar of McMaster University; or be deemed an exceptional case by McMaster Continuing Education 2. English Language Proficiency requirements: Completion of TOEFL exam with a 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 3. Some experience in web design and development is recommended but not required.
Program Completion Requirements:	Students who complete all three UX/UI Design courses (9 units) will be granted a Certificate of Professional Learning in UX/UI Design.
Program Delivery Format:	Courses will be delivered online. The online delivery formats will include instructor lectures and/or presentations, group discussions, and individual and/or small group practical application activities. Each course will have 39 hours of content delivered over 12 weeks.
Student Evaluations (Grading Process):	Student evaluation will be based on application activities, individual or group projects, tests/quizzes, class participation, or a combination thereof. Where appropriate, evaluations will be structured to evaluate participants' level of competency in achieving the overall learning objectives.
Course Evaluation:	For each course, students will complete an evaluation to assess content, delivery, materials, method of evaluation and instruction.
Course Instruction:	Instructors for courses will be selected from a pool of qualified

	external professionals. In compliance with <i>McMaster's Senate and Undergraduate Council Guidelines for Certificates and Diplomas</i> , 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.		
Program Advanced Standing:	One transfer credit (3 units) will be accepted into this program. Students will need to have obtained a minimum grade of C+ in each course transferred. The courses must have been taken at a recognized post-secondary institution in the last 5 years.		
Statement of Financial Viability:			
I have reviewed the business case and financial projections which include enrolment projections and costs. Sources of revenue for this program include tuition and supplementary fees (MAPS). Expenses are typical and include significant upfront 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).			
<i>Lorraine Carter, Director, McMaster Continuing Education</i>			
Statement of Administrative Responsibilities:			
Statement of Faculty Alignment:			
The staffing and systems infrastructure to support the following functions already exists within Continuing Education. Costs will be fully covered by tuition, except the first year of the program, when the startup will be subsidized by Continuing Education.			
Continuing Education program responsibilities:			
<ul style="list-style-type: none">• budget development and monetary responsibilities• program and course development• course registrations/administration• supervision of instructors to ensure all required policies and practices are adhered to and courses are taught according to program requirements and standards• marketing and promotions			
The Faculty of Humanities will act as an academic liaison and is charged with the responsibility of ongoing academic review and assessment of the curriculum. The Faculty's letter of support is included at the end of this document.			
Listing of Courses:			
Course Name	Required/Elective	Unit Value	Term
Design Thinking	Required	3 units	Fall 2022
Course Description:			
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 mindset and model in today's global and mobile world and why it is quickly becoming an industry-accepted toolset.			

UX/UI Applications	Required	3 units	Winter 2023
<p>Course Description:</p> <p>This application-based course enables students to work with design programs and applications to develop prototypes and mockups for different design challenges. With a focus on modern design tools, students will explore when to use specific programs and how programs can help solve design problems. They will also practice using the tools on real design problems. An introduction to HTML/CSS will prepare students to work within a development team.</p>			
The Design Team	Required	3 units	Winter 2023
<p>Course Description:</p> <p>This creative, critical thinking and problem-solving course challenges students to solve industry-related case studies as part of a design team. UX/UI designers consistently need to work as part of a larger team during the design process, product integration, usability and functionality. Students will navigate interpersonal challenges through team building and leadership activities while focussing on solving design issues and problems for the client and user.</p>			

Continuing Education Academic Program Submission – For Approval

Department & Program Information (complete all fields):	
Program Name:	Front-End Development
Academic Credential:	Certificate of Professional Learning
Name of Representative:	Nathan Cheney, Program Manager
Effective Date:	2022-02-01
Date of Submission:	2022-01-11
Academic Merit (complete all fields; write “not applicable” as needed):	
Program Overview:	The proposed <i>Front-End Development</i> program is designed to prepare students with skills and knowledge to become front-end developers of online content as identified by industry professionals and employers. This program will provide specialized training in HTML and JavaScript, highlighting the core competencies and skillsets that front-end developers need in today’s workforce. The curriculum will cover the following competency areas and software training: HTML, CSS, JavaScript and frameworks, source control (GIT) and an understanding of web services.
Learning Objectives:	<ol style="list-style-type: none"> 1. Use HTML to develop the front-end of websites. 2. Develop proficiency in JavaScript coding. 3. Apply JavaScript frameworks. 4. Work as part of a development team. 5. Use source control software when developing websites. 6. Identify the role and tasks of a front-end developer as part of the design process. 7. Explain what an API is and how it is incorporated into website design. <p>The following additional objectives will be threaded within each course:</p> <ul style="list-style-type: none"> • Demonstration of awareness of ethical practices and professional standards applicable to a field of employment and/or academic study. • Exemplification of the knowledge, skills, attitudes, and behaviours required to work and collaborate with people

	from different cultural backgrounds and to develop effective personal management skills.
Meeting Learning Objectives:	All course learning outcomes in the program will be mapped to the overall program objectives. The delivery format and teaching methods are structured to have a maximum effect on achieving the learning objectives.
Program Admission Requirements and Pre-requisites	In compliance with the Certificates and Diploma admission policy from Undergraduate Council, students who wish to enter the program should meet the following requirements based on their education and work experience: <ol style="list-style-type: none"> 1. 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 2. English Language Proficiency requirements: Completion of TOEFL exam with a minimum acceptable IBT score of 86 overall with a minimum score of 20 on each of the four components (Reading, Writing, Speaking, Listening), valid for 2 years 3. Some experience in HTML and JavaScript is recommended but not required. 4. Completion of the UX/UI Design program is recommended, but not required.
Program Completion Requirements:	Students who complete all three Front-End Development courses (9 units) will be granted a Certificate of Professional Learning in Front-End Development.
Program Delivery Format:	Courses will be delivered online. The online delivery formats will include instructor lectures and/or presentations, group discussions, and individual and/or small group practical application activities. Each course will contain 39 hours of content delivered over 12 weeks.
Student Evaluations (Grading Process):	Student evaluation will be based on application activities, individual or group projects, tests/quizzes, class participation, or a combination thereof. Where appropriate, evaluations will be structured to evaluate participants' level of competency in achieving the overall learning objectives.
Course Evaluation:	For each course, students will complete an evaluation to assess content, delivery, materials, method of evaluation and instruction.
Course Instruction:	Instructors for courses will be selected from a pool of qualified external professionals. In compliance with <i>McMaster's Senate and Undergraduate Council Guidelines for Certificates and</i>

	<i>Diplomas</i> , 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.		
Program Advanced Standing:	One transfer credit (3 units) will be accepted into this program. Students will need to have obtained a minimum grade of C+ in each course transferred. The courses must have been taken at a recognized post-secondary institution in the last 5 years.		
Statement of Financial Viability:			
I have reviewed the business case and financial projections which include enrolment projections and costs. Sources of revenue for this program include tuition and supplementary fees (MAPS). Expenses are typical and include significant upfront 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). <i>Lorraine Carter, Director, McMaster Continuing Education</i>			
Statement of Administrative Responsibilities:			
Statement of Faculty Alignment: The staffing and systems infrastructure to support the following functions already exists within Continuing Education. Costs will be fully covered by tuition, except the first year of the program, when the startup will be subsidized by Continuing Education. Continuing Education program responsibilities: <ul style="list-style-type: none">• budget development and monetary responsibilities• program and course development• course registrations/administration• supervision of instructors to ensure all required policies and practices are adhered to and courses are taught according to program requirements and standards• Marketing and Promotions The Faculty of Humanities will act as an academic liaison and is charged with the responsibility of ongoing academic review and assessment of the curriculum. The Faculty’s letter of support is included at the end of this document.			
Listing of Courses:			
Course Name	Required/Elective	Unit Value	Term
Website Development	Required	3 units	Fall 2022
Course Description: This course teaches the principles of designing a website to ensure the information is displayed in a relevant and user-friendly format. Focus is placed on the role of the front-end developer in the design process and on skill development with the tools of web development, such as HTML 5, Cascading Style Sheets (CSS) and JavaScript. Students will begin coding simple websites, learn the technical language and develop their skills related to front-end website development.			
HTML and CSS	Required	3 units	Winter 2023

Course Description:

In this course, there is an in-depth focus on required knowledge and skills in HTML and CSS so that students will feel comfortable in their website development work. Students will learn and apply industry-recognized techniques to make a visually appealing, functional, and interactive website.

Javascript and Frameworks

Required

3 units

Winter 2023 or
Spring 2023

Course Description:

The use of JavaScript and associated frameworks is the basis of this course so that students become proficient in the programming language. Students will develop a mobile-first design, add interactivity to a website, and make their websites functional for future use by adding key features to their pages, including e-commerce applications.

Continuing Education Academic Program Submission – For Approval

Department & Program Information (complete all fields):	
Program Name:	Back-End Development
Academic Credential:	Certificate of Professional Learning
Name of Representative:	Nathan Cheney, Program Manager
Effective Date:	2022-02-01
Date of Submission:	2022-01-11
Academic Merit (complete all fields; write “not applicable” as needed):	
Program Overview:	The proposed <i>Back-End Development</i> program is designed to prepare students with skills and knowledge to become back-end developers and full-stack developers for websites and online content. This program will provide more specialized training in the web development language JavaScript and an understanding of web databases and their relationship to websites, servers and API technology. This course will highlight the core competencies and skillsets that every back-end and full-stack development professional needs in today’s workforce.
Learning Objectives:	<ol style="list-style-type: none"> 1. Demonstrate how a server interacts with a database. 2. Develop expertise in JavaScript coding. 3. Demonstrate how to use API software. 4. Critically analyze the future of full-stack development through the lens of AWS and Shopify. 5. Demonstrate how to run queries from a back-end database. 6. Identify the role and tasks of a back-end developer as part of the website development process. 7. Understand what an API is and how it is incorporated into website design. 8. Apply web development principles to build functioning back-end code. <p>The following additional objectives will be threaded within each course:</p> <ul style="list-style-type: none"> • Demonstration of awareness of ethical practices and professional standards applicable to a field of employment and/or academic study.

	<ul style="list-style-type: none"> Exemplification of the knowledge, skills, attitudes and behaviours required to work and collaborate with people from different cultural backgrounds and to develop effective personal management skills.
Meeting Learning Objectives:	All course learning outcomes in the program will be mapped to the overall program objectives. The delivery format and teaching methods are structured to have a maximum effect on achieving the learning objectives.
Program Admission Requirements and Pre-requisites	<p>In compliance with the Certificates and Diploma, admission policy from Undergraduate Council, students who wish to enter the program should meet the following requirements based on their education and work experience:</p> <ol style="list-style-type: none"> 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 English Language Proficiency requirements: Completion of TOEFL exam with a minimum acceptable IBT score of 86 overall with a minimum score of 20 on each of the four components (Reading, Writing, Speaking, Listening), valid for 2 years Completion of the Front-End Development Certificate of Professional Learning or equivalent is required. Students are recommended to have completed the UX/UI Design Certificate of Professional Learning before the start of the program, but it is not required.
Program Completion Requirements:	Students who complete all three Back-End Development courses (9 units) will be granted a Certificate of Professional Learning in Back-End Development.
Program Delivery Format:	Courses will be delivered online. The online delivery formats will include instructor lectures and/or presentations, group discussions, and individual and/or small group practical application activities. Each course will contain 39 hours of content delivered over 12 weeks.
Student Evaluations (Grading Process):	Student evaluation will be based on application activities, individual or group projects, tests/quizzes, class participation, or a combination thereof. Where appropriate, evaluations will be structured to evaluate participants' level of competency in achieving overall learning objectives.
Course Evaluation:	For each course, students will complete an evaluation to assess content, delivery, materials, method of evaluation and instruction.
Course Instruction:	Instructors for courses will be selected from a pool of qualified

	external professionals. In compliance with <i>McMaster's Senate and Undergraduate Council Guidelines for Certificates and Diplomas</i> , 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.		
Program Advanced Standing:	One transfer credit (3 units) will be accepted into this program. Students will need to have obtained a minimum grade of C+ in each course transferred. The courses must have been taken at a recognized post-secondary institution in the last 5 years.		
Statement of Financial Viability:			
<p>I have reviewed the business case and financial projections which include enrolment projections and costs. Sources of revenue for this program include tuition and supplementary fees (MAPS). Expenses are typical and include significant upfront 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).</p> <p><i>Lorraine Carter, Director, McMaster Continuing Education</i></p>			
Statement of Administrative Responsibilities:			
<p>Statement of Faculty Alignment:</p> <p>The staffing and systems infrastructure to support the following functions already exists within Continuing Education. Costs will be fully covered by tuition, except the first year of the program, when the startup will be subsidized by Continuing Education.</p> <p>Continuing Education program responsibilities:</p> <ul style="list-style-type: none">• budget development and monetary responsibilities• program and course development• course registrations/administration• supervision of instructors to ensure all required policies and practices are adhered to and course are taught according to program requirements and standards• Marketing and Promotions <p>The Faculty of Humanities will act as an academic liaison and is charged with the responsibility of ongoing academic review and assessment of the curriculum. The Faculty's letter of support is included at the end of this document.</p>			
Listing of Courses:			
Course Name	Required/Elective	Unit Value	Term
Back-End Development	Required	3 units	Fall 2022
Course Description:			
In this course, students will learn about the purpose of back-end development and how servers, databases and the code that makes them drive web applications. Students will be given opportunities to apply their knowledge through case study scenarios which will enable development of their knowledge of the complex structure of a website. Students will			

also examine current development systems like Amazon Web Services and e-commerce sites to better understand how their systems align with the future of website development.

Interactivity and Databases

Required

3 units

Winter 2023

Course Description:

In this course, students will learn about the structure of database systems within a website and how their code will impact the interactivity with that database system. Students will learn how to set up and configure a database, how information is queried from the database, how systems work with the front-end of a website, the difference in database capability and the structured query language (SQL).

Advanced Javascript through Node.JS

Required

3 units

Spring 2023

Course Description:

Students will deepen their understanding of the JavaScript system and apply their knowledge through developing the back-end of a website using Node.JS. During this course, students will learn to develop their application programming interfaces (APIs), Lambda, and apply their knowledge by developing foundational code that will allow users to take action on any website.

ARTS & SCIENCE PROGRAM

UNDERGRADUATE CURRICULUM REPORT TO

UNDERGRADUATE COUNCIL

FOR THE 2022-2023

UNDERGRADUATE CALENDAR

17 November 2021

REPORT TO SENATE

ARTS & SCIENCE PROGRAM SUMMARY OF MAJOR CURRICULUM CHANGES FOR 2022-2023

This report highlights substantive changes being proposed. For a complete review of all changes, please refer to the November 2021 Arts & Science Program Report to Undergraduate Council for changes to the 2022-2023 Undergraduate Calendar, found at <https://artsci.mcmaster.ca/app/uploads/2021/11/2022-23-Arts-Science-Undergraduate-Curriculum-Report-FINAL-17-Nov.-2021.pdf>.

NEW PROGRAMS:

COMBINED HONOURS PROGRAM, ARTS & SCIENCE AND SUSTAINABLE CHEMISTRY

Rationale: This new combined honours option, developed jointly with the Department of Chemistry and Chemical Biology (Faculty of Science), has been added to the list of Arts & Science combined honours programs. It aligns with the Dept. of Chemistry and Chemical Biology's introduction of a combined honours program in Sustainable Chemistry.

Honours Arts & Science and Sustainable Chemistry

ADMISSION

Completion of Arts & Science I with a grade point average of at least 6.0 and an average of at least 6.0 in CHEM 1A03, 1AA3.

NOTES:

1. See additional notes in the Undergraduate Calendar, Faculty of Science, Department of Chemistry and Chemical Biology.
2. Nine units from the following list are required: ARTSSCI 3A06, 3B03, 3BB3, 3RL3/3S03. Students who choose to take ARTSSCI 3RL3 or 3S03 may only use one of those courses towards satisfying 3 units of the requirement. Students are encouraged, however, to take additional units from this list as an elective.
3. Six units of Upper-Level Inquiry beyond Level I are required. Additional units of Upper-Level Inquiry may be included as an elective with the permission of the Director. Upper-Level Inquiry courses are: ARTSSCI 3CL3, 3CU3, 3EH3, 3GJ3, 3TR3, 4CB3, 4CD3, 4CF3, 4CI3, 4CP3, 4CT3, 4DS3, 4EP3, 4HS3, 4ST3, 4VC3.
4. Students are recommended to take CHEM 2SC3 in Level II when possible.
5. Students considering postgraduate studies in Chemistry should note that 18 units of Level IV Chemistry or related subjects are required for consideration for admission at McMaster and most graduate schools in Canada. Such students are recommended to take CHEM 4G12 for their thesis.
6. Students who select CHEM 4G12 will take six units of Electives; students who select ARTSSCI 4A06, 4C06, or CHEM 4RP6 will take twelve units of Electives.

COURSE LIST 1

CHEM 2A03, 2II3, 2LB3, 2OD3, 2OG3, 2P03, 3AA3, 3EP3 A/B S, 3I03, 3II3, 3LA3, 3OA3, 3PA3, 3PC3, 3RC3, 3RP3, 4AA3, 4D03, 4IA3, 4IB3, 4IC3, 4II3, 4OA3, 4OB3, 4PB3, 4Q03, 4RP6 A/B S, 4W03; CHEMBIO 3BM3, 3OA3, 3OB3, 3P03, 4A03, 4OA3, 4OB3, 4Q03

COURSE LIST 2

BIOLOGY 3E13, 3ET3; EARTHSC 2GG3, 3CC3, 4CC3; ENVIRSC 2B03, 2C03, 2Q03, 2WW3, 3O03, 4EA3, 4N03; ENVSOCTY 2E13, 3EC3, 3EE3, 3ER3, 4HH3; HTHSCI 4MS3; LIFESCI 2X03; POLSCI 3GC3; SUSTAIN 2S03, 3S03

REQUIREMENTS

120 units total (Levels I-IV), of which 48 units may be Level I

- 24 units ARTSSCI 1A03, 1AA3, 1B03, 1BB3, 1C06, 1D06
- 6 units CHEM 1A03, 1AA3
- 18 units ARTSSCI 2A06, 2D06, 2E03, 2R03
- 9 units from ARTSSCI 3A06, 3B03, 3BB3, one of 3RL3/3S03 (see *Note 2*)
- 6 units Upper-Level Inquiry (see *Note 3*)
- 3 units CHEM 2SC3 (see *Note 4*)
- 3 units CHEM 2Q03
- 12 units from CHEM 2A03, 2II3, 2LB3, 2OD3, 2OG3, 2P03
- 3 units from CHEM 3SC3, CHEM 4SC3
- 6-12 units: one of ARTSSCI 4A06, 4C06, CHEM 4RP6, or 4G12 (see *Note 5 and Note 6*)
- 9 units from Course List 1
- 3 units from Course List 2
- 6 units from Course List 1 or Course List 2
- 6-12 units Electives (see *Note 5 and Note 6*)

PROGRAM CLOSURES:

N/A

MAJOR REVISIONS:

N/A

FACULTY OF HEALTH SCIENCES

UNDERGRADUATE CURRICULUM REPORT

**TO UNDERGRADUATE COUNCIL
CURRICULUM AND ADMISSIONS COMMITTEE**

FOR THE 2022-2023 CALENDAR

Friday November 26, 2021

**HSEC approved November 10, 2021
Faculty Executive Council approved November 24, 2021**

REPORT TO SENATE
FACULTY OF HEALTH SCIENCES
SUMMARY OF CURRICULUM CHANGES FOR 2022-2023

This report highlights substantive changes being proposed. For a complete review of all changes, please refer to the Faculty of Health Sciences Curriculum Report for changes to the 2022-2023 Undergraduate Calendar, found at:
<https://macdrive.mcmaster.ca/f/54d408da69f546259a3e/>

NEW PROGRAMS - 2

1. NEW PROGRAMS:

Biochemistry and Biomedical Sciences

1.1. Notes Applicable to all Honours Biochemistry Programs

1. In addition to the Honours Biochemistry program, the Department offers a Specialization in Biomedical Research. The Honours program has a specified set of basic requirements and a wide choice of electives (including those from outside the Faculty of Health Sciences), allowing for interdisciplinary studies or the opportunity to complete a Minor in another subject. Alternatively, students may wish to apply to the Biomedical Research Specialization which is strongly recommended for students intending to pursue graduate studies.
2. **Admission to the Honours Biochemistry program is limited.** Selection is based on academic achievement but requires, as a minimum, completion of the Level I requirements listed below.
3. **Admission to the Honours Biochemistry - Biomedical Research Specialization program is limited.** Admission to this program begins at Level III and requires, as a minimum, completion of Level II Honours Biochemistry and completion of a supplementary application.
4. Transfer between programs is possible at any time, subject to satisfying the admission requirements and availability of space.
5. Students considering graduate studies in Biochemistry are recommended to complete one of BIOCHEM 4F09 A/B or 4T15 A/B.

1.2 Honours Biochemistry (B.H.Sc.)

Admission

Enrolment in this program is limited and possession of the published minimum requirements does not guarantee admission. Admission is by selection but requires, as a minimum, completion of any Level I program with a Grade Point Average of at least 5.0 including:

6 units

- BIOLOGY 1A03 - Cellular and Molecular Biology
- BIOLOGY 1M03 - Biodiversity, Evolution and Humanity

6 units

- CHEM 1A03 - Introductory Chemistry I
- CHEM 1AA3 - Introductory Chemistry II

3 units from

- MATH 1A03 - Calculus For Science I
 - MATH 1LS3 - Calculus for the Life Sciences I
- 3 units from
- PHYSICS 1A03 - Introductory Physics
 - PHYSICS 1C03 - Physics for the Chemical and Physical Sciences

- 6 units from
- the Science I Course List

Note

A grade of at least C+ in four of BIOLOGY 1A03, 1M03, CHEM 1A03, 1AA3 and either MATH 1A03 or 1LS3 is required.

Program Notes

1. There are Level II and III prerequisites for many Level III and IV courses. The prerequisites should be considered when choosing Level II and III courses.
2. Both CHEMBIO 2A03 and 2P03 are highly recommended for students interested in pursuing an undergraduate thesis or graduate studies in biophysical chemistry.
3. Students who do not complete a research, thesis, or advanced biochemistry laboratory course (BIOCHEM 3A03, 3LA3, 3R06 A/B, 4F09 A/B, 4T15 A/B, 4Z03) must complete BIOCHEM 4C03.

Biochemistry Course List

- ANTHROP 2U03 - Plagues and People
- ANTHROP 3BD3 - The Black Death
- BIOCHEM 3BP3 - Practical Bioinformatics in the Genomics Era
- BIOCHEM 3CB3 - Emerging Discovery in Cell Biology
- BIOCHEM 3H03 - Clinical Biochemistry
- BIOCHEM 3MI3 - Microbial Interactions
- BIOCHEM 3Z03 - Structural Determination and Analysis of Macromolecules
- BIOCHEM 4H03 - Biotechnology and Drug Discovery
- BIOCHEM 4J03 - Immunological Principles in Practice
- BIOCHEM 4M03 - Cellular and Integrated Metabolism
- BIOCHEM 4N03 - Molecular Membrane Biology
- BIOCHEM 4Q03 - Biochemical Pharmacology
- BIOCHEM 4S03 - Introduction to Molecular Biophysics
- BIOLOGY 2B03 - Cell Biology
- BIOLOGY 2EE3 - Introduction to Microbiology and Biotechnology
- BIOMEDDC 2C03 - Exploring Careers in Biomedical Sciences
- BIOMEDDC 2W03 - Write Right for Your Science: Scientific Writing for the Biomedical Sciences
- CHEM 2A03 - Quantitative Chemical Analysis
- CHEM 2P03 - Applications of Physical Chemistry
- CHEMBIO 2A03 - Introduction to Bio-Analytical Chemistry
- CHEMBIO 2P03 - Physical Chemistry Tools for Chemical Biology
- CHEMBIO 3OA3 - Organic Mechanistic Tools for Chemical Biology
- HTHSCI 3I03 - Introductory Immunology
- HTHSCI 3K03 - Introductory Virology
- MOLBIOL 3O03 - Microbial Genetics

Requirements

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

Level I: 30 Units

30 units

- (See *Admission* above.)

Level II: 30 Units

12 units

- BIOCHEM 2B03 - Nucleic Acid Structure and Function
- BIOCHEM 2BB3 - Protein Structure and Enzyme Function
- BIOCHEM 2L06 A/B - Inquiry in Biochemical Techniques

3 units

- BIOLOGY 2C03 - Genetics

3 units from

- the *Biochemistry Course List* (See *Program Note 2* above.)

6 units

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

6 units

- Electives

Level III: 30 Units

3 units

- BIOCHEM 3D03 - Metabolism and Regulation

3 units

- BIOMEDDC 3WR3 – Biochemistry and Biomedical Scientific Writing: Right your Write

9 units from

- the *Biochemistry Course List* (See *Program Note 2* above.)

3 units

- STATS 2B03 - Statistical Methods for Science

12 units

- Electives

Level IV: 30 Units

3 units from

- Level IV Biochemistry courses, excluding:
 - BIOCHEM 4F09 A/B
 - BIOCHEM 4T15 A/B
 - BIOCHEM 4Z03

9 units from

- the *Biochemistry Course List* (See *Program Note 2* above.)

6-15 units from

- Levels III, IV Biochemistry, Biology, Chemical Biology, Chemistry, Molecular Biology courses
- HTHSCI 3I03 - Introductory Immunology
- HTHSCI 3K03 - Introductory Virology
- HTHSCI 4I03 - Advanced Concepts in Immunology
- HTHSCI 4O03 - Principles of Virus Pathogenesis

which must include one of:

- BIOCHEM 3A03 - Biochemical Research Practice
- BIOCHEM 3LA3 - Advanced Biochemistry Techniques
- BIOCHEM 3R06 A/B S - Research Project
- BIOCHEM 4C03 - Inquiry in Biochemistry
- BIOCHEM 4F09 A/B - Senior Thesis
- BIOCHEM 4T15 A/B - Senior Thesis
- BIOCHEM 4Z03 - Senior Project

(See Program Note 3 above)

3-12 units

- Electives

Requirements for Students Who Entered the Honours B.Sc. Biochemistry program prior to September 2022 and selected to transfer into the Honours B.H.Sc program

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

Level I: 30 Units

30 units

- (See *Admission* above.)

Level II: 30 Units

12 units

- BIOCHEM 2B03 - Nucleic Acid Structure and Function
- BIOCHEM 2BB3 - Protein Structure and Enzyme Function
- BIOCHEM 2L06 A/B - Inquiry in Biochemical Techniques

3 units

- BIOLOGY 2C03 - Genetics

3 units from

- the *Biochemistry Course List* (See *Program Note 2* above.)

6 units

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

6 units

- Electives

Level III: 30 Units

3 units

- BIOCHEM 3D03 - Metabolism and Regulation

12 units from

- the *Biochemistry Course List* (See *Program Note 2* above.)

3 units

- STATS 2B03 - Statistical Methods for Science
- 12 units
- Electives
- Level IV: 30 Units
- 3 units from
- Level IV Biochemistry courses, excluding:
 - BIOCHEM 4F09 A/B
 - BIOCHEM 4T15 A/B
 - BIOCHEM 4Z03
- 9 units from
- the *Biochemistry Course List* (See *Program Note 2* above.)
- 6-15 units from
- Levels III, IV Biochemistry, Biology, Chemical Biology, Chemistry, Molecular Biology courses
 - HTHSCI 3I03 - Introductory Immunology
 - HTHSCI 3K03 - Introductory Virology
 - HTHSCI 4II3 - Advanced Concepts in Immunology
 - HTHSCI 4O03 - Principles of Virus Pathogenesis
- which must include one of:
- BIOCHEM 3A03 - Biochemical Research Practice
 - BIOCHEM 3LA3 - Advanced Biochemistry Techniques
 - BIOCHEM 3R06 A/B S - Research Project
 - BIOCHEM 4C03 - Inquiry in Biochemistry
 - BIOCHEM 4F09 A/B - Senior Thesis
 - BIOCHEM 4T15 A/B - Senior Thesis
 - BIOCHEM 4Z03 - Senior Project
- (See *Program Note 3* above)
- 3-12 units
- Electives

RATIONALE: 1.1 & 1.2: Effective, September 2022, the Honours Biochemistry, program will be administered by the Faculty of Health Sciences. Initially, while the curriculum will not change substantively, the degree will be amended to the Hons B.H.Sc. Appropriate notifications will be included in the Faculty of Science section of the Calendar to ensure current Level 1 students, interested in applying to the program for September 2022, will be informed that the program will be available as both an Hons.B.Sc. and Hons.B.H.Sc. Students interested in the latter, will be directed to the Faculty of Health Sciences section of the Calendar for admission and program requirements. The existing Hons.B.Sc. Biochemistry program will be phased out, beginning September 2023. All in-course students currently enrolled in Level 2 or 3 will be given the option to remain in that program through to graduation or transfer to the Hons.B.H.Sc. program, effective September 2022. Final year students, scheduled to convocate in June 2022, will graduate with the Hons.B.Sc. degree at the Faculty of Science Convocation.

Over the next few years, the Hons.B.H.Sc. program will see a constructive alignment of the curriculum to better reflect the Faculty expertise and research, housed in the Faculty of Health Sciences.

1.3. Honours Biochemistry - Biomedical Research Specialization (B.H.Sc.)

Admission

Enrolment in this program is limited and possession of the published minimum requirements does not guarantee admission. Admission is by selection and is based on completion of the supplementary application by the stated deadline and academic achievement, but requires, as a minimum, completion of Level II Honours Biochemistry with a Grade Point Average of at least 5.0 and completion of the following courses:

12 units

- BIOCHEM 2B03 - Nucleic Acid Structure and Function
- BIOCHEM 2BB3 - Protein Structure and Enzyme Function
- BIOCHEM 2L06 A/B - Inquiry in Biochemical Techniques

3 units

- BIOLOGY 2C03 - Genetics

3 units from

- the *Biochemistry Course List* (See Program Note 4 below.)

6 units

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

Program Notes

1. Registration in an Honours Biochemistry program does not guarantee access to all courses. Some courses have program restrictions. There are Level II and III prerequisites for many Level III and IV courses. The prerequisites should be considered when choosing Level II and III courses.
2. Completion of one of BIOCHEM 4F09 A/B, 4T15 A/B or 4Z03 is required in Level IV.
3. A 'research intensive' option, available to students registered in this Specialization, offers additional laboratory research experience through completion of BIOCHEM 3R06 A/B S and 4T15 A/B. This option is intended for students planning to pursue graduate studies or a career in research and development. Enrolment in the courses is limited and admission is by selection.
4. Both CHEMBIO 2A03 and 2P03 are highly recommended for students interested in pursuing an undergraduate thesis or graduate studies in biophysical chemistry.

Biochemistry Course List

- ANTHROP 2U03 - Plagues and People
- ANTHROP 3BD3 - The Black Death
- BIOCHEM 3BP3 - Practical Bioinformatics in the Genomics Era
- BIOCHEM 3CB3 - Emerging Discovery in Cell Biology
- BIOCHEM 3H03 - Clinical Biochemistry
- BIOCHEM 3MI3 - Microbial Interactions
- BIOCHEM 3Z03 - Structural Determination and Analysis of Macromolecules
- BIOCHEM 4H03 - Biotechnology and Drug Discovery

- BIOCHEM 4J03 - Immunological Principles in Practice
- BIOCHEM 4M03 - Cellular and Integrated Metabolism
- BIOCHEM 4N03 - Molecular Membrane Biology
- BIOCHEM 4Q03 - Biochemical Pharmacology
- BIOCHEM 4S03 - Introduction to Molecular Biophysics
- BIOLOGY 2B03 - Cell Biology
- BIOLOGY 2EE3 - Introduction to Microbiology and Biotechnology
- BIOMEDDC 2C03 - Exploring Careers in Biomedical Sciences
- BIOMEDDC 2W03 - Write Right for Your Science: Scientific Writing for the Biomedical Sciences
- CHEM 2A03 - Quantitative Chemical Analysis
- CHEM 2P03 - Applications of Physical Chemistry
- CHEMBIO 2A03 - Introduction to Bio-Analytical Chemistry
- CHEMBIO 2P03 - Physical Chemistry Tools for Chemical Biology
- CHEMBIO 3OA3 - Organic Mechanistic Tools for Chemical Biology
- HTHSCI 3I03 - Introductory Immunology
- HTHSCI 3K03 - Introductory Virology
- MOLBIOL 3O03 - Microbial Genetics

Requirements

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

Level I: 30 Units

30 units

- Completed prior to admission to the program

Level II: 30 Units

30 units

- Completion of Level II Honours Biochemistry

Level III: 30 Units

3 units

- BIOCHEM 3D03 - Metabolism and Regulation

3-6 units from

- BIOCHEM 3A03 - Biochemical Research Practice
- BIOCHEM 3LA3 - Advanced Biochemistry Techniques
- BIOCHEM 3R06 A/B S - Research Project

3 units

- BIOMEDDC 3WR3 – Biochemistry and Biomedical Scientific Writing: Right your Write

9 units from

- the *Biochemistry Course List* (See *Program Note 4* above.)

