## SENATE

## NOTICE OF MEETING

April 17, 2020

Please be advised that the next meeting of Senate of Concordia University will be held on Friday, April 24, 2020, at 2 p.m., via Zoom Video Conferencing.

Join Zoom Meeting: https:/ / concordia-ca.zoom.us/j/92954747410
Meeting ID: 92954747410
Password: 973153

Join by conference call: 1-438-809-7799 Canada
Meeting ID: 92954747410
Password: 973153
Find your local number: https://concordia-ca.zoom.us/u/abpScWb5ha
Join by SIP: 92954747410@zoomcrc.com
Password: 973153

Join by Skype for Business: https://concordia-ca.zoom.us/skype/92954747410
You may want to connect 10 to 15 minutes in advance to ensure proper connectivity. Should you require support with Zoom, please contact Mark Mazumdar at 514-821-3246 or the IITS help line at 514.848.2424 ext. 7613.

Kindly confirm your attendance to Evelyne Loo as soon as possible at evelyne.loo@concordia.ca. You may also contact Evelyne if you have any problems accessing the documents.

Danielle Tessier
Secretary of Senate

# AGENDA OF THE OPEN SESSION OF THE MEETING OF SENATE 

Held on Friday, April 24, 2020, at 2 p.m., via Zoom Video Conferencing

## Item

1. Call to order
1.1 Adoption of the Agenda
1.2 Adoption of January 24,2020 Minutes
2. Business arising from the Minutes not included on the
Agenda
3. Research Committee recommendations P. Wood-Adams Approval
3.1 Policy revisions: Policy on Conflict of Interest in Research

## (VPRGS-5) and Policy for the Responsible Conduct of Research (VPRGS-12) (Document US-2020-2-D1) <br> 3.2 University recognition of Research Units: Indigenous Futures Research Centre (IFRC) and Security Research Centre (SRC) (Document US-2020-2-D2)

### 3.3 Equity, Diversity and Inclusion Action Plan for the Canada

Research Chairs Programs (Document US-2020-2-D3)

## CONSENT

## 4. Committee reports

4.1 Academic Planning and Priorities (Document US-2020-2-D4)
4.2 Library (Document US-2020-2-D5)
5. Committee appointments (Document US-2020-2-D6)

Presenter/s
G. Carr
G. Carr
G. Carr
G. Carr

## Action

Approval
Approval
6. Academic Programs Committee - Report and
recommendations (Document US-2020-2-D7)
6.1 Undergraduate curriculum proposal - Faculty of Arts andScience - Department of English (Document US-2020-2-D8)
6.2 Undergraduate curriculum proposal - Faculty of Fine Arts -
Department of Studio Arts (Document US-2020-2-D9)
6.3 Undergraduate curriculum proposal - Gina Cody School ofEngineering and Computer Science - Department ofComputer Science and Software Engineering (Document US-2020-2-D10)
6.4 Graduate curriculum proposals - Faculty of Arts and Science
6.4.1 Department of Applied Human Sciences (Document US-2020-2-D11)
6.4.2 Department of English (Document US-2020-2-D12)
6.4.3 Department of Health, Kinesiology and Applied Physiology(Document US-2020-2-D13)
6.5 Graduate curriculum proposals - Faculty of Fine Arts
6.5.1 Department of Art Education (Document US-2020-2-D14)
6.5.2 Department of Creative Arts Therapies (Document US-2020-2-D15)
6.6 Graduate curriculum proposals - Gina Cody School of Engineering and Computer Science
6.6.1 Department of Computer Science and Software Engineering (Documents US-2020-2-D16 and D17)
6.6.2 Department of Electrical and Computer Engineering (Document US-2020-2-D18)
6.7 Graduate curriculum proposals - John Molson School of Business
6.7.1 Graduate Diploma in Business Administration (DocumentUS-2020-2-D19)
6.7.2 Department of Supply Chain and Business TechnologyManagement (Document US-2020-2-D20)
6.8 Graduate curriculum proposal - Institute for Co-operativeEducation - Requirements (Document US-2020-2-D21)
7. Graduate calendar regular changes (Document US-2020-2-

## REGULAR

8. Update on COVID-19
G. Carr/

Information
A. Whitelaw
9. Question period (maximum - 15 minutes)
10. Other business
11. Adjournment
G. Carr

# MINUTES OF THE OPEN SESSION OF THE MEETING OF SENATE 

Held on Friday, January 24, 2020, at 2 p.m. in the Norman D. Hébert, LLD Meeting Room
(Room EV 2.260) on the SGW Campus

## PRESENT

Voting members: Graham Carr (Chair); Ali Akgunduz; Amir Asif; Leslie Barker; Matthew Barker; Guylaine Beaudry; Pascale Biron; Catherine Bolton; Christopher Brett; Sue Callender; Sally Cooke; Frank Crooks; Anne-Marie Croteau; Ricardo Dal Farra; Alex De Visscher; Rebecca Duclos; Linda Dyer; Medhi Farashahi; Ariela Freedman; Vince Graziano; Christophe Guy; Jarrad Hass; Chris Kalafatidis; Esther Morand; Helena Osana; Karan Pande; Gilles Peslherbe; Colin Philip; John Potvin; Martin Pugh; Patrick Quinn; Marguerite Rolland; André Roy; Timir Baran Roy; Bayan Abu Safieh; Reza Soleymani; Robert Soroka; Marc Steinberg; Ron Stern; Alex Stojda; Marlena Valenta; Victoria Videira; Jean-Philippe Warren; Anne Whitelaw; Paula Wood-Adams; Radu Zmeureanu

Non-voting members: Joanne Beaudoin; Philippe Beauregard; Paul Chesser; Denis Cossette; Roger Côté; Stéphanie de Celles; Isabel Dunnigan; Tom Hughes; Frederica Jacobs

## ABSENT

Voting members: Bakry Alsaieq; Shimon Amir; Maryam Bagherzadeh; Elizabeth Bloodgood; Matt Soar; Elizabeth Tasong

Non-voting members: Nadia Hardy; Candace Jacobs

## 1. Call to order

The meeting was called to order at 2:03 p.m.

### 1.1 Approval of Agenda

R-2020-1-1 Upon motion duly moved and seconded, it was unanimously resolved that the Agenda of the Open Session be approved.

### 1.2 Approval of the Minutes of the Open Session meeting of December 13, 2019

## R-2020-1-2 Upon motion duly moved and seconded, it was unanimously resolved that the Minutes of the Open Session meeting of December 13, 2019, be approved.

## 2. Business arising from the Minutes not included on the Agenda

Following a request made at the last meeting that the territorial acknowledgment be read at the beginning of each Senate meeting, the President discussed this matter with Steering Committee and also met with Manon Tremblay, Senior Director, Indigenous Directions. He indicated that the Indigenous Directions Action Plan is looking into establishing a protocol for the ongoing use of the territorial acknowledgment and that we will refer to that protocol once it will have been established.

## 3. President's remarks

The highlights of the President's remarks are summarized as follows:
> The crash of Ukraine International Airlines Flight 752 had a profound and devastating effect on the Concordia community. Two newlyweds and recent GCS graduates lost their lives, returning from Iran to Montreal. Dr. Carr thanked members of the community who held a vigil and a memorial service in honour of the victims as well as Vice-President Chesser and his team for establishing a merit-based recruitment memorial fund for newly-admitted Iranian students.
> With respect to the coronavirus outbreak in China, Concordia's Health Services and Concordia International are monitoring the situation with the Public Health Agency of Canada, and the University is in touch with its partner institutions in China.
> Dr. Carr spoke of his attendance last week at a conference hosted by Universities Canada, an advocacy group for the 96 Canadian universities. It will be making pre-budget submissions on behalf of its members to the federal government in five key areas: international research collaboration, greening research infrastructure, knowledge transfer, university cybersecurity, and indigenous student access and success.
$>$ Concordia is extending its presence in the community by launching a new Creative Living Lab at the Cavendish Mall, through an initiative to combat social isolation among older adults from engAGE, Concordia's Centre for Research on Aging.
> He underlined student led activities and projects, including the Molson School MBA International Case Competition, which attracted teams from 16 countries, as well as the Concordia Hackathon, organized by Gina Cody School students and which will kick off at 9:30 a.m. tomorrow morning in Room H 110.
> Three members of the Concordia community have received the Order of Canada: Hana Gartner, Caroline Ouellette and Lynn Zimmer.
> The President concluded his remarks by apprising Senators that Open House will be held on Saturday, February 15, on both campuses.
4. Academic update (Document US-2020-1-D1)

As complementary information to her written report, Dr. Whitelaw noted that the First Voices Week, a celebration of indigenous diversity, will be held from February 3 to 7 . She also apprised Senators that her email account had been hacked and not to respond to any email coming from her requesting the recipient to purchase gift cards on her behalf. She urged anyone who has or does receive such an email to report it immediately to IITS.

## CONSENT

5. Committee appointments (Document US-2020-1-D2)

R-2020-1-3 That the committee appointments, outlined in Document US-2020-1-D2, be approved.
6. Academic Programs Committee - Report and recommendations (Document US-2020-1-D3)
6.1 Undergraduate curriculum proposals - Faculty of Arts and Science
6.1.1 Certificate in Arts and Science (Document US-2020-1-D4)
6.1.2 Department of Applied Human Sciences (Document US-2020-1-D5)
6.1.3 School of Irish Studies (Document US-2020-1-D6)
6.1.4 Department of Education (Document US-2020-1-D7)
6.1.5 Simone de Beauvoir Institute (Document US-2020-1-D8)

R-2020-1-4 That the undergraduate curriculum proposals in the Faculty of Arts and Science be approved.
6.2 Undergraduate curriculum proposal- Faculty of Fine Arts - Department of Design and Computation Arts (Document US-2020-1-D9)

R-2020-1-5 That the undergraduate curriculum proposals in the Faculty of Fine Arts be approved.
6.3 Graduate curriculum proposals - Faculty of Arts and Science
6.3.1 Department of Biology (Document US-2020-1-D10)
6.3.2 Department of Education (Document US-2020-1-D11)

R-2020-1-6 That the graduate curriculum proposals in the Faculty of Arts and Science be approved.
6.4 Graduate curriculum proposals - Gina Cody School of Engineering and Computer Science
6.4.1 Concordia Institute for Information Systems Engineering (Document US-2020-1D12)

### 6.4.2 Department of Electrical and Computer Engineering (Documents US-2020-1-D13

 and D14)
## R-2020-1-7 That the graduate curriculum proposals in the Gina Cody School of Engineering

 and Computer Science be approved.
## REGULAR

7. Undergraduate curriculum proposal - Faculty of Arts and Science - Department of Journalism - New Minor in Science Journalism (Document US-2020-1-D15)

Dean Roy and the Chair of the Department of Journalism, David Secko, were pleased to present this new Minor which will offer an opportunity for students to develop their skills to effectively communicate science to the general public. It is unique and the first such program in Canada.

R-2020-1-8 Upon motion duly moved and seconded, it was unanimously resolved that the new Minor in Science Journalism, in the Department of Journalism, Faculty of Arts and Science, approved.

## 8. Presentation on Time and Space

Dr. Whitelaw prefaced her presentation by noting that Concordia is not the only University facing scheduling and space challenges, similar projects having been undertaken at Waterloo, Stanford and Yale. There is a recognition that historical scheduling patterns are not helping students graduate. She explained that this is not the first time that Concordia has looked at this issue. A number of years ago a similar project had been undertaken but not brought to fruition because it had been done without sufficient consultation.

The objective of the Time and Space project is to help students achieve academic success and complete their degrees as simply as possible, foster a culture of nextgeneration teaching practices delivery options, improve space capacity and establish policies on class scheduling more aligned with pedagogical goals.

Dr. Whitelaw gave a snapshot of the current state of class scheduling, resulting in students sometimes having trouble establishing a viable schedule because of class time conflicts which, in turn, affect their ability to complete their degrees in a timely manner because classes are often not available.

She conveyed the principles of the project. The primary focus is on student success, which will be achieved by developing best practices. The intention is to harmonize, not standardize. This is not "one size fits all", since faculties and disciplines have different requirements and needs. Time patterns must be guided by pedagogical aims, not inherited practice.

Dr. Whitelaw made the point that input from students, instructors and staff members is vital. She apprised Senate of the work conducted so far since the formation of a working group in May 2018. She noted that preliminary meetings have been held with CUFA, CUPFA, in addition to the ongoing conversations with the Time and Space working group members. A Time and Space website is currently in development with information about the project and the working group. This website will host a survey for students and faculty to complete as well as opportunities for all members of the Concordia community to post their views on how to address scheduling and better usage of space. Student focus groups will be held in the Fall, based on the feedback received via the website.

Dr. Whitelaw concluded the presentation by noting that the desired outcome of the consultations is to be able to validate assumptions to better understand the needs of the students. Further to her presentation, she responded to questions and comments.

## 9. Question period

No questions were asked.

## 10. Other business

There was no other business to bring before Senate.

## 11. Adjournment

The meeting adjourned at 2:50 p.m.

Danielle Tessier
Secretary of Senate

## INTERNAL MEMORANDUM

To: Danielle Tessier, Associate Secretary-General, University Secretariat
From: Paula Wood-Adams, Interim Vice-President, Research and Graduate Studies, Chair, Research Committee of Senate


Date: February 25, 2020
Subject: Policy revisions -
Policy on Conflict of Interest in Research (VPRGS-5)
Policy for the Responsible Conduct of Research (VPRGS-12)

The Research Committee (of Senate) met on February 14, 2020 to review the revisions of the Policy on Conflict of Interest in Research (VPRGS-5) and the Policy for the Responsible Conduct of Research (VPRGS-12) which were made to ensure consistency with recent changes made to the Code of Ethics and Safe Disclosure Policy Applicable to Employees of Concordia University (BD4).

| Policy | Summary of revisions |
| :--- | :--- |
| Policy on Conflict of <br> Interest in Research <br> (VPRGS-5) | -Changes of housekeeping nature were made. <br> References to external agreements and University policies were <br> updated. |
|  | The main substantive changes relate to the introduction of the <br> definition of Spin-off Company: a new example of Conflict of Interest <br> and questions to the Disclosure Report Form (Appendix A) <br> pertaining to Spin-off Company were added. |
| Policy for the <br> Responsible Conduct <br> of Research (VPRGS- <br> 12) | -Changes of housekeeping nature were made. <br> References to University policies were updated. |

The Research Committee is therefore pleased to recommend to Senate that it approve the revisions made to VPRGS-5 and VPRGS-12.

Thank you.