3 units

- STATS 2B03 - Statistical Methods for Science

6-9 units

- Electives

Level IV: 30 Units

3 units from

- Level IV Biochemistry courses, excluding:

- BIOCHEM 4F09 A/B
- BIOCHEM 4T15 A/B
- BIOCHEM 4Z03

9 units from

- the *Biochemistry Course List* (See *Program Note 4* above.)

12-15 units from

- Levels III, IV Biochemistry, Biology, Chemical Biology, Chemistry, Molecular Biology courses
- HTHSCI 3I03 - Introductory Immunology
- HTHSCI 3K03 - Introductory Virology
- HTHSCI 4I03 - Advanced Concepts in Immunology
- HTHSCI 4O03 - Principles of Virus Pathogenesis

which must include one of:

- BIOCHEM 4F09 A/B - Senior Thesis
- BIOCHEM 4T15 A/B - Senior Thesis
- BIOCHEM 4Z03 - Senior Project

(See *Program Note 2* above.)

3-6 units

- Electives

Requirements for Students Who Entered the Honours B.Sc. in Biochemistry program Prior to September 2022

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

Level I: 30 Units

30 units

- Completed prior to admission to the program

Level II: 30 Units

30 units

- Completion of Level II Honours Biochemistry

Level III: 30 Units

3 units

- BIOCHEM 3D03 - Metabolism and Regulation

3-6 units from

- BIOCHEM 3A03 - Biochemical Research Practice
- BIOCHEM 3LA3 - Advanced Biochemistry Techniques
- BIOCHEM 3R06 A/B S - Research Project

12 units from

- the *Biochemistry Course List* (See *Program Note 4* above.)

3 units

- STATS 2B03 - Statistical Methods for Science

6-9 units

- Electives

Level IV: 30 Units

3 units from

- Level IV Biochemistry courses, excluding:

- BIOCHEM 4F09 A/B
- BIOCHEM 4T15 A/B
- BIOCHEM 4Z03

9 units from

- the *Biochemistry Course List* (See *Program Note 4* above.)

12-15 units from

- Levels III, IV Biochemistry, Biology, Chemical Biology, Chemistry, Molecular Biology courses
- HTHSCI 3I03 - Introductory Immunology
- HTHSCI 3K03 - Introductory Virology
- HTHSCI 4I03 - Advanced Concepts in Immunology
- HTHSCI 4O03 - Principles of Virus Pathogenesis

which must include one of:

- BIOCHEM 4F09 A/B - Senior Thesis
- BIOCHEM 4T15 A/B - Senior Thesis
- BIOCHEM 4Z03 - Senior Project

(See *Program Note 2* above.)

3-6 units

- Electives

1.4. Honours Biochemistry - Biomedical Research Specialization Co-op (B.H.Sc.)

Admission

Enrolment in this program is limited and possession of the published minimum requirements does not guarantee admission. Selection is based on academic achievement and an interview but requires, as a minimum, submission of the on-line application by the stated deadline and completion of Level II Honours Biochemistry with a Grade Point Average of at least 5.0 and completion of the following courses:

12 units

- BIOCHEM 2B03 - Nucleic Acid Structure and Function
- BIOCHEM 2BB3 - Protein Structure and Enzyme Function
- BIOCHEM 2L06 A/B - Inquiry in Biochemical Techniques

3 units

- BIOLOGY 2C03 - Genetics

3 units from

- the *Biochemistry Course List* (See *Program Note 6* below.)

6 units

- CHEM 20A3 - Organic Chemistry I
- CHEM 20B3 - Organic Chemistry II

Program Notes

1. This is a five-level (year) co-op program which includes two eight-month work terms which must be spent in biochemistry related placements.
2. Students must be registered full-time and take a full academic workload, as prescribed by Level and Term.
3. Students are required to complete SCIENCE 2C00 prior to the Fall Term of Level III. Students are required to complete SCIENCE 3C00 before the first work placement.

4. Registration in an Honours Biochemistry program does not guarantee access to all courses. Some courses have program restrictions. There are Level II and III prerequisites for many Level III and IV courses. The prerequisites should be considered when choosing Level II and III courses.
5. Completion of one of BIOCHEM 4F09 A/B, 4T15 A/B or 4Z03 is required in Level IV.
6. Both CHEMBIO 2A03 and 2P03 are highly recommended for students interested in pursuing an undergraduate thesis or graduate studies in biophysical chemistry.

Biochemistry Course List

- ANTHROP 2U03 - Plagues and People
- ANTHROP 3BD3 - The Black Death
- BIOCHEM 3BP3 - Practical Bioinformatics in the Genomics Era
- BIOCHEM 3CB3 - Emerging Discovery in Cell Biology
- BIOCHEM 3H03 - Clinical Biochemistry
- BIOCHEM 3MI3 - Microbial Interactions
- BIOCHEM 3Z03 - Structural Determination and Analysis of Macromolecules
- BIOCHEM 4H03 - Biotechnology and Drug Discovery
- BIOCHEM 4J03 - Immunological Principles in Practice
- BIOCHEM 4M03 - Cellular and Integrated Metabolism
- BIOCHEM 4N03 - Molecular Membrane Biology
- BIOCHEM 4Q03 - Biochemical Pharmacology
- BIOCHEM 4S03 - Introduction to Molecular Biophysics
- BIOLOGY 2B03 - Cell Biology
- BIOLOGY 2EE3 - Introduction to Microbiology and Biotechnology
- BIOMEDDC 2C03 - Exploring Careers in Biomedical Sciences
- BIOMEDDC 2W03 - Write Right for Your Science: Scientific Writing for the Biomedical Sciences
- CHEM 2A03 - Quantitative Chemical Analysis
- CHEM 2P03 - Applications of Physical Chemistry
- CHEMBIO 2A03 - Introduction to Bio-Analytical Chemistry
- CHEMBIO 2P03 - Physical Chemistry Tools for Chemical Biology
- CHEMBIO 3OA3 - Organic Mechanistic Tools for Chemical Biology
- HTHSCI 3I03 - Introductory Immunology
- HTHSCI 3K03 - Introductory Virology
- MOLBIOL 3O03 - Microbial Genetics

Requirements For Students Who Enter in September 2022 or Prior

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

Level I: 30 Units

30 units

- Completed prior to admission to the program

Level II: 30 Units

30 units

Completion of Level II Honours Biochemistry, including completion of:

- SCIENCE 2C00 - Skills for Career Success in Science
(See Program Note 3 above.)

Level III

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

Fall Term: 15 units:

3 units

- STATS 2B03 - Statistical Methods for Science

3 units

- BIOCHEM 3D03 - Metabolism and Regulation

3 units from

- Level III, IV Biochemistry, Biology, Chemical Biology, Chemistry, Molecular Biology courses
- HTHSCI 3I03 - Introductory Immunology
- HTHSCI 3K03 - Introductory Virology
- HTHSCI 4II3 - Advanced Concepts in Immunology
- HTHSCI 4O03 - Principles of Virus Pathogenesis

3 units from

- the *Biochemistry Course List* (See *Program Note 6* above.)

3 units

- Electives

1 course

- SCIENCE 3C00 - Advanced Job Search Skills For Science Co-op Students

Winter Term:

Work Term

1 course

- SCIENCE 3WT0 - Science Co-op Work Term

Spring/Summer Term:

Work Term

1 course

- SCIENCE 3WT0 - Science Co-op Work Term

Level IV

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

Fall and Winter Terms: 30 units:

3 units

from

- Level IV Biochemistry courses, excluding:
 - BIOCHEM 4F09
 - BIOCHEM 4T15 A/B
 - BIOCHEM 4Z03

9 units from

- the *Biochemistry Course List* (See *Program Note 6* above.)

12-15 units from

- Levels III, IV Biochemistry, Biology, Chemical Biology, Chemistry, Molecular Biology courses
- HTHSCI 3I03 - Introductory Immunology
- HTHSCI 3K03 - Introductory Virology

- HTHSCI 4II3 - Advanced Concepts in Immunology
- HTHSCI 4O03 - Principles of Virus Pathogenesis

which must include one of:

- BIOCHEM 4F09 A/B - Senior Thesis
- BIOCHEM 4T15 A/B - Senior Thesis
- BIOCHEM 4Z03 - Senior Project

(See *Program Note 5* above.)

3-6 units

- Electives

Spring/Summer Term:

Work Term

1 course

- SCIENCE 4WT0 - Science Co-op Work Term

Level V

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

Fall Term:

Work Term

1 course

- SCIENCE 5WT0 - Science Co-op Work Term

Winter Term: 15 units:

6 units from

- the *Biochemistry Course List* (See *Program Note 6* above.)

6 units from

- Levels III, IV Biochemistry, Biology, Chemical Biology, Chemistry, Molecular Biology courses
- HTHSCI 3I03 - Introductory Immunology
- HTHSCI 3K03 - Introductory Virology
- HTHSCI 4II3 - Advanced Concepts in Immunology
- HTHSCI 4O03 - Principles of Virus Pathogenesis

3 units

- Electives

Requirements (Effective September 2023)

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

Level I: 30 Units

30 units

- Completed prior to admission to the program

Level II: 30 Units

30 units

Completion of Level II Honours Biochemistry, including completion of:

- SCIENCE 2C00 - Skills for Career Success in Science
- (See *Program Note 3* above.)

Level III

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

Fall Term: 15 units:

3 units

- STATS 2B03 - Statistical Methods for Science

3 units

- BIOCHEM 3D03 - Metabolism and Regulation

3 units from

- Level III, IV Biochemistry, Biology, Chemical Biology, Chemistry, Molecular Biology courses
- HTHSCI 3I03 - Introductory Immunology
- HTHSCI 3K03 - Introductory Virology
- HTHSCI 4I03 - Advanced Concepts in Immunology
- HTHSCI 4O03 - Principles of Virus Pathogenesis

3 units from

- the *Biochemistry Course List* (See *Program Note 6* above.)

3 units

- Electives

1 course

- SCIENCE 3C00 - Advanced Job Search Skills For Science Co-op Students

Winter Term:

Work Term

1 course

- SCIENCE 3WT0 - Science Co-op Work Term

Spring/Summer Term:

Work Term

1 course

- SCIENCE 3WT0 - Science Co-op Work Term

Level IV

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

Fall and Winter Terms: 30 units:

3 units from

- Level IV Biochemistry courses, excluding:
 - BIOCHEM 4F09
 - BIOCHEM 4T15 A/B
 - BIOCHEM 4Z03

3 units

- BIOMEDDC 3WR3 – Biochemistry and Biomedical Scientific Writing: Right your Write

6 units from

- the *Biochemistry Course List* (See *Program Note 6* above.)

12-15 units from

- Levels III, IV Biochemistry, Biology, Chemical Biology, Chemistry, Molecular Biology courses
- HTHSCI 3I03 - Introductory Immunology
- HTHSCI 3K03 - Introductory Virology
- HTHSCI 4I03 - Advanced Concepts in Immunology
- HTHSCI 4O03 - Principles of Virus Pathogenesis

which must include one of:

- BIOCHEM 4F09 A/B - Senior Thesis
- BIOCHEM 4T15 A/B - Senior Thesis
- BIOCHEM 4Z03 - Senior Project

(See *Program Note 5* above.)

3-6 units

- Electives

Spring/Summer Term:

Work Term

1 course

- SCIENCE 4WT0 - Science Co-op Work Term

Level V

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

Fall Term:

Work Term

1 course

- SCIENCE 5WT0 - Science Co-op Work Term

Winter Term: 15 units:

6 units from

- the *Biochemistry Course List* (See *Program Note 6* above.)

6 units from

- Levels III, IV Biochemistry, Biology, Chemical Biology, Chemistry, Molecular Biology courses
- HTHSCI 3I03 - Introductory Immunology
- HTHSCI 3K03 - Introductory Virology
- HTHSCI 4I03 - Advanced Concepts in Immunology
- HTHSCI 4O03 - Principles of Virus Pathogenesis

3 units

- Electives

Co-op Program Chart

	FALL TERM (September to December)	WINTER TERM (January to April)	SPRING/SUMMER TERM (May to August)
Level III	15 units from Academic Level III and SCIENCE 3C00	Work Term SCIENCE 3WT0	Work Term SCIENCE 3WT0
Level IV	30 units from Academic Levels III and IV		Work Term SCIENCE 4WT0
Level V	Work Term SCIENCE 5WT0	15 units from Academic Level IV	

RATIONALE: 1.3 & 1.4: Effective, September 2022, the Honours Biochemistry Biomedical Research Specialization and the Honours Biochemistry Biomedical Research Specialization Co-op programs will be administered by the Faculty of Health Sciences. Initially, while the curriculum will not change substantively, the degree will be amended to the Hons B.H.Sc.

Appropriate notifications will be included in the Faculty of Science section of the Calendar to ensure current Level 2 Biochemistry students, interested in applying or transferring to the program for September 2022, will be informed that the program will be available as both an Hons.B.Sc. and Hons.B.H.Sc. Students interested in the latter, will be directed to the Faculty of Health Sciences section of the Calendar for admission and program requirements. The existing Hons.B.Sc. Biochemistry Biomedical Research Specialization program will be phased out, beginning September 2023. All in-course students currently enrolled in Level 2 or 3 will be given the option to remain in that program through to graduation or transfer to the Hons.B.H.Sc. program, effective September 2022. Final year students, scheduled to convocate in June 2022, will graduate with the Hons.B.Sc. degree at the Faculty of Science Convocation.

Over the next few years, the Hons.B.H.Sc. Biochemistry Biomedical Research Specialization program will see a constructive alignment of the curriculum to better reflect the Faculty expertise and research, housed in the Faculty of Health Sciences. Effective, September 2023, the requirements of the Co-op program have been amended to include additions to the course list that are suitable for inclusion based on course content. Addition of required scientific writing course. This dedicated course recognizes the importance of equipping students with writing skills so they can succeed in their thesis research placements and future careers. Pending approval of the course that will be administered by the Biomedical Discovery and Commercialization Program Office. Relaxation of level IV BIOCHEM requirement to expand options for students. Maintaining the completion of any other level IV BIOCHEM course maintains rigour in the degree.

PROGRAM CLOSURES

NONE

MAJOR REVISIONS

NONE



SCIENCE

Undergraduate Curriculum Report to
Undergraduate Council, for the 2022-2023
Undergraduate Calendar

Approved by the General Faculty of
the Faculty of Science on November
19, 2021

November 19, 2021

FACULTY OF SCIENCE REPORT TO SENATE

SUMMARY OF MAJOR CURRICULUM CHANGES FOR 2022-2023

Following, is the summary of substantive curriculum changes being proposed by the Faculty of Science. For a complete review of all changes, refer to the November 19, 2021, Report of the Academic Planning and Policy Committee for changes to the 2022-2023 Undergraduate Calendar, found at:

<https://macdrive.mcmaster.ca/f/f8c97562ba16468bb250/>

1.0 NEW PROGRAMS

1.1 Honours Biology - Physiology Core (B.Sc.)

Admission Note

One of PHYSICS 1A03 or 1C03 is required for admission. Completion of PHYSICS 1AA3 or 1CC3 is also recommended.

Admission

Enrolment in this program is limited and possession of the published minimum requirements does not guarantee admission. Selection is based on academic achievement but requires, as a minimum, completion of any Level I program with a Grade Point Average of at least 5.0 including:

6 units

from the following courses, where an average of at least 6.0 (between the courses) is required

- BIOLOGY 1A03 - Cellular and Molecular Biology
- BIOLOGY 1M03 - Biodiversity, Evolution and Humanity

6 units

- CHEM 1A03 - Introductory Chemistry I
- CHEM 1AA3 - Introductory Chemistry II

3 units

from

- MATH 1A03 - Calculus for Science I
- MATH 1LS3 - Calculus for the Life Sciences I

3 units

from

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

6 units

from

- the Science I Course List

Program Notes

1. The Honours Biology – Physiology Core program allows students to choose Biology courses that reflect their own Physiology-related interest. Students are encouraged to discuss their course selections with a Biology academic program advisor.
2. It is recommended that students take both PSYCH 1X03 and 1XX3 if they are interested in upper level Psychology courses.
3. Completion of BIOLOGY 2A03 is required by the end of Level II.
4. Completion of STATS 2B03 is required by the end of Level III.

Physiology Course List

- BIOCHEM 2EE3 – Metabolism and Physiological Chemistry
- BIOCHEM 4M03 - Cellular and Integrated Metabolism
- BIOCHEM 4N03 - Molecular Membrane Biology
- BIOLOGY 2L03 - Experimental Design in Biology
- BIOLOGY 3AA3 - Fundamental Concepts of Pharmacology
- BIOLOGY 3B03 - Plant Physiology
- BIOLOGY 3EP3 A/B S - Applied Biology Placement
- BIOLOGY 3IR3 A/B S - Independent Research Project
- BIOLOGY 3MM3 - Invertebrate Form and Function
- BIOLOGY 3S03 - An Introduction to Bioinformatics
- BIOLOGY 3XL3 - Comparative Vertebrate Anatomy & Physiology
- BIOLOGY 3ZZ3 – Topics in Physiology
- BIOLOGY 4C12 A/B S - Senior Thesis
- BIOLOGY 4F06 A/B S - Senior Project
- BIOLOGY 4T03 - Molecular and Cellular Neuroscience
- BIOLOGY 4X03 - Environmental Physiology
- BIOPHYS 2A03 - Biophysics of the Cell and Living Organisms
- KINESIOL 2C03 - Neuromuscular Exercise Physiology
- KINESIOL 2CC3 - Cardiorespiratory and Metabolic Exercise Physiology
- KINESIOL 4C03 - Integrative Physiology of Human Performance
- LIFESCI 3AA3 - Human Pathophysiology
- MOLBIOL 3M03 - Fundamental Concepts of Development
- NEUROSCI 3J03 - Visual Neuroscience
- NEUROSCI 3SN3 - Neural Circuits
- PSYCH 2E03 - Sensory Processes
- PSYCH 3A03 - Audition
- PSYCH 3FA3 - Neuroscience of Learning and Memory

Experiential Learning Course List

- BIOLOGY 2L03 - Experimental Design in Biology
- BIOLOGY 3B03 - Plant Physiology
- BIOLOGY 3EI3- Ecological Indicators
- BIOLOGY 3EP3 - Applied Biology Placement
- BIOLOGY 3FF3- Evolution
- BIOLOGY 3IR3 - Independent Research Project
- BIOLOGY 3R03- Field Biology I
- BIOLOGY 3U03 - Animal Physiology – Homeostasis
- BIOLOGY 4A03- Advanced Topics in Ecology
- BIOLOGY 4C12 A/B S -Senior Thesis
- BIOLOGY 4F06- A/B S Senior Project
- BIOLOGY 4I03- Senior Project
- BIOLOGY 4J03- Field Biology II
- BIOLOGY 4PP3- Environmental Microbiology and Biotechnology
- MOLBIOL 3A03 - Current Topics in Molecular Biology and Genetics
- MOLBIOL 3D03 - Experimental Approaches in Cell Biology
- MOLBIOL 3I03 - Independent Research Project
- MOLBIOL 3V03 - Techniques in Molecular Genetics
- MOLBIOL 3Y03 – Plant Responses to the environment
- MOLBIOL 4BB3- Plant Metabolism and Molecular Biology
- MOLBIOL 4G12 A/B S- Senior Thesis

Requirements

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

Level I: 30 Units

30 units

(See *Admission* above.)

Levels II-IV: 90 Units

12 units

- BIOLOGY 2A03 - Integrative Physiology of Animals
- BIOLOGY 2B03 - Cell Biology
- BIOLOGY 2C03 - Genetics
- BIOLOGY 2F03 - Fundamental and Applied Ecology
(See *Program Note 3* above.)

6 units

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

3 units

- STATS 2B03 - Statistical Methods for Science
(See *Program Note 4* above.)

3 units

- BIOCHEM 3G03 - Proteins and Nucleic Acids

9 units

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

3 units

from

- the Experiential Learning Course List

3 units

from

- Level IV Biology or Molecular Biology courses

24 units

from

- the *Physiology Course List*

27 units

- Electives

Justification 1.1: Introduction of a new core program version of the Honours Biology – Physiology Research Specialization program. This new program option in Physiology will provide flexibility for students who still want to focus their studies in Physiology but have no interest in pursuing applied research or lab intensive experiences. This model is functionally equivalent to the Honours Biology Research Specialization and Honours Biology Core programs.

This new Honours Physiology program will initially be capped at 50 seats to ensure it is manageable given our current course offerings and their associated enrolment caps. Students in this program will be required to complete a minimum three units of experiential learning from a new experiential course list which will be added to all Biology core programs.

1.2 Honours Molecular Biology and Genetics Core (B.Sc.)

Admission Note

One of PHYSICS 1A03 or 1C03 is required for admission. Completion of PHYSICS 1AA3 or 1CC3 by the end of Level II is also recommended.

Admission

Enrolment in this program is limited and possession of the published minimum requirements does not guarantee admission. Selection is based on academic achievement but requires, as a minimum, completion of any Level I program with a Grade Point Average of at least 5.0 including:

6 units

from the following courses, where an average of at least 6.0 (between the courses) is required

- BIOLOGY 1A03 - Cellular and Molecular Biology
- BIOLOGY 1M03 - Biodiversity, Evolution and Humanity

6 units

- CHEM 1A03 - Introductory Chemistry I
- CHEM 1AA3 - Introductory Chemistry II

3 units

from

- MATH 1A03 - Calculus For Science I
- MATH 1LS3 - Calculus for the Life Sciences I

3 units

from

- PHYSICS 1A03 - Introductory Physics
- PHYSICS 1C03 - Physics for the Chemical and Physical Sciences
(See *Admission Note* above.)

6 units

from

- the Science I Course List (See *Admission Note* above.)

Program Notes

1. The Honours Molecular Biology and Genetics Core program allows students to choose Biology courses that reflect their own Molecular Biology-related interest. Students are encouraged to discuss their course selections with a Biology academic program advisor.
2. BIOLOGY 2B03, 2EE3 and MOLBIOL 2C03 must be completed in Level II.
3. Six units of BIOLOGY 2A03, 2D03, 2F03, 3FF3 are required. However, completion of at least nine units is recommended.
4. Completion of STATS 2B03 is required for admission to the Honours Molecular Biology and Genetics Research Specialization (Co-op) program and therefore, students intending to apply for the Co-op option must complete STATS 2B03 in Level II.
5. Students interested in microbiology and biotechnology and especially those considering postgraduate studies in this area should take the following courses: BIOLOGY 4PP3, MOLBIOL 4P03.

Molecular Biology and Genetics Course List I

- MOLBIOL 3A03 - Current Topics in Molecular Biology and Genetics
- MOLBIOL 3D03 - Experimental Approaches in Cell Biology
- MOLBIOL 3I03 A/B S - Independent Research Project
- MOLBIOL 3M03 - Fundamental Concepts of Development
- MOLBIOL 3Y03 - Plant Responses to the Environment
- MOLBIOL 4BB3 - Plant Metabolism and Molecular Biology
- MOLBIOL 4DD3 - Molecular Evolution
- MOLBIOL 4ED3 - Evolutionary Developmental Biology
- MOLBIOL 4H03 - Molecular Biology of Cancer
- MOLBIOL 4K03 - Research Advances in Biology of Aging
- MOLBIOL 4P03 - Medical Microbiology
- MOLBIOL 4RR3 - Human Genetics

Molecular Biology and Genetics Course List II

5

- BIOCHEM 2B03 - Nucleic Acid Structure and Function
- BIOCHEM 2BB3 - Protein Structure and Enzyme Function
- BIOCHEM 2EE3 - Metabolism and Physiological Chemistry
- BIOCHEM 3G03 - Proteins and Nucleic Acids
- BIOCHEM 4E03 - Gene Regulation in Stem Cells and Development
- BIOLOGY 2A03 - Integrative Physiology of Animals
- BIOLOGY 2D03 - Plant Biodiversity and Biotechnology
- BIOLOGY 2F03 - Fundamental and Applied Ecology
- BIOLOGY 2L03 - Experimental Design in Biology
- BIOLOGY 3FF3 - Evolution
- BIOLOGY 3PG3 - Population Genetics
- BIOLOGY 4EE3 - Human Diversity and Human Nature
- BIOLOGY 4PP3 - Environmental Microbiology and Biotechnology
- BIOPHYS 2A03 - Biophysics of the Cell and Living Organisms
- BIOPHYS 3G03 - Modelling Life
- CHEMBIO 2A03 - Introduction to Bio-Analytical Chemistry
- CHEMBIO 2P03 - Physical Chemistry Tools for Chemical Biology
- CHEMENG 3BK3 - Bio-Reaction Engineering
- CHEMENG 3BM3 - Bioseparations Engineering
- HTHSCI 3I03 - Introductory Immunology
- HTHSCI 3K03 - Introductory Virology
- HTHSCI 4I13 - Advanced Concepts in Immunology

Experiential Course List

- BIOLOGY 2L03 - Experimental Design in Biology
- BIOLOGY 3B03 - Plant Physiology
- BIOLOGY 3EI3- Ecological Indicators
- BIOLOGY 3EP3 - Applied Biology Placement
- BIOLOGY 3FF3- Evolution
- BIOLOGY 3IR3 - Independent Research Project
- BIOLOGY 3R03- Field Biology I
- BIOLOGY 3U03 - Animal Physiology – Homeostasis
- BIOLOGY 4A03- Advanced Topics in Ecology
- BIOLOGY 4C12 A/B-Senior Thesis
- BIOLOGY 4F06 A/B-Senior Project
- BIOLOGY 4I03- Senior Project
- BIOLOGY 4J03- Field Biology II
- BIOLOGY 4PP3- Environmental Microbiology and Biotechnology
- MOLBIOL 3A03 - Current Topics in Molecular Biology and Genetics
- MOLBIOL 3D03 - Experimental Approaches in Cell Biology
- MOLBIOL 3I03 - Independent Research Project
- MOLBIOL 3V03 - Techniques in Molecular Genetics
- MOLBIOL 3Y03 – Plant Responses to the environment
- MOLBIOL 4BB3 - Plant Metabolism and Molecular Biology
- MOLBIOL 4G12 A/B S - Senior Thesis

Requirements

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

Level I: 30 Units

30 units

(See Admission above.)

Levels II-IV: 90 Units

6 units

- CHEM 2OA3 - Organic Chemistry I
 - CHEM 2OB3 - Organic Chemistry II
- 3 units
- STATS 2B03 - Statistical Methods for Science
(See *Program Note 4* above.)
- 6 units
from
- BIOLOGY 2A03 - Integrative Physiology of Animals
 - BIOLOGY 2D03 - Plant Biodiversity and Biotechnology
 - BIOLOGY 2F03 - Fundamental and Applied Ecology
 - BIOLOGY 3FF3 - Evolution
(See *Program Note 3* above.)
- 21 units
- BIOLOGY 2B03 - Cell Biology
 - BIOLOGY 2EE3 - Introduction to Microbiology and Biotechnology
 - BIOLOGY 3S03 - An Introduction to Bioinformatics
 - MOLBIOL 2C03 - Genetics
 - MOLBIOL 3B03 - Advanced Cell Biology
 - MOLBIOL 3I13 - Molecular Genetics of Eukaryotes
 - MOLBIOL 3O03 - Microbial Genetics
(See *Program Note 2* above.)
- 3 units
from
- the Experiential Course List
- 9 units
from
- the *Molecular Biology and Genetics Course List I*, which must include at least three units of Level IV
- 12 units
from
- the *Molecular Biology and Genetics Course List I or II*
- 30 units
- Electives (See *Program Note 3* above.)

Justification 1.2: Introduction of a new core program version of the Honours Molecular Biology and Genetics Research Specialization program. This new program option in Molecular Biology and Genetics will provide flexibility for students who still want to focus their studies in Molecular Biology and Genetics but have no interest in pursuing applied research or lab intensive experiences. This model is functionally equivalent to the Honours Biology Research Specialization and Honours Biology Core programs.

2.0 PROGRAM CLOSURES

- **Honours B.Sc. in Biochemistry, Honours B.Sc. in Biochemistry – Biomedical Research Specialization, Honours B.Sc. in Biochemistry – Biomedical Research Specialization Co-op**

Memo from Dr. Maureen MacDonald, Dean of Science, and Dr. Susan Denburg, Executive Vice-Dean and Associate Vice-President, Academic, Faculty of Health Sciences will be sent as soon as possible.

3.0 MAJOR REVISIONS:

3.1 Honours Mathematics and Statistics - Mathematics Sub-Plan (B.Sc.)

Effective September 2023, this program will be renamed Honours Mathematics and Statistics – Mathematics Specialization (B.Sc.). Students who enrolled prior to September 2023 will be given the choice to remain in Honours Mathematics and Statistics – Mathematics Sub-plan or transfer into Honours Mathematics and Statistics – Mathematics Specialization.

Admission Notes

1. ~~For students entering the program as of September 2019, c~~Completion of MATH 1C03 is required by the end of Level II.
2. Students seeking admission to the program are strongly discouraged from taking MATH 1LS3 and 1LT3 as they do not cover all content needed for MATH 2X03.

Admission

Completion of any Level I program with a Grade Point Average of at least 8.0 including:

3 units

from

- MATH 1A03 - Calculus For Science I
- MATH 1LS3 - Calculus for the Life Sciences I
- MATH 1X03 - Calculus for Math and Stats I
- MATH 1ZA3 - Engineering Mathematics I
(See *Admission Note 2* above.)

3 units

from the following courses, with a grade of at least C+

- MATH 1AA3 - Calculus For Science II
- MATH 1LT3 - Calculus for the Life Sciences II
- MATH 1XX3 - Calculus for Math and Stats II
- MATH 1ZB3 - Engineering Mathematics II-A
(See *Admission Note 2* above.)

3 units

from

- MATH 1B03 - Linear Algebra I
- MATH 1ZC3 - Engineering Mathematics II-B

Program Notes

1. Students must satisfy a Scientific Computing requirement, by completing one of: COMPSCI 1MD3, ~~DATA~~SCI 2G03, MATH 1MP3, PHYSICS 2G03.
2. ~~For students entering the program as of September 2019, MATH 1C03 must be~~ completed by the end of Level II.

Core Course List

- ~~MATH 2E03~~
- MATH 2ET3* - Theory and Practice of Teaching Mathematics
- MATH 2LA3 - Applications of Linear Algebra
- MATH 2R03 - Theory of Linear Algebra
- ~~MATH 2S03~~
- ~~MATH 2T03~~
- MATH 3B03 - Geometry
- ~~MATH 3E03~~
- ~~MATH 3EE3~~
- MATH 3F03 - Ordinary Differential Equations
- MATH 3FF3 - Partial Differential Equations
- MATH 3GR3 - Abstract Algebra
- MATH 3MB3 - Introduction to Modelling
- MATH 3NA3 - Numerical Linear Algebra

- ~~MATH 3Q03~~
 - MATH 3T03 - Inquiry in Topology
 - STATS 2MB3 - Statistical Methods and Applications
 - STATS 3A03 - Applied Regression Analysis with SAS
 - ~~STATS 3CI3~~
 - STATS 3D03 - Mathematical Statistics
 - ~~STATS 3F03~~
 - STATS 3S03* - Survey Sampling
 - STATS 3U03* - Stochastic Processes
- Scientific Communication Course List
- MATH 3CY3 - Cryptography
 - MATH 3DC3 - Discrete Dynamical Systems and Chaos
 - MATH 3ET3 A/B S - Mathematics Teaching Placement
 - MATH 3G03 - Problem Solving
 - MATH 3MB3 - Introduction to Modelling
 - MATH 3QC3 - Introduction to Quantum Computing
 - MATH 3TP3 - Truth and Provability
 - MATH 3U03 - Combinatorics
 - MATH 3V03 - Graph Theory
 - MATH 3Z03 - Inquiry: History of Mathematics
 - MATH 4FM3 - Financial Markets and Derivatives
 - MATH 4MB3 - Mathematical Biology
 - MATH 4P06 A/B S - Senior Research Project
 - MATH 4W03 - Reading in Mathematics
 - STATS 3A03 - Applied Regression Analysis with SAS
 - **STATS 3DA3 – Data Science Methods**
 - STATS 3DS3 - Introduction to Data Science Theory
 - STATS 3PG3 - Probability and Games of Chance
 - STATS 4A03 - Time Series
 - STATS 4M03 - Multivariate Analysis
 - STATS 4P03 - Advanced Applied Statistics
 - STATS 4T06 A/B - Senior Research Project
 - STATS 4W03 - Reading in Statistics

Requirements

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

Level I: 30 Units

30 units

(See *Admission* above.)

Levels II-IV: 90 Units

18 units

- MATH 2C03 - Introduction to Differential Equations
- MATH 2R03 - Theory of Linear Algebra
- MATH 2X03 - Advanced Calculus I
- MATH 2XX3 - Advanced Calculus II
- MATH 3A03 - Real Analysis I
- MATH 3X03 - Complex Analysis I

3 units

- STATS 2D03 - Introduction to Probability

15 units

from the *Core Course List*, which must include six units from:

- ~~MATH 3E03~~
- ~~MATH 3EE3~~
- MATH 3F03 - Ordinary Differential Equations

- MATH 3FF3 - Partial Differential Equations
 - MATH 3GR3 - Abstract Algebra
 - MATH 3T03 - Inquiry in Topology
- 3 units
- MATH 4A03 - Real Analysis II
- 3 units
- from
- MATH 4B03* - Calculus on Manifolds
 - MATH 4E03 - Galois Theory
 - MATH 4GR3 - Groups and Rings
 - MATH 4L03* - Introduction to Mathematical Logic
 - MATH 4NA3 - Numerical Methods for Differential Equations
 - ~~MATH 4Q03~~
 - ~~MATH 4V03~~
 - MATH 4X03* - Complex Analysis II
- 15 units
- from
- Levels III, IV, V Mathematics or Statistics courses including one course selected from the *Scientific Communication Course List*
- 0-3 units
- from
- COMPSCI 1MD3 - Introduction to Programming
 - **DATASCI 2G03 - Scientific Computing**
 - MATH 1MP3 - Introduction to Mathematical Scientific Computation
 - ~~PHYSICS 2G03 - Scientific Computing~~
- (See *Program Note 1* above.)
- 0-3 units
- MATH 1C03 - Introduction to Mathematical Reasoning (if not completed in Level I)
- 27-33 units
- Electives

3.2 Honours Mathematics and Statistics - Mathematics Sub-Plan Co-op (B.Sc.)

Effective September 2023, this program will be renamed Honours Mathematics and Statistics – Mathematics Specialization Co-op (B.Sc.). Students who enrolled prior to September 2023 will be given the choice to remain in Honours Mathematics and Statistics – Mathematics Sub-plan Co-op or transfer into Honours Mathematics and Statistics – Mathematics Specialization Co-op.

Honours Mathematics and Statistics Co-op Programs

Co-op opportunities in Mathematics and Statistics are available in combination with the sub-plans. Enrolment in these programs is limited. Selection is based on academic achievement and an interview but requires, as a minimum, submission of the on-line application by the stated deadline, and completion of a Level II Honours Mathematics and Statistics program with a Grade Point Average of at least 5.0. Information about the program and the selection procedure may be obtained from Science Career and Cooperative Education.

Notes

1. These are five-level (year) co-op programs which include two eight-month work terms which must be spent in mathematics or statistics related placements.
2. Students must be registered in a full-load and take a full academic program as prescribed, by Level and Term.

3. Students are required to complete SCIENCE 2C00 prior to the Fall term of level III. ~~Students are required to complete and SCIENCE 3C00 before the first work placement.- and are strongly recommended to complete SCIENCE 2C00 in Level II.~~
4. Students must satisfy a Scientific Computing requirement, by completing one of: COMPSCI 1MD3, **DATASCI 2G03**, MATH 1MP3, PHYSICS 2G03. It is recommended that students in Mathematics Sub-plan (Co-op) complete this requirement prior to their first work term.

Admission

Enrolment in this program is limited. Selection is based on academic achievement and an interview but requires, as a minimum, submission of the on-line application by the stated deadline, and completion of Level II Honours Mathematics and Statistics (Mathematics Sub-Plan) with a Grade Point Average of at least 5.0.

Core Course List

- ~~MATH 2E03~~
- MATH 2ET3* - Theory and Practice of Teaching Mathematics
- MATH 2LA3 - Applications of Linear Algebra
- MATH 2R03 - Theory of Linear Algebra
- ~~MATH 2S03~~
- ~~MATH 2T03~~
- MATH 3B03 - Geometry
- ~~MATH 3E03~~
- ~~MATH 3EE3~~
- MATH 3F03 - Ordinary Differential Equations
- MATH 3FF3 - Partial Differential Equations
- MATH 3GR3 - Abstract Algebra
- MATH 3MB3 - Introduction to Modelling
- MATH 3NA3 - Numerical Linear Algebra
- ~~MATH 3Q03~~
- MATH 3T03 - Inquiry in Topology
- STATS 2MB3 - Statistical Methods and Applications
- STATS 3A03 - Applied Regression Analysis with SAS
- ~~STATS 3CI3~~
- STATS 3D03 - Mathematical Statistics
- ~~STATS 3F03~~
- STATS 3S03* - Survey Sampling
- STATS 3U03* - Stochastic Processes

Scientific Communication Course List

- MATH 3CY3 - Cryptography
- MATH 3DC3 - Discrete Dynamical Systems and Chaos
- MATH 3ET3 A/B S - Mathematics Teaching Placement
- MATH 3G03 - Problem Solving
- MATH 3MB3 - Introduction to Modelling
- MATH 3QC3 - Introduction to Quantum Computing
- MATH 3TP3 - Truth and Provability
- MATH 3U03 - Combinatorics
- MATH 3V03 - Graph Theory
- MATH 3Z03 - Inquiry: History of Mathematics
- MATH 4FM3 - Financial Markets and Derivatives
- MATH 4MB3 - Mathematical Biology
- MATH 4P06 A/B S - Senior Research Project
- MATH 4W03 - Reading in Mathematics
- STATS 3A03 - Applied Regression Analysis with SAS
- **STATS 3DA3 – Data Science Methods**

- STATS 3DS3 - Introduction to Data Science Theory
- STATS 3PG3 - Probability and Games of Chance
- STATS 4A03 - Time Series
- STATS 4M03 - Multivariate Analysis
- STATS 4P03 - Advanced Applied Statistics
- STATS 4T06 A/B - Senior Research Project
- STATS 4W03 - Reading in Statistics

Requirements

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

Level I: 30 Units

Completed prior to admission to the program

Level II: 30 Units

30 units

- Completion of Level II Honours Mathematics and Statistics (Mathematics Sub-Plan)

1 course

- SCIENCE 2C00 - Skills for Career Success in Science

Level III

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

Fall Term: 15 units:

3 units

- ~~MATH 3A03 – Real Analysis I~~
- MATH 3IA3 – Introduction to Analysis

3 units

from

- ~~MATH 3E03~~
- MATH 3F03 - Ordinary Differential Equations
- MATH 3GR3 - Abstract Algebra

6 units

from

- Core Course List

3 units

- Electives (See Note 4 above.)

2 ¹ courses

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

Winter Term:

Work Term

1 course

- SCIENCE 3WT0 - Science Co-op Work Term

Spring/Summer Term:

Work Term

1 course

- SCIENCE 3WT0 - Science Co-op Work Term

Level IV

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

Fall and Winter Terms: 30 units:

3 units

- MATH 3A03 – Real Analysis I

3 units

- MATH 3X03 - Complex Analysis I

~~3 units~~

- ~~• MATH 4A03 - Real Analysis II~~

3 units

from

- ~~• MATH 3EE3~~
- MATH 3FF3 - Partial Differential Equations
- MATH 3NA3 - Numerical Linear Algebra
- MATH 3T03 - Inquiry in Topology

9 units

from

- Levels III, IV, V Mathematics or Statistics courses including one course selected from the *Scientific Communication Course List*

0-3 units

from the following courses, if not already completed for another requirement:

- COMPSCI 1MD3 - Introduction to Programming
- DATASCI 2G03 - Scientific Computing
- MATH 1MP3 - Introduction to Mathematical Scientific Computation
- PHYSICS 2G03 - Scientific Computing
(See Note 4 above.)

9-12 units

- Electives

Spring/Summer Term:

Work Term

1 course

- SCIENCE 4WT0 - Science Co-op Work Term

Level V

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

Fall Term:

Work Term

1 course

- SCIENCE 5WT0 - Science Co-op Work Term

Winter Term: 15 units:

3 units

- MATH 4A03 - Real Analysis II

6 units

from

- Levels III, IV, V Mathematics or Statistics courses

3 units

from

- Level IV Mathematics courses

~~6~~ 3 units

- Electives

Requirements For Students Who Entered Prior To September 2019

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

Level I: 30 Units

Completed prior to admission to the program

Level II: 30 Units

30 units

- Completion of Level II Honours Mathematics and Statistics (Mathematics Sub-Plan)

1 course

- SCIENCE 2C00 - Skills for Career Success in Science

Level III

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

Fall Term: 15 units:

3 units

- MATH 3A03 - Real Analysis I

3 units

from

- ~~MATH 3E03~~
- MATH 3F03 - Ordinary Differential Equations
- MATH 3GR3 - Abstract Algebra

6 units

from

- *Core Course List*

3 units

- Electives (See *Note 4* above.)

2 courses

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

Winter Term:

Work Term

1 course

- SCIENCE 3WT0 - Science Co-op Work Term

Spring/Summer Term:

Work Term

1 course

- SCIENCE 3WT0 - Science Co-op Work Term

Level IV

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

Fall and Winter Terms: 30 units:

3 units

- MATH 3X03 - Complex Analysis I

3 units

- MATH 4A03 - Real Analysis II

3 units

from

- ~~MATH 3EE3~~
- MATH 3FF3 - Partial Differential Equations
- MATH 3NA3 - Numerical Linear Algebra
- MATH 3T03 - Inquiry in Topology

9 units

from

- Levels III, IV, V Mathematics or Statistics courses

0-3 units

from the following courses, if not already completed for another requirement:

- COMPSCI 1MD3 - Introduction to Programming
 - DATASCI 2G03 – Scientific Computing
 - MATH 1MP3 - Introduction to Mathematical Scientific Computation
 - PHYSICS 2G03 – Scientific Computing
- (See *Note 4* above.)

9-12 units

- Electives

Spring/Summer Term:

Work Term

1 course

- SCIENCE 4WT0 - Science Co-op Work Term

Level V

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

Fall Term:

Work Term

1 course

- SCIENCE 5WT0 - Science Co-op Work Term

Winter Term: 15 units:

6 units

from

- Levels III, IV, V Mathematics or Statistics courses

3 units

from

- Level IV Mathematics courses

6 units

- Electives

Co-op Program Chart

	FALL TERM (September to December)	WINTER TERM (January to April)	SPRING/SUMMER TERM (May to August)
Level III	15 units from Academic Level III + SCIENCE 2C00 (if not completed) and SCIENCE 3C00	Work Term SCIENCE 3WT0	Work Term SCIENCE 3WT0
Level IV	15 units from Academic Levels III, IV	15 units from Academic Levels III, IV	Work Term SCIENCE 4WT0
Level V	Work Term SCIENCE 5WT0	15 units from Academic Level IV	

Justification 3.1 & 3.2: Program name is being phased in to better reflect specialization in Mathematics. The sub-plan designation is not well understood by students or those outside the McMaster community. The note will provide students with sufficient warning of the program name change that will take effect in September 2023. Other changes include updates to Course Lists and program requirements to reflect changes to offerings.

3.3 Honours Mathematics and Statistics - Statistics Sub-Plan (B.Sc.)

Effective September 2023, this program will be renamed Honours Mathematics and Statistics – Statistics Specialization (B.Sc.). Students who enrolled prior to September 2023 will be given the choice to remain in Honours Mathematics and Statistics – Statistics Sub-plan or transfer into Honours Mathematics and Statistics – Statistics Specialization.

Admission Notes

1. For students entering the program as of September 2019, eCompletion of MATH 1C03 is required by the end of Level II.

2. Students seeking admission to the program are strongly discouraged from taking MATH 1LS3 and 1LT3 as they do not cover all content needed for MATH 2X03.

Admission

Completion of any Level I program with a Grade Point Average of at least 8.0 including:

3 units

from

- MATH 1A03 - Calculus For Science I
- MATH 1LS3 - Calculus for the Life Sciences I
- MATH 1X03 - Calculus for Math and Stats I
- MATH 1ZA3 - Engineering Mathematics I
(See *Admission Note 2* above.)

3 units

from the following courses, with a grade of at least C+

- MATH 1AA3 - Calculus For Science II
- MATH 1LT3 - Calculus for the Life Sciences II
- MATH 1XX3 - Calculus for Math and Stats II
- MATH 1ZB3 - Engineering Mathematics II-A
(See *Admission Note 2* above.)

3 units

from

- MATH 1B03 - Linear Algebra I
- MATH 1ZC3 - Engineering Mathematics II-B

Program Notes

1. Students must satisfy a Scientific Computing requirement, by completing one of: COMPSCI 1MD3, ~~DATA~~SCI 2G03, MATH 1MP3, PHYSICS 2G03.
2. ~~For students entering the program as of September 2019, c~~Completion of MATH 1C03 is required by the end of Level II.

Core Course List

- ~~MATH 2E03~~
- MATH 2ET3* - Theory and Practice of Teaching Mathematics
- MATH 2LA3 - Applications of Linear Algebra
- MATH 2R03 - Theory of Linear Algebra
- ~~MATH 2S03~~
- ~~MATH 2T03~~
- MATH 3B03 - Geometry
- ~~MATH 3E03~~
- ~~MATH 3EE3~~
- MATH 3F03 - Ordinary Differential Equations
- MATH 3FF3 - Partial Differential Equations
- MATH 3GR3 - Abstract Algebra
- MATH 3MB3 - Introduction to Modelling
- MATH 3NA3 - Numerical Linear Algebra
- ~~MATH 3Q03~~
- MATH 3T03 - Inquiry in Topology
- STATS 2MB3 - Statistical Methods and Applications
- STATS 3A03 - Applied Regression Analysis with SAS
- ~~STATS 3CI3~~
- STATS 3D03 - Mathematical Statistics
- ~~STATS 3F03~~
- STATS 3S03* - Survey Sampling
- STATS 3U03* - Stochastic Processes

Scientific Communication Course List

- MATH 3CY3 - Cryptography

- MATH 3DC3 - Discrete Dynamical Systems and Chaos
- MATH 3ET3 A/B S - Mathematics Teaching Placement
- MATH 3G03 - Problem Solving
- MATH 3MB3 - Introduction to Modelling
- MATH 3QC3 - Introduction to Quantum Computing
- MATH 3TP3 - Truth and Provability
- MATH 3U03 - Combinatorics
- MATH 3V03 - Graph Theory
- MATH 3Z03 - Inquiry: History of Mathematics
- MATH 4FM3 - Financial Markets and Derivatives
- MATH 4MB3 - Mathematical Biology
- MATH 4P06 A/B S - Senior Research Project
- MATH 4W03 - Reading in Mathematics
- STATS 3A03 - Applied Regression Analysis with SAS
- **STATS 3DA3 – Data Science Methods**
- STATS 3DS3 - Introduction to Data Science Theory
- STATS 3PG3 - Probability and Games of Chance
- STATS 4A03 - Time Series
- STATS 4M03 - Multivariate Analysis
- STATS 4P03 - Advanced Applied Statistics
- STATS 4T06 A/B - Senior Research Project
- STATS 4W03 - Reading in Statistics

Requirements

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

Level I: 30 Units

30 units

(See Admission above.)

Level II-IV: 90 Units

12 units

- MATH 2C03 - Introduction to Differential Equations
- MATH 2X03 - Advanced Calculus I
- MATH 2XX3 - Advanced Calculus II
- MATH 3X03 - Complex Analysis I

3 units

from

- MATH 2LA3 - Applications of Linear Algebra
- MATH 2R03 - Theory of Linear Algebra

3 units

from

- MATH 3A03 - Real Analysis I
- MATH 3IA3 - Introduction to Analysis

12 units

- STATS 2D03 - Introduction to Probability
- STATS 2MB3 - Statistical Methods and Applications
- STATS 3A03 - Applied Regression Analysis with SAS
- STATS 3D03 - Mathematical Statistics

3 units

from

- ~~STATS 3F03~~
- STATS 3S03* - Survey Sampling
- STATS 3U03* - Stochastic Processes

9 units

from

- the *Core Course List*
- 9 units
 - Levels III, IV, V Mathematics or Statistics courses including one course selected from the *Scientific Communication Course List*
- 6 units
 - Level IV Statistics
- 0-3 units from
 - COMPSCI 1MD3 - Introduction to Programming
 - DATASCI 2G03 - Scientific Computing
 - MATH 1MP3 - Introduction to Mathematical Scientific Computation
 - PHYSICS 2G03 - Scientific Computing
(See *Program Note 1* above.)
- 0-3 units
 - MATH 1C03 - Introduction to Mathematical Reasoning (if not completed in Level I)
- 27-33 units
 - Electives

3.4 Honours Mathematics and Statistics - Statistics Sub-Plan Co-op (B.Sc.)

Effective September 2023, this program will be renamed Honours Mathematics and Statistics – Statistics Specialization Co-op (B.Sc.). Students who enrolled prior to September 2023 will be given the choice to remain in Honours Mathematics and Statistics – Statistics Sub-plan Co-op or transfer into Honours Mathematics and Statistics – Statistics Specialization Co-op.

Honours Mathematics and Statistics Co-op Programs

Co-op opportunities in Mathematics and Statistics are available in combination with the sub-plans. Enrolment in these programs is limited. Selection is based on academic achievement and an interview but requires, as a minimum, submission of the on-line application by the stated deadline, and completion of a Level II Honours Mathematics and Statistics program with a Grade Point Average of at least 5.0. Information about the program and the selection procedure may be obtained from Science Career and Cooperative Education.

Notes

1. These are five-level (year) co-op programs which include two eight-month work terms which must be spent in mathematics or statistics related placements.
2. Students must be registered in a full-load and take a full academic program as prescribed, by Level and Term.
3. Students are required to complete SCIENCE 2C00 prior to the Fall term of level III. ~~Students are required to complete and SCIENCE 3C00 before the first work placement.- and are strongly recommended to complete SCIENCE 2C00 in Level II.~~
4. Students must satisfy a Scientific Computing requirement, by completing one of: COMPSCI 1MD3, DATASCI 2G03, MATH 1MP3, PHYSICS 2G03. It is recommended that students in Mathematics Sub-Plan (Co-op) complete this requirement prior to their first work term.

Admission

Enrolment in this program is limited. Selection is based on academic achievement and an interview but requires, as a minimum, submission of the on-line application by the stated deadline, and completion of Level II Honours Mathematics and Statistics (Statistics Sub-Plan) with a Grade Point Average of at least 5.0.

Core Course List

- ~~MATH 2E03~~
- MATH 2ET3* - Theory and Practice of Teaching Mathematics
- MATH 2LA3 - Applications of Linear Algebra
- MATH 2R03 - Theory of Linear Algebra
- ~~MATH 2S03~~
- ~~MATH 2T03~~
- MATH 3B03 - Geometry
- ~~MATH 3E03~~
- ~~MATH 3EE3~~
- MATH 3F03 - Ordinary Differential Equations
- MATH 3FF3 - Partial Differential Equations
- MATH 3GR3 - Abstract Algebra
- MATH 3MB3 - Introduction to Modelling
- MATH 3NA3 - Numerical Linear Algebra
- ~~MATH 3Q03~~
- MATH 3T03 - Inquiry in Topology
- STATS 3S03* - Survey Sampling
- STATS 3U03* - Stochastic Processes

Scientific Communication Course List

- MATH 3CY3 - Cryptography
- MATH 3DC3 - Discrete Dynamical Systems and Chaos
- MATH 3ET3 A/B S - Mathematics Teaching Placement
- MATH 3G03 - Problem Solving
- MATH 3MB3 - Introduction to Modelling
- MATH 3QC3 - Introduction to Quantum Computing
- MATH 3TP3 - Truth and Provability
- MATH 3U03 - Combinatorics
- MATH 3V03 - Graph Theory
- MATH 3Z03 - Inquiry: History of Mathematics
- MATH 4FM3 - Financial Markets and Derivatives
- MATH 4MB3 - Mathematical Biology
- MATH 4P06 A/B S - Senior Research Project
- MATH 4W03 - Reading in Mathematics
- STATS 3A03 - Applied Regression Analysis with SAS
- **STATS 3DA3 – Data Science Methods**
- STATS 3DS3 - Introduction to Data Science Theory
- STATS 3PG3 - Probability and Games of Chance
- STATS 4A03 - Time Series
- STATS 4M03 - Multivariate Analysis
- STATS 4P03 - Advanced Applied Statistics
- STATS 4T06 A/B - Senior Research Project
- STATS 4W03 - Reading in Statistics

Requirements

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

Level I: 30 Units

Completed prior to admission to the program

Level II: 30 Units

30 units

- Completion of Level II Honours Mathematics and Statistics (Statistics Sub-Plan)

1 course

- SCIENCE 2C00 - Skills for Career Success in Science

Level III

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

Term (Spring/Summer Term)

Fall Term: 15 units:

6 units

- STATS 3A03 - Applied Regression Analysis with SAS
- STATS 3D03 - Mathematical Statistics

3 units

from

- MATH 3A03 - Real Analysis I
- MATH 3IA3 - Introduction to Analysis

6 units

from

- the *Core Course List*

~~2~~ 1 courses

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

Winter Term:

Work Term

1 course

- SCIENCE 3WT0 - Science Co-op Work Term

Spring/Summer Term:

Work Term

1 course

- SCIENCE 3WT0 - Science Co-op Work Term

Level IV

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

Fall and Winter Terms: 30 units:

3 units

- MATH 3X03 - Complex Analysis I

3 units

from the following courses, if not completed in Level III

- ~~STATS 3CI3~~
- ~~STATS 3F03~~
- STATS 3S03* - Survey Sampling
- STATS 3U03* - Stochastic Processes

3 units

from

- Level IV Statistics courses

9 units

from

- Levels III, IV, V Mathematics or Statistics courses including one course selected from the *Scientific Communication Course List*

0-3 units

from the following courses, if not already completed for another requirement:

- COMPSCI 1MD3 - Introduction to Programming
- DATASCI 2G03 - Scientific Computing
- MATH 1MP3 - Introduction to Mathematical Scientific Computation
- PHYSICS 2G03 - ~~Scientific Computing~~
(See *Note 4* above.)

9-12 units

- Electives

Spring/Summer Term:

Work Term

1 course

- SCIENCE 4WT0 - Science Co-op Work Term

Level V

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

Fall Term:

Work Term

1 course

- SCIENCE 5WT0 - Science Co-op Work Term

Winter Term: 15 units:

3 units

from

- Levels III, IV, V Mathematics or Statistics courses

3 units

from

- Level IV Statistics courses

9 units

- Electives

Requirements For Students Who Entered Prior To September 2019

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

Level I: 30 Units

Completed prior to admission to the program

Level II: 30 Units

30 units

- Completion of Level II Honours Mathematics and Statistics (Statistics Sub-Plan)

1 course

- SCIENCE 2C00 - Skills for Career Success in Science

Level III

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

Fall Term: 15 units:

6 units

- STATS 3A03 - Applied Regression Analysis with SAS
- STATS 3D03 - Mathematical Statistics

3 units

- MATH 3A03 - Real Analysis I

6 units

from

- the *Core Course List*

2 courses

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

Winter Term:

Work Term

1 course

- SCIENCE 3WT0 - Science Co-op Work Term

Spring/Summer Term:

Work Term

1 course

- SCIENCE 3WT0 - Science Co-op Work Term

Level IV

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

Fall and Winter Terms: 30 units:

3 units

- MATH 3X03 - Complex Analysis I

3 units

from the following courses, if not completed in Level III

- ~~STATS 3C13~~
- ~~STATS 3F03~~
- STATS 3S03* - Survey Sampling
- STATS 3U03* - Stochastic Processes

3 units

from

- Level IV Statistics courses

9 units

from

- Levels III, IV, V Mathematics or Statistics courses

0-3 units

from the following courses, if not already completed for another requirement:

- COMPSCI 1MD3 - Introduction to Programming
- DATASCI 2G03 – Scientific Computing
- MATH 1MP3 - Introduction to Mathematical Scientific Computation
- PHYSICS 2G03 – ~~Scientific Computing~~

(See Note 4 above.)

9-12 units

- Electives

Spring/Summer Term:

Work Term

1 course

- SCIENCE 4WT0 - Science Co-op Work Term

Level V

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

Fall Term:

Work Term

1 course

- SCIENCE 5WT0 - Science Co-op Work Term

Winter Term: 15 units:

3 units

from

- Levels III, IV, V Mathematics or Statistics courses

3 units

from

- Level IV Statistics courses

9 units

- Electives

Co-op Program Chart

	FALL TERM (September to December)	WINTER TERM (January to April)	SPRING/SUMMER TERM (May to August)
Level III	15 units from Academic Level III + SCIENCE 2C00 (if not completed) and SCIENCE 3C00	Work Term SCIENCE 3WT0	Work Term SCIENCE 3WT0
Level IV	15 units from Academic	15 units from Academic	Work Term

	Levels III, IV	Levels III, IV	SCIENCE 4WT0
Level V	Work Term SCIENCE 5WT0	15 units from Academic Level IV	

Justification 3.3 & 3.4: Program name is being phased in to better reflect specialization in Statistics. The sub-plan designation is not well understood by students or those outside the McMaster community. The note will provide students with sufficient warning of the program name change that will take effect in September 2023. Other changes include updates to Course Lists and program requirements to reflect changes to offerings.



SCIENCE

Undergraduate Curriculum Addendum to
Undergraduate Council, for the 2022-2023
Undergraduate Calendar

January 3, 2022

FACULTY OF SCIENCE REPORT TO SENATE

SUMMARY OF MAJOR CURRICULUM CHANGES FOR 2022-2023

Following, is the summary of substantive curriculum changes being proposed by the Faculty of Science. For a complete review of all changes, refer to the November 19, 2021, Report of the Academic Planning and Policy Committee for changes to the 2022-2023 Undergraduate Calendar, found at:

<https://macdrive.mcmaster.ca/f/f8c97562ba16468bb250/>

1.0 NEW PROGRAMS

N/A

2.0 PROGRAM CLOSURES

N/A

3.0 MAJOR REVISIONS:

3.1 Honours Biochemistry – Biomedical Research Specialization Co-op (B.Sc.)

Entry at Level III last available September 2022.

Effective September 2022, all Honours Biochemistry programs will be administered by the Faculty of Health Sciences. Students interested in applying to this program should see the Honours Biochemistry (B.H.Sc.) in the Faculty of Health Sciences section of the Calendar.

Students who enrolled prior to September 2022 are given the choice to remain in Honours Biochemistry – Biomedical Research Specialization Co-op (B.Sc.) or transfer into Honours Biochemistry – Biomedical Research Specialization Co-op (B.H.Sc.). Such students will graduate at a Faculty of Science convocation.

Admission

Enrolment in this program is limited and possession of the published minimum requirements does not guarantee admission. Selection is based on academic achievement and an interview but requires, as a minimum, submission of the on-line application by the stated deadline and completion of Level II Honours Biochemistry with a Grade Point Average of at least 5.0 and completion of the following courses:

12 units

- BIOCHEM 2B03 - Nucleic Acid Structure and Function
- BIOCHEM 2BB3 - Protein Structure and Enzyme Function
- BIOCHEM 2L06 A/B - Inquiry in Biochemical Techniques

3 units

- BIOLOGY 2C03 - Genetics

3 units

from

- the *Biochemistry Course List* (See *Program Note 6* below.)

6 units

- CHEM 20A3 - Organic Chemistry I
- CHEM 20B3 - Organic Chemistry II

1 course

- SCIENCE 2D00 - Skills for Career Success in Biochemistry (or SCIENCE 2C00)

Program Notes

1. This is a five-level (year) co-op program which includes two eight-month work terms which must be spent in biochemistry related placements.
2. Students must be registered full-time and take a full academic workload, as prescribed by Level and Term.
3. ~~Students are required to complete SCIENCE 2C00 and SCIENCE 3C00 before the first work placement and are strongly recommended to complete SCIENCE 2C00 in Level II.~~ Students are required to complete SCIENCE 2D00 (or SCIENCE 2C00) prior to the Fall Term of Level III. Students are required to complete SCIENCE 3D00 (or SCIENCE 3C00) before the first work placement.
4. Registration in an Honours Biochemistry program does not guarantee access to all courses. Some courses have program restrictions. There are Level II and III prerequisites for many Level III and IV courses. The prerequisites should be considered when choosing Level II and III courses.
5. Completion of one of BIOCHEM 4F09 A/B, 4T15 A/B or 4Z03 is required in Level IV.
6. Both CHEMBIO 2A03 and 2P03 are highly recommended for students interested in pursuing an undergraduate thesis or graduate studies in biophysical chemistry.

Biochemistry Course List

- ANTHROP 2U03 - Plagues and People
- ANTHROP 3BD3 - The Black Death
- BIOCHEM 3BP3 - Practical Bioinformatics in the Genomics Era
- BIOCHEM 3CB3 - Emerging Discovery in Cell Biology
- BIOCHEM 3H03 - Clinical Biochemistry
- ~~BIOCHEM 3LA3 - Advanced Biochemistry Techniques~~
- BIOCHEM 3MI3 - Microbial Interactions
- ~~BIOCHEM 3X03~~
- ~~BIOCHEM 3Y03~~
- BIOCHEM 3Z03 - Structural Determination and Analysis of Macromolecules
- ~~BIOCHEM 4EA3~~
- BIOCHEM 4H03 - Biotechnology and Drug Discovery
- BIOCHEM 4J03 - Immunological Principles in Practice
- BIOCHEM 4M03 - Cellular and Integrated Metabolism
- BIOCHEM 4N03 - Molecular Membrane Biology
- BIOCHEM 4Q03 - Biochemical Pharmacology
- BIOCHEM 4S03 - Introduction to Molecular Biophysics
- ~~BIOCHEM 4Y03~~
- BIOLOGY 2B03 - Cell Biology
- BIOLOGY 2EE3 - Introduction to Microbiology and Biotechnology
- BIOMEDDC 2C03 - Exploring Careers in Biomedical Sciences
- BIOMEDDC 2W03 - Write Right for Your Science: Scientific Writing for the Biomedical Sciences
- CHEM 2A03 - Quantitative Chemical Analysis
- CHEM 2AA3
- CHEM 2P03 - Applications of Physical Chemistry
- CHEMBIO 2A03 - Introduction to Bio-Analytical Chemistry
- CHEMBIO 2P03 - Physical Chemistry Tools for Chemical Biology
- CHEMBIO 3OA3 - Organic Mechanistic Tools for Chemical Biology
- HTHSCI 3I03 - Introductory Immunology
- HTHSCI 3K03 - Introductory Virology

- MOLBIOL 3O03 - Microbial Genetics

Requirements **For Students Who Enter in September 2022 or Prior**
 120 units total (Levels I to V), of which no more than 48 units may be Level I

Level I: 30 Units

30 units

- Completed prior to admission to the program

Level II: 30 Units

30 units

Completion of Level II Honours Biochemistry, including completion of:

- SCIENCE 2C00 - Skills for Career Success in Science
 (See *Program Note 3* above.)