## POLICY ON CONFLICT OF INTEREST IN RESEARCH

Effective Date: [insert date]

Supersedes /Amends: March 23, 2009

Originating Office: Office of the Vice-President, Research and Graduate Studies

Policy Number: VPRGS-5

## PREAMBLE

In accordance with the principles of transparency, accountability and the highest standards of professional conduct expected of members of the University engaged in research, a policy governing Conflicts of Interest (as defined below) in research is essential.

The present Policy forms part of a body of codes, policies, directives and collective agreements which set out standards of good conduct. Externally, these policies, agreements and statements include several emanating from the Tri-Council itself including, but not limited to, the Agreement on the Administration of Agency Grants and Awards by Research Institutions, which is entered into by all Canadian universities and the Tri-Council Granting Agencies (the Natural Sciences and Engineering Research Council of Canada, the Canadian Institutes of Health Research and the Social Sciences and Humanities Research Council of Canada). Internally, relevant University policies include the Policy on Conflict of Interest (BD-4), the Policy on Contract Research (VPRGS-1), the Policy for the Ethical Review of Research Involving Humans (VPRGS-3), the Policy for the Responsible Conduct of Research (VPRGS-12), the Policy on the Ethical Use of Animals in Research and Teaching (VPRGS-13), the Academic Code of Conduct and provisions in the relevant collective agreements.

## SCOPE

This Policy shall apply to all faculty members, undergraduate students taking part in research, graduate students, postdoctoral fellows and other personnel involved directly or indirectly in research, including, but not limited to, research associates, technical staff, adjunct, affiliate and visiting professors, and employees, administrators and officials representing the University (the "Members").

Any provision of any University code, policy or directive which is inconsistent with this Policy with respect to the subject matter hereof shall be superseded and replaced by the provisions of this Policy.

However, nothing in this Policy shall replace or supersede any provision set out in any collective agreement to which the University is a party nor shall this Policy be applied in such a

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

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way as to detract from the rights of unions to defend the interests of their members and to exercise their rights under a collective agreement. In particular, nothing in this Policy shall be construed as detracting from the rights of a Member or a union from contesting a final decision made pursuant to this Policy in accordance with the grievance provisions of the relevant collective agreement.

## PURPOSE

The purpose of this Policy is to:

- promote transparency thereby increasing public trust in the research enterprise;
- create a culture of trust in the research community;
- help to educate Members;
- strive to reduce the negative impact of conflicts of interest; and
- ensure visibility and consistent application of measures to prevent and deal with conflicts of interest.


## DEFINITIONS

For the purposes of this Policy, the following definitions shall apply:
"Conflict of Interest" means a situation in which a Member, or their Related Party(ies), has a personal interest that conflicts or could conflict with the Member's obligations to the University. The existence of a Conflict of Interest involves two elements:
a) the Member's or a Related Party's personal interest(s); and
b) the Member's obligations to the University.

Personal interests may include business, commercial or financial interests, as well as relationships, private and career interests. A Member's obligation to the University is to act in the University's best interests, which includes acting in support of the University's integrity and

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mission and avoiding circumstances that may undermine confidence and trust of the public, as well as the confidence and trust necessary between the University and its Members.

Conflicts of Interest may be actual or potential. An actual Conflict of Interest is a situation where the personal interest actually conflicts with the Member's obligations to the University. A potential Conflict of Interest is a situation where the personal interest has not yet conflicted with the Member's obligations to the University but might be expected to.

A perceived Conflict of Interest is a situation where an actual or potential Conflict of Interest may or may not exist, but where there may be, nonetheless, from the perspective of a reasonably well informed and impartial person, a perception of a Conflict of Interest. This is sometimes referred to as an "apparent" Conflict of Interest.
"Disclosure Report" means a report that discloses specific considerations relevant to deciding whether a Member is in a Conflict of Interest situation as outlined in Appendix A.
"Related Party" means a Member's immediate relative (spouse, child, parent, sibling or person with whom the Member has a personal/close relationship that is of primary importance in their life), or other person living in the same household, or any other person with whom the Member shares a financial interest, either directly or indirectly, or any entity in which the Member has an ownership interest.
"Reporting Officer" means the person to whom the Member must submit a Disclosure Report as outlined in Appendix B.
"Spin-off Company" means a company in which a Member or a Related Party has a personal interest (as described in the definition of Conflict of Interest).

## POLICY

## Standards of Conduct

1. A Member shall conduct themselves in an ethical and professional manner. They shall honour the principles of collegiality and fairness, and perform their duties and responsibilities with objectivity, care, integrity, loyalty, prudence and diligence to facilitate and foster the accomplishment of the University's mission.

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## Situations of Conflicts of Interest

2. A Member shall perform their duties and responsibilities, and act in such a manner as to avoid any Conflict of Interest. The interests of the University shall always prevail when a Member is in a situation of Conflict of Interest or when the personal interest of a Related Party places a Member in a situation of Conflict of Interest. The following, without limitation, are examples of Conflicts of Interest in research:
a) when financial, professional or other personal considerations or commitments may compromise or have the appearance of compromising a Member's judgment in carrying out or reporting their research activities at the University;
b) when a Member is in a position to influence, either directly or indirectly, research activities in ways that could advance the Member's own personal interests, advance or hinder the personal interests of another Member or the personal interests of a Related Party; or
c) when the Member makes use of University resources and/or personnel in carrying out research activities to the benefit of a Spin-Off Company.

## Disclosure and Management of Conflicts of Interest

3. Members shall be required to disclose the nature and extent of a Conflict of Interest prior to providing or undertaking the activity or service or entering into a situation that may constitute a Conflict of Interest. When a Member anticipates or is aware of a Conflict of Interest, they shall immediately file a Disclosure Report, in the form set out in Appendix A, to the Reporting Officer identified in Appendix B.
4. Until activities, services or situations having Conflict of Interest considerations are disclosed, assessed and dealt with in accordance with this Policy, Members shall not engage in such activities, services or situations.
5. A Conflict of Interest may be permitted when the University determines, in its sole discretion, that the Conflict of Interest can be managed in such a manner that it is compliant with legislation and other regulatory or contractual requirements, protects the

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

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integrity, reputation and interests of the University and withstands the test of reasonable and independent scrutiny.
6. All information disclosed by a Member in respect of this Policy shall be held in confidence by the University, in accordance with the University's policies and legislative, regulatory or contractual requirements.
7. Each Member shall be responsible for ensuring their compliance with this Policy.
8. A Member who fails to disclose circumstances of a Conflict of Interest or who is otherwise not in compliance with this Policy shall be subject to appropriate disciplinary action in accordance with the relevant University policy or relevant collective agreement.

## Determination of Conflicts of Interest

9. Until there has been a determination that there is no Conflict of Interest or that there is a Conflict of Interest, but that it may be managed appropriately and therefore permitted, a Member shall not enter into the activities, services or situations that are the subject matter of the Disclosure Report.
10. Upon receipt of the Disclosure Report, the Reporting Officer shall immediately send a copy to the Vice-President, Research and Graduate Studies who shall be available for any guidance that may be required. The Reporting Officer shall review the Disclosure Report and shall determine whether:
a) no Conflict of Interest exists;
b) a Conflict of Interest exists that is prohibited; or
c) a Conflict of Interest exists, but that it may be permitted if it is managed and monitored.
11. Prior to rendering a decision, the Reporting Officer may request additional information of the Member regarding the anticipated Conflict of Interest.

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

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12. The Reporting Officer shall inform the Member of their decision in writing within 15 working days following receipt of the Disclosure Report.
13. In the event that the Reporting Officer anticipates themselves having a Conflict of Interest in the situation being assessed, the Reporting Officer shall refer the Disclosure Report to the next appropriate senior Reporting Officer for review, as set out in Appendix B.
14. When the Reporting Officer has determined that:
a) there is no Conflict of Interest, the Member shall be free to pursue the activity, service or situation that was the subject matter of the Disclosure Report;
b) there is a Conflict of Interest that is prohibited, the Member shall not pursue the activity, service or situation that was the subject matter of the Disclosure Report; or
c) there is a Conflict of Interest, but that it can be managed (and therefore permitted), the Member shall be free to pursue the activity, service or situation that was the subject matter of the Disclosure Report, but only when an appropriate method of managing and monitoring the Conflict of Interest has been established, and the Member has agreed, in writing, to comply with such management and monitoring process.
15. A copy of the Reporting Officer's decision shall be sent to the Vice-President, Research and Graduate Studies and, in a case involving a faculty member, to the Department Chair and Faculty Dean, as well. A copy of the decision shall be placed in the Member's personnel file.

## Review of Reporting Officer's Decision Requested by the Member

16. Within 10 working days from the issuance of the Reporting Officer's decision, a Member may submit such decision for review to the next appropriate senior Reporting Officer as set out in Appendix B (the "Reviewing Officer").
17. The Reviewing Officer shall review the decision of the Reporting Officer and may uphold the decision in its entirety, uphold the decision in part, modify the decision or overrule the decision in whole or in part.

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18. Prior to rendering a decision, the Reviewing Officer may request additional information of the Member or the Reporting Officer regarding the anticipated Conflict of Interest.
19. The Reviewing Officer shall inform the Member of their decision in writing within 15 working days following receipt of the review request.
20. A copy of the Reviewing Officer's decision shall be sent to Vice-President, Research and Graduate Studies, the Reporting Officer and, in a case involving a faculty member, to the Department Chair and Faculty Dean, as well. A copy of the decision shall be placed in the Member's personnel file.
21. In the event that the Reviewing Officer anticipates themselves having a Conflict of Interest in the matter being reviewed, they shall refer the review request to the next appropriate senior Reporting Officer for review as set out in Appendix B.

Review of Reporting or Reviewing Officer's Decision by the Vice-President, Research and Graduate Studies
22. Within 10 working days from the receipt of the Reporting or Reviewing Officer's decision, the Vice-President, Research and Graduate Studies may choose to submit such decision for an independent review and recommendation by a three person Ad-Hoc Advisory Committee named by the Vice-President, Research and Graduate Studies.
23. The Ad-Hoc Advisory Committee shall review the decision of the Reporting or Reviewing Officer and may recommend to the Vice-President, Research and Graduate Studies to uphold the decision in its entirety, uphold the decision in part, modify the decision or overrule the decision in whole or in part.
24. Prior to rendering its recommendation, the Ad-Hoc Advisory Committee may request additional information of the Member and the Reporting or Reviewing Officer regarding the anticipated Conflict of Interest.
25. The Ad-Hoc Advisory Committee's recommendation shall be made to the Vice-President, Research and Graduate Studies within 15 working days following receipt of the review request from the Vice-President, Research and Graduate Studies. The Vice-President,

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Research and Graduate Studies shall render their final decision on the matter within 5 working days of receiving the recommendation.

## Responsibility of the Vice-President, Research and Graduate Studies

26. The Vice-President, Research and Graduate Studies shall:
a) ensure that sound record-keeping and documentation mechanisms are in place for Conflict of Interest disclosures, their management and Conflict of Interest decisions;
b) prepare an annual report summarizing, without nominative information, the number of Conflict of Interest disclosures. The report will outline the number of disclosures that required decisions and management, and the number that could not be managed and therefore led to a prohibition of an activity;
c) ensure that annual education and awareness workshops on Conflict of Interest are held;
d) develop appropriate and reliable mechanisms for informing Members about this Policy and its requirements; and
e) act as the central University resource with respect to any Conflict of Interest issues that may arise.

## Policy Responsibility and Review

27. The overall responsibility for implementing and recommending amendments to this Policy shall rest with the Vice-President, Research and Graduate Studies.

Adopted by Senate on March 20, 2009 and amended on [insert date].
Adopted by the Board of Governors on March 23, 2009 and amended on [insert date].

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

## APPENDIX A <br> DISCLOSURE REPORT FORM

Appendix A to the Policy on Conflict of Interest in Research (VPRGS-5) (the "Policy").

To be completed by any Member who anticipates or is aware of a Conflict of Interest ("COI").

The Member shall file updated Disclosure Report Forms relative to any COI and/or to the answers provided on this form on an ongoing and timely basis as necessary to report any material developments.

SECTION 1: To be completed by the Member

Name of Member $\qquad$

Date of the present Disclosure $\qquad$

Faculty / Department $\qquad$

Email address and telephone number $\qquad$

Status/title of Member taking part in research (check one):
Faculty member
Undergraduate student
Graduate student
Post-doctoral fellow
Research associate
Technical staff
Adjunct professor
Affiliate professor
Visiting professor
Administrator

Other: $\qquad$

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Describe below (or in a separate attached document) the research project in question ${ }^{1}$ :
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Describe below (or in a separate attached document) the nature and extent of the COI including all activities, services or situations which could place the Member in a $\mathrm{COI}^{2}$ in accordance with the Policy.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
${ }^{1}$ All information disclosed will be held in confidence in accordance with University policies and legislative, regulatory and contractual requirements.
${ }^{2}$ Until activities, services or situations having COI considerations are disclosed, assessed and dealt with, Members shall not engage in such activities, services or situations.

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

For situations of COI relating to a Spin-off Company (as defined in the Policy) please provide the following information:

Describe the Member's or Related Party's interests or stake in the Spin-off Company.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Describe the Member's or Related Party's role or position in the Spin-off Company.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

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Describe the Member's intended time commitment to the activities of the Spin-off Company.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Describe the planned involvement of any students, University faculty and/or other University personnel in the Spin-off Company's activities, highlighting in particular any situations in which the Member has academic or administrative supervision responsibilities for such individuals.

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Describe the relationship between the Spin-off Company activities and the Member's University research activities, highlighting any real or perceived overlap in these activities.

Signature of Member

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

SECTION 2: To be completed by the Reporting Officer
Name and title of Reporting Officer $\qquad$

Date of receipt of the present Disclosure Report $\qquad$

Email address and telephone number $\qquad$

Copy of the present Disclosure Report sent to the Vice-President, Research and Graduate
Studies? Yes $\square \quad$ Date sent $\qquad$
No

Decision of the Reporting officer (check one):
$\square \quad$ No COI exists, the Member is free to pursue the activity, service or situation that was the subject matter of the present Disclosure Report.
$\square \quad$ A prohibited COI exists, the Member shall not pursue the activity, service or situation that was the subject matter of the present Disclosure Report.