Level III

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

Fall Term: 15 units:

3 units

- STATS 2B03 - Statistical Methods for Science

3 units

- BIOCHEM 3D03 - Metabolism and Regulation

3 units

from

- Level III, IV Biochemistry, Biology, Chemical Biology, Chemistry, Molecular Biology courses
- HTHSCI 3I03 - Introductory Immunology
- HTHSCI 3K03 - Introductory Virology
- HTHSCI 4I13 - Advanced Concepts in Immunology
- HTHSCI 4O03 - Principles of Virus Pathogenesis

3 units

from

- the *Biochemistry Course List* (See *Program Note 6* above.)

3 units

- Electives

~~1~~ 2 courses

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

Winter Term:

Work Term

1 course

- SCIENCE 3WT0 - Science Co-op Work Term

Spring/Summer Term:

Work Term

1 course

- SCIENCE 3WT0 - Science Co-op Work Term

Level IV

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

Fall and Winter Terms: 30 units:

3 units

from

- ~~BIOCHEM 4E03 - Gene Regulation in Stem Cells and Development~~
- Level IV Biochemistry courses, excluding:

- o BIOCHEM 4F09
- o BIOCHEM 4T15 A/B
- o BIOCHEM 4Z03

9 units

from

- the *Biochemistry Course List* (See *Program Note 6* above.)

12-15 units

from

- Levels III, IV Biochemistry, Biology, Chemical Biology, Chemistry, Molecular Biology courses
- HTHSCI 3I03 - Introductory Immunology
- HTHSCI 3K03 - Introductory Virology
- HTHSCI 4I13 - Advanced Concepts in Immunology
- HTHSCI 4O03 - Principles of Virus Pathogenesis

which must include one of:

- BIOCHEM 4F09 A/B - Senior Thesis
 - BIOCHEM 4T15 A/B - Senior Thesis
 - BIOCHEM 4Z03 - Senior Project
- (See *Program Note 5* above.)

3-6 units

- Electives

Spring/Summer Term:

Work Term

1 course

- SCIENCE 4WT0 - Science Co-op Work Term

Level V

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

Fall Term:

Work Term

1 course

- SCIENCE 5WT0 - Science Co-op Work Term

Winter Term: 15 units:

6 units

from

- the *Biochemistry Course List* (See *Program Note 6* above.)

6 units

from

- Levels III, IV Biochemistry, Biology, Chemical Biology, Chemistry, Molecular Biology courses
- HTHSCI 3I03 - Introductory Immunology
- HTHSCI 3K03 - Introductory Virology
- HTHSCI 4I13 - Advanced Concepts in Immunology
- HTHSCI 4O03 - Principles of Virus Pathogenesis

3 units

- Electives

Co-op Program Chart (For Students who Enter in September 2022 or Prior)

	FALL TERM (September to December)	WINTER TERM (January to April)	SPRING/SUMMER TERM (May to August)
Level III	15 units from	Work Term	Work Term

	Academic Level III and SCIENCE 2C00 (if not completed) and SCIENCE 3C00	SCIENCE 3WT0	SCIENCE 3WT0
Level IV	30 units from Academic Levels III and IV		Work Term SCIENCE 4WT0
Level V	Work Term SCIENCE 5WT0	15 units from Academic Level IV	

Justification 3.1: Co-op course changes allow for a cohort of Biochemistry students to enroll in career courses in parallel to students in Science but within their own course. Support for and tracking of these students will be facilitated by this.

3.2 Concurrent Certificate in Urban Studies and Planning (USP)

School of Earth, Environment & Society

The Concurrent Certificate in Urban Studies and Planning is administered by the School of Earth, Environment & Society (Faculty of Science) (formerly the School of Geography and Earth Sciences).

General Science Building, Room 206, ext. 23534

ugadmin@mcmaster.ca

The Concurrent Certificate in Urban Studies & Planning (USP) will provide students with an opportunity to develop expertise in the related fields of urban geography and urban planning.

Certificate Requirements

Any student in an undergraduate program at McMaster may declare the USP Certificate at the time of graduation providing they satisfy the following requirements.

Requirements

18 units total

3 units

- ENVSOCY 2UI3 - The Urban Experience

9-12 units

from

- ENVSOCY 3MF3 - Urban Field Camp
- ENVSOCY 3UP3 - Urban Planning
- ENVSOCY 4UD3 - Special Topics in Urban Planning
- ENVSOCY 4US3 - Sustainable Cities

3-6 units

from

- ENVSOCY 3UW3 - Cities of the Developing World
- ENVSOCY 4LP3 - Transport Policy
- ENVSOCY 4MS3 - Independent Study
- ENVSOCY 4MT6 A/B - Senior Thesis
- HLTHAGE 4S03 - Health and the Unfairly Structured City

Justification 3.2: this change provides greater flexibility for students completing the certificate. It also permits students to count all four of the core urban courses currently offered within SEES towards the concurrent certificate

Faculty of Social Sciences
Undergraduate Curriculum Report to
Undergraduate Council
FOR THE 2022-2023 UNDERGRADUATE
CALENDAR

Approved
by
The Faculty of Social Sciences
Faculty Council

November 16, 2021

**REPORT TO SENATE
FACULTY OF SOCIAL SCIENCES**

SUMMARY OF MAJOR CURRICULUM CHANGES FOR 2022-2023

Below is the summary of substantive curriculum changes being proposed by the Faculty of Social Sciences. For complete review of all of the changes, please refer to the November 2021 Faculty of Social Sciences Report to Undergraduate Council for changes to the 2022-2023 Undergraduate Calendar, found at:

<https://macdrive.mcmaster.ca/d/b8df016956f2453a8f78/>

1.0 NEW PROGRAMS: N/A

2.0 PROGRAM CLOSURES:

3.0 MAJOR REVISIONS:

- 3.1** The School of Labour Studies is proposing that the Combined Honours. B.A., the Honours. B.A., the B.A. degrees and the minor have the name changed from "Labour Studies" to "Work and Labour Studies." The details of this change are reflected in the full Faculty of Social Sciences Curriculum Report under Labour Studies at (2.1-2.4).

The program name changes are as follows:

Combined Honours Labour Studies and Another Subject (B.A.) to Combined Honours Work and Labour Studies and Another Subject (B.A.)

Honours Labour Studies (B.A.) to Honours Work and Labour Studies (B.A.)

Labour Studies (B.A.) to Work and Labour Studies (B.A.)

Minor in Labour Studies to Minor in Work and Labour Studies

***Justification** - The School of Labour Studies is proposing to rename their programs and the subject code for all of the courses. For many years, too many students - and parents – have clearly not known what "labour" means; many think the program is associated with midwifery. The name change reflects the focus of studies within the School of Labour Studies, and it will provide better context so that people will understand what we study. This in turn should help attract more students to the programs.*

Revisions to the Undergraduate Calendar 2022-2023

Summary and Revision Justifications
Office of the Registrar, November 2021

Admission Requirements (see attached, page 2)

Housekeeping:

- Changes to dates/deadlines as they align with the application cycle
- Rewording/editing content for grammar, spelling, consistency and clarity
- Revisions to Registrar's Office contact information and URLs
- Changes to submission process for documents (uploading vs. mailing for 105 applicants due to changes based on Slate system)
- Change of name of Studio Art I to iArts to align with new program name; revised alpha order

BC Applicant Requirements – Section 1B

- Changes to requirements for applicants from British Columbia – move from four (4) required Grade 12 courses to six (6). This aligns with other Canadian universities, and allows those applying to programs where there are four (4) required courses to benefit from having additional non-required courses in their average calculation.

Section 1E – Other International Secondary School Qualifications: American High School Curriculum

- For SAT/ACT admission requirements for Fall 2023, readers are being redirected to the future.mcmaster.ca/admission/website for updated information as pertains to submitting exams results. For F2022 admission, exams could not be completed due to COVID; whether students are able to sit exams this summer for F2023 admission is not yet known.

Language Proficiency – Section 5

- English Language Proficiency (ELP)– adjustment to wording to reflect time frame in which to qualify to be exempt from the requirement to submit and ELP. Changed from 'immediately prior to application to McMaster' to 'immediately prior to anticipated start at McMaster'. This change aligns with how the ELP requirement is assessed and assigned in our system and has been past practice.

Application Procedures (See attached, page 15)

- Changes to dates/deadlines as they align with the new application cycle
- Rewording/editing content for grammar, spelling, consistency and clarity
- Revisions to Registrar's Office contact information and URLs
- Changes to submission process for documents (uploading vs. mailing for 105 applicants due to changes based on Slate system)
- Section 1E- Nursing Consortium Programs- updated with directions for the two applicant groups (101s and 105s)
- Section 3-- Application and Documentation Deadlines Fall and Winter Terms chart updated to include:
 - Addition of Engineering disciplines above Level 1 now requiring a supplementary application
 - BTech Degree Completion (Above Level 1) – addition of different term application and document deadlines
 - Nursing Post Diploma RPN stream information.

General Academic Regulations (See attached, page 20)

- Revision to calculation used for a student to be named to *Dean's Honour List* and *Provost's Honour List* to allow students to with a minimum of 30 units since the last review and a minimum of 24 graded units to be assessed for Honours (DHL, PHL) regardless of the number of non-graded units (i.e. pass/fail, complete/not complete, etc.).

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Admission Requirements

1. Admission from Secondary Schools

All Level I programs have enrollment limits and admission is by selection.

A. Ontario

General Requirements (For all Level I Programs)

To be considered for admission, ~~you~~ ~~an applicant~~ must satisfy the general requirements of the university and the specific subject requirements for the program to which ~~you~~ ~~they~~ applied, plus any specified supplementary application/on-line assessment/audition/portfolio/ required by some programs at the university.

If you are an applicant from an Ontario secondary school, you must meet the following minimum requirements:

1. An Ontario Secondary School Diploma (OSSD) with acceptable standing; AND
2. An overall average in completed Grade 12 U and/or M courses which meets or exceeds the minimum set by the specific program to which you applied; AND
3. Satisfactory completion of six Grade 12 U and/or M courses including the subject requirements for your chosen program.

Note: Co-op courses are not included in any admission ~~or final admission~~ average calculations. Music External (Conservatory) 4M is acceptable as a credit and the mark obtained can be included in the calculation of your admission average. Alternatively, you may submit certificates from a recognized conservatory of music in Grade 8 practical and Grade 2 theory to your secondary school for one Grade 12M credit.

Admission Average Range

The Admission Average Range used to determine eligibility ~~for consideration~~ is calculated using the best six Grade 12 U and/or M grades, including all required subjects. **McMaster calculates averages to two decimal points and does not round up averages.**

Please Note: Grade 12 Co-op courses are not eligible to be used ~~as one or more of the required prerequisite courses used~~ to calculate admissibility and/or the admission averages. See *Early Conditional Admission* and *Final Admission* below for specific details. Estimated admission average ranges for our Level I Programs can be found at: <http://future.mcmaster.ca> ~~under~~ ~~and select~~ *Admission Requirements*.

Early Conditional Admission

Early **conditional** admission may be granted annually to qualified applicants with strong academic standing. Early **conditional** admission is based on:

1. six appropriate midterm/interim Grade 12 U and/or M grades, OR
2. at least three final Grade 12 U and/or M grades PLUS enrollment in the appropriate additional three Grade 12 U and/or M courses.
3. In some cases, Grade 11 marks may be considered in extending early conditional offers of admission.

~~If you~~ Applicants who do not receive an offer of admission in March, ~~you~~ will automatically be reassessed for admission until May 15 after additional Grade 12 U and/or M grades are received from ~~your~~ secondary schools. Due to enrollment limits, McMaster may not be able to consider additional grade data ~~received after May 15~~ for admission purposes ~~received after May 15~~.

The University reserves the right to withdraw a conditional offer of admission due to any of the following:

1. ~~You do not meet~~ The minimum final average prescribed for ~~your chosen program~~ required was not met; OR
2. ~~You do not receive an~~ The OSSD was not achieved; OR
3. ~~You do not complete six~~ Six Grade 12 U and/or M courses including all required subjects ~~were not completed~~; OR
4. ~~You do not~~ The applicant did not successfully accept ~~you're~~ the offer of admission at the Ontario Universities' Application Centre (OUAC) by the response deadline indicated on ~~you're~~ the offer letter; OR
5. ~~You do not meet any other~~ Conditions stipulated on ~~you're~~ the conditional offer of admission ~~were not met~~; OR
6. ~~You attend a~~ A post-secondary institution ~~was attended~~ prior to beginning ~~your~~ studies at McMaster; OR
7. ~~You're~~ The offer of admission to the university was secured through fraudulent means. **Please note the University's statements regarding application fraud at the end of the Admission section of this calendar.**

Minimum Final Average

~~If you are a~~ Secondary school applicants who receives a conditional offer of admission, ~~you will be~~ ~~are~~ required to achieve an overall average (calculated to two decimal points) on (six (6) final grades including all **program specific** required courses). ~~for your desired program~~ This information is as indicated on ~~your offer of conditional~~ offers of admission.

If ~~you're~~ the applicant's final average falls below this level (or its equivalent), ~~you're~~ the offer of admission will be rescinded/revoked and ~~your~~ registration will be cancelled.

The required minimum final average will vary ~~varies~~ from year to year and by program. This average ~~will be~~ **is clearly stated clearly on the offer of conditional admission letter.**

Supplementary Application Forms and Extenuating Circumstances

Certain Level I programs including Arts & Science, Automation Engineering Technology 1 (co-op), Automotive & Vehicle Engineering Technology 1 (co-op), Bachelor of Health Sciences (Honours), Biotechnology 1 (co-op), Computer Science 1 (regular and co-op), Engineering 1 (regular and co-op), Integrated Business and Humanities (IBH), Integrated Biomedical Engineering & Health Sciences (iBioMed) (regular and co-op), Engineering 4 (regular and co-op), Integrated Business and Humanities (IBH), Honours Integrated Science, and Nursing have **mandatory online supplementary application forms or online assessments** which must be completed by specific deadline dates. Applicants to Nursing must complete a **mandatory on-line assessment (CASPer™)** on the dates specified each year. See *Application and Documentation Deadlines*, for specific deadline dates. Applicants to Engineering 1 (regular and co-op) and Integrated Biomedical Engineering and Health Sciences (regular and co-op) must complete a **mandatory on-line assessment (©**

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Kira Talent) by January 20 each year. See *Application and Documentation Deadlines*, for specific deadline dates. Applicants to Integrated Business and Humanities must complete a **mandatory on-line assessment (@ Kira Talent)** and **submit a personal resume** by February 1 each year. Applicants to Business 1 may elect to complete an optional supplemental form prior to February 1. to let the program know more about themselves.

McMaster does not normally use **optional** supplementary application forms. Applicants will be notified if the program they applied to decides to use an optional supplementary application form.

Applicants with special circumstances whose average falls slightly below the required admission average range may **forward a letter to provide information** to the Office of the Registrar, **Admissions** explaining the nature of their extenuating circumstances.

In some cases, the university may request letters of recommendation, personal history or other additional information to aid in the admission process.

Offers of Admission for Secondary School Graduates

Applicants may be eligible for final admission if they have fulfilled the requirements for **completed** their OSSD and have final grades in six Grade 12 U and/or M courses. If you fulfill the **Applicants who fulfill these** requirements for your chosen program by the end of February, you may be granted an offer of **final admission**.

The University reserves the right to withdraw an offer of final admission due to any of the following:

1. You do not successfully **Failure to** accept your **an** offer of admission at the Ontario Universities' Application Centre (OUAC) by the response deadline indicated on your **the** offer letter; OR
2. You attend **Attendance at** a post-secondary institution prior to beginning your studies at McMaster.
3. Your **An** offer of admission to the university was secured through fraudulent means. **Please note the University's statements regarding application fraud at the end of the Admission section of this calendar.**

Deferral of Admission

McMaster does not normally grant a deferral of an offer of admission unless special extenuating circumstances exist. Each case is evaluated on its own merits.

All requests for deferral of both admission and scholarship **should be made in writing to: are to be submitted**

Office of the Registrar, Admissions

McMaster University

Gilmour Hall 109, 1280 Main St. W.

Hamilton, Ontario L8S 4L8

by September 1 of the application year, outlining the reasons for the request. If a deferral is granted, it is conditional upon the student not attending a secondary or post-secondary institution during the deferral period. For additional information, please refer to:

<https://registrar.mcmaster.ca/events/admission-deferrals/>

Subject Requirements for Specific Level I Programs

McMaster University offers the following Level I programs:

Arts & Science I, Automation Engineering Technology 1 (B.Tech.), Automotive and Vehicle Engineering Technology I (B.Tech.), Biotechnology I (B.Tech.), Business I, Chemical & Physical Sciences Gateway, Computer Science I (regular and co-op), Economics I, Engineering I (regular and co-op), Environmental and Earth Sciences Gateway, Honours Health and Society I, Health Sciences I, Humanities I, Honours Integrated Science (Level I), Honours Kinesiology (Level I), **Integrated Arts I**, Integrated Biomedical Engineering & Health Sciences I (regular and co-op), Integrated Business & Humanities I, Life Sciences Gateway, Mathematics and Statistics Gateway, Medical Radiation Sciences (Level I), Midwifery I, Music I, Nursing I, **and Social Sciences I, and Studio Art I.**

ARTS & SCIENCE I

You are required to complete a **Applicants must complete a mandatory supplementary application**

(<https://arts.mcmaster.ca/prospective-students/supplementary-application/>) by the deadline as specified each year. See *Application and Documentation Deadlines*, for specific deadline dates.

A mandatory Supplementary Application Form which must be submitted at <https://arts.mcmaster.ca/prospective-students/supplementary-application/>. The information provided enters into the selection process. A minimum overall average of 88% or higher is required for application consideration.

The following are the minimum Grade 12 U and M requirements:

1. English U
2. One of Advanced Functions U or Calculus and Vectors U (Calculus and Vectors U is strongly recommended)
3. Completion of four additional U or M courses, to total six courses, of which two must be at the U level

AUTOMATION ENGINEERING TECHNOLOGY I CO-OP (B.TECH.), AUTOMOTIVE AND VEHICLE ENGINEERING TECHNOLOGY I CO-OP (B.TECH.), BIOTECHNOLOGY I CO-OP (B.TECH.)

Admission to Automation Engineering Technology I, Automotive and Vehicle Engineering Technology I, and Biotechnology I is by selection. A minimum average range in the low 80s is required for application consideration. Applicants must complete a **mandatory on-line assessment** by the deadline as specified each year. See *Application and Documentation Deadlines*, for specific deadline dates.

The following are the minimum Grade 12 U and M requirements:

1. English U
2. Calculus and Vectors U
3. Chemistry U
4. Physics U
5. Completion of two additional U or M courses to total six courses

BUSINESS I

The following are the minimum Grade 12 U and M requirements:

1. English U
2. Advanced Functions U
3. Calculus and Vectors U
4. Completion of three additional U or M courses to total six courses

*Applicants to Business I may elect to complete an optional supplemental form prior to February 1 to let provide the program know **with more information** about themselves.*

CHEMICAL & PHYSICAL SCIENCES GATEWAY

The following are the minimum Grade 12 U and M requirements:

1. English U
2. Advanced Functions U
3. Calculus and Vectors U
4. Chemistry U
5. Physics U
6. Completion of one additional U or M courses to total six courses

COMPUTER SCIENCE I, COMPUTER SCIENCE I CO-OP

Admission to Computer Science I (regular and co-op) is by selection. A minimum average range in the low 90s is required for application consideration. Applicants must complete a **mandatory on-line assessment** by the deadline as specified each year. See *Application and Documentation Deadlines*, for specific deadline dates.

The following are the minimum Grade 12 U and M requirements:

1. English U
2. Calculus and Vectors U
3. Two of: Biology U, Chemistry U, Physics U, Earth and Space U, Computer and Information Science M (or Computer Science U), or Computer Engineering M (or Computer Engineering Technology M)
4. Completion of two additional U or M courses to total six courses

ECONOMICS I

The following are the minimum Grade 12 U and M requirements:

1. English U
2. Two of Advanced Functions U, Calculus and Vectors U, and ~~or~~ Mathematics of Data Management U
3. Completion of three additional U or M courses to total six courses

Note: Applicants without Calculus and Vectors 4U will be required to take an equivalent Calculus course in Level I. Applicants without Data Management U will be required to take an equivalent Stats course in Level I.

ENGINEERING I, ENGINEERING I CO-OP

Admission to Engineering 1 (regular and co-op) is by selection. A minimum average range in the high 80s is required for application consideration. Applicants must complete a **mandatory on-line assessment** by the deadline as specified each year. See *Application and Documentation Deadlines*, for specific deadline dates.

The following are the minimum Grade 12 U and M requirements:

1. English U
2. Calculus and Vectors U
3. Chemistry U
4. Physics U
5. Completion of two additional U or M courses to total six courses

ENVIRONMENTAL AND EARTH SCIENCES GATEWAY

The following are the minimum Grade 12 U and M requirements:

1. English U
2. One of Advanced Functions U or Calculus and Vectors U
3. One of Biology U, Chemistry U
4. One of Advanced Functions U, Biology U, Calculus and Vectors U, Chemistry U, Physics U
5. Completion of two additional U or M courses to total six courses

HONOURS HEALTH AND SOCIETY I

The following are the minimum Grade 12 U and M requirements:

1. English U
2. Completion of five additional U or M courses to total six courses

HONOURS HEALTH SCIENCES I

~~The selection method is by consideration of academic and a~~ Applicants will be selected based on both their academic qualifications and their scores on the **mandatory on-line Supplementary Application Form (due mid-February) submitted electronically; details at <https://bhsc.mcmaster.ca/>**. A minimum overall average of 90% or higher is required for application consideration. The Supplementary Application must be completed and submitted on-line by the specified deadline date. A review of the mandatory Supplementary Application is a very important component of the admission process. Applicants who do not complete the Supplementary Application by the deadline will not be considered for admission.

The following are the minimum Grade 12 U and M requirements:

1. English U
2. One of Advanced Functions U, Calculus and Vectors U, or Mathematics of Data Management U
3. Biology U
4. Chemistry U
5. One U or M non-math/non-science course (**Note:** courses in technological education, science or mathematics are not acceptable)

6. Completion of one additional U or M course in any subject area to total six courses

HUMANITIES I

The following are the minimum Grade 12 U and M requirements:

1. English U
2. Completion of five additional U or M courses to total six courses

The Faculty of Humanities strongly recommends that you select at least one Grade 12 U or M course from Humanities subjects (Art, Drama, English, French, Français, other languages, History and Music). **Note:** In addition to Requirement 1 above, Biology U is strongly recommended for students planning to enter the Cognitive Science of Language program.

STUDIO ART I / INTEGRATED ARTS I (iArts)

The following are the minimum Grade 12 U and M requirements:

1. English U
2. Completion of additional U or M courses to total six courses

McMaster offers Studio Art iArts as a direct-entry Level I program leading to a Bachelor of Fine Arts (BFA) degree. Admission to this program is by selection and requires a **mandatory portfolio interview creative submission with** to the School of the Arts

<https://sota.humanities.mcmaster.ca/studio-art/>. <https://sota.humanities.mcmaster.ca/undergraduate-programs/iarts/apply-now/>

You must make arrangements for your portfolio interview with the School of the Arts at sota@mcmaster.ca.

For questions, please contact sota@mcmaster.ca.

HONOURS INTEGRATED SCIENCE (Level I)

Candidates are required to complete a mandatory **Supplementary Application Form** which must be submitted electronically at <http://www.science.mcmaster.ca/isci/prospective-students>. The information provided in the supplementary application enters into the selection process. Only applicants with high academic standing will be selected. Successful candidates must present a minimum average in the high 80's.

The following are the minimum Grade 12 U and M requirements:

1. English U
2. Advanced Functions U
3. Calculus and Vectors U
4. Two of Biology U, Chemistry U, Physics U
5. Completion of one additional U or M course to total six courses

INTEGRATED BIOMEDICAL ENGINEERING AND HEALTH SCIENCES (IBEHS) I / INTEGRATED BIOMEDICAL ENGINEERING AND HEALTH SCIENCES (IBEHS) I CO-OP

Admission to Integrated Biomedical Engineering and Health Sciences 1 (regular and co-op) is by selection. A minimum overall average of 90% or higher is required for application consideration. Applicants must complete a **mandatory on-line assessment** as specified each year. See *Application and Documentation Deadlines*, for specific deadline dates.

The following are the minimum Grade 12 U and M requirements:

1. English U
2. Calculus and Vectors U
3. Biology U
4. Chemistry U
5. Physics U
6. Completion of one additional U or M course to total six courses

INTEGRATED BUSINESS AND HUMANITIES I

Admission to Integrated Business and Humanities 1 is by selection. A minimum overall average of 88% or higher is required for application consideration. Applicants must complete a **mandatory on-line assessment (© Kira Talent)** by February 1 each year. The following are the Minimum Grade 12 U and M requirements:

1. English U
2. Calculus and Vectors U
3. Data Management U
4. Completion of three additional U and M courses to total six courses.

HONOURS KINESIOLOGY (Level I)

The following are the minimum Grade 12 U and M requirements:

1. English U
2. Calculus and Vectors U
3. Biology U
4. Completion of three additional Grade 12 U or M courses to total six courses. Introductory Kinesiology U is strongly recommended.

LIFE SCIENCES GATEWAY

The following are the minimum Grade 12 U and M requirements:

1. English U
2. **One of** Advanced Functions U or Calculus and Vectors U
3. Biology U
4. One of Advanced Functions U, Calculus and Vectors U, Chemistry U or Physics U
5. Completion of two additional U or M courses to total six courses

MATHEMATICS AND STATISTICS GATEWAY

The following are the minimum Grade 12 U and M requirements:

1. English U
2. Advanced Functions U
3. Calculus and Vectors U
4. Completion of three additional U or M courses to total six courses

MEDICAL RADIATION SCIENCES (Level I)

Students considering the Medical Radiation Sciences I program should refer to the *Regulations for License to Practice and Functional Demands* in the Medical Radiation Sciences program in the *Faculty of Science* section of this calendar.

The following are the minimum Grade 12 U and M requirements:

1. English U
2. Advanced Functions U
3. Calculus and Vectors U
4. Biology U
5. Chemistry U
6. Completion of one additional U or M course to total six courses

MIDWIFERY I

Places in the Midwifery program are very limited and the admission process is highly competitive. Admission to the Midwifery Education Program is by selection. **Application to the Midwifery program must be completed by February 1.** In recent years an average range in the mid to high 80's has been required to move forward to the admissions interview stage. Interviews are by-invitation only.

The following are the minimum Grade 12 U and M requirements:

1. English U
2. Biology U
3. Chemistry U
4. Completion of additional U or M courses to total six courses
5. To be eligible to apply, students must obtain a minimum grade of 75% in each of the three required courses listed in points 1, 2, and 3 above AND an overall average, including the required courses, that is acceptable to the Program.
6. Current (Ontario) secondary students may apply if one or more of the three (3) mandatory prerequisite courses are in progress at the time of application; however, the grade 11 prerequisite(s) in the same subjects must be completed at the time of application so that a preliminary assessment of the subject area(s) can be made. Admission is based on in-progress secondary school subjects for current secondary students only if the grade 11 prerequisite in that subject area has been completed with a minimum grade of at least 75%.

MUSIC I

The academic requirements are the same as for Humanities I. In addition, applicants to Music I or to the B.A. in Music must successfully complete a **music audition/examination** consisting of:

1. Demonstration of technique (a level equivalent to at least honours standing in Grade 8 of the Royal Conservatory of Music)
2. Performance (approximately 20 minutes' duration) of two or three varied pieces of your choice (approximately Grade 8 honours level), including at least one from the **past 100 years 20th century**
3. Ear test appropriate to the Grade 8 performance level
4. Written examination on rudiments of theory (Grade 2 level)
5. Interview

For comprehensive details, visit <https://sota.humanities.mcmaster.ca/music/>

Auditions take place between February and April. **You must make Audition arrangements are to be made** with the School of the Arts for your audition at sota@mcmaster.ca.

NURSING I

NURSING CONSORTIUM (CONESTOGA)

NURSING CONSORTIUM (MOHAWK)

Note: Effective September 2021, all applicants for the three sites streams will apply to the OUAC (Ontario University Universities' Application Centre), selecting McMaster University BScN and the specific site(s) of interest.

Students interested in a McMaster (B.Sc.N.) Nursing degree have **three location options: McMaster University, Mohawk College or Conestoga College**. Each of the three sites offers the four-year program which uses the problem-based learning and small group tutorial educational model. For more information about the Mohawk and Conestoga College sites refer to the B.Sc.N. (A) Stream in the School of Nursing, *Faculty of Health Sciences* portion of the Calendar. For full application instructions see the *School of Nursing and Application Procedures* sections as well as <https://nursing.mcmaster.ca/programs/undergraduate>.

Admission to Nursing 1 at all sites is by selection. A minimum overall average of 85% or higher is normally required for application consideration. Additionally, applicants to Nursing must complete a **mandatory on-line assessment (CASPer™)** on the dates specified each year (October-February). Applicants who do not complete the CASPer™ test will not be considered for admission.

The following are the minimum Grade 12 U and M requirements:

1. English U
2. One of Advanced Functions U, Calculus and Vectors U, Mathematics of Data Management U
3. Biology U
4. Chemistry U
5. Completion of two additional U or M courses to total six courses

The selection method is by academic qualifications (minimum overall average range of 85% or higher is required for consideration) and a **mandatory, online, 90-minute computer-based assessment of personal characteristics called CASPer™**. Applicants who do not complete the CASPer™ test will not be considered for admission.

Health requirements for admission to Nursing 1: During the registration process, you must file with the University information pertaining to your state of health and immunization **is required**. Detailed instructions will be provided after acceptance into the program. Students considering the Nursing 1 program should refer to the document *Requisite Skills and Abilities for Nursing Practice in Ontario* at the College of Nurses of Ontario www.cno.org.

SOCIAL SCIENCES I

The following are the minimum Grade 12 U and M requirements:

1. English U
2. Completion of five additional U or M courses to total six courses

Advanced Functions U and Calculus and Vectors U are strongly recommended for students planning to enter programs in Economics or Psychology, Neuroscience and Behaviour. Biology U is recommended for students planning to enter a program in Psychology, Neuroscience and Behaviour.

STUDIO ART I

The following are the minimum Grade 12 U and M requirements:

3. English U
4. Completion of additional U or M courses to total six courses

McMaster offers Studio Art as a direct entry Level I program leading to a Bachelor of Fine Arts (BFA) degree. Admission to this program is by selection and requires a **mandatory portfolio interview** with the School of the Arts <https://sota.humanities.mcmaster.ca/studio-art/>.

You must make arrangements for your portfolio interview with the School of the Arts at sota@mcmaster.ca.

B. Other Canadian Provinces and Territories

Subject Requirements for Level I Programs

In addition to the minimum requirements below, satisfactory completion of the specified subject requirements for the program to which you applied is also required. Please refer to our website <http://future.mcmaster.ca> for more details.

Averages used to determine eligibility for admission and residence are calculated to two decimal points based on the minimum provincial requirements, including the prerequisite courses for the program to which you have applied.

Early Conditional Admission

Applications are reviewed for conditional admission as soon as all required documents, with sufficient course and grade data, are received by the Office of the Registrar, Admissions. All Canadian applicants should **upload forward interim/midyear school grade reports** showing **marks for all courses taken during the Grade 11 and 12 years as well as all course registrations for the current academic year**, as soon as they are available. The terms and conditions of the offer of admission are stated clearly on the offer letter. The Provincial Ministry final transcript confirming final grades and graduation status will be required at the end of the school year. **Students from all other provinces where transcripts are issued by their high schools should have their schools forward the appropriate interim mid-year transcripts and final transcripts confirming graduation.**

Applicants are required to meet the following minimum requirements including the specified subject requirements (not listed below) for their chosen program. For a complete listing of our specific course requirements by province and Level I program you may refer to our web site: <https://future.mcmaster.ca/>.