A COI exists but the Member may pursue the activity, service or situation that was the subject matter of the present Disclosure Report only in accordance with the following conditions and/or instructions and/or method and/or monitoring (or see separate attached document) ${ }^{3}$ :

[^0]
## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

Signature of the Member agreeing and consenting to the aforementioned conditions:
Signature Date

Date of decision by Reporting Officer $\qquad$

Signature of Reporting Officer $\qquad$

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

APPENDIX B
REPORTING OFFICERS

| Member type | Reporting Officer |
| :--- | :--- |
| President | Chair of the Board |
| Vice-President | President |
| Associate Vice-President | Vice-President |
| Dean of a Faculty or a School with the <br> exception of the School of Graduate <br> Studies | Provost and Vice-President, Academic <br> Dean of the School of Graduate Studies |
| Vice-President, Research and Graduate Studies |  |
| Faculty Member including adjunct, <br> affiliate and visiting professor | Associate Dean with responsibility for <br> Research |
| Postdoctoral Fellow | Associate Dean with responsibility for <br> Research |
| Research staff including research <br> associate and technical staff | Associate Dean with responsibility for <br> Research |
| Graduate Student | Associate Dean with responsibility for <br> Research |
| Undergraduate Student | Associate Dean with responsibility for <br> Research |
| Staff member of an administrative unit <br> within a faculty | Associate Dean with responsibility for <br> Research |
| Staff member in an administrative unit <br> outside of a faculty | Vice-President, Research and Graduate Studies |

## POLICY ON CONFLICT OF INTEREST IN RESEARCH

Effective Date: March 23, 2009 Originsert datel Office: Office of the Vice-President,

Research and Graduate Studies

Supersedes /Amends: n/a_March 23,2009 Policy Number:- VPRGS-5

## PREAMBLE

In accordance with the principles of transparency, accountability and the highest standards of professional conduct expected of members of the University engaged in research, a policy governing eonflicts of interest Conflicts of Interest (as defined below) in research is essential.

In addition, as a result of the Memorandum of Understanding on the Roles and Responsibilities in the Management of Federal Grants Awards The present Policy forms part of a body of codes, policies, directives and collective agreements which set out standards of good conduct. Externally, these policies, agreements and statements include several emanating from the TriCouncil itself including, but not limited to, the Agreement on the Administration of Agency Grants and Awards by Research Institutions, which is entered into by all Canadian universities and the Tri-Council Granting Agencies (the Natural Sciences and Engineering Research Council of Canada, the Canadian Institutes of Health Research and the Social Sciences and Humanities Research Council of Canada), all universities must have a Policy on Conflicts of Interest in Research in order to remain eligible for funding. The Policy must adhere to the guidelines set out in Schedule 14 of the Memorandum of Understanding.

The Policy below forms part of a body of codes, policies, directives and collective agreements which set out standards of good conduct. Externally, these policies and statements include several emanating from the Tri Council itself. Internally, relevant University polices include Goncordia University Code of Ethics Guidelines for Ethical Actions). Internally, relevant University policies include the Policy on Conflict of Interest (BD-4), the Policy on Contract Research (VPRGS-1), the Policy for the Ethical Review of Research Involving Humans (VPRGS-3), the Policy for the Responsible Conduct of Research (VPRGS-12), the Policy on the Ethical Use of Animals in Research and Teaching (VPRGS-13), the the Academic Code of Conduct and provisions in the relevant collective agreements.

## SCOPE

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

## Page $\mathbf{2}$ of $\mathbf{9}$

This Policy appliesshall apply to all faculty members, undergraduate students taking part in research, graduate students, postdoctoral fellows and other personnel involved directly or indirectly in research, including, but not limited to, research associates, technical staff, adjunct professors, affiliate and visiting professors, and employees, administrators and officials representing the University ("the "Members").

Any provision of any University code, Policypolicy or directive which is inconsistent with this Policy iswith respect to the subject matter hereof shall be superseded and replaced by the provisions of this Policy.

However, nothing in this Policy shall replace or supersede any provision set out in any collective agreement to which the University is a party nor shall this Policy be applied in such a way as to detract from the rights of unions to defend the interests of their members and to exercise their rights under a collective agreement. In particular, nothing in this Policy shall be construed as detracting from the rights of a Member or a union from contesting a final decision made pursuant to this Policy in accordance with the grievance provisions of the relevant collective agreement.

## PURPOSE

The purpose of this Policy is to:

- promote transparency thereby increasing public trust in the research enterprise;
- create a culture of trust in the research community;
- help to educate Members;
- strive to reduce the negative impact of conflicts of interest; and
- ensure visibility and consistent application of measures to prevent and deal with conflicts of interest.


## DEFINITIONS

For the purposes of this Policy, the following definitions shall apply:

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

Page $\mathbf{3}$ of 9
"Conflict of Interest in research" ("COI")", means engaging in activities or sittations-a situation in which place-a Member-or, or their Related Party(ies), has a personal interest that conflicts or could conflict with the Member's obligations to the Universityin a reat. The existence of a Conflict of Interest involves two elements:
a) the Member's or perceived conflict between their duties or responsibilities related to researcha Related Party's personal interest(s); and their personal,
b) the Member's obligations to the University-or other,

Personal interests.COI may eccur when Members' or the University's judgments and actions in relation to research are, or could be, affected by personal, University or other interests, including, but not limited toinclude business, commercial or financial interests, whether of individuals, a Related Party or of as well as relationships, private and career interests. A Member's obligation to the University is to act in the University's best interests, which includes acting in support of the University's integrity and mission and avoiding circumstances that may undermine confidence and trust of the public, as well as the confidence and trust necessary between the University itself. and its Members. COI includes, but
Conflicts of Interest may be actual or potential. An actual Conflict of Interest is not limited to, a situation:
(i) where financial, professional or other the personal considerations or commitments may compromise or have the appearance of compromising a interest actually conflicts with the Member's judgment in carrying out hishher research activities atobligations to the University;
(ii) A potential Conflict of Interest is a situation where a Member is in a position to influence, either directly or indirectly, University research activities in ways that could advancethe personal interest has not yet conflicted with the Member's own interests, advance or hinder the interests of another Member or the interests of a Related Party to the detriment of the University's interests, integrity or fundamental mission; orobligations to the University but might be expected to.

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

## Page 4 of 9

(iii) Where financial or other personal considerations may compromise, or have the appearance of compromising, a Member's professional judgment in conducting, evaluating or reporting research.

A COI may be real or perceived.

A perceived Conflict of Interest is a situation where an actual or potential Conflict of Interest may or may not exist, but where there may be, nonetheless, from the perspective of a reasonably well informed and impartial person, a perception of a Conflict of Interest. This is sometimes referred to as an "apparent" Conflict of Interest.
"Disclosure Report" means a report that discloses specific considerations relevant to deciding whether a Member is in a COIConflict of Interest situation as outlined in Appendix $1 \underline{\underline{A}}$.
"Related Party" means a Member's immediate family memberrelative (spouse, child, parent-өr sibling or person with whom the Member has a personal/close relationship that is of primary importance in their life), or other person living in the same household, or any other person with whom the Member shares a financial interest, either directly or indirectly-, or any entity in which the Member has an ownership interest.
"Reporting Officer" means the person to whom the Member must submit a Disclosure Report as outlined in Appendix 2B.
"Spin-off Company" means a company in which a Member or a Related Party has a personal interest (as described in the definition of Conflict of Interest).

POLICY
Overall Responsibility for this Poliey

1. The Vice President, Research and Graduate Studies shall have the overall responsibility for the oversight, implementation and administration of this Policy. He/she shall:
(i) ensure that sound record-keeping and documentation mechanisms are in place for COI disclosures, their management and COI decisions;

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

## Page 5 of 9

(ii) prepare an annual report summarizing, without nominative information, the number of COI disclosures. The report will outline the number of disclosures that required decisions and management and the number that could not be managed and therefore led to a prohibition of an activity;
(iii) ensure that annual education and awareness workshops on COI are held;
a) (iv) develop appropriate and reliable mechanisms for informing Members about this Policy and its requirements; and
(v) act as the central University resource with respect to any COI issues that may arise.

## General Provisions

2. 

Standards of Conduct

1. A Member shall conduct themselves in an ethical and professional manner. They shall honour the principles of collegiality and fairness, and perform their duties and responsibilities with objectivity, care, integrity, loyalty, prudence and diligence to facilitate and foster the accomplishment of the University's mission.

## Situations of Conflicts of Interest

2. A Member shall perform their duties and responsibilities, and act in such a manner as to avoid any Conflict of Interest. The interests of the University shall always prevail when a Member is in a situation of Conflict of Interest or when the personal interest of a Related Party places a Member in a situation of Conflict of Interest. The following, without limitation, are examples of Conflicts of Interest in research:
a) when financial, professional or other personal considerations or commitments may compromise or have the appearance of compromising a Member's judgment in carrying out or reporting their research activities at the University;
b) when a Member is in a position to influence, either directly or indirectly, research activities in ways that could advance the Member's own personal interests,

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

## Page $\mathbf{6}$ of 9

## advance or hinder the personal interests of another Member or the personal interests of a Related Party; or <br> c) when the Member makes use of University resources and/or personnel in carrying out research activities to the benefit of a Spin-Off Company.

## Disclosure and Management of Conflicts of Interest

1.3. Members areshall be required to disclose, through the filing of a Disclosure Report to a Reporting Officer, the nature and extent of a COIConflict of Interest prior to providing or undertaking the activity or service or entering into a situation that may constitute a COIConflict of Interest. When a Member anticipates or is aware of a Conflict of Interest, they shall immediately file a Disclosure Report, in the form set out in Appendix A, to the Reporting Officer identified in Appendix B.
2.4. 3. Until activities, services or situations having EOIConflict of Interest considerations are disclosed, assessed and dealt with in accordance with this Policy, Members shall not engage in such activities, services or situations.
3.5._4. A COIConflict of Interest may be permitted wherewhen the University determines, in its sole discretion, that the COIConflict of Interest can be managed in such a manner that it is compliant with legislation and other regulatory or contractual requirements, protects the integrity, reputation and interests of the University and withstands the test of reasonable and independent scrutiny.
4.6. 5. All information disclosed by a Member in respect of this Policy willshall be held in confidence by the University ${ }_{\underline{\Sigma}}$ in accordance with the University's policies and legislative, regulatory or contractual requirements.
5.7. 6. Each Member isshall be responsible for ensuring his/hertheir compliance with this Policy and its procedures.
6.8. 7. A Member who fails to disclose circumstances of a COIConflict of Interest or who is otherwise not in compliance with this Policy shall be subject to appropriate disciplinary action in accordance with the relevant University Policypolicy or relevant collective agreement.

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

## Page 7 of 9

## Provisions Relating to the Commercialization

Determination of Research
8. A Member shall fully disclose his/her interest, the extent of his/her time commitment, and the nature and scope of his/her activity in relation to any direct or indirect economic interest the Member or a Related Party may have or acquire in any enterprise related to his/her research activities. Such disclosure shall be made to a Reporting Officer prior to the commencement of the activity and annually thereafter.
9. When a Member wishes to engage in the commercialization of his/her research findings, he/she shall follow the relevant policies and collective agreement provisions relating to Intellectual Property and thereafter will maintain a clear distinction between University activities and participation in the promotion and commercial development of the invention or patent.
10. When a Member uses his/her research for a commercial enterprise on or off campus, he/she shall not, through the commercial enterprise's name, publicity or operations, imply that it is associated with or benefits the University unless authorized to do so by a Reporting Officer.
11. In the case where a commercial enterprise in which a Member or a Related Party has an economic interest wishes to employ students of the University, the Member shall first seek authorization from a Reporting Officer.

Procedures for Reporting and Managing Conflicts of Interestin Research
12. Where a Member anticipates a COI, he/she shall file a Disclosure Report, in the form set out in Appendix 1, to the Reporting Officer identified in Appendix 2.
9. 13. Until there has been a determination that there is no COIConflict of Interest or that there is a COIConflict of Interest, but that it may be managed appropriately and therefore, permitted, a Member shall not enter into the activities, services or situations that are the subject matter of the Disclosure Report.

Determination of CO

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## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

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12.10.14. Upon receipt of the Disclosure Report, the Reporting Officer shall immediately send a copy to the Vice-President, Research and Graduate Studies who shall be available for any guidance that may be required. The Reporting Officer shall review the Disclosure Report and shall determine whether:
a) (i) no COIConflict of Interest exists;-or
b) (ii) a COIConflict of Interest exists that is prohibited; or
c) (iii) -a COIConflict of Interest exists ${ }_{\underline{t}}$ but that it may be permitted if it is managed and monitored.
13.11.15. Prior to rendering a decision, the Reporting Officer may request additional information of the Member regarding the anticipated COIConflict of Interest.
14.12.16. The Reporting Officer shall inform the Member of his/hertheir decision in writing within fifteen ( $15 \neq$ working days following receipt of the Disclosure Report.
15.13.17. In the event that the Reporting Officer anticipates himself/herselfthemselves having a COIConflict of Interest in the situation being assessed, the Reporting Officer shall refer the Disclosure Report to the next moreappropriate senior Reporting Officer for review, as set out in Appendix Z. $\underline{\underline{B} \text {. }}$
18. Where
16.14. When the Reporting Officer has determined that:
(i)
a) there is no $\mathrm{COIConflict} \mathrm{of} \mathrm{Interest} ,\mathrm{the} \mathrm{Member} \mathrm{shall} \mathrm{be} \mathrm{free} \mathrm{to} \mathrm{pursue} \mathrm{the} \mathrm{activity}$, service or situation that was the subject matter of the Disclosure Report;-\&
b) (ii) -there is a COIConflict of Interest that is prohibited, the Member shall not pursue the activity, service or situation that was the subject matter of the Disclosure Report; or
c) (iii) -there is a COIConflict of Interest, but that it can be managed (and therefore permitted), the Member shall be free to pursue the activity, service or situation that was the subject matter of the Disclosure Report, but only wherewhen an appropriate method of managing and monitoring the COIConflict of Interest

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

## Page 9 of 9

has been established ${ }_{\underline{z}}$ and the Member has agreed, in writing, to comply with such management and monitoring process.
17.15.19. A copy of the Reporting Officer's decision shall be sent to the Vice-President, Research and Graduate Studies and in a case involving a faculty member to the Department Chair and Faculty Dean, as well. A copy of the decision shall be placed in the Member's personnel file.

## Review of Reporting Officer's Decision Requested by the Member

20. 

18.16. Within ten (10) working days from the issuance of the Reporting Officer's decision, a Member may submit such decision for review to the next moreappropriate senior Reporting Officer as set out in Appendix Z ("B (the "Reviewing Officer").
21.
19.17.The Reviewing Officer shall review the decision of the Reporting Officer and may uphold the decision in its entirety, uphold the decision in part, modify the decision or overrule the decision in whole or in part.
22.
20.18. Prior to rendering a decision, the Reviewing Officer may request additional information of the Member or the Reporting Officer regarding the anticipated COIConflict of Interest.
21.19.23. The Reviewing Officer shall inform the Member of his/hertheir decision in writing within fifteen (15) working days following receipt of the review request.
22.20.24. A copy of the Reviewing Officer's decision shall be sent to Vice-President, Research and Graduate Studies, the Reporting Officer and in a case involving a faculty member to the Department Chair and Faculty Dean, as well. A copy of the decision shall be placed in the Member's personnel file.
23.21.25. -In the event that the Reviewing Officer anticipates himself/herselfthemselves having a COHConflict of Interest in the matter being reviewed, he/shethey shall refer the review request to the next appropriate senior Reporting Officer for review as set out in Appendix 2 B.