Alberta, Northwest Territories and Nunavut

Grade 12 high school diploma with five acceptable academic courses numbered 30 or 31, including English Language Arts 30-1.

British Columbia and Yukon

Grade 12 high school diploma with ~~four six~~ acceptable Grade 12 academic courses (or equivalent), including English Studies 12, English 12, or English 12 First Peoples. ~~Five Grade 12 academic courses, including all required courses, are used for programs with five requirements.~~

Manitoba

Grade 12 high school diploma with five acceptable Grade 12 academic courses numbered 40S, including one of English 40S.

New Brunswick

Grade 12 high school diploma with five acceptable Grade 12 academic courses numbered 120, 121, or 122, including English 121 or English 122, or English as a Second Language 22411.

Newfoundland and Labrador

Grade 12 high school diploma with eleven acceptable Grade 12 academic credits at the 3000 level, including English 3201.

Nova Scotia

Grade 12 high school diploma with five acceptable Grade 12 academic **or advanced** courses (~~university preparatory Academic or Advanced~~), including English 12.

Prince Edward Island

Grade 12 high school diploma with five acceptable Grade 12 academic courses numbered 611 or 621, including English 611 or 621.

Québec

Grade 12 Diploma with six acceptable Grade 12 academic courses in the 600 series including English
OR

Year I CEGEP with twelve appropriate academic courses, including two English/Anglais 603 or two English 604 courses. Students completing Year II or III CEGEP who will or have achieved the DEC may be considered for advanced credit in their chosen program. The *côte de rendement* (R Score) is used for admission consideration.

Saskatchewan

Grade 12 high school diploma with five acceptable Grade 12 academic courses numbered 30, including both English A30 and B30.

C. International Baccalaureate Diploma

Applicants who have completed or will be completing the International Baccalaureate Diploma will be considered for admission to Level I, provided the completed diploma program includes the subject requirements of the program desired. Advanced credit of up to 18 units of study will be considered for Higher Level (HL) courses based on the achievement of final IB Diploma grades of 5 or greater.

For more information please refer to <https://future.mcmaster.ca/>.

D. Advanced Placement (AP) Courses/Examinations

Applicants who have completed AP courses will be considered for admission to a Level I program. Applicants who have completed A.P. exams through the College Board in acceptable courses and achieve a minimum grade of 4 will be considered for up to 18 units of advanced credit. For all students who have completed AP examinations through the College Board, an official copy of the final *Advanced Placement Examination Results Report* from the College Board is required as part of the admission and advanced credit evaluation process. For more information please refer to <https://future.mcmaster.ca/admission/>

E. Other International Secondary School Qualifications

~~See the admission~~ **Admission** requirements for applicants from the more common international educational systems **are noted** below. For all other education systems ~~from around the world~~, please visit our website for ~~the specific minimum requirements for your country's educational system~~ **country-specific requirements**. Required subjects ~~would be~~ are the same as required for Ontario and other Canadian students: <https://future.mcmaster.ca/admission/>.

Applicants must arrange for official upload high school transcripts as part of the application process. to be sent to McMaster University well in advance of the session to which they are applying. The equivalent of first-class standing will be required for admission consideration. Documents in a language other than English should be accompanied by notarized English translations. ~~You will be~~ **Applicants are** considered for admission on an individual basis and ~~you~~ will not be allowed to attend the University until ~~we have~~ **received official evidence** that all conditions attached to ~~your the~~ Offer of Admission have been fulfilled.

McMaster University may require students presenting **admission** documents that ~~will form the basis of their admission to the university~~, from schools outside of North America, to have those documents authenticated via WES Canada <https://www.wes.org/ca/>. ~~Students will be supplied with~~ **This requirement, if applicable, will be specified** specific information in their official Offer of Admission letter.

American High School Curriculum

American Curriculum High School applications are reviewed for admission based on McMaster's own calculation of the admission average. McMaster's calculations ~~of the admission averages~~ may vary from those used at other institutions.

Applicants from an American high school curriculum must satisfactorily complete a secondary school diploma with a minimum overall average of at least 80% in a Grade 12 academic program from an accredited American high school/International American Curriculum high school AND must present all prerequisite courses for their chosen program(s).

Admission is competitive and many programs ~~will~~ require grades/averages well above the minimum 80% for admission consideration. For complete requirements for American Curriculum applicants, please visit our website: <https://future.mcmaster.ca/admission/>.

General Requirements

High school Diploma from an accredited school with prerequisite subjects including English completed at the AP or Senior Grade 12 academic level.

Students may be required to satisfy our English language proficiency requirements: <https://future.mcmaster.ca/english-proficiency/> <https://future.mcmaster.ca/admission/language/>

McMaster will consider a minimum of five Senior Grade 12 academic courses including all prerequisite subjects for the applicant's selected program(s). **Students applying to programs in Engineering, Science, Health Sciences, Economics and Business programming that have mandatory Science and/or Mathematics prerequisites should note the following requirements for each subject:**

- **Biology** - 2 years/ 2 full credits (Junior and Senior) or AP Biology (or equivalent)
- **Physics** - 2 years/2 full credits (Junior and Senior) or AP Physics (or equivalent)
- **Chemistry** - 2 years/ 2 full credits (Junior and Senior) or AP Chemistry (or equivalent)
- **Calculus** - 4 years of high school Mathematics including Pre-Calculus and AP Calculus or equivalent.

~~McMaster University will accept the r~~ **Results of an equivalent AP challenge examination will be accepted** in lieu of ONE of the science/math prerequisites ~~for your chosen subject~~ if your school does not offer the subject. A minimum score of 4 or 5 ~~will be is~~ required for AP challenge exams.

Students ~~who are~~ presenting AP courses that are prerequisites to their selected program(s) will be required to complete and submit the AP Examination(s) via the College Board and minimum grades of at least 3 ~~will be is~~ required ~~from the examinations~~ to meet admission conditions.

SAT II Subject Test with a score of at least 670 or higher may be considered on a case-by-case basis in lieu of ONE of the science/math prerequisites for your chosen program.

For claimed equivalencies, detailed syllabi including all topics covered, total hours and textbooks used are required for our evaluation and should be submitted alongside official high school transcripts/reports.

In response to the pandemic, McMaster University is making made the submission of SAT/ACT optional for the Fall 2022 admission cycle. For SAT/ACT admission requirements for Fall 2023, please visit <https://future.mcmaster.ca/admission/> for updated information as it becomes available. Results (if submitted) will be considered if they benefit the student and make their application stronger; however students who do not submit a score will not be penalized. Applicants choosing to submit SAT/ACT results may do so by email to: macdocs@mcmaster.ca. Applicants choosing to submit SAT/ACT results may do so by email to: macdocs@mcmaster.ca.

- Detailed school profile including grading scale
- 2nd quartile results can be used for consideration for a conditional offer of admission provided at least 2 of the 5 required courses have been completed and grades presented.
- Grade 9, 10, 11 and Grade 12 2nd quartile results
- SAT and SAT II Subject Test results must be sent from the College Board directly and cannot be accepted electronically.
- SAT minimum - overall score of 1200 or greater (Reading/Math sections only) with a minimum score of 600 in each section (Institutional Code for SAT/AP - 0936)

OR

- ACT - minimum composite score of 27 or greater (Institutional Code - 5326)

General Certificate of Education (G.C.E.)

Applicants from the General Certificate of Education system require a minimum of five G.C.E. subjects, at least two three of which must be at the Advanced A2 Level with the balance of the subjects at the IGCSE/GSCE (Ordinary Level). Advanced Level subjects must be appropriate to your chosen program.

Note: Many programs may require a minimum of three Advanced A2 Level courses.

For program specific requirements please refer to <https://future.mcmaster.ca/admission/>.

Other Countries or Educational Systems

For admission requirements from other education systems, please visit <https://future.mcmaster.ca/admission/> to view our country-specific Admissions Requirements.

F. Home Schooled Applicants

Home schooled applicants who in addition to their home schooling experience have completed six Grade 12 U and M courses at an Ontario Ministry of Education inspected and approved school, or equivalent courses from another recognized academic jurisdiction may be considered for their program of choice providing they present the appropriate prerequisite courses on official transcripts from accredited schools and meet the required admission average. McMaster University is the sole arbiter of what is considered as equivalent level education and equivalent courses.

All other home schooled applicants may apply for admission consideration to Humanities I or Social Sciences I by presenting the following:

1. List of home school credentials including but not limited to structured curriculum completed through ACE (Accelerated Christian Education Program) or other such programs.
2. Portfolio of written work; normally, evidence of appropriate intellectual maturity.
3. Results of standardized tests such as SAT, ACT. Applicants must also present results from the Critical Reading and Mathematics components of **SAT I** with a minimum combined score of 1200 (minimum 580 Critical Reading, 520 Mathematics) OR a minimum combined score for the **Redesigned SAT** result of at least 1200 as a combined score with a minimum of 600 in each section OR from **ACT** with a minimum composite score of 27.

Interested applicants should contact the Office of the Registrar for further information regarding admission criteria.

G. Prior-Year Secondary School Graduates

Applicants who have previously completed a secondary school diploma and have not attended a post-secondary institution since graduation, may be considered for admission by presenting satisfactory standing in six required Grade 12 U and M courses (or equivalent) as identified in the *Subject Requirements For Specific Level I Programs* section in this calendar.

If you have **Having** attended a post-secondary institution after high school graduation; **disqualifies applicants from being you would not** be considered as an applicant from secondary school. See *Admission/Transfer From Post-Secondary Institutions* section in this calendar.

2. Admission/Transfer from Post-Secondary Institutions

A. From Universities

Most McMaster programs have enrollment limits and admission is by selection. Possession of the minimum admission requirements does not guarantee admission. Admission will be considered on a case by case basis and is not guaranteed.

When you transfer to McMaster University, **Transfer applicants** you will normally receive credit for courses in which a grade of you have obtained at least a C- standing (as per the McMaster grading scale) **has been achieved**. Assessment of courses for transfer credit is subject to the guidelines of the individual Faculties.

As a transfer student, you **Transfer students** must also satisfy the Residence Requirements set out in the General Academic Regulations section of this Calendar. **The University will not accord to you privileges which would not be granted by your own university.**

Grades obtained in courses taken at another university will not be included in McMaster's Grade Point Average, and, therefore, cannot be used to raise your standing.

If you have been required to withdraw from another university and have fulfilled your period of suspension, you may apply for admission. However, you must present a letter of explanation and clarification concerning your past academic performance. You may also be asked to provide academic documentation for proof of further academic achievement which is both current and relevant. For full transfer information see our website: <https://future.mcmaster.ca/admission/transfer-student-information/>.

B. From Colleges of Applied Arts and Technology

Most McMaster programs have enrollment limits and admission is by selection. Possession of the minimum admission requirements does not guarantee admission. Admission will be considered on a case by case basis and is not guaranteed.

See the minimum admission requirements for Level I programs as listed below.

For information regarding the amount of available transfer credits when transferring from a College of Applied Arts and Technology and to view the minimum admission requirements, please visit <https://future.mcmaster.ca/college-transfer-student/>.
<https://future.mcmaster.ca/admission/college-transfer-student-information/>

C. University Graduates Applying for a Second Bachelor's Degree

All programs have enrollment limits and admission is by selection. If you have a first non-Honours degree, you may apply to take an Honours second degree in the same subject area or a second degree in another discipline. Please note the following exceptions: B.Arts Sc.(Arts & Science), B.Com. (Bachelor of Commerce), B.Com. (Honours), B.H.Sc. (Bachelor of Health Sciences (Honours)), B.Sc. (Honours) in Integrated Science (ISCI), Honours B.Sc. Kinesiology, Integrated Biomedical Engineering and Health Sciences, and Integrated Business and Humanities cannot be done as second degree programs. Honours Music is only available as a second degree to students whose first degree is not a BA in Music. The requirements are set out in the *General Academic Regulations* section of this Calendar.

If you wish to enter a Second Bachelor's Degree in a subject area from the Faculty of Science, please note that admission to all limited enrollment programs, with the exception of Medical Radiation Sciences I, may not be possible. Second Degree applicants to all Science programs, except Medical Radiation Sciences I, are not eligible to apply to or be admitted to any of the other first year Science programs. Second Degree applicants must have already completed all first year requirements for the second year program they wish to apply to, with the exception of Medical Radiation Sciences I. See *Limited enrollment Programs* in the *Faculty of Science* section of this Calendar for a list of programs. Please contact the Office of the Associate Dean of Science (Academic) for further information (see the *Application Procedures* section).

If you are a McMaster graduate or potential graduate, you may be able to use the *McMaster University Returning Student Application* (see the *Application Procedures* section).

D. Continuing Students

At McMaster, a *Continuing Student* is defined as a graduate from an undergraduate program, who wishes to take more undergraduate courses, ~~either out of general interest or to upgrade or obtain courses required for future applications to graduate studies or other professional programs.~~ To be eligible to take courses as a Continuing Student ~~applicants will~~ you will be expected to have an undergraduate university degree and at least a C average, with no failures, in your final year's work (or the equivalent, in the case of a degree taken through part-time studies), and academic records which are satisfactory to the Department and the Office of the Associate Dean of the appropriate Faculty. *Please Note: not all courses are available to Continuing students and course prerequisites for selected courses must be met. Also note that admission as a Continuing student does not guarantee registration in courses of interest to the student.

McMaster Graduates

If you are a graduate of a McMaster undergraduate degree program and wish to become a Continuing Student, you do not need to apply for admission. Graduates who have not attended courses for more than two years will need to contact the Office of the Registrar prior to attempting to enrol for courses.

Graduates from Other Universities

As a Continuing Student with a non-McMaster degree, you must apply formally for admission ~~in the first instance.~~ In subsequent ~~academic terms sessions,~~ you will only be required to enrol.

Acceptance as a Continuing Student carries no implications with respect to acceptance in the School of Graduate Studies. If you plan to proceed to a graduate degree you should apply directly to the specific department of your program of interest.

E. From Six Nations Polytechnic

McMaster University, along with ~~four~~ five other universities, partnered with Six Nations Polytechnic to offer university courses in the community of Six Nations. The courses offered are eligible for transfer credit at any of the universities within the consortium. For more information please contact the Indigenous Student Services at 905-525-9140, ext. 27459 or indigsc@mcmaster.ca.

F. From Post-Secondary Institutions with Religious Affiliation

Undergraduate general academic studies taken at colleges with religious affiliation that are member institutions of specific accredited associations will be considered for admission and transfer credit on a case by case basis. Applicants from a non-accredited postsecondary institution with religious affiliation will be considered for admission based on completion of a Grade 12 high school diploma.

3. Other Categories of Admission

A. Part-time Admission

~~Students~~ Applicants interested in beginning studies on a part-time basis should review the requirements and information found in the following sections of this Calendar:

- Admission Requirements

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- Application Procedures
- General Academic Regulations
- Sessional Dates
- Program descriptions found in the specific Faculty sections

Applicants who wish to pursue undergraduate studies on a part-time basis at McMaster must meet one of the admissions criteria outlined in the sections above. If applicants do not meet any of these criteria, they may qualify for *Mature Student Admission* as outlined under the heading *Mature Student Admission* below.

Detailed information can be found on our website: <http://future.mcmaster.ca/admission/>.

B. Mature Students (Admission)

If you do not qualify Applicants for admission consideration, who do not qualify under one of the above categories, McMaster will be assessed your for eligibility as a mature student. You may be considered for limited admission; provided both of the following conditions are satisfied:

1. You have not The applicant has not attended secondary school or college on a full-time basis for at least two years.
2. You have The applicant has never attended university.

Applicants admitted as mature students will not be granted transfer credit. Programs in the Faculties of Humanities and Social Sciences have no specific course requirements for mature student admission. The following Level I programs have specific course requirements that mature applicants must present from secondary school, as outlined:

- **Business I:** requires satisfactory completion of Grade 12 Calculus and Vectors U one Grade 12 U Mathematics course (or equivalent).
- **Chemical and Physical Sciences Gateway:** requires satisfactory standing in four Grade 12 U mathematics and science courses (or equivalent) as specified under the heading *Subject Requirements For Specific Level I Programs*.
- **Environmental and Earth Sciences Gateway:** requires satisfactory standing in three Grade 12 U mathematics and science courses (or equivalent) as specified under the heading *Subject Requirements For Specific Level I Programs*.
- **Life Sciences Gateway:** requires satisfactory standing in three Grade 12 U mathematics and science courses (or equivalent) as specified under the heading *Subject Requirements For Specific Level I Programs*.
- **Mathematics and Statistics Gateway:** requires satisfactory standing in two Grade 12 U mathematics courses— Advanced Functions U and Calculus and Vectors U (or equivalent) as specified under the heading *Subject Requirements For Specific Level I Programs*.
- **Midwifery I: does not offer mature admission directly to the program.** However, students interested in Midwifery may be admitted as a mature student to another program in order to complete a minimum of six university courses (18 units) in their program of admission before applying to the Midwifery Education Program.
- **Nursing I does not offer mature admission directly to the program.** However, students interested in Nursing may be admitted as a mature student to another program in order to complete university prerequisite courses for later consideration for admission to Nursing I. Possession of the minimum admission requirements does not guarantee an offer of admission. Contact the School of Nursing for more details.

The following programs do not admit under the category of Mature Students: Arts & Science I, Automation Engineering Technology I (B.Tech.), Automotive and Vehicle Technology I (B.Tech.), Biotechnology I (B.Tech.), Computer Science I, Engineering I, Health Sciences I, Honours Integrated Science (Level I), Honours Kinesiology (Level I), Integrated Biomedical Engineering and Health Sciences I, Integrated Business and Humanities I, Medical Radiation Sciences (Level I), Midwifery I, and Nursing I, and Process Automation Technology I (B.Tech.).

If admitted to a program Those admitted as a mature student, you may register to take up to 18 units of course work (normally Level I courses) during the Fall/Winter session with no more than nine units in each term (three courses). Within the first 18 units, mature students will be limited to taking three units in each term of the Spring/Summer session.

Upon completion of 18 units, your academic performance will be reviewed according to the general academic regulations of the university. (See Level I *Registration and Academic Standing Requirements under General Academic Regulations*).

C. Visiting Students (Letter of Permission - For Credit at Another University)

If you are a student Students currently attending another university, you may apply to take McMaster courses for credit at your their own/home institution. Please note, not all courses are available for credit outside McMaster and all are subject to enrollment limits. so it is important that all applicants adhere to McMaster application deadlines.

You must initially apply Applications are made through the Ontario Universities' Application Centre (OUAC). The and send your Letter of Permission and an official transcript are required. from your home institution directly to the Office of the Registrar, Admissions. Upon receipt, your transcripts will be reviewed to ensure you have met the prerequisites for courses have been completed. you plan to take at McMaster. Approval of your application as a Visiting Student application does not guarantee your enrollment in a course.

Subsequent requests to take courses on a Letter of Permission do not require another application; however you must send an updated Letter of Permission and a current official transcript from your home institution must be sent to the Office of the Associate Dean of the Faculty offering the course at McMaster. If you are interested in registering attempting to register in courses offered by more than one Faculty, you must obtain approval from each Office of the Associate Dean must be obtained.

D. Graduates of McMaster Certificate/Diploma Programs

If you have Applicants who have completed certificate or diploma programs from McMaster, you may be granted advanced credit up to maximum specified by Undergraduate Council upon successful completion of the certificate/diploma program. Faculties will take into

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account review the subject matter of both the certificate and degree programs. The credit granted will normally be applied against your elective courses. For more information concerning the amount of credit granted, please refer to the *Certificate and Diploma Programs* section of this Calendar.

E. Post-Degree Students

If you are a university graduate or a person with professional qualifications who wishes to take one or more graduate courses but not proceed to an advanced degree, you may apply to McMaster as a post-degree student. To enroll as a post-degree student, you must apply to the appropriate department(s) and have your admission and registration approved by the School of Graduate Studies for each session in which you wish to take courses. You will register and pay fees as a graduate student. Acceptance as a post-degree student carries no implications with respect to admission to advanced degrees, and even if such admission is granted subsequently, credit toward the advanced degree will not normally be granted for the work previously taken.

F. Listeners

If you are uncertain about taking degree courses, you may register as a listener in a degree course that may be of interest, but not for credit. Listeners attend all classes, but do not complete any of the essays, tests and other formal requirements and do not receive a grade or credit. You do not receive a grade for courses that you attend. Some students have eased their way into degree study with this option, subsequently applying for admission and enrolling in further courses for credit. Please note not all courses are available to Listeners. Please see <https://financial-affairs.mcmaster.ca/> <https://registrar.mcmaster.ca/fees/> for any applicable fees. For more information please contact the Office of the Registrar.

Written permission to attend must be obtained from the instructor delivering the course. An I.D. card cannot be issued until permission has been obtained.

G. Enrichment Program for Secondary School Students

If you are an outstanding Grade 12 student and who wish to enroll in a university-level course while completing Grade 12 U and M courses in your final year of study, you may apply for the Enrichment Program. For more information contact the Office of the Registrar <https://future.mcmaster.ca/contact-us/>.

H. Former McMaster Degree Students (Returning Students)

Readmission

If you are a former McMaster student who voluntarily withdrew from an undergraduate program more than five years ago (and have not attended another university or completed a college diploma elsewhere) and you wish to return to your studies, then you must apply for Readmission. Students from the School of Nursing or the Physician Assistants program must apply for Readmission regardless of time elapsed following voluntary withdrawal.

If you were enrolled (have a record of course enrolment) within the last five years and you left the university in good academic standing (and have not attended another university or completed a college diploma elsewhere), then it is not necessary for you to apply for Readmission. Normally, you will be permitted to enrol in your previous program or another program for which you qualify. You must contact the Office of the Registrar directly in order to have your status reactivated prior to enrollment.: (905) 525-4600.

Reinstatement

See the *General Academic Regulations* section in this Calendar.

Second McMaster Degree

See *University Graduates Applying for a Second Bachelor's Degree* in this section of the Calendar.

Continuing Studies

See *Continuing Students* in this section of the Calendar.

4. Transfer Credits

A. General Policy on the Transfer of University Course Credits

To facilitate program completion by undergraduate students seeking to transfer course credit from an accredited university to McMaster, the University has implemented the following principles:

1. Acceptance of transfer credits from accredited universities shall be based on the recognition that, while learning experiences may differ in a variety of ways, their substance may be essentially equivalent in terms of their content and rigour. Insofar as possible, acceptance of transfer credit shall allow for the maximum recognition of previous learning experience in university-level courses;
2. Subject to degree, grade and program requirements, any course offered for credit by an accredited university shall be accepted for credit by McMaster when there is an essential equivalency in course content. However, no course for which a grade of less than C- (60%) has been achieved will be considered.
3. Evaluation of all possible transfer credits available at the time of admission must be completed within one year of the date of admission to the University.

B. From Colleges of Applied Arts and Technology

Normally, if you are a well-qualified graduate of a three-year program and where the college work is appropriate to your chosen university program, you could receive up to 30 units of transfer credit. If you have completed a Graduate of two-year programs and performed well, will be reviewed for transfer credit will be reviewed on a case-by-case basis.

Credit beyond this may be given on an individual basis where the college and university programs are in similar areas, and where you're the academic record warrants special consideration.

In the granting of credit, attention will be given to:

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1. your performance in the college program;
2. the duration of the college program;
3. the program taken at the college and the program to which entry is sought;
4. you're the applicant's secondary school record.

Each case will be considered individually on its own merits for the program desired.

C. Advanced Credit

Subject to the discretion of the Faculty, advanced credit may be granted if you have for a completed the International Baccalaureate (I.B.) Diploma; the Advanced Placement (A.P.) Program and the College Board examinations; or the General Certificate of Education (G.C.E.) and you have met the minimum requirements prescribed have been achieved. Advanced credit may shorten your degree program length at McMaster.

D. Credit in Courses by Special Assessment (Challenge Examinations)

Students Applicants who have acquired knowledge at a different type of institution or in a manner that makes assessment of their qualifications difficult are permitted to seek degree credit through special assessment (Challenge for Credit). Challenge for credit is not intended to give credit for skills or knowledge gained through high school, college or previous university instruction. The special assessment may include one or more of the following: written examinations, papers, essays, submissions of a substantial body of work, or portfolios, or laboratory tests. Credit can be granted only for those courses listed in the current McMaster calendar. Not all courses in all disciplines are available for challenge. Faculties and departments are free to determine which, if any, of their courses are open for special assessment. Challenges are assessed on a pass/fail basis. The passing grade for a challenge appears on the transcript as COM (Complete) and is not used in computing averages or evaluating honours or scholarship standing, but is counted as a course attempt. Unsuccessful attempts will be noted on the transcript as a grade of F. Special Assessment is not available for a course taken previously and a course may be attempted only once by special assessment. Once you have registered for a course by such means (known as challenge exams) the registration may not be cancelled and you may not withdraw from the course. Waivers of prerequisites only (ie. no degree credit) will be at the discretion of the department.

5. English Language Proficiency

If you have been Applicants asked to meet the English Language Proficiency requirement, you must demonstrate English language proficiency by achieving the minimum requirements as specified by McMaster. The university reserves the right to require applicants with an English Language Proficiency score disparate from their English prerequisite subject grade to present further evidence of achievement. You may review acceptable tests of English Language Proficiency and minimum score requirements on our web site <https://future.mcmaster.ca/english-proficiency/>. It is your responsibility to make all arrangements regarding the writing of the English Language Proficiency tests and to have the official score report submitted to the Office of the Registrar, Admissions in a timely manner. At the discretion of the university, you may be exempted from this requirement if you meet one of the following requirements:

- i. Attended immediately prior to application to McMaster, in full-time academic studies (non-ESL), an accredited Secondary School (High School) or Post-Secondary College in an English-speaking country for at least four years immediately prior to your anticipated start date at McMaster, OR
- ii. Attended immediately prior to your application to McMaster, in full-time academic studies (non-ESL), at an accredited English medium Secondary School (High School) or Post-Secondary College for at least four years,* immediately prior to the anticipated start date at McMaster OR
- iii. Attended immediately prior to your application to McMaster, in full-time academic studies (non-ESL), at an accredited English medium University for at least one year, immediately prior to the anticipated start date at McMaster OR
- iv. Resided in an English-speaking country for at least four years immediately prior to your anticipated start date at application to McMaster.

*Please note that the Undergraduate MD program requires a minimum of three years of study at an English-medium university. More information about the admission requirements for Medicine at McMaster can be found at: <https://mdprogram.mcmaster.ca/>.

Statements for Application Fraud

If McMaster concludes based on reasonable grounds that the applicant has falsified any information presented to the University as part of his or her application, without limiting any other rights of McMaster available at law, McMaster reserves the right to revoke the offer and, subject to applicable law and University Policy, to terminate a student's registration.

Without limiting McMaster's General Statement on Collection of Personal Information and Protection of Privacy, please take note that McMaster University collects and retains personal information of applicants for admissions to McMaster University under the authority of The McMaster University Act, 1976. This information may be used for the administration of admissions and registration and, subject to McMaster University policies (as may be amended or revoked from time to time), McMaster may disclose any evidence of misrepresentation, fraud or falsification of admissions documentation to other educational institutions, to government agencies, to law-enforcement agencies and to other relevant third parties. The information you provide on any application for admissions will be protected and used in compliance with *Ontario's Freedom of Information and Protection of Privacy Act (RSO 1990)* and will be disclosed only in accordance with this Act. If you have any questions about the collection and use of this information please contact the University Registrar, University Hall, Room 209, Student Records, Gilmour Hall, Room 108, or the University Secretary, Gilmour Hall, Room 210, McMaster University.

McMaster English Language Development Diploma (MELD)

Department of Linguistics and Languages (Faculty of Humanities)
Phone: (+1) 905.525.9140 Ext. 23718

Email: meld@mcmaster.ca

Web: <https://meld.humanities.mcmaster.ca/diploma/>

Students who meet the academic admission requirements for their choice of Level 1 program, but do not meet McMaster's English Language Proficiency requirement may be admitted to the MELD bridging program which has been developed for international students, providing them with a supportive environment in which they can succeed. The diploma is a two-term, full-time intensive bridging program in English language development, acculturation and engagement.

Students accepted into MELD are given a conditional offer of admission to their program of choice, pending successful completion of the MELD diploma. Once the diploma in MELD has been successfully completed, the student may register in the program to which the student was given conditional admission and will have completed 6 units of degree credit courses in Linguistics that may be applied as electives to that program. In exceptional circumstances, MELD will consider transfers from other McMaster programs.

Please visit <https://meld.humanities.mcmaster.ca/diploma/> for more information or email meld@mcmaster.ca.

Fall Term

(September - December)

- LINGUIST 1E03 - Introduction to English Linguistics I (degree credit course)
- MELD 1M00 - Mentorship Lab 1
- MELD 1Q03 - Critical and Analytic Reading
- MELD 1QQ3 - Grammar, Structure and University Writing
- MELD 1R03 - Aural Communication and Academic Culture
- MELD 1RR3 - Oral Communication for Academic and Social Interactions

Winter Term

(January - April)

- LINGUIST 1EE3 - Introduction to English Linguistics II (degree credit course)
- MELD 1MM0 - Mentorship Lab 2
- MELD 1S03 - Critical Reading, Research and Academic Vocabulary
- MELD 1SS3 - Academic Writing, Reporting and Research
- MELD 1T03 - Cross-Cultural Perspectives on Language and Language Learning
- MELD 1TT3 - Oral Communication for Academic Discourse

McMaster English Readiness for Graduate Excellence Certificate

<https://meld.humanities.mcmaster.ca/merge/>

MERGE (the McMaster English Readiness for Graduate Excellence Certificate) is an intensive six-week summer certificate program for current or prospective graduate students from any institution who are looking to improve their English-language skills. The MERGE program offers over 200 hours of language training; 35 hours per week. Admission requirements include successful completion of an undergraduate degree and English language proficiency minimum requirements of **TOEFL iBT 90** or **IELTS 6.5** (with minimum category requirements). Target English proficiency upon program completion will be an **IELTS score of 7-7.5** or **Common European Framework Reference for Languages (CEFR) level C2.1**, in keeping with graduate English proficiency admission requirements. The MERGE program goes beyond essential training in speaking, listening, reading, and writing. It has been designed to support the integration of these skills as applied to real world contexts students will encounter during graduate school and beyond. The MERGE certificate does not require current or conditional admission to a McMaster University graduate program and program completion does not guarantee admission to a graduate program of study in and of itself. As a stand-alone program, the MERGE certificate coursework cannot be utilized for advanced standing or credit towards degree studies.

Certificate Requirements

Each of the program's six weeks will be divided into modules that will focus on a different set of skills. These modules will approach the development of these skills from the point of view of both cultural understanding and practical implementation, with an emphasis on teaching and practising the language skills needed to be successful in each domain. The six modules are:

- **Module 1 - General social interactions:** conventions and strategies for everyday social encounters students face
- **Module 2 - Academic feedback and critique:** the role of critique in academia along with tools for both giving and receiving feedback or peer review
- **Module 3 - Academic reasoning:** identifying, understanding, and summarizing arguments and evaluating supporting evidence in both reading and listening
- **Module 4 - Academic interactions:** navigating relationships with supervisors, teams, and other faculty in person, through email, at conferences, and in seminars
- **Module 5 - Career preparation:** best practices for CVs/resumes, job interviews, elevator pitches, and online brand building
- **Module 6 - Teaching:** principles of effective teaching including developing lessons, interacting with students, and grading

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Application Procedures

HOW TO APPLY

1. Determine the appropriate application form and/or procedures. (See *Categories of Admission* below.)
2. Determine application deadline. (See *Application and Documentation Deadlines* in this section.)
3. Refer to the Admission Requirements and specific Faculty sections of this Calendar for further information.
4. Complete and submit your application as directed.
5. Submit all required documentation to McMaster. (See *Documents* in this section.)
6. Once you're an application has been received, McMaster's Office of the Registrar, Admissions will provide you with an acknowledgment of receipt of your application plus further instructions/details about tracking you're the application.

1. Categories of Admission

A. Current Ontario High School Students

You should complete the The 101 application should be used if you meet ALL of the following requirements apply:

- You are taking courses during the day at an Ontario secondary school (this includes students returning for second semester and graduated students returning to upgrade one or more courses)
- You have not, at some any point, been out of secondary school for more than seven consecutive months
- You will have received or expect to receive your Ontario Secondary School diploma (OSSD) with six 4U/M courses at the end of the current year
- **You have not attended a postsecondary institution (college/university/career college)**
- You are applying to the first year of an undergraduate degree program or diploma program at an Ontario university
- You are under 21 years of age.

Use the Undergraduate 101 on-line application at www.ouac.on.ca/101/. Please consult with your secondary school guidance office regarding this application process.

B. All Other Canadian High School Students

If you are For applicants currently attending secondary school outside of Ontario or have recently completed a secondary school diploma in any Canadian province or territory

- Use the OUAC 105 on-line application at www.ouac.on.ca/105/.

C. High School Students with International Qualifications

If you are Applicants currently attending or have recently completed a secondary school program outside of Canada, and you are not a Canadian citizen nor Permanent Resident of Canada

- Use the OUAC 105 on-line application at www.ouac.on.ca/105/.

D. University/College Transfer/Continuing Students

If you are currently registered in or have completed an undergraduate degree program at another university and wish to attend McMaster **OR**

If you are currently registered in or have attended or completed a college diploma program and wish to attend McMaster

- Use the OUAC 105 on-line application at www.ouac.on.ca/105/.

E. Nursing Consortium Programs

If you are interested in Applying to McMaster's Nursing (B.Sc.N.) programs at the Mohawk College or Conestoga College sites

- For admission to Nursing for Fall 2022, applicants to all three sites will apply through the OUAC at www.ouac.on.ca/.

- Current Ontario high school applicants – use the OUAC 101 on-line application at www.ouac.on.ca/101/.
- All other applicant groups use the OUAC 105 on-line application at www.ouac.on.ca/105/.

F. Previous McMaster Degree Students (Returning Students)

1. **Readmission:** If you are a former McMaster student with a record of course enrolment, who was in good standing and who voluntarily withdrew from an undergraduate program more than five years ago (providing you have not attended another university nor received a college diploma since last registered at McMaster). If you are a former Nursing or Physician Assistant student, you must apply for readmission regardless of the amount of time that has elapsed. Apply on-line at: future.mcmaster.ca/admission/process/returning/ <https://registrar.mcmaster.ca/build-degree/continuing-students-second-degree/>
2. **McMaster Second Degree:** If you are a McMaster graduate or potential graduate at the end of your current academic term and wish to pursue a second undergraduate degree (providing you have not attended another university nor received a college diploma since last registered at McMaster).
 - Use the McMaster Returning Student Application to apply on-line at future.mcmaster.ca/admission/process/returning/ <https://registrar.mcmaster.ca/build-degree/continuing-students-second-degree/>
3. **Reinstatement:** If you are a former McMaster student who was required to withdraw from studies at McMaster.

- Complete Obtain the *Reinstatement Request Form* found from the Office of the Registrar, Gilmour Hall, Room 108, McMaster University, Hamilton, Ontario, L8S 4L8 or online here: <https://registrar.mcmaster.ca/build-degree/reinstatement/>. Submit a *Service Request in Mosaic* and attach the completed form.
4. **Continuing Student:** If you are a McMaster graduate from an undergraduate program and wish to become a Continuing Student.
- You do not need to apply for admission. Contact the Office of the Registrar, Services, for assistance <https://registrar.mcmaster.ca/events/connect-with-us-online/>.

G. Visiting Students (Letter of Permission - For Credit at Another University)

If you are currently enrolled at another university and wish to attend McMaster to take courses on a Letter of Permission for credit at that university

- Use the OUAC 105 on-line application at www.ouac.on.ca/105/

H. Part-Time Degree Studies at McMaster Only

If you wish to begin undergraduate studies on a part-time basis (enrolled in less than 18 units of study)

- Use the OUAC 105 on-line application at www.ouac.on.ca/105/.

I. Post-Degree Studies

If you wish to register as a post-degree student (taking graduate courses but not proceeding to an advanced degree)

- Contact the Graduate Studies Office, Gilmour Hall, Room 212, McMaster University, Hamilton, Ontario, L8S 4L8 for information on how to apply to the appropriate academic department(s).

J. Medical Program

See the heading *Admission Policy for the Medical Program* in the *Faculty of Health Sciences* section of this Calendar.

2. Documents

A. Required Documents

A complete application includes: an application form, relevant transcripts and all other documentation stipulated in the *Admission Requirements* and specific Faculty sections of this Calendar, in letters from the appropriate Faculty and/or in letters from Office of the Registrar, Admissions.

You must provide McMaster with Transcripts of marks and/or certificates from all secondary and post-secondary institutions attended must be provided. When you are requested to provide an official transcript, then an official signed and sealed transcript is a signed and sealed record of all academic achievement must be issued and sent by an academic institution directly to McMaster University, Office of the Registrar, Admissions.

If you are currently attending secondary school, please see your contact a guidance counselor to request that your current Grade Report showing all courses you will be completing in Grade 12 courses. If you have previously attended secondary school in another province, you may need to submit a request for a transcript containing your secondary school marks from the Ministry or Department of Education in that province if it is not normally provided by your high school.

Where documentation from a school outside of Canada is in a language other than English, you must provide official transcripts in the original language as well as official, notarized English translations are required.

For specific document submission requirements and processes/procedures, please review:

<https://future.mcmaster.ca/admission/documents/>.

If McMaster concludes based on reasonable grounds that the applicant has falsified any information presented to the University as part of his or her application, without limiting any other rights of McMaster available at law, McMaster reserves the right to revoke the offer and, subject to applicable law and University Policy, to terminate a student's enrolment.

Without limiting McMaster's General Statement on Collection of Personal Information and Protection of Privacy, please take note that McMaster University collects and retains personal information of applicants for admissions to McMaster University under the authority of *The McMaster University Act, 1976*. This information may be used for the administration of admissions and registration and, subject to McMaster University policies (as may be amended or revoked from time to time), McMaster may disclose any evidence of misrepresentation, fraud or falsification of admissions documentation to other educational institutions, to government agencies, to law-enforcement agencies and to other relevant third parties. The information you provide on any application for admissions will be protected and used in compliance with Ontario's *Freedom of Information and Protection of Privacy Act (RSO 1990)* and will be disclosed only in accordance with this Act. If you have any questions about the collection and use of this information please contact the University Registrar, University Hall, Room 209, Student Records, Gilmour Hall, Room 108, or the University Secretary, Gilmour Hall, Room 210, McMaster University.

B. Retention of Documents

All documentation submitted in support of your application for admission becomes the property of the University and will not be returned.

Documentation for those not accepted. If you are not accepted, or you for those who fail to enroll following acceptance, your documentation will be destroyed at the end of the admissions cycle. If you an applicant reapplies, reapply, you they must resubmit any new academic information in addition to the documentation submitted previously required documentation.

3. Application and Documentation Deadlines

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McMaster University reserves the right, at its sole discretion, not to accept, process or adjudicate applications or amendments to applications to any program at any time. Meeting minimum application requirements does not guarantee admission to any program at McMaster University. **Application fees are non-refundable and you are advised to review admission requirements carefully before applying**, to determine your academic eligibility for admission consideration for admission. Please see the *Admission Requirements* section of this calendar for general information. University transfer applicants should review *programs by Degree and Minors Programs (by Degree) and Minors* requirements section before applying.

McMaster University has a number of highly competitive by-selection programs that require requiring a mandatory supplementary application/assessment, and all of these programs have early application and supplementary submission deadlines, as specified in the chart below. Failure to apply on time or to submit the required supplementary application/assessment by the specified dates will automatically disqualify applicants for consideration for to these specified programs. You are advised to submit your application Submission of an application and/or amendments should be made well in advance of the deadlines listed below.

Fall and Winter Terms

The dates and deadlines listed below are for applications submitted for the ~~2022-2023~~ 2021-2022 academic year. Please refer to <http://future.mcmaster.ca> for the date and deadline information for 2023-2024 applications.

PROGRAM	APPLICATIONS	MANDATORY SUPPLEMENTARY APPLICATIONS
Arts & Science	February 1 January 13	February 1
Actuarial & Financial Mathematics (Above Level 1) Regular and Co-op Programs	April 1	April 30 For information see: https://www.math.mcmaster.ca/undergraduate/undergraduateprograms/41-undergraduate-studies/4758-afm-supplementaryapplication.html - https://www.math.mcmaster.ca/undergraduate/useful-links/actuarial-and-financial-mathematics-supplementary-application.html
Automation Engineering Technology I Co-op (B.Tech.), Automotive and Vehicle Engineering Technology I Co-op (B.Tech.), Biotechnology I Co-op (B.Tech.)	January 45-13	End of January Online Kira® Assessment Details at: https://www.eng.mcmaster.ca/future-students/supplementary-application
Bachelor of Technology Degree Completion (Above Level 1)	April March 1 (May intake) July 1 45 (September intake) November 1 (January intake)	Must be completed by the application deadline. Details at: https://www.eng.mcmaster.ca/forms/bachelor-technology-degree-completion-program-supplementary-application-form View more information about the mandatory supplementary application for the Bachelor of Technology degree.
Biomedical Discovery & Commercialization (Level 3 entry; Health Sciences (Above Level 2))	February 1	February 1 Supplementary application deadline. Details at: https://bdcprogram-mcmaster.ca/apply
Computer Science I (Regular and Co-op)	January 45-13	End of January Online Kira® Assessment Details at: https://www.eng.mcmaster.ca/future-students/supplementary-application
Computer Science (Above Level 1) (Regular and Co-op)	April 1	Mid - April Online Kira® Assessment Details at: https://www.eng.mcmaster.ca/future-students/supplementary-application
Engineering 1 (Regular and Co-op)	January 45-13	End of January Online Kira® Assessment Details at: https://www.eng.mcmaster.ca/future-students/supplementary-application
Engineering (Above Level 1) (Regular and Co-op)	April 1	Mid - April Online Kira® Assessment Details at: https://www.eng.mcmaster.ca/future-students/supplementary-application
Engineering & Management (Above Level 1) (Regular and Co-op)	April 1	Mid - April Online Kira® Assessment Details at: https://www.eng.mcmaster.ca/future-students/supplementary-application

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PROGRAM	APPLICATIONS	MANDATORY SUPPLEMENTARY APPLICATIONS
Engineering & Society (Above Level 1) (Regular and Co-op)		
Health Sciences I (Honours)	January 4 5 13	Early February Details at: https://bhsc.mcmaster.ca
Health Sciences (Honours) (Above Level 1)	April 1	Early May Details at https://bhsc.mcmaster.ca
Honours Biology and Pharmacology Co-op (Above Level 1)	February 1	February 1 Mandatory Letter of Intent specifying reasons for applying and applicant suitability for the program. Email biophrm@mcmaster.ca by February 1.
Honours Integrated Science I	February 1 January 13	February 1 Details at: https://www.science.mcmaster.ca/sis/undergraduate/isci/isci-admission-requirements.html
Integrated Biomedical Engineering & Health Sciences 1 (Regular and Co-op)	January 4 5 13	End of January Online Kira® Assessment Details at: https://www.eng.mcmaster.ca/future-students/supplementary-application
Integrated Business & Humanities	January 4 5 13	February 1 Online Kira® Assessment
Justice, Political Philosophy & Law	April 1	April 1 For more information see: https://philos.humanities.mcmaster.ca/undergraduateprograms/justice-political-philosophy-and-law-program/
Midwifery (including submission of all transcripts)	February 1	N/A
Physician Assistant (including submission of all official transcripts) Note: This program is not open to International Applicants. This program is open to Canadian citizens and present Permanent Residents of Canada only.	February 1	End of February 4
Social Work	February 1	February 1
Nursing I: Secondary School Applicants	January 4 5 13	Mandatory Supplementary application information is available on the CASPer™ website.
Nursing 1 (university transfer applicants from programs other than Nursing and applicants from college pre-health programs) (including submission of all official transcripts)	February 1	Mandatory Supplementary application information is available on the CASPer™ website.
Nursing: Transfer from another Nursing program to the McMaster site.		Students from other university Nursing programs should contact the McMaster Nursing program office at 905-525-9140, ext. 22232, for information about transfer options and application procedures. McMaster will not typically accept transfer applications from students already in a Nursing program elsewhere.
Nursing Basic-Accelerated Stream (above level 1) (including submission of all official	February 1	Mandatory Supplementary application information is available on the CASPer™ website.

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PROGRAM	APPLICATIONS	MANDATORY SUPPLEMENTARY APPLICATIONS
transcripts)		
Nursing Post Diploma RPN Stream (Mohawk) (Conestoga)	February 1	Mandatory Supplementary application information is available on the CASPer™ website.

Application Deadlines for All Other McMaster Programs for Fall and Winter Terms

***February 1** - Applications received on or before February 1 with all supporting official documentation received no later than February 15 from applicants with no postsecondary experience will be reviewed for admission pending space availability in the program. All applications received after February 1 will be considered only if there is space available in the program.
April 1 - The final date to apply for admission and submit all required documentation for admission consideration is April 1. This final deadline applies to all international and domestic applicants.

	APPLICATION DEADLINE	SUPPORTING DOCUMENTATION DEADLINE
Ontario High School Applicants (Recommended)	January 15-13	April 1
Early Deadline* (see above)	February 1	February 15
Final Deadline Domestic Applicants	April 1	April 1
Final Deadline International Applicants	April 1	April 1
B.Tech. Degree Completion Program Only - January Entry	November 15-1	November 15
May Entry	March 1	March 15
September Entry	July 1	July 15

Spring/Summer Term

	DOMESTIC DEADLINE	INTERNATIONAL DEADLINE
May Entry (Term 1 or 3)	April 1	April 1
Supporting Documentation for May Entry	April 1	April 1
June Entry (Term 2)	May 15	May 15
Supporting Documentation for June Entry	May 15	May 15

Former McMaster Students: Re-admission / Re-instatement Deadlines for Fall and Winter Terms

	DOMESTIC DEADLINE	INTERNATIONAL DEADLINE
Re-instatement Deadline	June 30	June 30
Re-admission Deadline	July 15	July 15
Nursing Deadline	February 1	February 1
Physician Assistant	February 1	N/A

Academic Advising for Admitted Students

If you are Applicants offered admission to a program at McMaster, you will be asked to confirm that you have accepted acceptance of the offer of admission and will to attend the University. Your Admission offers will include information regarding acceptance procedures for the offer of admission, specified deadline for your acceptance, a response deadline, and registration procedures. Offer of Admission acceptance deadlines specified in you're the Offer of Admission letter are strictly enforced. Please ensure that you accept Accepting the your offer of admission as directed well before the specified deadline date is recommended.

If you are admitted to Level 1, your the Faculty Office may also arrange a meeting with an Faculty Academic Advisor to set up your program. Although summer advising and registration sessions are not compulsory, you are strongly it is recommended advised to participate.

If you are offered admission above Level 1, you may arrange for academic advising with the Office of the Associate Dean of the Faculty offering the program, or the Office of the Director of the program may be arranged.

4. Review of Admission and Re-Admission Decisions

No appeal procedure shall be available for decisions on admission or re-admission to the University. Such decisions may be reviewed within the following framework:

- a. An applicant to the University ~~who~~ believes ~~that~~ the admission or re-admission decision, or, in the case of a transfer student the decision to grant credits, is incorrect, or based on incorrect or incomplete information, may, **within one week of receiving the decision**, request a review of that decision by writing to the Senior Associate Registrar, Undergraduate Admissions, stating why ~~she/he~~ they thinks the decision should be reviewed.
- b. The Senior Associate Registrar, Undergraduate Admissions, shall determine whether the information on which the decision was based was incomplete or incorrect and, if so, shall refer the request for review to the appropriate Faculty Committee. That Committee shall make a final decision and report it to the Senior Associate Registrar, Undergraduate Admissions, who shall then convey the decision in writing to the student.

Enquiries: Application Procedures

For information about applying to McMaster, visit: <https://future.mcmaster.ca/how-to-apply/>, or direct your enquiries to our online chat: <https://future.mcmaster.ca/contact-us/>

Office of the Registrar, Admissions

Gilmour Hall, Room 109

McMaster University

Hamilton, Ontario, L8S 4L8

Telephone: (905) 525-4600

<https://future.mcmaster.ca/>

General Academic Regulations

Non-Numeric Grades and Notations

Honour Lists

Students are reviewed for Deans' Honour Lists (DHL) and Provost's Honour List (PHL) each time a minimum of 30 units ~~(with at least 24 graded units)~~ may not exceed 6 units assessed with a non-numeric grade) have been completed. Subsequent assessments are based on all units completed since the previous review. Students will be named to the Deans' Honour List when a minimum average of 9.5 is achieved. Students will be named to the Provost's Honour List when an average of 12.0 is achieved.

REPORT TO SENATE
FROM THE
UNIVERSITY PLANNING COMMITTEE
Open Session (Regular Agenda)

At its meeting of January 19, 2022, the University Planning Committee approved the following items and now recommends them to Senate:

1. Proposal for McMaster Institute for Research on Aging| Dixon Hall Centre (MIRA|DH)

The University Planning Committee now recommends,

that Senate approve, for recommendation to the Board of Governors, the establishment of the McMaster Institute for Research on Aging | Dixon Hall Centre (MIRA|DH), as circulated.

2. Closure of Certificate and Diploma Program

The University Planning Committee now recommends,

that Senate approve the closure of the Certificate in Metallurgy of Iron and Steel, as set out in the attached.

SENATE: FOR APPROVAL
February 9, 2022

January 10, 2022

TO: University Planning Committee
FROM: Karen Mossman, Vice-President, Research
RE: **Proposal for MIRA | Dixon Hall**



The Committee on Research Centres and Institutes has reviewed the attached proposal for MIRA | Dixon Hall as per the policies and guidelines, and has been unanimously approved.

Please include this as an agenda item for the next University Planning Committee Meeting on January 19, 2022.

KM:jt

Attach.

cc: Provost
Dean of Graduate Studies
University Secretariat
Dean of Business
Dean of Engineering
Dean of Faculty of Health Sciences
Dean of Humanities
Dean of Science
Dean of Social Sciences

Overview

Proposal for the Establishment of the

an Institute ☐

a Centre ☒

McMaster Institute for Research on Aging | Dixon Hall Centre (MIRA | DH)

Submitted by

Parminder Raina & The McMaster Institute for Research on Aging

MIRA|DH Members

Dr. Parminder Raina is the proposed Scientific Director for MIRA|DH. As MIRA|DH is nestled within MIRA all current MIRA members are also members of MIRA|DH. As of November 1, 2021, MIRA has 161 researchers representing all six Faculties and 177 active trainee members. MIRA|DH [research](#) and [trainee](#) members are listed on the MIRA website

Space Needs

New space required?

Yes

No ☒

Location: MIRA @ MIP suite 109A and

Dixon Hall @ 58 Sumach St Toronto

Confirmed

☒

Proposed

Space cost allocation covered by lead Faculty?

Yes

☒

No

Plans for Organizational Review	Frequency of Internal:	Annually	
	Frequency of External:	The first review for this Centre will align with the next five-year review of MIRA, which will be in 2026, and then every five years	
Please provide names below and check box to verify that approval has been obtained from each:			Check box
Department Chair/ Area Director	Dr. Karen Mossman, VP Research, McMaster		<input checked="" type="checkbox"/>
Faculty Dean or Director of Administration	Dr. Paul O'Byrne, VP and Dean FHS		<input checked="" type="checkbox"/>
Other (specify)	Dr. Susan Denburg, Exec. Vice-Dean & Associate VP, Academic FHS		<input checked="" type="checkbox"/>
	Dr. Susan Tighe, Provost & VP Academic, McMaster		<input checked="" type="checkbox"/>
	Dr. Suzanne Labarge, Donor and former chancellor McMaster		<input checked="" type="checkbox"/>

A. Background:

i. What events led to this proposal for a new Centre/Institute?

First established in 2014 as the McMaster Institute of Geroscience, **the McMaster Institute for Research on Aging (MIRA)** was created in 2016 and supported by a generous \$5 million donation from Suzanne Labarge, a McMaster graduate, past chancellor and esteemed university champion and friend. Suzanne shares MIRA's commitment to evidence-based research focused on health and well-being and has provided support in championing the creation of the **Labarge Centre for Mobility in Aging**, the **Labarge Optimal Aging Initiative**, the McMaster Optimal Aging Portal, the McMaster Institute for Research on Aging and the establishment of the **Raymond and Margaret Labarge Chair in Research and Knowledge Application for Optimal Aging**. MIRA grew out of recognition that the best way to tackle the complex issues facing an aging population was as an organized, interdisciplinary team that integrates the perspectives of older adults, caregivers, stakeholders, and knowledge users into research efforts.

In addition to her philanthropic activities at McMaster University, Suzanne Labarge has invested in Toronto's Dixon Hall with annual contributions to assist with technology upgrades in the Seniors' Department. Since 1929, Dixon Hall has been a resource for older adults living in Regent Park, Moss Park, St. James Town, and other downtown east Toronto neighbourhoods. Dixon Hall's goal is to assist older adults in living independent and healthy lives and offer a range of programs and services to help ensure that older adults and adults living with a disability or illness can continue to live at home and be engaged in the community for as long as possible. Dixon Hall provides crucial programming and services to isolated, marginalized and at-risk people in Toronto's Downtown East and is an established, well-recognized entity celebrated for a commitment to comprehensive client care. In part, the depth, continuity, and consistency of the services it provides are enabled through robust partnerships and long-established relationships: The seniors' department is funded by the Province of Ontario (Ontario Health Teams), the City of Toronto – Community Service Partnerships, the United Way, the Ministry for Seniors and Accessibility, as well as by individual, foundation, and corporate donors. Dixon Hall's efforts are also empowered by its history. Dixon Hall's history and ability to address the needs of older adults who live within this community are key components to its effectiveness. Dixon Hall's Seniors' Services Department is well connected and has partnerships with Toronto Ride, and Home At Last, which include: Reconnect, WoodGreen, SPRINT Senior Care, West Neighbourhood House, Storefront Humber, the Neighbourhood Group, West Toronto Support Services, Les Centres d'Accueil Heritage, and is also involved with the following partners/organizations: Progress Place (Seniors Mental Health Day Program in St. James Town partner), Hospice Toronto (Seniors Mental Health Day Program in St. James Town partner), Fred Victor, Central Neighbourhood House, Sherbourne Health, The Neighbourhood Organization (TNO), Toronto Community Housing, St. James Town Community Corner, St. Michael's Hospital, Neighbourhood Information Post, Regent Park Community Health Centre, Yonge Street Mission, and Health Commons Solutions Lab-Sinai Health. Dixon Hall also has a strong presence and engagement at relevant not-for-profit network tables and in dialogues taking place at all levels of government. Yet, financial constraints have necessarily limited Dixon Hall's activities, growth areas, research, effective use of data, and capacity for engagement in broader policy and advocacy work.

Recognizing MIRA's expertise in aging and mobility research and the potential to extend this expertise beyond the borders of McMaster University and Hamilton, in April 2021, Suzanne Labarge invested \$5 million to enable a new partnership between MIRA and Dixon Hall, a service centre offering crucial programming and services to isolated, marginalized and at-risk people in Toronto's Downtown East. Bridging the gap between the academic and the practical, the **McMaster Institute for Research on Aging | Dixon Hall Centre** promises access to unique insights from diverse populations and research opportunities that neither organization could provide alone. MIRA and Dixon Hall are proposing to capitalize on each other's considerable strengths to forge a new partnership that will undoubtedly improve the lives of at-risk older adults: members of our community who have been profoundly affected by the complexities of coping with the extraordinary circumstances in which we all find ourselves only two decades into the 21st century. At-risk seniors can only benefit from access to supports and technology that can help them feel more connected and engaged with their community as they age in place at home. This collaboration will primarily focus on a group that is not often seen or heard – seniors who are low-income, homeless, or precariously housed, or facing multiple challenges to mobility, health, and other social barriers. Our aim is to improve their quality of life and enable them to live with dignity through purposeful initiatives planned over both the short- and long term.

ii. How do those events relate to academic/research priorities?

We propose to establish both a virtual and, eventually, a physical centre at Dixon Hall in Toronto that will further cement McMaster's position as a national leader in research on optimal aging and mobility and enriching the experience for almost 2,000 seniors who access Dixon Hall programming and supports on a yearly basis. This centre will build direct links to McMaster expertise and increase capacity for knowledge dissemination to increase broad awareness of the importance of mobility for the well-being of older adults. It will enable researchers to quickly identify issues and questions of importance to all stakeholders. Opportunities will be augmented to pursue target areas for training, research, and knowledge translation around the topic of mobility and aging. The partnership will also provide a rich learning environment in the science of aging and will enable our experts from MIRA and Dixon Hall to create novel educational initiatives and knowledge translation and dissemination opportunities that will benefit Dixon Hall, MIRA trainees, and members of the general public. With a physical presence in Toronto and access to superb online resources such as the Optimal Aging Portal (OAP) at McMaster, opportunities to enhance public outreach initiatives will grow. This new centre will foster collaborations with researchers that will include community members and stakeholders such as those in the housing and transportation industries as well as government and policymakers. Collaborations between MIRA and Dixon Hall will also allow isolated, marginalized, and at-risk older adults the opportunity to actively participate in all aspects of research, from the formulation of research questions through to knowledge translation and dissemination. MIRA and Dixon Hall have numerous areas of shared capacity and priorities. These areas of alignment inform the following research themes:

Facilitating technology use and access

Technology has the capacity to promote mobility, connection, and healthy aging, but inequities and lack of access can serve to further widen the gap between older adults who are doing well and those who are not. Research platforms and other assets, including the developing Technology Hub at Dixon Hall, McMaster's Institute for Music and the Mind (MIMM), and the numerous MIRA researchers engaged in understanding how older adults interact with, and use technology, will facilitate the pursuit of research questions and initiatives related to technology, aging, and equity. The **McMaster Optimal Aging Portal**, a digital platform that enables older adults and care providers to access plain language evidence summaries of relevant topics, can be further facilitated, evaluated, and explored through Dixon Hall's Technology Hub. Current intergenerational initiatives (e.g., Symbiosis, Timeless, and Dixon Hall's youth programming) provide further opportunity to explore intergenerational interventions in navigating digital tools and platforms.

Housing and aging in place

The Greater Toronto Housing Authority (GTHA) experiences a simultaneous housing shortage and challenges related to health, mobility and social isolation as many older adults struggle to age in place. Innovative approaches are needed to meet the housing needs of an aging population. Dixon Hall's deep capacity for supporting older adults facing housing insecurity is well complemented by McMaster's engagement in housing research and aging in place initiatives, including the CRUNCH (Collaboratory for Research on Urban Neighbourhoods, Community Health and Housing) Lab, engaged in work in both Hamilton and Toronto; the McMaster Smart Home, a test facility for technologies enabling older adults to age in place; and, Health TAPESTRY (Health Teams Advancing Patient Experience: Strengthening Quality), which has currently scaled up from its pilot sites in Hamilton to include additional intervention sites in Niagara-on-the-Lake, Windsor, Harrow, Sault Ste. Marie, and Dufferin County.

Transportation mobility

Transportation is a key element to older adults' health, mobility and meaningful participation in community and society. Population aging will demand research and initiatives focused on understanding and reducing barriers to transportation, including those relating to declining physical mobility, driving cessation, and the costs and limitations of public transit. Dixon Hall's existing partnerships and initiatives (Toronto Ride, SPRINT Senior Care) provide key opportunities to apply MIRA's research capacity, exemplified through platforms such as the McMaster Institute for Transportation Logistics (MITL), and projects including the McMaster Monitoring My Mobility (MacM3) project, the Candrive study, and several Labarge Centre for Mobility in Aging-funded projects on driving, transit, and active transport led by researchers in the social sciences, geography, civil engineering, and rehabilitation science.

Transitions in care and end of life

As older adults experience changes in health and mobility, increasing demands will be placed on transitions in care, including those from hospital to home and to other forms of supported living in the community. Understanding the best practices and policies around these transitions, as well as those associated with end-of-life, can be advanced through Dixon Hall's ongoing work with the Local Health Integration Networks and developing Ontario Health Teams, Hospice Toronto, Sherbourne Health and others, as well as McMaster's research relationships and initiatives with the THRIVE Group, St. Joseph's Villa and its hospice, Margaret's Place, and the dementia care support platform iGeriCare.

Participation and mobility

Participation in the community and reducing social isolation are key elements of mobility that both MIRA and Dixon Hall identify as priorities. As Dixon Hall connects 1,500 – 2,000 older adults annually to service providers and community programming, its seniors' department is poised to link community members to innovative, evidence-based approaches facilitating participation and connectedness. Several of MIRA's current programs of research, including the community codesigned EMBOLDEN trial, the ABLE arts-based mobility therapy platform, and GERAS Dance program, seek to promote social and community mobility among their key aims.

To achieve the overall objectives for the **McMaster Institute for Research on Aging | Dixon Hall Centre**, we propose several mechanisms to conduct research, support community engagement and promote knowledge translation, including but not limited to:

- Facilitating ongoing access to the McMaster Optimal Aging Portal through Dixon Hall's Technology Hub, and evaluating its usability and impact in this population;
- Community initiatives and events to engage Dixon Hall clients, community members, partners, and the wider aging community in Toronto;
- Research and data analysis to better understand current Dixon Hall clients, caregivers, and program use;
- Building capacity in Dixon Hall's work with low-income, precariously housed seniors;
- Identifying service gaps or research topics as determined by the evaluation of Dixon Hall's or partner organizations' program outcomes and trends;
- An inner-city longitudinal cohort study, leveraging MIRA experience and assets, including the Canadian Longitudinal Study on Aging (CLSA);
- Expansion of Labarge Centre for Mobility in Aging-funded multi-year major research programs, Community-based Program to Enhance Physical and Community Mobility in Older Adults (EMBOLDEN) and the McMaster Monitoring my Mobility (MacM3) research platform;
- Expansion of MIRA member-led projects including Arts-based Therapies Enabling Longevity for Geriatric Outpatients (ABLE), Health Teams Advancing Patient Experience: Strengthening Quality (TAPESTRY), Geriatric Education and Research in Aging Sciences Centre (GERAS) Dance, and the online dementia education program iGeriCare;
- Systematic reviews of older adult programming within and beyond Canada, leading to potential evidence-based demonstration projects;
- Intergenerational technology accessibility initiative, linking MIRA trainees and older and younger Dixon Hall users.

iii. *How will creating this Centre/Institute improve and enhance research that will address these priorities?*

The **McMaster Institute for Research on Aging | Dixon Hall Centre** will build direct links to McMaster expertise in academic research and knowledge translation and increase capacity for broad awareness of the importance of mobility for the well-being of older adults. Opportunities will be augmented to pursue target areas for training, research, and knowledge translation around mobility and aging while also focusing on groups that are not often seen or heard – urban, older Canadians who may be low-income, homeless, or precariously housed, to mobility, health, and other social barriers or are facing more complex challenges or concurrent disorders. Our aim is to improve the quality of life for these older adults and enable them to live with dignity through purposeful initiatives planned over both the short- and long term.

Combining the lived experience of the experts at Dixon Hall, with research expertise of academics at MIRA, will allow researchers to quickly identify issues and questions of importance to all stakeholders. With a physical presence in Toronto

and access to superb online resources such as the Optimal Aging Portal (OAP) at McMaster, the centre will have greater opportunities to enhance public outreach initiatives. This new centre will foster collaborations with researchers that will include community members and stakeholders such as those in the housing and transportation industries as well as government and policymakers.