Review of Reporting or Reviewing Officer's Decision by the Vice-President, Research and Graduate Studies

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

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26. 

24.22. Within ten (10) working days from the receipt of the Reporting or Reviewing Officer's decision, the Vice-President, Research and Graduate Studies may choose to submit such decision for an independent review and recommendation by a three (3) person Ad-Hoc Advisory Committee named by him/her. the Vice-President, Research and Graduate Studies.
27.
25.23.The Ad-Hoc Advisory Committee shall review the decision of the Reporting or Reviewing Officer and may recommend to the Vice-President, Research and Graduate Studies to uphold the decision in its entirety, uphold the decision in part, modify the decision or overrule the decision in whole or in part.

## 28.

26.24.Prior to rendering its recommendation, the Ad-Hoc Advisory Committee may request additional information of the Member and the Reporting or Reviewing Officer regarding the anticipated COIConflict of Interest.
27.25.29. The Ad-Hoc Advisory Committee's recommendation shall be made to the VicePresident, Research and Graduate Studies within fifteen (15) working days following receipt of the review request from the Vice-President, Research and Graduate Studies. The Vice-President, Research and Graduate Studies shall render his/hertheir final decision on the matter within five (5) working days of receiving the recommendation.

## Responsibility of the Vice-President, Research and Graduate Studies

26. The Vice-President, Research and Graduate Studies shall:
a) ensure that sound record-keeping and documentation mechanisms are in place for Conflict of Interest disclosures, their management and Conflict of Interest decisions;
b) prepare an annual report summarizing, without nominative information, the number of Conflict of Interest disclosures. The report will outline the number of disclosures that required decisions and management, and the number that could not be managed and therefore led to a prohibition of an activity;

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

Page 11 of 9<br>c) ensure that annual education and awareness workshops on Conflict of Interest are held;<br>d) develop appropriate and reliable mechanisms for informing Members about this Policy and its requirements; and

e) act as the central University resource with respect to any Conflict of Interest issues that may arise.

Policy Responsibility and Review
27. The overall responsibility for implementing and recommending amendments to this Policy shall rest with the Vice-President, Research and Graduate Studies.

Adopted by Senate on March 20, 2009 and amended on [insert date].

Adopted by the Board of Governors on March 23, 2009 and amended on [insert date].

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

## APPENDIX 1-A <br> DISCLOSURE REPORT FORM

Appendix $4 \underline{\underline{A}}$ to the Policy on Conflicts Conflict of Interest ("COI") in Research (VPRGS-5) (the "Policy").

To be completed by any Member who anticipates a-or is aware of a Conflict of Interest ("COI").

The Member shall file updated Disclosure Report Forms relative to any COI and/or to the answers provided on this form on an ongoing and timely basis as necessary to report any material developments.

SECTION 1: To be completed by the Member

Name of Member $\qquad$

Date of the present Disclosure $\qquad$

Faculty / Department $\qquad$

Email address and telephone number $\qquad$
$\qquad$

Status/title of Member taking part in research (check one):

Faculty member
Undergraduate student
Graduate student
Post-doctoral fellow
Research associate
Technical staff
Adjunct professor
Affiliate professor
Visiting professor

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

## Page 13 of 13

Administrator

Other: $\qquad$

Describe below (or in a separate attached document) the research project in question ${ }^{1}$ :
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

[^1] legislative, regulatory and contractual requirements.

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

## Page 13 of 13

Describe below (or in a separate attached document) the nature and extent of the COI including all activities, services ofor situations which could place the Member in a real or perceived-COI ${ }^{2}$ in accordance with the Policy-m Conflicts of Interest ("COI") in Resenrch (VPRGS-5).
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
${ }^{2}$ Until activities, services or situations having COI considerations are disclosed, assessed and dealt with, Members shall not engage in such activities ${\underset{\varepsilon}{\ell}}^{\text {services or situations. }}$

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

## Page 13 of 13

For situations of COI relating to a Spin-off Company (as defined in the Policy) please provide the following information:

Describe the Member's or Related Party's interests or stake in the Spin-off Company.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Describe the Member's or Related Party's role or position in the Spin-off Company.

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

## Page 13 of 13

Describe the Member's intended time commitment to the activities of the Spin-off Company.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Describe the planned involvement of any students, University faculty and/or other University personnel in the Spin-off Company's activities, highlighting in particular any situations in which the Member has academic or administrative supervision responsibilities for such individuals.

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

## Page 13 of 13

Describe the relationship between the Spin-off Company activities and the Member's University research activities, highlighting any real or perceived overlap in these activities.

Signature of Member

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

## Page 13 of 13

SECTION 2: To be completed by the Reporting Officer

Name and title of Reporting Officer $\qquad$

Date of receipt of the present Disclosure Report $\qquad$

Email address and telephone number $\qquad$

Copy of the present Disclosure Report sent to the Vice-President, Research and Graduate
Studies?- Yes $\square —$ __Date sent $\qquad$
No

Decision of the Reporting officer (check one):

No COI exists, the Member is free to pursue the activity, service or situation that was the subject matter of the present Disclosure Report.
$\square \quad$ A prohibited COI exists, the Member shall not pursue the activity, service or situation that was the subject matter of the present Disclosure Report.
$\square \quad$ A COI exists but the Member may pursue the activity, service or situation that was the subject matter of the present Disclosure Report only in accordance with the following conditions and/or instructions and/or method and/or monitoring (or see separate attached document) ${ }^{3}$ :

[^2]
## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

## Page 13 of 13

Signature of the Member agreeing and consenting to the aforementioned conditions:

Signature Date

Date of decision by Reporting Officer-

Signature of Reporting Officer $\qquad$

## POLICY ON CONFLICTS OF INTEREST IN RESEARCH

## Page 13 of 13

## APPENDIX Z-B <br> REPORTING OFFICERS

| Member type | Reporting Officer |
| :--- | :--- |
| President | Chair of the Board |
| Vice-Presidentspresident | President |
| Associate Vice-President | Vice-President |
| Dean of a Faculty or a School with the <br> exception of the School of Graduate <br> Studies | Provost and Vice-President, Academic-Affairs |
| Dean of the School of Graduate Studies | Vice-President, Research and Graduate Studies |
| Associate DeansDean or Departmental <br> Chair | Dean |
| Faculty MembersMember including <br> adjunct affiliate and visiting <br> professorsprofessor | Associate Dean with responsibility for <br> Research |
| Postdoctoral Fellows-Fellow | Associate Dean with responsibility for <br> Research |
| Research staff including research <br> associatesassociate and technical staff | Associate Dean with responsibility for <br> Research |
| Graduate Students-Student | Associate Dean with responsibility for <br> Research |
| Undergraduate StudentsStudent | Associate Dean with responsibility for <br> Research |
| Staff member of an administrative unit <br> within a faculty | Associate Dean with responsibility for <br> Research |
| Staff member in an administrative unit <br> outside of a faculty | Vice-President, Research and Graduate Studies |

## POLICY FOR THE RESPONSIBLE CONDUCT OF RESEARCH

Effective Date: [insert date]

Supersedes /Amends: September 11, 2015

Originating Office: Office of the Vice-President, Research and Graduate Studies

Policy Number: VPRGS-12

## PREAMBLE

Research is one of the components of an intellectually vigorous university environment and is an integral part of the mission of Concordia University (the "University"). The University is committed to providing an environment that supports research and that fosters researchers' abilities to act honestly, accountably, openly and fairly in the search for and dissemination of knowledge.

It is understood that all research activity will be conducted within the framework of relevant collective agreements and all relevant University policies including, but without limitation, the Policy on Conflict of Interest (BD-4), the Policy for the Ethical Review of Research Involving Humans (VPRGS-3), the Policy on Conflict of Interest in Research (VPRGS-5), the Policy on Intellectual Property (VPRGS-9) and the Policy on the Ethical Use of Animals in Research and Teaching (VPRGS13).

The University expects of its members conducting research (whether funded or not), the highest standards of ethical conduct in every aspect of research. These standards are consistent with the requirements of funding agencies and others who sponsor research at the University. A component of these standards is the need to have a process that addresses allegations of Research Misconduct, as defined below. This Policy and its related Procedures for the Inquiry and Investigation of Allegations of Research Misconduct (the "Procedures") have been developed to comply with the requirements of the relevant funding agencies including the Tri-Agency Framework: Responsible Conduct of Research and the Politique sur la conduite responsable en recherche adopted by Les Fonds de recherche du Québec.

## SCOPE

This Policy shall apply to all Researchers, as defined below. This Policy takes precedence over any provision of any University code, policy or directive which is inconsistent with this Policy.

However, nothing in this Policy shall replace or supersede any provision set out in any collective agreement to which the University is a party nor shall this Policy be applied in such a

## POLICY FOR THE RESPONSIBLE CONDUCT OF RESEARCH

Page 2 of $\mathbf{6}$
way as to detract from the rights of unions to defend the interests of their members and to exercise their rights under a collective agreement.

For greater clarity, the provisions of this Policy shall replace or supersede the provisions of the collective agreement in force between the University and the Concordia University Faculty Association dealing with Misconduct in Academic Research and Scholarship.

## PURPOSE

The purposes of this Policy and its related Procedures are:

- to promote research integrity by ensuring that all Researchers, as defined below, employ the highest standards of ethical conduct in every aspect of research, including funding applications, the research itself and its dissemination;
- to specify the responsibilities of Researchers with respect to research integrity;
- to outline the University's responsibilities for promoting responsible conduct of research;
- to define what constitutes a breach of policy of the University or funding agency(ies);
- to address how allegations of all types of policy breaches will be treated by the University, and
- to ensure compliance with standards of granting agencies and report accordingly.


## DEFINITIONS

For the purposes of this Policy, the following definitions shall apply:
"Affiliated Institution" means an institution working on a common research project with a member of the University.

## POLICY FOR THE RESPONSIBLE CONDUCT OF RESEARCH

## Page $\mathbf{3}$ of $\mathbf{6}$

"Agency" means the funding agency, foundation, organization, sponsor or other entity, public or private, international, national or provincial, which supports the research in whole or in part, or which has oversight of any research activities.
"Infrastructure" means major equipment and/or research centers financed by the Agency.
"Researcher" means a member of the University conducting research (whether funded or not), including, but not limited to, faculty members, undergraduate students taking part in research, graduate students, postdoctoral fellows and other personnel involved directly or indirectly in research, research associates, technical staff, adjunct professors, visiting professors, and administrators and officials representing the University.
"Research Integrity Officer" (the "RIO") refers to a person appointed by the Vice-President, Research and Graduate Studies whose role is to provide information, support, training and assistance to the community in fulfilling all obligations related to research integrity as outlined in all the relevant policies and procedures. The RIO shall also be responsible for implementing an educational campaign to inform Researchers of best research practices, requirements of the Policy and Agencies and avoidance of Research Misconduct, and for overseeing and modifying said campaign as required over time. The RIO shall also have the roles set out in the Procedures.
"Research Misconduct" means, but is not limited to, the definitions of the Agency for such misconduct, for example: fabrication, destruction of research records, falsification, plagiarism, redundant publications, misappropriation of intellectual property rights of another, failure to report a conflict of interest, misrepresentation in an Agency application or related document, failure to comply with relevant legislation as well as relevant University policies, or failure to meet other legal requirements that relate to the conduct of research, including the intentional misuse of funds designated for research purposes or any other conduct that constitutes a significant departure from the standards that are commonly accepted within the relevant research discipline.

## POLICY

1. Researchers shall be responsible for employing best research practices by following the requirements of applicable University policies and ethical, professional or disciplinary standards, and complying with applicable laws and regulations. At a minimum, Researchers shall be responsible for the following:

## POLICY FOR THE RESPONSIBLE CONDUCT OF RESEARCH

## Page 4 of 6

a) using a high level of rigour in:

- proposing and executing research;
- accurately recording, analyzing, and interpreting data in a manner that allows verification or replication of the work by others; and
- reporting and disseminating data and findings.
b) acknowledging all material or conceptual contributions to research, including authors (with their consent), funders and sponsors;
c) sharing responsibility for the contents of any publication or document in a manner that is consistent with University policies, authorship policies of relevant publications or the contributions of the relevant contributors;
d) reporting any conflict of interest in accordance with the University's Policy on Conflict of Interest in Research (VPRGS-5);
e) providing true and accurate information in funding applications and related documents and representing themselves, their research and their accomplishments in a manner consistent with the relevant research discipline;
f) complying with all applicable Agency policies and requirements for the conduct of research and the administration of awarded funds.

2. No Researcher shall engage in Research Misconduct.
3. Any individual who has reasonable grounds to believe that Research Misconduct is occurring or has occurred in the University or by a collaborator at an Affiliated Institution shall immediately report the matter to the relevant Faculty Dean, per the Procedures. The relevant Faculty Dean shall immediately report any such allegation to the Vice-President, Research and Graduate Studies who will provide guidance on the application of this Policy.
4. Where a person is unsure whether a suspected incident constitutes Research Misconduct, they shall seek guidance from the Office of the Vice-President, Research and Graduate Studies.

## POLICY FOR THE RESPONSIBLE CONDUCT OF RESEARCH

## Page 5 of 6

5. The University shall take the allegations of Research Misconduct seriously. The submission of allegations of Research Misconduct and the inquiry and investigation of such allegations shall be undertaken in accordance with the Procedures or, when applicable, the provisions outlined in the relevant collective agreement.
6. No individual shall make an allegation of Research Misconduct that is not in good faith.
7. The University will not threaten to or retaliate or discriminate, and will not permit any threat of or retaliation or discrimination against any individual making an allegation, in good faith, under this Policy. This protection is also extended to anyone providing information in connection with an investigation.
8. The University shall take all reasonable measures to ensure that the standing of a member of the University, who is not directly implicated but is directly affected by an allegation of Research Misconduct, is not prejudiced by such allegation, subsequent investigation, or any administrative action(s) and/or disciplinary proceedings that may be instituted as a result.
9. All members of the University shall cooperate in any inquiry or investigation related to Research Misconduct.
10. Subject to any applicable legislation, including privacy legislation, the Office of the VicePresident, Research and Graduate Studies shall:
a) advise the relevant Agency of any allegation of Research Misconduct related to activities funded by the Agency that may involve significant financial, health and safety, or other risks;
b) in accordance with the requirement of the relevant Agency, report to the Agency, in writing, a decision to initiate an investigation of Research Misconduct;
c) provide on-going reporting to the relevant Agency, as required, throughout the course and at the conclusion of the investigation of Research Misconduct;
d) make public statistical annual reports on confirmed findings of Research Misconduct and actions taken.