The partnership will also provide a rich learning environment in the science of aging and will enable our experts from MIRA to create novel educational and funding initiatives together with Dixon Hall. MIRA will work together with Dixon Hall to establish research opportunities with existing datasets and to identify research and knowledge gaps that could be addressed through this new partnership. The **McMaster Institute for Research on Aging | Dixon Hall Centre** will capitalize on this activity by leveraging the platforms, research strengths and existing research and educational initiatives in which MIRA and the Labarge Centre for Mobility in Aging have collectively participated, and data that has already been collected at Dixon Hall, while providing experienced leadership in community-engaged initiatives serving older adults in Toronto.

The COVID-19 pandemic has presented us with new opportunities and challenges and MIRA has pivoted to enhancing linkages with Dixon Hall via technology to establish a virtual centre. For Dixon Hall, COVID-19 has presented a new reality and highlighted heightened challenges for many of its clients, and for its role as a multi-service agency. Certainly, the pandemic has highlighted those at-risk older adults can benefit from access to supports and technology that can help them feel more connected and engaged with their community as they live at home, and has the capacity to promote mobility, connection, and healthy aging. However, inequities and lack of access to technology and supports can widen the gap between older adults who are doing well and older adults who are not thriving.

With MIRA as a partner, however, these challenges can be analyzed to create promising opportunities for collaborative community work. There is an urgency to consider the pandemic-specific issues facing many of Dixon Hall's clientele, and the exploration of these challenges will inform future areas of inquiry and help to inform decisions on current and future program design for the populations accessing services at Dixon Hall. This collaboration will focus on short-term collaborative projects leveraging existing projects and technology; long-term collaborative projects, using established infrastructures and frameworks to implement interdisciplinary community-based projects that support research in social and physical mobility utilizing technology and co-design techniques; and leveraging McMaster aging-related research platforms to support research in aging in these populations.

B. Objectives and Proposed Activities:

i. Objectives

Impact on key stakeholders

The **McMaster Institute for Research on Aging | Dixon Hall Centre** aims to improve the quality of life for Dixon Hall clientele and enable them to live with dignity through purposeful initiatives planned over both the short- and long term. These will include the implementation of a digital platform that enables older adults and care providers to access plain language evidence summaries of relevant topics, exploration of intergenerational initiatives to promote connection and reduce feelings of loneliness and isolation, and access to programs of research that facilitate participation and connectedness. This would include the community codesigned EMBOLDEN trial, the ABLE arts-based mobility therapy platform, and GERAS Dance program, all of which seek to promote social and community mobility. Dixon Hall clientele will also benefit from knowledge translation events and community initiatives aiming to engage Dixon Hall clients, community members, partners, and the wider aging community in Toronto. Given MIRA's dedication to inclusion of key stakeholders in research program creation and execution, community members can also be engaged in the design process, conceptualization, and execution of novel research programs and dissemination of knowledge products following successful conclusions of research programs.

The impact on Dixon Hall will include the opportunity for program evaluation to identify efficacy and impact of services currently provided, collaboration in novel educational and funding opportunities, and the ability to steer the research agenda to help identify and create programs and services to support underserved older adults.

Partners involved with Dixon Hall, including Meals on Wheels may also benefit from access to program evaluation tools and access to experts and evidence-based tools to inform decision making.

Government agencies including the Province of Ontario (Ontario Health Teams), the City of Toronto – Community Service Partnerships, the United Way, the Ministry for Seniors and Accessibility, and individual, foundation, and corporate donors involved with Dixon Hall would also benefit from receiving detailed information about how programs at Dixon Hall impact on the community, as well as receiving insights into service gaps that may be uncovered as a result of research occurring within the **McMaster Institute for Research on Aging | Dixon Hall Centre**.

Potential for collaboration

The **McMaster Institute for Research on Aging | Dixon Hall Centre** aims to include key stakeholders in research program creation and execution through the opportunity to be engaged in the design process, conceptualization and execution of novel research programs and dissemination of knowledge products following successful conclusions of research programs.

Innovative approaches are also needed to support older adults facing housing insecurity and barriers to transportation and transitions in care such as hospital-to-home, and end-of-life care. Participation in the community and reducing social isolation are also key elements to mobility that both MIRA and Dixon Hall identify as shared research themes.

Dixon Hall leaders have significant capacity as knowledge brokers who can mobilize information generated by MIRA with older adults and their caregivers, relevant support networks and service-provider organizations, and engaged funders and other partners. For example, Dixon Hall is an anchor agency for the United Way and has deep and long-standing connections with existing board members and other agencies and organizations that could both contribute to and benefit from this work. There is an opportunity for a McMaster-Dixon Hall partnership to build a collaborative platform that can mobilize other community-based organizations at the regional and national level.

We would also propose collaborating on implementing evidenced-based community demonstration projects and strengthening MIRA's work with stakeholders that support aging research by engaging them in project specific advisory boards, MIRA's governance committees and review panels.

Exploring opportunities for co-authored or co-presented research, with findings to be shared both in academic dialogues and through Dixon Hall's communication channels and networks would also be a priority.

Currently, Dixon Hall has limited capacity for data collection. This new partnership would enable more collaborative work on data analysis and program evaluation to both enhance Dixon Hall's program offerings, assist in identifying service gaps and improve data collection and management. This would include population-specific work and the consideration of gaps in services provided for at-risk groups, including homeless or precariously housed older adults and low-income older adults. Working together would also enable MIRA researchers and Dixon Hall leaders to identify new research topics and enhance Dixon Hall's mandate by mapping onto the priorities of MIRA and the Labarge Centre for Mobility in Aging.

ii. Proposed Activities

Research Projects

One of the aging-related research platforms at McMaster is the Canadian Longitudinal Study on Aging (CLSA). Data and biological samples from the CLSA provide McMaster researchers with one-of-a-kind opportunities to develop high-impact, targeted research agendas that answer critical questions by integrating the perspectives of a variety of disciplines.

a) Short-term collaborative projects (Year 1)

Dixon Hall and MIRA have existing connections and technology to collaborate on the following initiatives:

- Collecting data on COVID-19 experiences and impact on health and wellbeing of Dixon Hall clientele. Relying upon resources and support provided by MIRA, Dixon Hall has collaborated with Dr. Andrea to collect measures examining the impact of COVID-19 on the physical and mental health of individuals. Part of the data for this study was collected through the MIRA | Dixon Hall Centre and includes Dixon Hall clients and findings are currently being analyzed and evaluated. Thorough consideration of topics in this questionnaire that include health, mobility, technology, access to housing and community support, will enable Dixon Hall to enhance their understanding of clients' experiences and needs at this time. In turn, this will help Dixon Hall to prepare for potential future events.
- Engagement in providing access and share the most appropriate up-to-date and evidence-based resources using the **McMaster Optimal Aging Portal** for improving the well-being of older Ontarians and their families. This collaboration will develop and provide standardized training for staff and volunteers who work with service providers and programs on how to use the Portal and integration into existing programs at Dixon Hall enabling the provision to clients of more multi-faceted supports. This would also build Dixon Hall's capacity by helping to ensure utilization of best practices and offering the most current research-based resources and programs to its clients. In turn, MIRA's access to the Dixon Hall client base can help bolster the number and diversity of clients engaging potential service provision projects.
- A robust exploration and observational study of the impact of technology and connectedness on Dixon Hall clients. This work can begin with a consideration of what has been witnessed during the pandemic – clients experiencing heightened levels of isolation because of either a lack of access to technology or a lack of understanding about how to properly use technology. Together, we can then consider the next best steps. Dixon Hall will work to build and expand the Technology Hub that is being facilitated by a gift from Suzanne Labarge. Given current circumstances, Dixon Hall will consider revising the timeline or even the approach to facilitating either a fixed- or portable-use library of laptops, tablets, etc. for client use. This could be on-site, should health circumstances permit a return to day programs, or off-site should the public health restrictions due to the pandemic persist, or in cases of clients unable to attend in person. This new partnership will enable this resource to be developed with an evidence-based approach leading to enhanced service for the clients of Dixon Hall, and ultimately, facilitate the exploration and access to more areas in the future. Moreover, the building of a Technology Hub in concert with MIRA could support MIRA's advancement of technology as a policy tool to reduce inequity and create a meaningful link for MIRA to the McMaster Digital Transformation Research Centre (MDTRC). Through multidisciplinary studies and insight, the MDTRC seeks to investigate and understand the impact of the changes brought about by technological and digital innovation on individuals, groups, and organizations.

b) Longer-term collaborative projects (Year 1 and onward)

MIRA has funded two major interdisciplinary community-based projects that will be conducted in the Hamilton region: **McMaster Monitoring My Mobility (MacM3)**, and the **Enhancing physical and community MoBility in OLDER adults with health inequalities using commuNity co-design (EMBOLDEN)** trial. These projects are funded, designed and ready for implementation. They are described below in their current form with participants expected to be enrolled within the Hamilton area, however, we propose to expand these projects to include communities served by Dixon Hall. Based on Dixon Hall's priority areas and through dialogue and collaboration, these projects will be tailored using a co-design approach and incorporated into the Regent Park area. For example, Dixon Hall and its partner organizations may be host sites for sub-projects or components of the projects and collaborate in participant enrollment or share insight on the mobility needs of their communities. In addition, community members may choose to become project participants or share lived experience in other ways such as in advisory groups. These types of activities could amplify the scope of these research projects and expand the findings to a range of diverse communities. In turn, project information can support program development in Toronto's communities. Overall, this will integrate research within the mandate and operations of Dixon Hall and further support the development of a local research milieu that attracts research and policy experts to engage with and become involved in the exciting research developments occurring at Dixon Hall. Briefly:

- Challenges with mobility such as difficulty with walking or getting into and out of a car are common in older adulthood and can negatively impact health and social functioning. The **MacM3** project will use advanced wearable technologies to understand how mobility changes over time and how this affects health outcomes in older adults. Informed by preliminary research activities to customize activity tracking devices (i.e., wearable technology), each participant in this project will be provided with a wearable device for defined periods over a 2-year span to monitor a variety of mobility measures as they move within their home and in their community. At

the same time, health information will be captured periodically through in-person or phone interviews. These data will be used to identify unique trajectories of mobility for differing levels of mobility challenges and health outcomes. Finally, with input from older adults and caregivers and findings from this research, a self-monitoring mobility tool will be designed to track and manage mobility and health that, ultimately, may prevent or delay mobility problems in later life. Throughout the span of this research, a number of smaller activities will be integral to its success and these include investigating and validating currently available wearable technology for older adults; stakeholder engagement planning, which will involve consultations with older adults, community organizations, clinicians, policy makers, caregivers, and industry; and, the establishment of community ‘pop-ups’ – temporary data collection sites – in shared spaces such as the YMCA, YWCA, or public library. Certainly, MacM3 offers many opportunities for collaboration with Dixon Hall, its partners, and community members throughout the span of the project.

- The **EMBOLDEN trial** is a co-designed intervention that aims to advance the social and physical mobility of older adults that live in communities of high health inequity in Hamilton. The ability to participate, at will, in social interactions and to be physically mobile is important to maintaining health-related quality of life in older adults (55 years and older). Many adults, however, face barriers in accessing community programs that have the potential to ameliorate the effects of increased social isolation and reduced physical mobility. A co-design approach facilitates cooperation and the exchange of ideas between researchers, stakeholders, and the intended program recipients. The idea of the co-design technique is to identify gaps in service, and to develop unique programs that leverage and align with current community programming to meet the needs of individuals. This approach would be equally suited for implementation with Dixon Hall and its community. Specifically, the program will engage existing best practices and supports in the local community to improve mobility and health through social support, nutrition, physical activity, and system navigation, and strengthen connections with existing support services. The co-designed program will then undergo vigorous empirical evaluation of its implementation and efficacy for meeting the needs of older adults living in the community. The long-term goal of the program is to design interventions and services that can be adapted for implementation in other communities throughout Canada.
- MIRA is also developing a third program of research to address intergenerational issues related to aging. This project **The Intergenerational and Life Course Cohort and Intervention Research Platform (iGEN)** will be a larger examination of intergenerational research across communities in Hamilton and in communities in Toronto served by Dixon Hall. The specific themes for which we will solicit research proposals will be jointly identified by MIRA, Dixon Hall, and relevant stakeholders. These calls will be like MIRA’s existing Catalyst Grant calls.

The implementation of these directed projects will be tailored to the Dixon Hall communities using a co-design approach. Integral to the creation of the **McMaster Institute for Research on Aging - Dixon Hall** partnership is McMaster’s culture of collaboration as expressed clearly by researchers from diverse fields of study such as social sciences, biology, psychology, engineering, business, and health sciences who continually work together to promote healthy and functional aging. This expertise combined with unparalleled existing platforms, ensures that both the research impact and the benefits for Dixon Hall clients can be optimized.

c) Leveraging McMaster Aging-related Research Platforms (Years 1-5)

There are several aging-related research platforms at McMaster including the Canadian Longitudinal Study on Aging (CLSA). Data and biological samples from the CLSA provide McMaster researchers with one-of-a-kind opportunities to develop high-impact, targeted research agendas that answer critical questions by integrating the perspectives of a variety of disciplines.

In addition to the CLSA, MIRA has an extensive infrastructure needed to carry out and disseminate this research, including:

- Knowledge translation platforms such as the **McMaster Optimal Aging Portal** and the McMaster Health Forum that enable evidence-based research to be easily shared with researchers, decision-makers, and citizens;
- Platforms for developing, evaluating, and implementing new technologies such as the Smart Home within the Faculty of Engineering;
- Biobanks and high-throughput biomarker labs to support high-quality research;
- Centres such as the Geriatric Education and Research in Aging Sciences Centre (GERAS), the Physical Activity Centre for Excellence (PACE), and the Gilbreath Centre for Studies in Aging, providing complementary clinical, social, cultural and community links that amplify the research agendas of the Labarge Centre and the Institute;

- The MIRA Trainee Network, which supports and develops trainees engaging in interdisciplinary research on aging.

Educational outreach

The **McMaster Institute for Research on Aging - Dixon Hall** partnership would provide additional opportunities for knowledge dissemination and training opportunities for students in the MIRA Trainee Network and the related Association for Undergraduate Research in Aging (AURA; currently in development) in both being recipients of information as well as providing additional opportunities for these students to participate in and learn more about and participate in knowledge translation and dissemination.

Engagement in “Staying Healthy and Safe at Home”, a project MIRA has developed for consideration by Dixon Hall. This project aims to develop and provide standardized training and access to resources for staff and volunteers who work with service providers and programs on how to access and share the most appropriate up-to-date and evidence-based resources using the **McMaster Optimal Aging Portal** for improving the well-being of older Ontarians and their families. This project will be submitted for funding through the development of partnerships. This initiative would be easily integrated into Dixon Hall’s existing programs, enabling Dixon Hall to provide clients with more multi-faceted supports. This would also build Dixon Hall’s capacity by helping to ensure utilization of best practices and making certain that the most current research-based resources and programs are offered to its clients. In turn, MIRA’s access to the Dixon Hall client base can help bolster the number and diversity of clients engaging in this project.

There will also be opportunities for the partnership to engage in knowledge dissemination and knowledge translation events virtually and in person (when permitted) to engage the communities that Dixon Hall is currently serving, and to diversify the types of knowledge translation events that MIRA has developed a reputation for in the greater Hamilton area., as well as opportunities to provide these events to a wider national audience on a virtual platform.

C. Rationale for Establishment of the Research Centre or Institute:

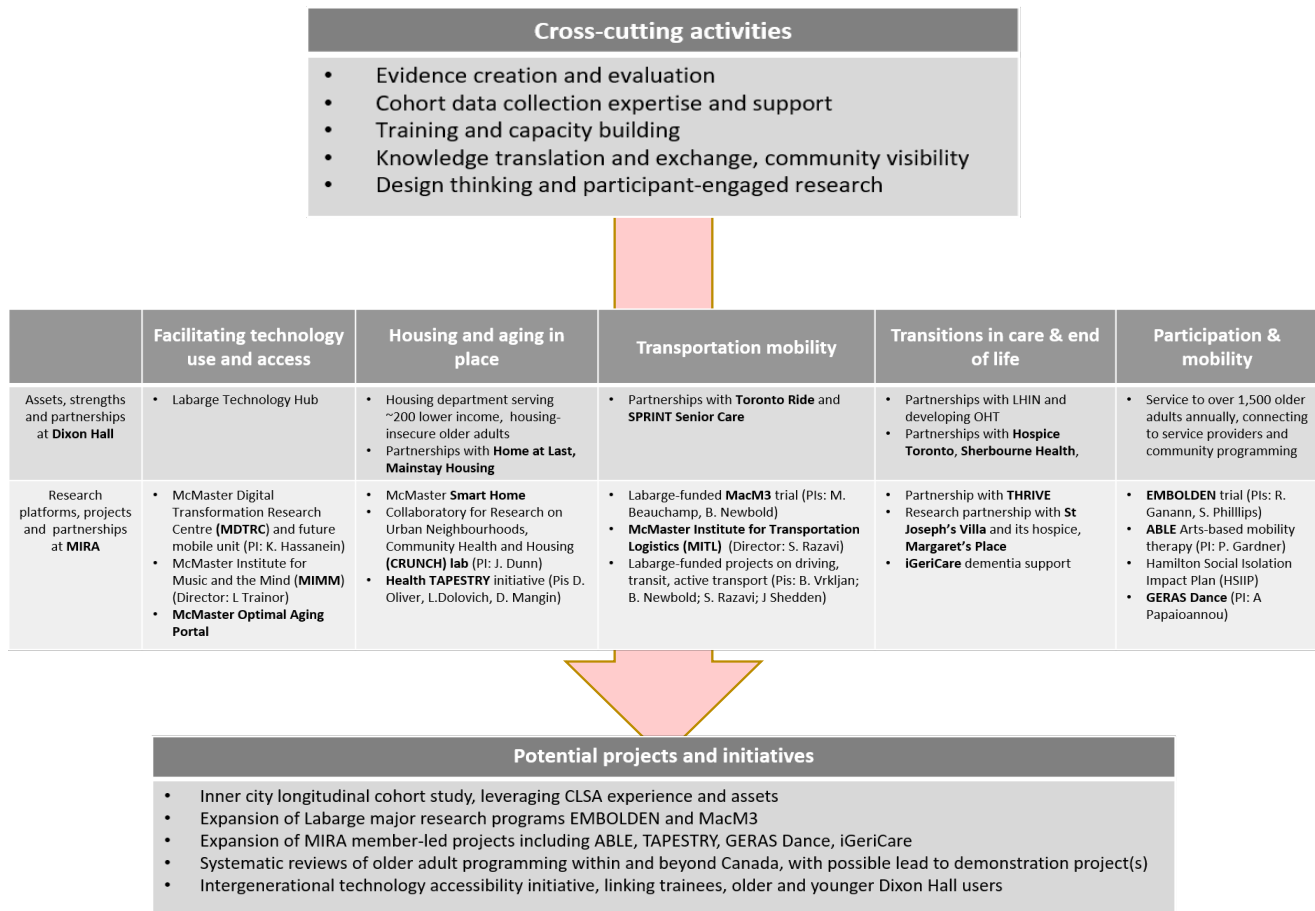
i. Why is there a need for this Centre/Institute?

Bridging the gap between the academic and the practical, the **McMaster Institute for Research on Aging | Dixon Hall Centre** promises access to unique insights and research opportunities that neither organization could provide alone. The McMaster Institute for Research on Aging and Dixon Hall are proposing to capitalize on each other’s considerable strengths to forge a new partnership that will undoubtedly improve the lives of at-risk older adults: members of our community who have been profoundly affected by the complexities of coping with the extraordinary circumstances in which we all find ourselves only two decades into the 21st century. At-risk older adults can only benefit from access to supports and technology that can help them feel more connected and engaged with their community as they live at home. This collaboration will focus on a group that is not often seen and heard – older adults who are low-income, homeless, or precariously housed, or facing multiple or complex challenges to mobility, health, and other social barriers. Our aim is to improve their quality of life and enable them to live with dignity through purposeful initiatives planned over both the short- and long term.

Integral to the creation of the **McMaster Institute for Research on Aging - Dixon Hall** partnership is McMaster’s culture of collaboration as expressed clearly by researchers from diverse fields of study such as social sciences, biology, psychology, engineering and health sciences who continually work together to promote healthy and functional aging. This expertise, combined with unparalleled existing platforms, ensures that both the research impact and the benefits for Dixon Hall clients can be optimized.

MIRA|DH will support cross-cutting activities that align with the values and strengths identified in this proposal.

Figure 1: Core Activities of MIRA|DH: Cross-cutting activities will support defined research themes aligned with both organizations' priorities and strengths. Several potential projects and initiatives are poised for implementation, adaptation or scale-up.



i. **Alignment with McMaster's Strategic Research Plan**
<https://research.mcmaster.ca/research/strategic-plan-for-research-2018-2023/>

MIRA – DH will build on and support McMaster University's Strategic Plan for Research by contributing to the discovery, communication, and preservation of knowledge about mobility and aging. This collaboration will encompass the core values of student education and extending boundaries of knowledge through research via the MIRA Trainee Network and the Association for Undergraduate Research in Aging (AURA). The research conducted at the centre will advance society via best practices, and research and knowledge translation events will involve MIRA experts across all faculties, experts from Dixon Hall, as well as stakeholders, and international partners of MIRA including experts in aging from the University of Leeds, and the University of Lancaster. Working together with Dixon Hall, MIRA researchers will be able to disseminate information across a wider provincial, national, and international audience to strengthen communities and improve the lives of Canadians and others around the world.

Work to improve mobility in aging will help older adults live well for longer. The centre commits to partnering with local community agencies and centres to disseminate the learnings from our research to benefit the end user as well as involving the end user in the research from inception to knowledge translation and dissemination.

With respect to sustainability for global prosperity, the centre will extend work that Dixon Hall is already doing to provide access to technology for older adults, as well as work MIRA is already undertaking to improve environmental design in homes such as through the SmartHome research agenda, as well as on streetscapes to improve mobility in urban environments making them more walkable and accessible for older adults.

With respect to the strategic goal of addressing the growing burden of chronic disease **MIRA|DH** will provide opportunities to explore how public services provided to vulnerable and disadvantaged populations can be provided or improved.

In line with the strategic goal to address aging across the life span, **MIRA|DH** will be uniquely positioned to provide opportunities for researchers to interact with service providers to explore and develop opportunities to foster the health and mobility of older adults, focusing on areas including: impact of exercise on aging; interrelationship between psychological function and social function; causes and consequences of multimorbidity, frailty and polypharmacy; the role of caregiving, equity, economics and transportation in optimal aging; the understanding of the biological mechanisms of diseases of aging; evaluating approaches to knowledge translation to improve optimal aging; the use of technology to promote optimal aging and aging in place; understanding and defining mobility in aging; maintaining and restoring mobility in aging; and environmental facilitators and barriers that influence mobility in aging.

The strategic goal of examining data, artificial intelligence and the digital society will be explored through the analysis of data already available at Dixon Hall with respect to digital literacy and access to technology and access to the internet as it pertains to the clientele that utilize services provided by Dixon Hall and its partners. Specifically, during the COVID-19 pandemic, Dixon Hall staff had to pivot to use a variety of different methods to reach out to their clients during lockdowns and when physical contact was severely restricted.

Regarding the strategic goal of equitable, prosperous, and sustainable societies, studies such as the EMBOLDEN study conducted by MIRA and which will expand to **MIRA|DH** will explore how to promote physical and community mobility of older adults who experience difficulties participating in community programs and who reside in communities of high health inequity. This model allows researchers to work together with older adults in the community and service providers to promote mobility in community-dwelling older adults.

ii. Expected regional, provincial, national, global impact

Through the research proposed for the MIRA|DH Centre and through MIRA's work that has been ongoing in the past five years to successfully develop strategic partnerships on a local, national, and international level, the expected impacts of this work will be at the local/regional levels as well as nationally and internationally

Over the past five years MIRA has developed a wide network of collaborators and partners who support MIRA's research, educational endeavors and community-based initiatives. MIRA's partnership development has focused on strengthening our goals and leveraging resources while collaborating with new and existing partners who complement the Institute's research strengths. MIRA has formalized over 30 strategic partnerships, while many more informal collaborations have been developed with a wide variety of stakeholders within McMaster University, locally, nationally, and internationally. These collaborations are with other academic institutions, government agencies, not-for-profit and private industry partners.

To date MIRA's partnerships have resulted in significant leveraged funds, expanded research programs or platforms, new educational programs, and interdisciplinary learnings. [MIRA's five-year report](#) highlights these partnerships and collaborations that showcase the diversity of partners engaged with MIRA and how they support the Institute's many goals—from developing institutional strength in aging and mobility through scientific exchange programs to enabling stakeholder and citizen networks and promoting aging in place with evidence-based resources.

As MIRA|DH is nestled within MIRA, this to build and utilize the many regional partnerships Dixon hall has in place as listed in section A. By leveraging these partnerships and supporting Dixon Hall to generate evidence-based outcomes that will inform their programs and services, the regional impact is expected to be significant.

Through the proposed research objectives and projects, the outcomes will become of national and international significance as well. The potential to translate future findings of the proposed research to other cities and under-served older adults' communities nationally and internationally.

D. Criteria for expanding the membership:

Currently membership to this Centre is included in the membership to MIRA. Currently MIRA has over 150 Faculty members and close to 100 trainee members and continues to grow to support the growing body of researchers engaging in aging research and identified priority by the University. MIRA is currently working on how to design different levels of membership so that the model is supportive to the needs of our researchers and stakeholders

E. Detailed business plan:

Financial needs

Based on the proposal developed for MIRA|DH and careful budget development based on the proposed program of research and activities at MIRA|DH a request was made for \$5M over five years 2021-2026. This amount was approved and donated by Susan Labarge for this work in 2021. The budget is detailed in Appendix A. The budget allows for Dixon Hall to establish core staff and processes for the Centre's collaborative research. Directed MIRA|DH research initiatives builds on existing MIRA projects as described and funds are allocated for new initiatives and projects. There is an allowance in the budget to reimburse MIRA staff for their work with the MIRA|DH Centre.

Anticipated and secured sources of support

With the funds provided by the donor, MIRA will not require any additional funds from McMaster University. MIRA expects to secure additional sources of support through its partnership development activities as well as ability of the MIRA network to attract and leverage funding through funding opportunities. MIRA has been able to leverage significant funding in the past year to support research initiatives and the research in aging milieu at McMaster.

Space needs

Due to the global COVID-19 pandemic, we propose to establish first a virtual and later a physical centre at Dixon Hall in Toronto that will further cement McMaster's position as a national leader in research on optimal aging and mobility; enriching the experience for almost 2,000 seniors who access Dixon Hall programming and supports on a yearly basis.

Phase one of this collaboration will entail the creation of a virtual centre and leveraging existing strengths at both MIRA and Dixon Hall immediately to launch several projects that will generate important information to improve the lives of at-risk seniors and support Toronto's communities.

Phase two will include dedicated space at Dixon Hall's Senior Services' centre on Carlton Street or the soon-to-be renovated community hub on Sumach Street and expansion of further research activities. Dixon Hall's Sanctuary provides a multi-purpose space ideal for hosting community and academic events. These spaces will be sufficient to house some administrative staff and will offer meeting and collaboration areas. The Youth Centre at Wyatt Avenue is an ideal space for intergenerational work.

Please note that there is no request for space from the university. MIRA|DH Centre will be supported through the staff that are located at the MIRA space at the McMaster Innovation Park in suite 109A. No funds will be required for space allocated at Dixon Hall. Staff at Dixon Hall will operate within the existing infrastructure at Dixon Hall. Activities supported will be hosted through existing spaces both at McMaster and at Dixon Hall

Human Resource needs

Existing MIRA staff will support the activities for the proposed work within MIRA|DH similarly as they support MIRA's overall work. Predominantly, MIRA's Research Coordinator, Project Manager and Program Coordinator will support the

collaborative work such as liaising with the researchers support the MIRA|DH research initiatives, managing and supporting data gathering and surveys and funding opportunities and all administrative processes including communications and promotions. Dixon Hall has hired two additional staff to meet their research needs. They have hired a Research & Community Lead and a Research and Communications Officer to be the main staff available to facilitate the collaborative research proposed for the Centre and to liaise with the Dixon Hall clientele.

MIRA's support and the Dixon Hall staff are covered within the budget in Appendix A.

Faculty, researchers, and students will engage with MIRA|DH through collaborative projects and initiatives. MIRA and Dixon Hall staff will liaise with Faculty, researchers and students and support administrative work required. MIRA and Dixon Hall's organization have a broad skillset through its staffing complement that can support all proposed activities.

It is anticipated that MIRA|DH will hire students for research projects and initiatives the centre will engage in. Graduate students may also be involved in MIRA|DH funded projects that will hire students for research and other related activities.

MIRA's staff complement available to support the MIRA|DH Centre:

Senior leadership

Parminder Raina, proposed Scientific Director
Ine Wauben, Managing Director

MIRA team

Gésine Alders, Research Coordinator
Allison Dubé, Project Manager
Casey Irvin, Communications Coordinator
Alison Outtrim, Program Coordinator
Audrey Patocs, Research Manager

Dixon Hall staff complement to support the MIRA|DH Centre:

Senior leadership

Mercedes Watson, CEO
Christine Chow, Director Senior Services
Laura Stenberg, Director Philanthropy & Communications

Dixon Hall team

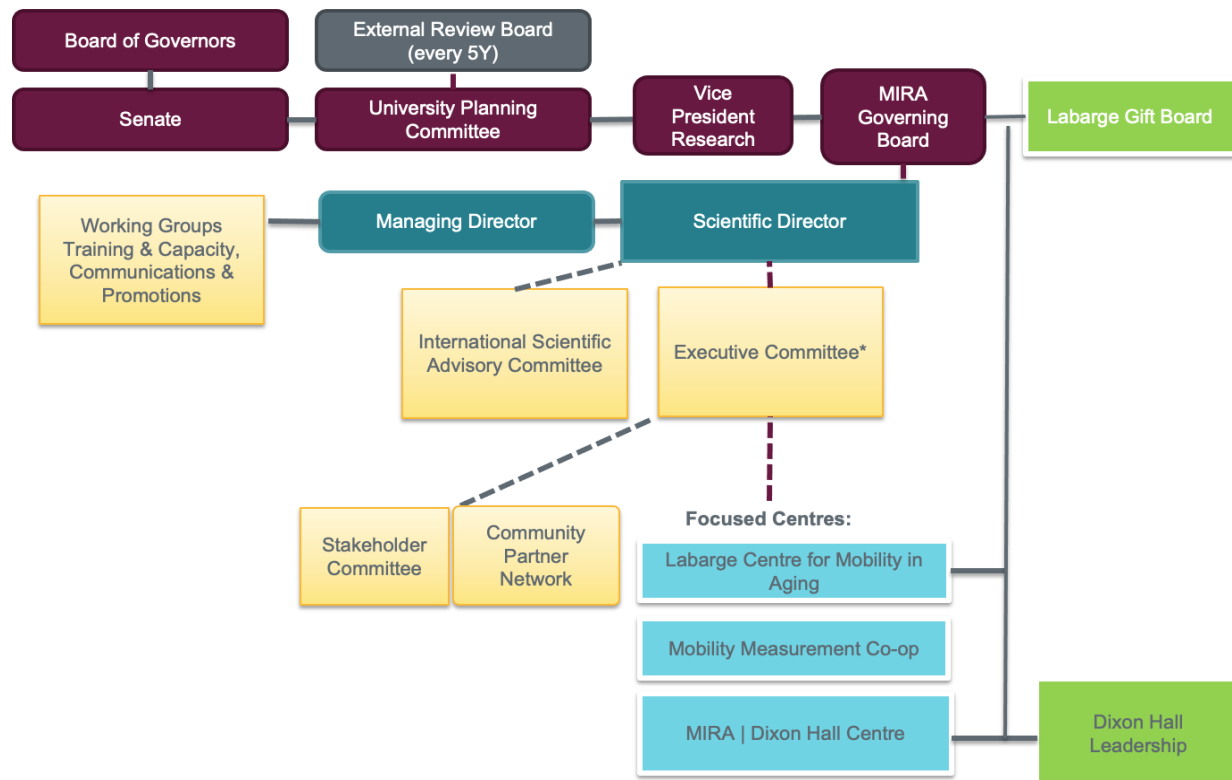
Nadia Jamil, Research and Community Lead
Olga Levitski, Research and Communications Officer
Haiat Iman, Data Analysis Coordinator
Laura Thiboutot, Communications Assistant

Organizational & Governance Structure

MIRA's governance and management structure has been carefully crafted to ensure scientific excellence. It provides robust management and oversight from both the Labarge Gift Board as well as University senior leadership. The governance model allows for modification and accountability over time, which will be necessary for the management of scientific and executive strategies and growth.