## POLICY FOR THE RESPONSIBLE CONDUCT OF RESEARCH

## Page 6 of $\mathbf{6}$

11. The overall responsibility for implementing and recommending amendments to this Policy shall rest with the Vice-President, Research and Graduate Studies.

Adopted by Senate on May 18, 2012 and amended on September 11, 2015 and [insert date].

## POLICY FOR THE RESPONSIBLE CONDUCT OF RESEARCH

Effective Date: September 11,2015 insert datel Originating Office: -Office of the Vice-President, Research and Graduate Studies

Supersedes /Amends: May 18, 2012 September 11, 2015 Policy Number: VPRGS-12

## PREAMBLE

Research is one of the components of an intellectually vigorous university environment and is an integral part of the mission of Concordia University (the "University"). The University is committed to providing an environment that supports research and that fosters researchers' abilities to act honestly, accountably, openly and fairly in the search for and dissemination of knowledge.

It is understood that all research activity will be conducted within the framework of relevant collective agreements and all relevant University policies, including ${ }_{\S}$ but without limitation, the Gode of Ethics and Safe Disclosure Policy Applicable to Employees of Concordia Universityon Conflict of Interest (BD-4), the Policy for the Ethical Review of Research Involving Humans (VPRGS_3VPRGS-3), the Policy on ComflictsConflict of Interest in Research (VPRGS-5) and-VPRGS-5), the Policy on Intellectual Property (VPRGS-9).VPRGS-9) and the Policy on the Ethical Use of Animals in Research and Teaching (VPRGS-13).

The University expects of its members conducting research (whether funded or not), the highest standards of ethical conduct in every aspect of research. These standards are consistent with the requirements of funding agencies and others who sponsor research at the University. A component of these standards is the need to have a process that addresses allegations of Research Misconduct, as defined below. This Policy and its related Procedures for the Inquiry and Investigation of Allegations of Research Misconduct (the "Procedures") have been developed to comply with the requirements of the relevant funding agencies including the Tri-Agency Framework: Responsible Conduct of Research and the Politique sur la conduite responsable en recherchePolitique sur la conduite responsable en recherche adopted by Les Fonds de recherche du Québec.
This Policy, which is approved by Senate and administered by the Office of the Vice-President, Research and Graduate Studies, is intended to ensure the integrity of research conducted throughout the University.

# POLICY FOR THE RESPONSIBLE CONDUCT OF RESEARCH 

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## PURPOSE

The purposes of this Policy and its related Procedures are:
to promote research integrity by ensuring that all Researchers, as defined below, employ the highest standards of ethical conduct in every aspect of research including funding applications, the research itself and its dissemination to specify the responsibilities of Researchers with respect to research integrity to outline the University's responsibilities for promoting responsible conduct of research to define what constitutes a breach of policy of the University or funding agency(ies) to address how allegations of all types of policy breaches will be treated by the University, and

- to ensure compliance with standards of granting agencies and report accordingly.


## SCOPE

This Policy appliesshall apply to all Researchers, as defined below. This Policy takes precedence over any provision of any University code, policy or directive which is inconsistent with this Policy.

However, nothing in this Policy shall replace or supersede any provision set out in any collective agreement to which the University is a party nor shall this Policy be applied in such a way as to detract from the rights of unions to defend the interests of their members and to exercise their rights under a collective agreement.

For greater certaintyclarity, the provisions of this Policy do notshall replace or supersede the provisions of the collective agreement in force between the University and the Concordia University Faculty Association dealing with Misconduct in Academic Research and Scholarship.

PURPOSE

## POLICY FOR THE RESPONSIBLE CONDUCT OF RESEARCH

Page 3 of 7

The purposes of this Policy and its related Procedures are:

- to promote research integrity by ensuring that all Researchers, as defined below, employ the highest standards of ethical conduct in every aspect of research, including funding applications, the research itself and its dissemination;
- to specify the responsibilities of Researchers with respect to research integrity;
- to outline the University's responsibilities for promoting responsible conduct of research;
- to define what constitutes a breach of policy of the University or funding agency(ies);
- to address how allegations of all types of policy breaches will be treated by the University, and
- to ensure compliance with standards of granting agencies and report accordingly.


## DEFINITIONS

For the purposes of this Policy, the following definitions shall apply:
"Affiliated Institution" means an institution working on a common research project with a member of the University.
"Agency" means the funding agency, foundation, organization, sponsor or other entity, public or private, international, national or provincial, which supports the research in whole or in part, or which has oversight of any research activities.
"Affiliated Institution" means an institution working on a common research project with a member of the University.
"Designated Investigator" means a senior academic administrator, appointed by the VicePresident, Research and Graduate Studies (VPRGS) whe shall assess, at the inquiry stage, all allegations of research misconduct made under this Policy;
"Infrastructure" means major equipment and/or research centers financed by the Agency.

## POLICY FOR THE RESPONSIBLE CONDUCT OF RESEARCH

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"Researcher" means a member of the University conducting research (whether funded or not), including, but not limited to ${ }_{z}$ faculty members, undergraduate students taking part in research, graduate students, postdoctoral fellows and other personnel involved directly or indirectly in research, research associates, technical staff, adjunct professors, visiting professors, and administrators and officials representing the University.
"Research Integrity Officer" (the "RIO") refers to a person appointed by the VPRGSVicePresident, Research and Graduate Studies whose role is to provide information, support, training and assistance to the community in fulfilling all obligations related to research integrity as outlined in all the relevant policies and procedures. The RIO shall also be responsible for implementing an educational campaign to inform Researchers of best research practices, requirements of the Policy and Agencies and avoidance of Research Misconduct ${ }_{t}$ and for overseeing and modifying said campaign as required over time. The RIO shall also have the roles set out in the Procedures for the Inquiry and Investigation Af Allegations of Research Misconduct.Procedures.
"Research Misconduct" means, but is not limited to ${ }_{t}$ the definitions of the Agency for such misconduct, for example: fabrication, destruction of research records, falsification, plagiarism, redundant publications, misappropriation of intellectual property rights of another, failure to report a conflict of interest, misrepresentation in an Agency application or related document, failure to comply with relevant legislation as well as relevant University policies, or failure to meet other legal requirements that relate to the conduct of research including the intentional $_{\underline{L}}$ misuse of funds designated for research purposes; or any other conduct that constitutes a significant departure from the standards that are commonly accepted within the relevant research discipline.

## POLICY

1. Researchers areshall be responsible for employing best research practices by following the requirements of applicable University policies and ethical, professional or disciplinary standards and complying with applicable laws and regulations. At a minimum, Researchers areshall be responsible for the following:
a) using a high level of rigour in:

- proposing and executing research

POLICY FOR THE RESPONSIBLE CONDUCT OF RESEARCH

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- accurately recording, analyzing, and interpreting data in a manner that- allows verification or replication of the work by others; and
- reporting and disseminating data and findings.
b) acknowledging all material or conceptual contributions to research, including authors (with their consent), funders and sponsors $\underline{\underline{\underline{x}}}$
c) sharing responsibility for the contents of any publication or document in a manner that is consistent with University policies, authorship policies of relevant publications or the contributions of the relevant contributors;
d) reporting any real, potential or perceived conflict of interest in accordance with the University's Policy on ConflictsConflict of Interest in Research (VPRGS-5)VPRGS5);
e) providing true and accurate information in funding applications and related documents and representing themselves, their research and their accomplishments in a manner consistent with the relevant research discipline ${ }_{\text {t }}$
f) complying with all applicable Agency policies and requirements for the conduct of research and the administration of awarded funds.

2. No Researcher shall engage in Research Misconduct.
3. Any individual who has reasonable grounds to believe that Research Misconduct is occurring or has occurred in the University or by a collaborator at an Affiliated Institution shall immediately report the matter to the relevant Faculty Dean, per the Procedures. The relevant Faculty Dean shall immediately report any such allegation to the Vice-President, Research and Graduate Studies who will provide guidance on the application of this Policy.
4. Where a person is unsure whether a suspected incident constitutes Research Misconduct he/she should, they shall seek guidance from the Office of the Vice-President, Research and Graduate Studies.

## POLICY FOR THE RESPONSIBLE CONDUCT OF RESEARCH

## Page 6 of 7

5. Allegations The University shall take the allegations of Research Misconduct will be taken seriously by the University., The submission of allegations of Research Misconduct and the inquiry and investigation of such allegations shall be undertaken in accordance with the Procedures or ${ }_{t}$ when applicable, the provisions outlined in the relevant collective agreement.
6. No individual shall make an allegation of Research Misconduct that is not in good faith. In accordance with Section 15 of the University's Code of Ethics and Safe Disclosure Policy Applicable to employees of Concordia University (BD-4), the
7. The University will not threaten to or retaliate or discriminate, and will not permit any threat of or retaliation or discrimination against any individual making an allegation, in good faith, under this Policy. This protection is also extended to anyone providing information in connection with an investigation.
8. The University shall take all reasonable measures to ensure that the standing of a member of the University, who is not directly implicated but is directly affected by an allegation of Research Misconduct, is not prejudiced by such allegation, subsequent investigation, or any administrative action(s) and/or disciplinary proceedings that may be instituted as a result.
9. All members of the University shall cooperate in any inquiry or investigation related to Research Misconduct.
10. Subject to any applicable legislation, including privacy legislation, the Office of the VicePresident, Research and Graduate Studies shall:
a) advise the relevant Agency of any allegation of Research Misconduct related to activities funded by the Agency that may involve significant financial, health and safety, or other risks
b) in accordance with the requirement of the relevant Agency, report to the Agency, in writing, a decision to initiate an investigation of Research Misconduct- $i$
c) provide on-going reporting to the relevant Agency, as required, throughout the course and at the conclusion of the investigation of Research Misconduct

## POLICY FOR THE RESPONSIBLE CONDUCT OF RESEARCH

## Page 7 of 7

d) make public statistical annual reports on confirmed findings of Research Misconduct and actions taken.
11. The overall responsibility for implementing and recommending amendments to this Policy shall rest with the Vice-President, Research and Graduate Studies.

Adopted by Senate at its meeting ofon May 18, 2012 and amended on September 11, 2015 and [insert date].

## OFFICE OF THE VICE-PRESIDENT, RESEARCH AND GRADUATE STUDIES

## INTERNAL MEMORANDUM

To: Danielle Tessier, Associate Secretary-General, University Secretariat
From: Paula Wood-Adams, Interim Vice-President, Research and Graduate Studies, Chair, Research Committee of Senate


Date: February 25, 2020

## Subject: University Recognition of Research Units Indigenous Futures Research Centre (IFRC) Security Research Centre (SRC)

The Research Committee (of Senate) met on February 14, 2020 to review the submission dossiers of the Indigenous Futures Research Centre (IFRC) and the Security Research Centre (SRC), for University recognition. A research unit, recognized by the University, is expected to meet a set of criteria before it can be deemed "recognized". Committee members agreed that both, IFRC and SRC met the criteria outlined in the Policy for Research Units.

| Research Unit | Category | Director | Faculty |
| :--- | :--- | :--- | :--- |
| Indigenous Futures <br> Research Centre <br> (IFRC) | Emerging Research <br> Centre (with an <br> Emerging Research <br> Infrastructure Platform) | Director: <br> Dr. Jason Lewis <br> (Design \& Computation <br> Arts) | Fine Arts |
| Security Research <br> Centre (SRC) | Established Research <br> Centre (with an <br> Emerging Infrastructure <br> Platform) | Director: <br> Dr. Mourad Debbabi <br> (Concordia Institute for <br> Information Systems <br> Engineering) | School of <br> Engineering <br> and Computer <br> Science |

The Research Committee is therefore pleased to recommend to Senate that it grant Universityrecognized status to the Indigenous Futures Research Centre (IFRC) and the Security Research Centre (SRC), in accordance with the Policy on Research Units (VPRGS-8).

The directors will be informed of the Senate decision and will be reminded that they are required to submit an annual report describing their operations and financial status to the VPRGS, as set out in the Procedures document accompanying VPRGS-8.

Thank you.

FACULTY OF FINE ARTS

# INTERNAL MEMORANDUM 

TO: Dr. Paula Wood-Adams, Interim VPRGS
FROM: Dr. Rebecca Duclos, Dean, Faculty of Fine Arts


DATE: $\quad 10$ February 2020
SUBJECT: University Recognition of the Indigenous Futures Research Centre (IFRC) as a Research Unit and Infrastructure Platform

It is our great pleasure to offer our enthusiastic support for the Indigenous Futures Research Centre (IFRC) to be recognized as a University Research Unit and Infrastructure Platform. The Faculty of Fine Arts is deeply committed to supporting the development of innovative and impactful Indigenous research-creation and to the promotion of unique research opportunities for students and faculty alike. We consider this an exceptional opportunity to become international leaders by launching a world-class Research Centre that builds on Indigenous knowledge to imagine, build, and nurture Indigenous futures, bringing together a wealth of scholars, artists, and students from across the university.

The aims of the IFRC "to identify concrete, culturally-supported strategies for creating the future Indigenous communities desire" are timely and urgent. The IFRC will be truly unique and positioned for success, leveraging the outstanding research strengths of the Initiative for Indigenous Futures and the Inuit Art Futures Partnership Grants, the research programs of three Indigenous Research Chairs, as well as the significant number of Concordia researchers across three faculties (PIs on $\$ 7+$ million in current grants) who have already achieved important recognition for innovative Indigenous research-creation and capacity building.

It is important to underline that the Indigenous Directions Action Plan, produced by Concordia's Indigenous Directions Leadership Group (IDLG), directly calls for the development of an Indigenous research centre. In response, the IFRC will support research that operates across a range of interconnected goals and areas including the Indigenous Future Imaginary; Inuit Futures; Indigenous Art Practices; Indigenous STEAM Futures; Land, the Environment and Bioethics; Shaping Public Policy; and Building Indigenous Postsecondary Research Capacity.

The Faculty of Fine Arts attests to the crucial role played by IFRC members in catalyzing vibrant and innovative research in the area of Indigenous research-creation that serves both our Strategic Research Plan and our Indigenous Directions Action Plan. The research programs currently sustained by IFRC members have helped our researchers network with internationally recognized scholars and artists, fostered exciting collaborations, and created a thriving program of knowledge dissemination.