To properly administer the proposed work and responsible use of funds, the governance model for the Centre is incorporated within MIRA's governance model. Thus, focused centres created within MIRA use a single, centralized, and shared operational, governance and administrative model to facilitate advancement of the strategic objectives of all centres. The centralised governance and administration model maintains MIRA's unique operating structure while creating multiple focused centres that will advance diverse but integrated strategic priorities such as outlined in this proposal.

The Scientific Director and co-lead for Dixon Hall have a seat on the Executive Committee. MIRA|DH will report their progress to the Labarge Gift Board at the annual Labarge Gift Board meeting.



* The Scientific (Co-)Directors of MIRA and the Focused Centres have a seat on the Executive Committee

i. Director

At the request of the donor, it is proposed that the MIRA|DH will be led by Parminder Raina (MIRA) as the Scientific Director and co-led by Mercedes Watson (Executive Director, Dixon Hall).

ii. Advisory Committees

MIRA focussed Centres including MIRA|DH will be supported and advised by the Executive Committee and the International Scientific Advisory Committee. The Executive Committee provides insight and advice to the Scientific and Managing Director regarding operation and strategic priorities of the Institute and corresponding Centres including MIRA|DH. The ISAC is responsible for advising the Scientific and Managing Director on the relevance and quality of the research outcomes of MIRA and corresponding Centres, including MIRA|DH, as well as assisting in decision-making regarding areas of research focus and peer review of strategic initiatives annually. The ISAC will also advise on potential international collaboration and partnership opportunities with a particular focus on research, but also potentially impacting MIRA|DH knowledge translation, training/education, and external relations activities.

The membership of both committees is listed:

Members of MIRA Executive Committee

Dr. Paula Gardner, Humanities
Dr. Michel Grignon, Social Sciences
Dr. Milena Head, Business
Dr. Bhagwati Gupta, Science
Dr. Peter Mascher, International Affairs
Dr. Alexandra Papaioannou, Health Science (Clinical)
Dr. Ravi Selvaganapathy, Engineering
Dr. Michael Surette, Health Sciences (Basic Science)
Dr. Brenda Vrkljan, Health Sciences (Design Thinking)
Mercedes Watson, Chief Executive Officer Dixon Hall

Members of MIRA International Scientific Advisory Committee (ISAC)

Dr. David Hogan (Chair), University of Calgary
Academic Leader, Brenda Strafford Centre on Aging, O'Brien Institute for Public Health, Cumming School of Medicine
Dr. Amelia DeFalco, University of Leeds
University Academic Fellow in Medical Humanities / Cultural representations of aging, disability, dementia, and care
Dr. Tom Kirkwood, Newcastle University
Professor Emeritus (formerly Associate Dean for Ageing), Institute for Ageing
Dr. James Nazroo, University of Manchester
Professor of Sociology, Honorary / Director, Cathie Marsh Centre for Census and Survey Research
Dr. S.V. Subramanian, Harvard University
Professor of Population Health and Geography, Department of Social and Behavioral Sciences
Prof. Nicola Palmarini, Newcastle University
Director, National Innovation Centre for Ageing

Governing Board and Role in Annual Review

The MIRA | Dixon Hall Centre will report annually to the MIRA Governing board as part of the annual MIRA review. The Board is chaired by the Vice-President, Research and oversees the overall activities of MIRA and its performance in supporting McMaster Strategic Research Plan

Members of MIRA Governing Board

Dr. Karen Mossman (Chair), Vice-President, Research
Dr. Susan Tighe, Academic Provost and Vice-President (Academic)
Dr. Susan Denburg, Associate VP Academic, Health Sciences
Dr. Paul O'Byrne, Dean, Health Sciences
Dr. Maureen MacDonald, Dean, Science
Dr. Heather Sheardown, Acting Dean, Engineering
Dr. Jeremiah Hurley, Dean, Social Sciences

The Centre will also report annually to the Labarge Gift board. The Labarge Gift Board is comprised of McMaster University senior leaders and joined by the Donor and/or a candidate nominated by the Donor. The Labarge Gift Board will receive annual updates from the McMaster Institute for Research on Aging (MIRA) on the status of the funds, research successes, outreach activities and financial outcomes that occur each year as part of the Labarge supported initiatives including the MIRA|DH Centre.

Members of the Labarge Gift Board

David Farrar, President and Vice-Chancellor, McMaster University

Paul O’Byrne, Dean, Faculty of Health Sciences

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

Laura Harrington, Assistant Vice-President/Chief Administrative Officer, Faculty of Health Sciences

Mary Williams, Vice-President, University Advancement

Lorna Somers, Vice-President, University Foundation

Karen Mossman, Vice-President, Research

Susan Tighe, Provost and Vice-President, Academic

Suzanne Labarge and/or representative

F. Plan for Five Year External Review

MIRA and its embedded Centres underwent its five-year external review in 2021. The intention is for the MIRA|DH Centre five-year review to coincide with MIRA’s next five-year review in 2026.

Appendix A: **MIRA|DH budget**

APPENDIX A

Budget Template for Research Institutes, Centre or Core Platforms

Please include additional detail in Proposal if necessary

	Insert year	Insert year	Insert year	Insert year	Insert year	Total
OPENING BALANCE/CARRY FORWARD		-\$ 15,000	-\$ 30,000	-\$ 90,000	-\$ 65,000	

REVENUE - indicate whether secured or anticipated	2020/21	2021/22	2022/23	2023/24	2024/25		\$ Secured	\$ Anticipated
<i>Please ensure that any anticipated revenue from grant funding will only support costs eligible for that grant and note funding available for indirect or general operations.</i>								
Donation from Suzanne Labarge	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 5,000,000	\$ 5,000,000	
TOTAL REVENUE	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 5,000,000	\$ 5,000,000	

EXPENSES	2020/21	2021/22	2022/23	2023/24	2024/25	
Dixon Hall Core Budget*						
Staff - Seniors, Research & Communications	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000	\$ 600,000
Community Partners, Stakeholders & Community Engagement	\$ 20,000	\$ 20,000	\$ 15,000	\$ 10,000	\$ 15,000	\$ 80,000
Infrastructure, Admin and Technology	\$ 200,000	\$ 200,000	\$ 200,000	\$ 120,000	\$ 100,000	\$ 820,000
	\$ 340,000	\$ 340,000	\$ 335,000	\$ 250,000	\$ 235,000	\$ 1,500,000
MIRA Operations Budget						\$ -
Staff - Research Support & Admin	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 200,000
Miscellaneous incl office supplies, etc.	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 175,000
Total Administrative Expenses	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 375,000

Research Expenses:

Directed MIRA-Dixon Hall Research Initiatives						\$ -
Evidence based resource development - Staying Healthy and safe at home	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 500,000
MacM3	\$ 150,000	\$ 150,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 600,000
Embolden	\$ 150,000	\$ 150,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 600,000
Interdisciplinary initiatives/leveraging existing programs or funded projects	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 125,000
New MIRA-Dixon Hall Research Initiatives						\$ -
Surveys, data gathering and analyses Dixon Hall ongoing initiatives	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 375,000
Catalyst grants (intergenerational Projects)	\$ 50,000	\$ 50,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 700,000
Demonstration/Evaluation Projects	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 25,000	\$ 225,000
Total Research Expenses	\$ 600,000	\$ 600,000	\$ 650,000	\$ 650,000	\$ 625,000	\$ 3,125,000
TOTAL EXPENSES	\$ 1,015,000	\$ 1,015,000	\$ 1,060,000	\$ 975,000	\$ 935,000	\$ 5,000,000
IN-YEAR (Surplus/ Deficit)	-\$ 15,000	-\$ 30,000	-\$ 90,000	-\$ 65,000	\$ -	

REPORT TO THE UNIVERSITY PLANNING COMMITTEE
from the
UNDERGRADUATE COUNCIL

a. Closure of Certificate and Diploma Programs

i. The Closure of the Certificate in Metallurgy of Iron and Steel.

At its December 7th, 2021 meeting, the Undergraduate Council reviewed and approved the proposal to close the Continuing Education's Certificate in Metallurgy of Iron and Steel. Details of the proposed closure program are contained within the circulated material.

It is now recommended,

that the University Planning Committee approve the closure of the Certificate in Metallurgy of Iron and Steel, as set out in the attached.

University Planning Committee: FOR APPROVAL
January 19, 2022



Centre for
Continuing
Education

One James North
3rd Floor
Hamilton, Ontario
L8S 4L8 Canada

Phone 905.525.9140
Ext. 24321
Fax 905.546.1690
www.mcmastercce.ca

Date: September 16, 2021

To: Dr. Sean Corner, Chair, Certificates and Diplomas Committee

From: Dr. Lorraine Carter, Director, McMaster Continuing Education

Cc: Dr. Kim Dej, Associate Vice Provost (Faculty)
Dan Piedra, Assistant Director, McMaster Continuing Education
Anne Dwyer, Program Manager, McMaster Continuing Education

Re: Closure of the Certificate in Metallurgy of Iron and Steel

I am writing to share information about the closure of the Certificate in Metallurgy of Iron and Steel offered through McMaster Continuing Education (MCE).

History

The Certificate in the Metallurgy of Iron and Steel originated in 1954 as a partnership between the Department of Extension (McMaster Continuing Education) and the Ontario chapter of the American Society of Metals. The program consisted of a lecture series that ran once a year. The official certificate began in 1955 and was designed as a 3-year program offering five courses once yearly. From 1959 – 1968, the program evolved to consist of 3 courses offered once a year. In 1997, the Faculty of Engineering and Continuing Education partnered to revise the program to a 6 course, in-person certificate. Finally, in 2012/13 the program was reduced to 5 courses and delivered fully online with the intent to broaden the audience to international pockets of the steel industry.

Current Situation

Enrolment in the metallurgy program has been slowly declining since before the 2012 decision to move to an online format. Reasons for this are multiple and include:

- Students complete a limited number of courses rather than complete the full program.
- The program struggles to find an audience, as the program is too technical for individuals working in the steel industry in administrative roles (i.e. data analysts, finance, sales). The steel industry recruits engineers from Material Science programs for positions in quality control, supervisors, metallurgists, etc. This will continue to reduce the number of engineering graduates attending the program as content will overlap with undergraduate studies.
- Active students are predominately from Ontario. The recruitment of international students from India, China, and Europe has not increased.
- There are limited opportunities for contract training in metallurgy. Past inquiries do not proceed as representatives from the steel industry have difficulty determining the specific training needs of employees. Furthermore, increased training programs offered by industry associations and online resources provide more direct education and training for employees in the steel industry.

Communication and Program Wind Down Plan

Every effort will be made to ensure that students, who are currently enrolled, have the opportunity to complete the certificate. The following steps will be taken to communicate the closure of the program and manage the wind-down phase:

- A program closure wind-down plan, including course offerings schedule will be prepared.
- Instructors will be informed about the closure and the wind-down plan.
- An email will be sent to all students who have enrolled in a metallurgy course in the last 8 years to inform them of the closure, as well as MCE's commitment to ensure that students enrolled in the program will have the opportunity to complete the certificate.
- The last intake to the Metallurgy program, as well as the last offering of the foundation course (Met 450 Physical Metallurgy) will be Spring 2022. No new intakes to the program will be permitted beyond Spring 2022.
- Those interested in completing individual courses, without qualifying for the certificate will be permitted to do so.
- Scheduling will be aligned with the requirements of current students to complete the program.
- Students wishing to complete the program requirements will have 18 months to do so (May 2022-December 2023), with a final offering of courses scheduled during the Fall 2023 semester.
- A closure message will be posted on the MCE website.

MCE is committed to helping all current students complete the present program should they wish to do so.

Sincerely,



Dr. Lorraine Carter, Centre for Continuing Education
McMaster University

REPORT TO THE SENATE
FROM THE
COMMITTEE ON APPOINTMENTS

Open Session (Regular)

On January 17, 2022, the Committee on Appointments approved the following recommendations and now recommends them to Senate for approval:

1. Terms of Reference

a. Revised Terms of Reference – Hannah Chair

It is now recommended,

that Senate approve the proposed revisions to the Hannah Chair Terms of Reference, as circulated.

2. SPS B13 Revisions

It is now recommended,

that Senate approve, for recommendation to the Board of Governors, the proposed revisions to SPS B13 Extension of Timeline for Academic Assessments in Response to the COVID-19 Pandemic, effective March 3, 2022.

SENATE: FOR APPROVAL
February 9, 2022

January 10, 2022

Senate Committee of Appointments
c/o University Secretariat
Gilmour Hall, Room 210

Re: Update to Terms of Reference – Hannah Chair

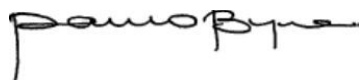
On behalf of the Faculty of Health Sciences, I am forwarding the attached revised Terms of Reference for approval.

The terms have been updated to better reflect the current processes as well as to clarify the appointment and renewal process for Chairholders.

Enclosed, please find the revision as well as the current ToR for this role.

Thank you for considering this recommendation. If you need further information, please do not hesitate to contact me.

Yours sincerely,



Dean and Vice President
Faculty of Health Sciences

Hannah Chair in the History of Medicine

The Hannah Chair in the History of Medicine is named in honour of Jason A. Hannah, M.D. The endowment for the Chair was provided by Associated Medical Services (AMS). This Chair resides within the Faculty of Health Sciences (FHS) and will be jointly appointed to a relevant department in another Faculty (normally Humanities or Social Sciences).

Faculty Appointment:

The holder of the Chair will hold a full-time faculty appointment. Their primary appointment will be within FHS and their joint appointment will be in a relevant faculty as noted above. In addition to fulfilling the normal duties of a faculty member in FHS, they will take on some of the regular duties of a faculty member in their secondary department.

Duties and Responsibilities:

The Hannah Chair will:

- be responsible for the development and expansion of academic program(s) in the History of Medicine,
- ensure that aspects of medical history are introduced into the curricula of the education programs in both Faculties,
- develop and promote a University-wide seminar series,
- foster the appreciation of medical history among undergraduate, graduate and post-graduate trainees.

In addition to these educational contributions, it is expected that the Chair will maintain an active research program in their field.

Selection Process

The Dean of the Faculty of Health Sciences will consult with appropriate Faculties and Departments to determine whether the Chair will be filled via an internal or external search. Once this determination is made, a selection committee, co-Chaired by the Deans (or delegates) will be constituted.

The selection committee will follow all relevant university recruitment policies and will include representatives of both faculties, including faculty and students involved with academic programs aligned with the History of Medicine. Additionally, the committee may wish to have an existing Hannah Chairholder serve as an external consultant.

An appointment to the Chair shall be for an initial five-year period, with the understanding that renewal for additional terms, subject to satisfactory performance, is possible. The recommendation from the Selection Committee shall be forwarded to the Senate and Board via the Senate Committee on Appointments.

Renewal Process

In the final year of appointment, the Chair holder will submit a report of their accomplishments over the current term and will be interviewed by a review committee.

The review committee will be co-Chaired by the Department Chairs (or delegates) and will include appropriate representation from both Faculties, including faculty involved with academic programs aligned with the History of Medicine. Additionally, the committee may wish to have an existing Hannah Chairholder serve as an external consultant.

The recommendation from the renewal committee shall be forwarded to the Senate and Board via the Senate Committee on Appointments.

Reporting

Upon their appointment/reappointment as the Hannah Chair, the Chair holder will work with their Department Chairs (or delegates), to determine the appropriate focus of activities over their term.

The Hannah Chair will include their activities as the Chairholder in their annual career review documentation and these accomplishments will be considered when determining Career Progress and Merit (CP/M) scores.

Approved by Associated Medical Services, June 2021.

For approval via McMaster's Governing bodies.

TERMS OF REFERENCE

THE HANNAH CHAIR IN THE HISTORY OF MEDICINE

General

An endowment has been provided by Associated Medical Services (AMS) toward the establishment of an endowed Chair in the History of Medicine. AMS has funded a Hannah Chair in the History of Medicine at each Ontario University with a Medical School for many years and wishes to endow these Chairs permanently. Because of the goals and objectives of AMS, there has been agreement reached within the University and with AMS that this Chair will be primarily based within the Faculty of Health Sciences but the Chair will have a joint appointment in the Faculty of Health Sciences and the Faculty of Humanities.

Details and Duties of the Proposed Chair

The holder of the Chair will undertake the normal duties of a faculty member in the Faculty of Health Sciences and in consultation with the Dean of the Faculty of Humanities and Chair of the Department of History will also take on some of the regular duties of a faculty member in the Faculty of Humanities. The Chair will be responsible for the development of an academic programme in the History of Medicine, will ensure that aspects of medical history are introduced into the curricula of the education programmes in both Faculties, will develop and promote a University-wide seminar series, and foster the appreciation of medical history among undergraduate, graduate and post-graduate trainees. In addition to making contributions to the education programmes of the Faculties, it is expected that the Chair will remain a leader in the field. An appointment to the Chair shall be for an initial five year period, with the understanding that renewal for additional terms is possible.

Selection Process

The first stage of the selection procedure will be the responsibility of the Deans of the Faculties of Health Sciences and Humanities who, working with their respective appointments committees and following consultation with appropriate departments, will determine whether the Chair will be filled after advertising externally or whether a suitable internal candidate can be identified. The recommendation from the Appointments Committees (following a recommendation of a duly constituted selection committee) shall be forwarded to the Senate and Board via the Senate Committee on Appointments.

TO: Senate Committee on Appointments

FROM: Andrea Thyret-Kidd

RE: Revisions to SPS B13 - Extension of Timeline for Academic Assessments in Response to the COVID-19 Pandemic

In 2020, the University approved the establishment of SPS B13 *Extension of Timeline for Academic Assessments in Response to the COVID-19 Pandemic*. The intent of the Policy is to provide faculty with flexibility due to the wide-ranging impacts of the COVID pandemic. As required by the Policy, a review has been undertaken by University administrators and the Joint Committee, with the attached document being approved for recommendation to the Senate Committee on Appointments.

The proposed revisions include amended language to better reflect the original intent of the Policy, which is to provide faculty with the ability to use the automatically granted one-year extension in years 1, 2, or 3 or later, as long as the timing does not exceed 7 years. This clarification seeks to articulate the University's commitment to flexibility given the disruptive impact of COVID across all Faculties. The other substantive change to the Policy is the inclusion of all faculty members appointed as of June 30, 2022. The next review period is scheduled for December 2022.

A tracked and clean version of the Policy has been included in the agenda package.

It is now recommended,

that the Senate Committee on Appointments approve, for recommendation to the Senate and Board of Governors, the proposed revisions to SPS B13 *Extension of Timeline for Academic Assessments in Response to the COVID-19 Pandemic*, effective March 3, 2022.

**Senate Committee on Appointments: FOR APPROVAL
January 17, 2021**

Complete Policy Title

**Extension of Timeline for Academic
Assessments in Response to the COVID-19
Pandemic**

Policy Number (if applicable):

SPS B13

Approved by

**Senate /
Board of Governors**

Date of Most Recent Approval

TBD

Date of Original Approval(s)

**April 29, 2020
June 4, 2020**

Supersedes/Amends Policy dated

**February 10, 2021 /
March 4, 2021**

Responsible Executive

Provost and Vice-President (Academic)

Policy Specific Enquiries

[Provost and Vice-President \(Academic\)](#)

General Policy Enquiries

[Policy \(University Secretariat\)](#)

DISCLAIMER:

*If there is a Discrepancy between this electronic policy and the written copy held
by the policy owner, the written copy prevails.*

PREAMBLE

1. McMaster University recognizes the exceptional circumstances that have resulted from the COVID-19 pandemic and the effect it has had on the career progression of its faculty members. COVID-19 has resulted in an unprecedented situation that has required faculty to rapidly adapt to new and/or alternate methods for teaching and course delivery for classes. This has affected their ability to engage in normal scholarly activities, University service, and has impeded faculty in their ability to undertake research and clinical scholarly activities.
2. The purpose of this Policy is to outline the details of how the academic assessment extension will be applied and administered in conjunction with the *Tenure and Promotion Policy* and *SPS (Supplementary Policy Statement) documents*.
3. For the purpose of interpreting this Policy:
 - a) words in the singular may include the plural and words in the plural may include the singular;
 - b) **One-Year Extension** means the one-year extension of a tenure-track appointment beyond the normal six-year limit and includes delaying the timing of their academic assessments by one year;
 - c) **SPS** means the [Supplementary Policy Statements](#);
 - d) **Tenure and Promotion Policy** means the [McMaster University Revised Policy and Regulations with Respect to Academic Appointment, Tenure and Promotion \(2012\)](#); and
 - e) **Tenure-Track** means:
 - (i) tenure-track appointments;
 - (ii) teaching-track appointments; and
 - (iii) special appointments.
4. Normally the total duration of a faculty member's initial [Tenure-Track](#) appointment may not exceed six years from the date of their first appointment (Section II, clause 6 of the *Tenure and Promotion Policy*). However, the *Tenure & Promotion Policy* does envision specific situations where these time limits may be extended (Section II, clause 7).
5. In keeping with the principles of the *Tenure and Promotion Policy* the University has deemed it appropriate that all Tenure-Track faculty have their appointment extended by one year, which will in turn affect the timing of their academic assessments for re-appointment, tenure/permanence, and promotion.

ELIGIBILITY

6. All faculty members holding a Tenure-Track appointment as of **June 30, 2022**, shall have their appointment extended by one year and the timing of their academic assessments may be delayed by one year.
7. Section II, clause 4 (c) of the [Tenure and Promotion Policy](#) will continue to apply to those in special appointments. Although this Policy outlines a one-year extension for all eligible [Tenure-Track](#) faculty, individuals do have the ability to proceed on the normal timing, as outlined in the *Tenure and Promotion Policy*.

EXTENSION GUIDELINES

Responsibilities of Department Chairs

8. It is the responsibility of the Chair of each Department to inform all members of the Department of the University's tenure and promotion provisions related to the COVID-19 pandemic.
9. The *Tenure and Promotion Policy* (Section III, clause 37a) sets out the expectation that Department Chairs should meet at least once each academic year with all Tenure-Track candidates. Results of these discussions must be recorded in writing and agreed to by both parties. When a faculty member is eligible for the One-Year Extension the extended date must be clearly documented in the written summary of these discussions.

Faculty Member Decision to Proceed on the Normal Timing

10. The [One-Year Extension](#) for eligible faculty is **automatically granted**, normally applying to the next assessment. Faculty members in years 1, 2, or 3 have the option to proceed with normal timing for their 3 year assessment and use the extension later. The total tenure clock will be a maximum of 7 years.
11. Although this Policy outlines a One-Year Extension for all eligible [Tenure-Track](#) faculty, individuals do have the ability to proceed on the normal timing, as outlined in the *Tenure and Promotion Policy*.
12. Faculty members will inform their Chair in writing of their decision to go forward for re-appointment, tenure/permanence/CAWAR on the normal timing. In such cases, faculty should refer to the *Tenure and Promotion Policy* for guidance on timing and requirements.

Other Time Limit Extensions

13. The One-Year Extension is in addition to any other time limit extensions that have been made in compliance with Section II, clause 7 of the [Tenure & Promotion Policy](#) (e.g. special leave, medical leave, or a pregnancy/parental leave).

Dossiers

14. All eligible faculty members' dossiers (prepared in compliance with [SPS B12 Preparation of Dossiers for Re-Appointment, Tenure/Permanence and/or Promotion](#)) shall include a copy of this Policy under section #8 identified in the Table of Contents (listed below):

TENURE, PERMANENCE AND/OR PROMOTION DOSSIER: Dr. E. Z. Rider
Table of Contents

1. Written Recommendation of the Departmental Tenure and Promotion Committee based on an examination of the following elements of the dossier:
2. Curriculum Vitae
3. Candidate's Statement
4. Departmental Teaching Evaluation Report
5. Candidate's Response to Departmental Teaching Evaluation Report
6. List and Biographical Sketch of Potential Referees
7. Referee Letters
8. Sample Copy of Chair's or Dean's Letter Sent to Referees, and the Relevant Policy for Referees

15. Chairs and Directors are encouraged to include in their statement to the Faculty Tenure and Promotion Committee a description of the effect the COVID-19 pandemic had on the candidate's research, clinical, and/or teaching activities.
16. Eligible faculty members may elect to include an additional 1-page statement on how the COVID-19 pandemic has affected their research, teaching and/or University service within section 3 of their dossier (Candidate's Statement).

REVIEW

17. This Policy will be reviewed by MUFA and the Senate Committee on Appointments in December 2022 to determine if conditions require an extension of the application of this Policy and/or if revisions are necessary.

Complete Policy Title

**Extension of Timeline for Academic
Assessments in Response to the COVID-19
Pandemic**

Policy Number (if applicable):

SPS B13

Approved by

**Senate ~~Executive~~ /
Board of Governors**

Date of Most Recent Approval

**~~February 10, 2021 /~~
~~March 4, 2021 - effective March 4, 2021~~ TBD**

Date of Original Approval(s)

**April 29, 2020
June 4, 2020**

Supersedes/Amends Policy dated

**February 10, 2021 ~~April 29, 2020 /~~
~~March 4, 2021~~ June 4, 2020 - effective May 12,
2020**

Responsible Executive

Provost and Vice-President (Academic)

Policy Specific Enquiries

Provost and Vice-President (Academic)

General Policy Enquiries

Policy (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.*

PREAMBLE

1. McMaster University recognizes the exceptional circumstances that have resulted from the COVID-19 pandemic and the effect it has had on the career progression of its faculty members. COVID-19 has resulted in an unprecedented situation that has required faculty to rapidly adapt to new and/or alternate methods for teaching and course delivery for ~~Winter Term 2020~~ classes, ~~as well as future classes~~. This has affected their ability to engage in normal scholarly activities, University service, and has impeded faculty in their ability to undertake research and clinical scholarly activities.
2. The purpose of this Policy is to outline the details of how the academic assessment extension will be applied and administered in conjunction with the *Tenure and Promotion Policy* and *SPS (Supplementary Policy Statement) documents*.
3. For the purpose of interpreting this Policy:
 - a) words in the singular may include the plural and words in the plural may include the singular;
 - b) **One-Year Extension** means the one-year extension of a tenure-track appointment beyond the normal six-year limit and includes delaying the timing of their academic assessments by one year;
 - c) **SPS** means the [Supplementary Policy Statements](#);
 - d) **Tenure and Promotion Policy** means the [McMaster University Revised Policy and Regulations with Respect to Academic Appointment, Tenure and Promotion \(2012\)](#); and
 - e) **Tenure-Track** means:
 - (i) tenure-track appointments;
 - (ii) teaching-track appointments; and
 - (iii) special appointments.
4. Normally the total duration of a faculty member's initial [Tenure-Track](#) appointment may not exceed six years from the date of their first appointment (Section II, clause 6 of the *Tenure and Promotion Policy*). However, the *Tenure & Promotion Policy* does envision specific situations where these time limits may be extended (Section II, clause 7).
5. In keeping with the principles of the *Tenure and Promotion Policy* the University has deemed it appropriate that all Tenure-Track faculty have their appointment extended by one year, which will in turn affect the timing of their academic assessments for re-appointment, tenure/permanence, and promotion.

ELIGIBILITY

6. All faculty members holding a Tenure-Track appointment as of **June 30, 2021**, shall have their appointment extended by one year and the timing of their academic assessments may be delayed by one year.
7. Section II, clause 4 (c) of the [Tenure and Promotion Policy](#) will continue to apply to those in special appointments. Although this Policy outlines a one-year extension for all eligible [Tenure-Track](#) faculty, individuals do have the ability to proceed on the normal timing, as outlined in the *Tenure and Promotion Policy*.

EXTENSION GUIDELINES

Responsibilities of Department Chairs

8. It is the responsibility of the Chair of each Department to inform all members of the Department of the University's tenure and promotion provisions related to the COVID-19 pandemic.
9. The *Tenure and Promotion Policy* (Section III, clause 37a) sets out the expectation that Department Chairs should meet at least once each academic year with all Tenure-Track candidates. Results of these discussions must be recorded in writing and agreed to by both parties. When a faculty member is eligible for the One-Year Extension the extended date must be clearly documented in the written summary of these discussions.

One-Year Extension Requirements

- ~~10.—~~ 10. The [One-Year Extension](#) for eligible faculty is **automatically granted**, normally applying to the next assessment. however ffaculty members in years 1, 2, or 3 have the option to can proceed with normal timing for their 3 year assessment and use the extension later. The total tenure clock will be a maximum of 7 years in compliance with the following:
- ~~11.—~~
- ~~12.—~~ the One-Year Extension applies to the **next assessment** of a [Tenure-Track](#) faculty member, specifically the academic assessment that usually occurs in the faculty member's third year at McMaster or the tenure/CAWAR/permanence assessment;
- ~~13.—~~
- ~~14.—~~ faculty members currently in years 1, 2 or 3, may decide if they want to go forward with the year 3 assessment or defer to year 4;
- ~~15.—~~
- ~~16.—~~ faculty members currently in years 4 or 5 may decide if they want to go forward with the tenure/CAWAR/permanence assessment in year 5 or defer to year 6;
- ~~17.—~~
- ~~18.—~~ faculty members currently in year 6 may go forward with the tenure/CAWAR/permanence assessment or request a final review in year 7; and
- ~~19.—~~
- ~~20.—~~ **the total tenure clock will be a maximum of 7 years.**
- ~~21.—~~

Faculty Member Decision to Proceed on the Normal Timing

11. Although this Policy outlines a One-Year Extension for all eligible [Tenure-Track](#) faculty, individuals do have the ability to proceed on the normal timing, as outlined in the *Tenure and Promotion Policy*.
12. Faculty members will inform their Chair in writing of their decision to go forward for re-appointment, tenure/permanence/CAWAR on the normal timing. In such cases, faculty should refer to the *Tenure and Promotion Policy* for guidance on timing and requirements.

Other Time Limit Extensions

13. The One-Year Extension is in addition to any other time limit extensions that have been made in compliance with Section II, clause 7 of the [Tenure & Promotion Policy](#) (e.g. special leave, medical leave, or a pregnancy/parental leave).

Dossiers

14. All eligible faculty members' dossiers (prepared in compliance with [SPS B12 Preparation of Dossiers for Re-Appointment, Tenure/Permanence and/or Promotion](#)) shall include a copy of this Policy under section #8 identified in the Table of Contents (listed below):

<p style="text-align: center;">TENURE, PERMANENCE AND/OR PROMOTION DOSSIER: Dr. E. Z. Rider Table of Contents</p> <ol style="list-style-type: none">1. Written Recommendation of the Departmental Tenure and Promotion Committee based on an examination of the following elements of the dossier:2. Curriculum Vitae3. Candidate's Statement4. Departmental Teaching Evaluation Report5. Candidate's Response to Departmental Teaching Evaluation Report6. List and Biographical Sketch of Potential Referees7. Referee Letters8. Sample Copy of Chair's or Dean's Letter Sent to Referees, and the Relevant Policy for Referees
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15. Chairs and Directors are encouraged to include in their statement to the Faculty Tenure and Promotion Committee a description of the effect the COVID-19 pandemic had on the candidate's research, clinical, and/or teaching activities.
16. Eligible faculty members may elect to include an additional 1-page statement on how the COVID-19 pandemic has affected their research, teaching and/or University service within section 3 of their dossier (Candidate's Statement).

REVIEW

17. This Policy will be reviewed by MUFA and the Senate Committee on Appointments in December 202~~2~~⁴ to determine if conditions require an extension of the application of this Policy and/or if revisions are necessary.