The infrastructure afforded by the creation of the Research Unit and Infrastructure Platform will allow the range of collaborative activities currently spearheaded by IFRC members to grow and to thrive. These include initiatives such as the Indigenous Futures Cluster at the Milieux Institute for Arts, Culture and Technology; Initiative for Indigenous Futures and the Inuit Art Futures Partnership Grants; the Inuit Studies Conference 2019; and the Indigenous Directions Leadership Group. Community and external partner collaborations include the Kahnawake Education Centre (Kahnawake); the imagineNATIVE Film + Media Festival (Toronto); the McKenzie Gallery (Regina); the Great Northern Arts Society (Inuvik); the Winnipeg Art Gallery (Winnipeg); and many others.

In support of the IFRC proposal, we confirm that the Faculty of Fine Arts will offer a 3-credit remission per year to the Director of the Centre, in the case when the Director is a Fine Arts member whose workload is over 6 credits per year, in recognition of the deeply impactful research-creation activities that will benefit our students and our larger research community.

The IFRC will be a foundational Research Unit and Infrastructure Platform for Indigenous research-creation activities as well as graduate/undergraduate recruitment and training. Moreover, the Centre will help to position our Faculty as an international player in an emergent and crucial field of Indigenous artistic and scholarly production. Given the interest of the Faculty of Fine Arts in the creation of unique research opportunities, dissemination activities, collaborations with other researchers and practitioners, as well as the development of innovative research-creation, we are in full support of this proposal.

To: VPRGS
From: Bart Simon, Director, Milieux Institute
Re: Indigenous Futures Research Centre Proposal
I am writing this letter in support of the proposal to create an Indigenous Futures Research Centre at Concordia University. I am familiar with the proposal and have been involved in consultations on feasibility for the last year or so. There is no doubt that with Concordia's new Indigenous directions initiative the proposal for this centre is timely and an important step in solidifying a strength in indigenous research capacity that has been developing across campus for some time.

The main proponents of this proposal have been deeply involved with the creation, development and expansion of the Indigenous Futures cluster of the Milieux Institute for Arts, Culture and Technology at Concordia. Much of the labour has fallen on the backs of Jason Lewis and Heather Igloliorte who between them have marshalled an unprecedented amount of research funds as well as dedicated many hours of their time to managing all aspects of the cluster including mentoring students, public dissemination of research, events organization, community partnerships, and participating in cross-cluster and institute wide collaborations. In the 4 years since the cluster's formation, Indigenous Futures has grown from a single studio-lab (led by Jason Lewis) training mostly undergraduate students to a multi-faceted collaborative space involving visiting indigenous artists, an increasing number of indigenous graduate students, and collaboration with other indigenous and non-indigenous faculty and graduate students around the campus.

From my perspective as Milieux director I see that with relatively few human resources in terms of available faculty there has been tremendous growth in research capacity in an exceptionally short period. Expanding this cluster into a formal research centre is the logical next step. Centre status will bring administrative stability and a level of national and international visibility that will strengthen Concordia's position and commitment not only to indigenous led scholarship and research-creation but also as a top university for interdisciplinary research combining arts and science disciplines with fine arts and design. As an experiment in the organization of interdisciplinary research alone the indigenous futures research centre should be considered essential.

Milieux was founded with a mandate to incubate new research centres on the basis of sustained collaboration and dialog between artists-researchers and students in a cluster. Indigenous Futures stands a successful example of how such collaboration can unfold and the researchers, artists and students involved deserve as much of our support as we can muster.

Sincerely,


## Indigenous Futures Research Centre (IFRC)

A cluster of the Milieux Institute for Arts, Culture and Technology (please see letter of support) Recognition supported by the Faculty of Fine Arts (please see letter of support)

Category and Configuration (as per Procedures for Research Units and Infrastructure Platforms): Emerging Research Centre (with an Emerging Research Infrastructure Platform)

## Evaluation Criteria Requirements

## Centre mission, research program and objectives:

- $\quad$ The Indigenous Futures Research Centre (IFRC) is an Indigenous-led environment that welcomes all researchers, Indigenous and non-Indigenous, whose research is focused on Indigenous peoples and who are interested in creating and maintaining a space that will enable collaboration.
- The IFRC evolved from the IFC (Indigenous Futures Cluster) in the Milieux Institute for Arts, Culture and Technology. That Cluster was established in 2015 and has been coordinating numerous research-creation efforts involving faculty and students in the last few years.
- The IFRC supports a mix of research approaches, topics, and collaborations ranging across art- and technology-making, scholarly analysis, community collaboration and theoretical development to illuminate how the challenges of the present can be addressed, in part, through concrete, constructive, and critical dreams of the future. The Centre supports a wide range of research methodologies already established in the academy, such as research-creation, participatory research, and action-oriented research.
- The major research areas that are collectively being explored by the members of the IFRC are the following:
o Indigenous Futures Imaginary: conducting research, creating artwork and collaborating with Indigenous communities to populate the 'future imaginary' with Indigenous bodies, knowledge, and ways of being.
o Inuit Futures: exploring how to build capacity for Inuit arts and humanities and community development.
o Indigenous Art Practices: encompassing a range of approaches and ways of working in a relationship with Indigenous identity, interests, and traditions as a foundational point of reference (preservation of traditional material practices as well as contemporary adaptation of ancestral techniques).
o Indigenous STEM Futures: bringing together faculty and projects across humanities, social sciences, and engineering fields to increase capacity for STEM research by students and scholars from Indigenous communities.
0 Land, the Environment, and Bioethics: focus on Indigenous peoples and their multifaceted relationship to their land and territories (conservation and environmental futures, land-based pedagogies, Indigenous bioethics through literature and art, etc.).
o Shaping Public Policy: developing research projects aimed at informing public policy debates concerning Indigenous peoples at the local, provincial and national levels.
- The importance of formally recognizing the IFRC is apparent and timely:
o Truth and Reconciliation Commission's (TRC) Calls to Action (2015): expressed need to grow research capacity across Canada to address the needs of the Indigenous communities.
o Concordia's Indigenous Directions Action Plan: one of the main recommendations of the Action Plan is the need to establish an Indigenous research centre at the university.
o Critical mass: Indigenous research capacity across Concordia has been growing rapidly in the last few years. The IFRC regroups active, engaged and well-funded scholars and artists who ground their research in Indigenous issues.
o Innovation in Indigenous Research: Research funding bodies are recognizing the need to articulate research approaches that respect and engage Indigenous methods for knowledge recovery, dissemination, discovery and transmission. These approaches challenge and often critique normative academic research methodologies. The IFRC is creating an environment where these approaches can be practiced, refined, and evolved.


## Directorship:

- Director: Prof. Jason Lewis (Design \& Computation Arts).
- Initial term length of three years, renewable.


## Research centre membership and demonstration of collaborative research activities:

- As listed in the application documents, the IFRC is comprised of thirteen Concordia researchers from nine departments in two Faculties:
o In the Faculty of Fine Arts, from the departments of Design and Computation Arts (Lewis and Smitheram), Studio Arts (Myre), Art History (Igloliorte), and Theatre (Carmichael);
0 In the Faculty of Arts and Science, from the departments of Applied Human Sciences (BlanchetCohen and Fast), Geography, Planning and Environment (Mulrennan and St-Jacques), English (Bardill), Sociology and Anthropology (Watson), and the School of Community and Public Affairs (Richardson and White).
- Eleven of the Concordia researchers are listed as regular members (Bardill, Blanchet-Cohen, Carmichael, Fast, Igloliorte, Lewis, Mulrennan, Myre, Richardson, Smitheram and White).
- The IFRC regular members include one Canada Research Chair T2 (Myre), two CURC T1 (Igloliorte and Lewis) and one FRQ-SC/Stratégie Jeunesse Québec Youth Network Chair (Blanchet-Cohen).
- The IFRC members have collaborated on numerous projects, including the afore-mentioned Indigenous Futures Cluster of the Milieux Institute and the Indigenous Directions Leadership Group (from which the Concordia Action Plan stems), but also the Initiative for Indigenous Futures SSHRC Partnership, the Inuit Futures in Arts Leadership (Pilimmaksarniq/Pijariuqsarniq Project) SSHRC Partnership, and the Pathways towards youth autonomy and fulfillment in a transforming society research project, in addition to other team research grants. Other collaborations include workshops such as the Making Research Matter in Indigenous Communities and the Across All These Tundras exhibition.


## External research partnerships and cooperation with scholars from outside Concordia:

- The IFRC members work with a number of external partners such as: Kahnawake Education Centre (Kahnawake); Kanien'kehá:ka Onkwawén:na Raotitióhkwa (Kahnawake); Tsi Ronterihwanónhnha ne Kanien'kéha Language and Cultural Center (Kanehsatà:ke); imagineNATIVE Film + Media Festival (Toronto); McKenzie Gallery (Regina); BHVR Interactive (Montreal); Akpik Theatre (Yellowknife); Government of Nunavut; Inuit Art Foundation (Toronto); Nunavut Film Development Corporation; Unikkaat Studios; The Great Northern Arts Society (Inuvik); Winnipeg Art Gallery (Winnipeg); Nunatta Sunakkutaangit Museum (Iqaluit); Guilde canadienne des métiers d'art (Montreal); National Arts Centre (Ottawa); First Nations Regional Adult Education Council (Kahnawake); Kahnawake Survival School (Kahnawake); and CEGEP John Abbott College (Montreal).
- The two SSHRC Partnership Grants administered through the IFRC have achieved national and international recognition for innovative, community-grounded research and Indigenous research-creation capacity building.


## Training of graduate students and other highly qualified personnel:

- The Centre members are currently supervising 31 undergraduate research assistants, 16 Masters students and 11 PhD students. Of the current Masters and PhD students, 4 Masters students and 7 PhD students are co-supervised by centre members. In addition, 6 incoming Masters students and 2 incoming PhD students will also be co-supervised by centre members.
- An example of a special activity organized through the IFRC is the public Writers Read event that took place in March 2019, bringing poet Billy-Ray Belcourt to Concordia to exchange with the IFRC students and members.
- HQP also benefit from the Milieux affiliation, with events and activities organized by other clusters and the Milieux organization for its entire membership.


## Governance structure:

- Director: The Director is responsible for the strategic operations of the Centre, including articulating a shared vision of the Centre research goals, and managing internal and external relationships. The Director has day-to-day responsibility for staff operations as well as ensuring that the Centre conforms to the relevant Collective Agreements and policies in effect within the University, and is responsible for the budget, annual reports and other review materials.
- Steering Committee: The Steering Committee of the IFRC is comprised of three faculty members, one of whom is the Director. The Steering Committee meets quarterly to review the IFRC activities and make recommendations to the Director for operational as well as research issues and activities.
- Advisory Committee: The Advisory Committee of the IFRC is comprised of the Steering Committee in addition to two regular members, two students (one graduate and one undergraduate), and three representatives from local Indigenous communities (urban and/or reserve). The Advisory Committee will provide guidance and advice to the Steering Committee on issues related to mission, values, goals, assessment and high-level operations decisions. It will meet once a year. It is expected that a majority of the Advisory Committee membership will be Indigenous.


## Designated resources for the research centre:

- Physical resources:
o The IFRC currently occupies 140 m 2 in four adjacent rooms at the Milieux Institute, on the $11^{\text {th }}$ floor of the EV building (Ev11.615, 625, 635 and 645). The space is used at full capacity, and discussions have taken place with Milieux and the OVPRGS to explore the layout of the rooms to increase the usable space.
o Objective in the next three years is to have the IFRC be part of the planning for a First Peoples House (as per the Indigenous Directions Action Plan).
- Human resources:

0 The IFRC currently employs two research coordinators ( 60 hours/week total) and one technical director (25 hours/week).
0 Going forward, it is expected that the Centre would function with one Coordinator (35 hours/week), one Technical Director (20 hours/week in first two years, increasing to full-time in Y3), one Community Liaison (15 hours/week), and two Research Leadership Undergraduate Research Assistants (20 hours/week each).

- Coordinator: responsible for the daily running of the Centre, including financial and administrative support, arranging for visitors, coordinating grant writing and overseeing internships.
- Technical Director: technical support to help numerous research-creation projects and administer the Centre equipment.
- Community Liaison: to facilitate and support robust research relationships with Indigenous reserve and urban communities.
- Research Leadership Undergraduate Research Assistants: actively mentored by centre members and staff, these research assistants will learn how to support centre operations and administer research projects (articulating research goals, devising research plans, managing research teams, applying and administering research funding).


## Operating funding:

- Significant operating funding from external SSHRC Partnership Grants and other external team grants and projects.
- The OVPRGS Support Program funding would be used to help cover remuneration costs for the centre staff and for training, communication and supplies.


## Development Plan to help steer the growth of the research centre:

The main objective following the recognition of the IFRC by the University will be to formalize the operation of a vibrant space where questions of importance to Indigenous people can be engaged from multiple perspectives, and faculty and students can operate within a context of advanced Indigenous thinking and creating.

- Research Program, Collaborations and Outreach:

0 The recognition of the centre will also allow centre members to further deepen their existing collaborations and develop new ones, which should result in new large-scale research partnerships.
o Providing an organized structure for communication, fundraising, recruitment and network building that will maximize Concordia's ability to compete on an international stage in the area of Indigenous Research.
o Developing a clear program for public and community engagement that emphasizes student participation and training in conjunction with partners and collaborators outside the university.

- Infrastructure and Space:
o Optimization of the use of the research funding and infrastructure through the sharing of equipment, space and human resources across allied research initiatives.
o Maximizing the use of available space by fully collectivizing research areas, making them more flexible/agile, and facilitating their use by students, researchers, collaborators, and community partners.
0 Active involvement of the IFRC in the planning for a First Peoples House and into other axes of the Indigenous Directions Action Plan.
- HQP Training:

0 Increasing opportunities for peer-to-peer learning and cross-disciplinary problem-solving by creating robust "research commons" for IFRC members, students and community participants.
o Establishing a research-lab model to increase the number of Indigenous graduate students at Concordia through intense engagement of the undergraduate students within the Centre. This includes active mentorship, support for maintaining strong ties with their home communities, research assistantships on research projects, and providing a welcoming and nurturing location where students can find peer support and collegiality.

Dr. Paula Wood-Adams<br>Interim Vice-President, Research and Graduate Studies<br>Concordia University

February 10, 2020

Dear Vice-President Wood-Adams,

The Gina Cody School of Engineering and Computer Science expresses its strongest support to the application for establishing the Security Research Centre (SRC) as an established University research unit.

SRC, formerly known as the Computer Security Laboratory, was founded in 2003, and has been recognized as a research centre at the Gina Cody School of Engineering and Computer Science since 2015. The centre strengthens the leadership of Concordia University both nationally and internationally through cutting-edge research and development in cybersecurity, design and implementation of high-impact security technologies, training of highly qualified personnel (HQP), and establishing major research partnerships with leading governmental and industrial corporations.

The proposed mission of the SRC is to: (1) Lead cybersecurity research in Quebec and nationally in Canada with a strong presence on the international scene; (2) Foster major and impactful research collaborations involving researchers and subject-matter experts across Concordia University, other academic institutions, industrial organizations and government agencies, and; (3) Continue to be the leading training force in cybersecurity, critical infrastructure protection, privacy, and digital forensics in Quebec and Canada.

The SRC will serve as a key research platform to generate a strong synergy in developing and executing an integrated research program and a graduate training plan, both aligned with the Strategic Plan of Concordia and the socio-economic needs and priorities of Quebec and Canada. Through the pooling of expertise and resources, the centre is creating a high added value proposition in terms of: (1) Establishment of a centre of excellence in cyber security, critical infrastructure protection, privacy and cyber forensics in Quebec and Canada; (2) Capacity to advise government agencies and corporations on matters related to the detection, prevention, mitigation, attribution, and recovery from cyber and cyber-physical threats; (3) Design and implementation of cutting-edge cybersecurity technologies and intellectual property with highpotential for commercialization and technology transfer; (4) Reinforcement of a multidisciplinary training environment for the next generation of cybersecurity leaders; (5) Development of a platform that catalyses high-impact research collaborations and partnerships

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among cybersecurity experts, and; (6) Creation of a critical mass for ground-breaking results for cybersecurity research, and a platform for ideas exchange, communication, and collaboration.

The SRC is an established research unit with 18 faculty researchers from three faculties and six departments, including six research chairs holders:

- NSERC/Hydro-Québec Thales Senior Industrial Research Chair in Smart Grid Security, held by Dr. Mourad Debbabi.
- NSERC/Ericsson Senior Industrial Research Chair in SDN/NFV Security, held by Dr. Lingyu Wang.
- NSERC/Raymond Chabot Grant Thornton/Catallaxy Associate Industrial Research Chair in Blockchain Technologies, held by Dr. Jeremy Clark.
- Concordia University Research Chair Tier 1 in Broadband Wireless Networks, held by Dr. Chadi Assi.
- Concordia University Research Chair Tier 1 in Information Systems Security, held by Dr. Mourad Debbabi.
- Canada Research Chair Tier 2 in End-User Services Engineering for Communication Networks, held by Dr. Roch Glitho.

It is important to note that the centre is funded at a level of close to $1.8 \mathrm{M} \$$ per year (in 2019/2020). The 6 research chairs constitute an investment of $5 \mathrm{M} \$$ over a 5 -year period.

The SRC has also established research partnerships with leading corporations, including Ericsson, Hydro-Québec, Thales, Raymond Chabot Grant Thornton, Catallaxy, and CANARIE. In addition, it has successfully secured external funding from several organizations including NSERC, FRQNT, Mitacs, Department of National Defence (DND), PROMPT, Office of the Privacy Commissioner Canada, Autorité des Marchés Financiers (AMF), Education and Good Governance Fund (EGGF), and Canada Foundation for Innovations (CFI), to name a few leading funding agencies.

The SRC is operating a research platform for cybersecurity research that includes: 30+ computer servers, 3 storage servers, 2 GPU servers, close to 2 Peta Bytes of storage, 1 smart grid testbed with a digital runtime power systems simulator, phasor measurement units, phasor data concentrators, protection relays, power amplifiers and controllers. In addition, the centre has secured daily cybersecurity feeds that are in the vicinity of hundreds of GB per day. This unique research platform has been acquired through: (i) major donations from Government of Canada, CISCO, SEL, Farsight, ThreatTrack, etc.; (ii) funding from CFI; (iii) funding from CANARIE, and; (iv) funding from GCS and Concordia University through the Capital Innovation Fund and Facility Optimization.

Dr. Mourad Debbabi is the designated Director of the centre for a 3 year-term. He is strongly supported by centre members, the advisory committee, the involved academic departments, and the Gina Cody School of Engineering and Computer Science. The recognition of the SRC as an established university research unit will provide critical support to Concordia researchers in
supporting a world-class research program and training environment with additional research funds, collaborations, co-supervisions, and leadership at both provincial and national levels.

The School will offer the Director of SRC a one-course remission for assuming this important role in accordance with the School course remission policy.

In the light of these major achievements and exceptional successes of SRC researchers, I wholeheartedly express my strongest support to the recognition of the Security Research Centre as an established university research unit.

Sincerely,


Dean Ambir Asif
Gina Cody School of Engineering and Computer Science
Concordia University
cc. Philippe Jacques, Administrator, Strategic \& Institutional Programs and Infrastructure, OVPRGS

## Security Research Centre (SRC)

Recognized by the Gina Cody School of Engineering and Computer Science (please see letter of support)

Category and Configuration (as per Procedures for Research Units and Infrastructure Platforms): Established Research Centre (with an Emerging infrastructure Platform)

## Evaluation Criteria Requirements

## Centre mission, research program and objectives:

- The Security Research Centre (SRC) is a research and graduate training centre that brings together active and dynamic academic researchers from different faculties and schools at Concordia as well as external academic institutions, government and industrial organizations, in the fields of cyber security, critical infrastructure security, privacy protection and cyber forensics.
- The Centre serves as a platform that generates a strong synergy to develop and execute an integrated research program and a graduate training plan that are aligned with the socio-economic needs and strategic priorities of Québec and Canada. It will enhance the existing research environment to encourage the development of expertise in the theoretical and applied aspects of information security and privacy.
- The main mission of the SRC is:
o To be one of the leading academic organizations for research on information systems security in Québec and Canada;
o To be an umbrella organization for fostering collaborations between researchers from different academic units inside the university as well as other academic institutions, industrial and government organizations; and
o To be a leading source of education and training in information systems security in Québec and Canada.
- The primary objectives of the Centre can be summarized as follows:
o Operate a world-class centre at Concordia University with expertise in cyber security, critical infrastructure security and resilience, privacy, and cyber forensics, to facilitate and promote multidisciplinary research and development across engineering, computer science, social science, business, financial managements, and other security-related programs.
o Provide a forum for members to conduct important and relevant research activities that will improve security and privacy of individuals, corporations, and government organizations.
o Design and implement processes, methodologies, techniques and tools that will have a strong and positive impact in the relevant fields and disciplines, and on Québec and Canada, in reacting to cyber threats before they might translate into large-scale, debilitating, intimidating and disruptive attacks.
o Share best practices, technologies, tools, insights, and intelligence with law enforcement and government agencies.
o Serve as a neutral platform to foster existing research and development initiatives between academia, industry and government, and act as a bridge to applications and technology transfer.
o Create an enhanced training environment for highly qualified personnel through joint supervision and the pooling of expertise and infrastructure.
- Five main research themes that involve overlapping portions of the SRC membership:
o Malware Defence, Threat Intelligence and Network Security
o Critical Infrastructure Security
o Software-Defined Networking and Network Functions Virtualization Security
o Blockchain Technologies
o Systems Security and Usability


## Directorship:

- Director: Dr. Mourad Debbabi (Concordia Institute for Information Systems Engineering).
- Term length of three years, renewable.


## Research centre membership and demonstration of collaborative research activities:

- As listed in the application documents, the SRC is comprised of eighteen Concordia researchers, and thirteen external members.
- The Concordia researchers come from six departments in three Faculties:

0 In the Gina Cody School of Engineering and Computer Science, from the departments of Computer Science and Software Engineering (Hanna, Mokhov, Paquet), Electrical and Computer Engineering (Ait Mohamed) and the Concordia Institute for Information Systems Engineering (Assi, Clark, Debbabi, Ghafouri, Glitho, Lucia, Mannan, Mohammadi, Yan, Youssef and Wang);
o In the John Molson School of Business, from the Department of Accountancy (Boulianne); and
0 In the Faculty of Arts and Science, from the departments of Communication Studies (McKelvey) and Sociology and Anthropology (French).

- Thirteen of the Concordia researchers are listed as regular members, all from the Gina Cody School of Engineering and Computer Science (Ait Mohamed, Assi, Clark, Debbabi, Ghafouri, Hanna, Lucia, Mannan, Mohammadi, Yan, Youssef and Wang).
- The SRC regular members include three Industrial Research Chairs (Clark, Debbabi and Wang) and one CURC T1 (Assi).
- The external members of the CSRC are from academia (McGill University, Université de Montréal, Université Laval, UQO, ÉTS, and the University of Applied Sciences in Munich, Germany), from industry (Ericsson Canada, Siemens CT Americas, Thales Canada) and from government agencies (Hydro-Québec, Royal Canadian Mounted Police).
- The SRC builds on extensive collaborations between the centre members, most of which have been supported by organizations and funding agencies. A subset of current and recent collaborative projects include notably:
o Auditing and Monitoring the Security of NFV \& SDN-based Cloud Environments (NSERC CRD, involving Drs. Wang and Debbabi);
o Understanding BlockChains through Experimentation (Autorité des Marchés Financiers du Québec, involving Drs. Clark and Boulianne);
o Software Fingerprinting for Automated Malicious Code Analysis (Department of National Defense and NSERC Research Partnership, involving Drs. Debbabi, Wang, Youssef and Mannan); and
o STARTBASE-1: Integrated Smart Microgrids \& Autonomous Vehicles Research Testbed for Smart Connected Communities (ENCS Capital Research Innovation Fund, involving Drs. Mohammadi, Yan, Lucia, Assi, Youssef and Wang).
- There is significant evidence of co-authored publications by members of the Centre. As of late 2019, the members had jointly published a total of 4 books, 4 book chapters, 67 journal papers, 137 conference papers, and 4 patents.


## External research partnerships and cooperation with scholars from outside Concordia:

- As noted above, the SRC involves external members from other institutions (mostly in Québec), from industry, and from government-related agencies.
- The Centre members also collaborate with numerous other industry partners, such as AMD, Alcatel Lucent, Bell Canada, Cisco Systems, Ericsson Canada, Google, NVidia, Rogers, Siemens CT Americas, Telus, Thales Canada and Videotron (to name only a subset). There is also collaboration with government agencies such as National Defense Canada, Industry Canada, Public Safety Canada, Hydro-Québec, Sureté
du Québec, Royal Canadian Mounted Police, and the National Institute of Standards and Technology (USA), as well as numerous universities in Québec, Canada, the USA and abroad.


## Training of graduate students:

- Twenty-five graduate students are currently co-supervised by SRC members (15 Doctoral students and 10 Masters students). This is in addition to the 13 Doctoral students and 34 Masters students that were previously co-supervised by SRC members and have graduated in the last few years.


## Governance structure:

- Director: The Director is responsible for providing research and administrative leadership, which includes:
o Promoting and facilitating leading-edge research, including collaborative and interdisciplinary research, in areas of security;
0 Building and providing support to enhance the security research capacity at Concordia and to increase the internal and external research opportunities for faculty, PDF and students;
0 Developing networks between the research centre and researchers at Concordia, in the public and private sectors, locally, nationally and internationally;
0 Acting as a spokesperson of the research centre in public events;
o The Director has the day-to-day responsibility for staff operations as well as ensuring that the Centre conforms to the relevant Collective Agreements and policies in effect within the University, and is responsible for the budget, annual reports and other review materials.
- Administrative Support Team: The Director formally benefits from the support of the members of the Centre through an Administrative Support Team, with specific roles and responsibilities: an Associate Director (Dr. Youssef), a Secretary (Dr. Mohammadi), as well as resources for IT support and web (Dr. Mohkov), research and development (Dr. Yan), curriculum and seminars (Drs. Mannan and Lucia) and partnerships and collaborations (Drs. Assi and Wang).
- Advisory Committee: The Advisory Committee of the SRC is composed of external members from universities (full-time faculty members at the rank of Associate or Full Professor) and industries (at the rank of executives, chief officers, and (vice) presidents).


## Designated resources for the research centre:

- Physical resources:
o The SRC has dedicated space for its activities, located on the $4^{\text {th }}, 7^{\text {th }}, 8^{\text {th }}, 9^{\text {th }}$ and $10^{\text {th }}$ floors of the EV Building.
- Rooms EV09.173 and EV09.174 constitute the main spaces of the centre to host meetings, visitors, demonstrations, and other activities
- The server room (EV07.235) is managed by the Centre and hosts rack-mount hardware, testbeds, computational servers, and data storages for the research programs of the members.
- Other research labs are located on the various floors mentioned above.
o Research infrastructure and equipment directly managed by the SRC (subset):
- OPAL-RT OP 5600 simulator with Hypersim and ePHASORSIM licenses
- SEL intelligent relays, phasor measurement units, phasor data concentrators, real-time automation controller, voltage regulators, and capacitor bank controllers
- National Instrument phasor measurement units
- Woodward easYgen genset controller
- Lantronix UDS2100 network I/O interface
- Wifibots and Webots robotic systems
- Raspberry PI microcontrollers
- Satellite-synchronized GPS clocks
- CISCO networking routers and switches
- GPU server
- Near-real-time Darknet feeds for industrial control network threat intelligence
- High-performance computation and software servers.
- Human resources:

0 The SRC currently relies on part-time staff hired by its members for their various team initiatives.
0 The Centre will have one Full-time technical specialist (for testbed management and maintenance) and one full-time research professional (for research management and development).

## Operating funding:

- Significant operating funding from external research grants and contracts, from CFI Infrastructure Operating Funds, and from various internal programs.
- The OVPRGS support program funding would be used to help cover remuneration costs for the Centre staff.


## Development Plan to help steer the growth of the research centre:

- A CFI Innovation Fund application was submitted in January 2020. Should it be successful, it will add over 100 equipment/devices valued at over $\$ 1.7 \mathrm{M}$ to the Centre infrastructure, as well as involve the renovation of some of the laboratory space for the centre activities. Results are expected in December 2020.
- In Y1 following recognition, the SRC is expected to enhance its status, notably through the following means:
o Formally establishing the advisory committee structure of the centre
0 The elaboration of a $4 Y$ plan articulating research priorities, targeted partnerships and collaborations, and training priorities;
o The elaboration of a communication and dissemination plan to nationally and internationally promote the centre activities;
0 Strengthening the existing cohesion of the team by increasing the number of collaborative projects and co-supervised students (notably through bi-weekly meetings and invited seminars); and
0 Increasing the centre membership from other faculties.
- In Y2 and Y3, the Centre will go through an expansion phase, notably through the organization of research and networking events, the attraction of high-quality students and PDFs, the establishment of research partnerships with leading organizations in the telecommunications, energy and financial sectors, and the organization of large national and international events.
- The Centre would reach sustainability in Y4 and onwards.


## OFFICE OF THE VICE-PRESIDENT,

 RESEARCH AND GRADUATE STUDIES
## INTERNAL MEMORANDUM

To: Danielle Tessier, Associate Secretary-General, University Secretariat

From: Paula Wood-Adams, Interim Vice-President, Research and Graduate Studies, Chair, Research Committee of Senate


Date: April 17, 2020
Subject: Senate approval of Concordia University's Equity, Diversity and Inclusion (EDI) Action Plan for the Canada Research Chairs (CRC) Program

I am pleased to re-submit for Senate approval Concordia University's Equity, Diversity and Inclusion (EDI) Action Plan for the Canada Research Chairs (CRC) Program.

You will recall that the EDI Plan (which was a shared undertaking of the Offices of the VicePresident, Research and Graduate Studies and the Provost and Vice-President, Academic Affairs) was first submitted in December 2017 for approval at the January 2018 Senate. The EDI Plan is required by the CRC Secretariat for institutions with five or more chair allocations and is intended to guide institutional efforts in increasing and sustaining the participation of individuals from the four designated groups (FDGs) - women, persons with disabilities, Indigenous peoples and members of visible minorities.

Following this original approval by Senate, the Plan was submitted to the CRC Secretariat but unfortunately did not achieve a satisfactory rating in phase 1 of the review process. The plan was subsequently revised and resubmitted in September 2019, again as a collaborative effort with the Office of the Provost and Vice-President, Academic. In February 2020, the OVPRGS received a positive assessment from the CRC Secretariat stating that "the revised action plan had effectively addressed all areas for improvement", with a "Fully satisfies" final rating.

The Senate Research Committee met on April 17, 2020 to review the Plan. The Senate Research Committee unanimously recommends that Senate approve this final version of Concordia's EDI Plan.

## Equity, Diversity and Inclusion Action Plan

for the Canada Research Chairs Program

Revised (pending Senate approval)
September 27, 2019

Concordia University is located on unceded Indigenous lands. The Kanien'kehá:ka Nation is recognized as the custodian of the lands and waters on which we gather today. Tiohtiá:ke/Montreal is historically known as a gathering place for many First Nations. Today, it is home to a diverse population of Indigenous and other peoples. We respect the continued connections with the past, present and future in our ongoing relationships with Indigenous and other peoples within the Montreal community.

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## Executive Summary

At Concordia University, we recognize the importance of equity, diversity, and inclusion (EDI) in fostering excellence by improving learning, advancing research, inspiring creativity, and contributing to a healthy, productive working environment. As such, the University was proud to endorse the Dimensions Charter and to develop the following Equity, Diversity and Inclusion Action Plan. The Plan integrates EDI considerations across the University, and responds to requirements of the Canada Research Chairs Program (CRCP).

The development of this Action Plan has been a shared undertaking of the Offices of the Vice-President, Research and Graduate Studies (OVPRGS), and the Provost and Vice-President, Academic (OPVPA). At Concordia, the OVPRGS has oversight over processes related to Canada Research Chairs (CRC) while the OPVPA has oversight over processes related to faculty hiring, both of which are implicated in the University's CRC program and its EDI Action Plan.

The key Actions of our Plan respond to both short- and long-term goals, and were developed with the understanding that addressing the overarching imperatives of EDI cannot be limited to the recruitment and retention of CRCs but instead must be embraced as a broader, institutional commitment. Thus, while the main focus of the plan relates to the requirements of the CRCP, it includes a broader set of actions responding to a larger context involving all members of the Concordia University community.

The Actions of the Plan are embedded in, and emerge from, a thorough assessment of the University's employment system (Section 4.a), a comparative review of Chairholders' compensation and research funding (Section 4.b), and an environmental scan (Section 4.c). The Actions (Section 5), which arise from and respond to actual or potential barriers to EDI as identified through the reviews, are organized according to the various stages of CRC recruitment, hiring, and retention. These include: organizational planning and allocation of the Chairs (Actions 1-3); the search committee (Action 4); the hiring committee (Action 5), the interview (Action 6); hiring decisions (Actions 7-9); retention and promotion (Action 10); efforts to encourage self-identification (Action 11); and, the overall environment in which our CRCs - and all of our students, faculty, and staff - will have equal and ample opportunities to work and thrive (Actions 12-19). A detailed review of our management of the CRC program is then provided (Section 6), followed by considerations related to the collection of equity and diversity data (Section 7), and to retention, inclusivity, and resources at Concordia (Section 8).

We strongly believe that this Action Plan will advance and further embed the significant work and recent progress the University, as a community, has made (see Section 1), ever mindful that more work remains to be done. Similar to Concordia's Indigenous Directions Action Plan, and in concert with it, this Plan is envisioned as a "tool to enable all Concordians to move the University towards a more equitable and inclusive future".

## 1. Background and Context

Institutional context

## Background

Equity and inclusion are core to Concordia University's institutional character. Both of its founding institutions were values-led; Sir George Williams University was created as an offshoot of the YMCA to offer adult education classes to the working class and Loyola College was a Jesuit college. Until the abolition of McGill University's quotas after the Second World War, the University offered Montreal's substantial Jewish population the best prospect for English-language post-secondary education. The University also has a long tradition of serving newcomers and mature students.

Today, Concordia University is proud to have one of the most diverse university communities in Canada-and the most diverse university community in Québec-both in terms of population and impact. With faculty, staff, and students from over 150 countries, the University plays a special role in the Québec higher education system. Fewer than half of its more than fifty thousand students speak English as a first language and more than a quarter have a mother tongue that is neither French nor English. Moreover, and unique amongst the province's Anglophone institutions, Francophone Québecers make up approximately a quarter of its student population. Times Higher Ed recently ranked Concordia University amongst the two hundred most international universities in the world, and it is among the top three most diverse Canadian universities in terms of the international diversity of our student population.

Concordia University is thus distinctively bi-focal, with deep roots in the broad diversity of our local community, combined with a consciously global outlook. The greater share of our EDI initiatives to date have been driven by the representational needs of our remarkably diverse and engaged student population.

## Staffing

Concordia benefits from the most extensive EDI staffing of any post-secondary institution in Québec. In total, over a dozen staff members across the University devote all or part of their time to EDI. This includes leadership at the most senior level, with a ViceProvost and two Special Advisors to the Provost spearheading EDI-related initiatives. It also includes, as a result of the expansion of the EDI mandate of the OPVPA in 2017, two dedicated EDI staff members tasked specifically to address EDI issues affecting the professorial corps (including one devoted exclusively to faculty hiring initiatives). Beyond the OPVPA, EDI staffing extends to two units in the Secretariat, including the Office of Rights and Responsibilities; and Human Resources. A stand-by response team for specific student cases includes the Access Centre for Students with Disabilities, the Sexual Assault Resource Centre, the Office of the Dean of Students, the Student Success Centre, and the Aboriginal Students Resource Centre (see Graphic on page 7).

This core group, supported by a broader team, has developed a host of initiatives driving EDI considerations, which now extend across the University. Of particular note are the numerous EDI training opportunities currently offered to community members (see Appendix 2), ongoing community consultation processes on the establishment of a formal EDI structure, and extensive collaboration with collective bargaining groups. Indeed, as a result of reciprocal support and advocacy, all three of the University's academic personnel unions and associations have formed their own EDI committees, and are working with senior leadership at Concordia to embed EDI concerns in upcoming collective bargaining exercises (as well as collaborating on joint EDI initiatives, such as inclusive learning and compensation equity).

## Current EDI Landscape

## Indigeneity and decolonization

Concordia's efforts to engage, recruit, and improve relations with Indigenous students began decades ago, notably with the establishment in 1992 of what is today the Aboriginal Student Resource Centre. An annual Native Awareness Week was launched in October 1993, the same year the Native Access to Engineering Program (NAEP) was created in partnership with l'Ordre des ingénieurs du Québec. The establishment of the First Peoples Studies Program was another important milestone in 2002.

In the years since then, and particularly following the recommendations of the Truth and Reconciliation Commission in 2015, Concordia has made a public commitment to take "concrete steps towards the decolonization and Indigenization" of the University, with the aim to "co-construct a new shared future based on responsibility, reciprocity, and respect".

The creation of the Indigenous Directions Leadership Group (IDLG) in 2016, and the resulting Indigenous Directions Action Plan (IDAP see Appendix 3) in 2019, form the cornerstone of the University's Indigenous-led approach to decolonization and Indigenization. The IDLG is well resourced and operates autonomously, reporting directly to the Provost through the Senior Director, Indigenous Directions; the Special Advisor to the Provost on Advancing Indigenous Knowledges, and the incoming Special Advisor to the Provost on Indigenous Spaces and Donor Engagement.

While much remains to be done, high level commitment and coordination of efforts have been crucial for the successful recruitment and retention of top-calibre Indigenous scholars at Concordia, and the increasing appeal of Concordia for Indigenous undergraduate and graduate level students.

## Disability

The Access Centre for Students with Disabilities (ACSD) offers services to more than two thousand students per year, and provides a wide variety of accommodations. The University has particularly well-established student service expertise in the fields of physical, psychosocial, and mental disability. A two-year (physical) accessibility audit of the entire University by the ACSD, at the behest of

Facilities Management, has recently been completed, data from which is in the process of being analysed in order to develop functional strategies for improved physical accessibility at Concordia.

One major shortcoming of existing arrangements is that no equivalent service exists for non-student members of the community. Anecdotal evidence from recent hiring experiences suggests that the hiring and onboarding of faculty members with disabilities would benefit from a more coordinated approach by a dedicated cross-functional (i.e., academic sector, human resources, facilities management, etc.) team or network. Reticence of faculty members and faculty applicants to self-disclose invisible disabilities also remains an obstacle, particularly given the collegial hiring process.

Access for persons with a disability is a burgeoning research focus at Concordia. This research expertise is a valuable resource to draw upon in our efforts to achieve an accessible university. For example, Concordia has, since 2014, been home to the Critical Disability Studies Working Group (CDSWG), the first working group of its kind in Québec.

## Gender

Similar to most post-secondary institutions within Canada (and beyond), Concordia faces challenges with the full inclusion and equal remuneration of female faculty members. We have experienced difficulties in collecting adequate and accurate data to measure this. However, a number of related initiatives are underway. For example, a faculty-wide quantitative compensation equity analysis, jointly conducted by the OPVPA and the Concordia University (full-time) Faculty Association (CUFA) (ongoing since 2018, completion 2021), will measure the extent of the underrepresentation of women faculty (especially within the senior ranks of the professorial corps), the equitability of their compensation with respect to male faculty, and the extent to which female colleagues (particularly those from other equity seeking groups) carry an disproportional administrative load. Despite the current absence of the accurate quantitative data to support our assessment, we fully recognize that the University has a gender problem and we are committed to addressing it.

An important strategy has been to promote women to senior academic leadership positions at Concordia. This currently includes: Interim Provost, Interim Deputy Provost, all three Vice-Provosts, two of four Faculty Deans, the Dean of Graduate Studies, the University Librarian, the Associate Vice-President, Lifelong Learning, and one of two Associate Vice-Presidents of Research. Two of the three special advisors to the Provost are also women. Furthermore, special attention is paid to intersectionality in senior leadership. Of the senior academic leadership positions listed above, 13 of the 17 positions are occupied by women. Five of those women belong to at least one of the other equity-seeking groups. In September 2019, Concordia's John Molson School of Business became the first business school to receive Parity Certification from Women in Governance, a not-for-profit organization that supports women in their leadership development, career advancement and access to board seats across Canada.

Systematic efforts are also being made to promote women in engineering. The University is proud to be the first engineering faculty in Canada named after a woman, Gina Cody-herself a member of a visible minority and a first generation Canadian. The creation of the

Gina Cody School of Engineering and Computer Science (GCS) has helped consolidate and launch a broad series of initiatives aimed at promoting women in engineering. These include the creation of a number of research chairs and hiring opportunities aimed at women.

## Visible minorities

The University lacks data on the representation of visible minorities within its faculty and staff. Human Resources compiles statistics on the percentage of its faculty and staff that belong to the five provincially designated groups (women, persons with a disability, Indigenous peoples, visible minorities, and ethnic minorities), in order to comply with Québec's Loi sur l'accès à l l'égalité en emploi dans des organismes publics. However, the data do not reflect community members' actual self-identification. ${ }^{1}$ Our immediate focus is, therefore, to establish a robust data-gathering system to address this. We are also aware that while the University has significant levels of representation from visible minorities among its full-time faculty overall, this diversity is very uneven across the University, with tremendous diversity in some areas and virtually none in others. Furthermore this unevenness often correlates with a lack of diversity in terms of the other designated groups.

In order to assess these discrepancies and promote diversity at all levels of the institution, Concordia, via its OPVPA, is the first among its provincial peers to conduct an equity census of its faculty that will break down the category of visible minority, and invite members to self-identify by race and ethnicity (using the Canadian census categories of race and ethnicity) (See Appendix 4). By doing so, the University hopes to assess the representation (or lack thereof) of visible minorities by academic discipline and department-laying the groundwork for the explicit invocation of Article 12.01e of the CUFA Collective Agreement to promote greater representation in faculty hiring:

If the data on academic availability indicate that a designated group is under-represented in a given disciplinary sector in the University, then, all things being equal, candidates from that designated group shall be given priority in that disciplinary sector

## LGBTQ+

Finally, although not a designated group, Concordia is committed to the inclusion of sexual orientation and gender identity in its EDI initiatives. One survey of faculty applicants already includes a question asking whether they self-identify as a member of the LGBTQ + community, and our forthcoming equity census includes two distinct questions on sexual orientation and non-binary gender identity, respectively.

[^3]It is important to note that Concordia University reserves the entirety of its CRC allocations for recruitment purposes in accordance with the Policy on Research Chairs (see Appendix 5, Article 8), with significant implications for the handling of CRCP EDI requirements.

At Concordia, every new CRC allocation is a new faculty recruitment, and thus while there is room for formal interventions on EDI grounds in the organizational planning and allocation stage (i.e., via the use of flex moves and the modification of letter of intention requirements), once a CRC is allocated there is limited scope for interventions in the selection process by EDI staff and/or senior academic leadership. As a recruitment, filling the CRC allocation follows the normal collegial hiring process set out in Article 12.08 of the CUFA Collective Agreement (see Graphic on page 15).

Systematic interventions to manage the EDI implications of the CRC program have been introduced since 2017 (i.e. the first Action Plan) involving collaboration between the OPVPA and OVPRGS (see Section 4.a, below) and now extend to regular faculty hiring. Mandatory training developed for CRC hiring committees is now compulsory for all faculty members participating in full-time faculty hiring. Guidelines and policies developed for the CRC hiring process are now applied to all full-time (including limited term) faculty hiring committees. As a result, EDI initiatives are becoming embedded in the University's wider hiring processes-with slow, but palpable, and steady results.

The University's management of the current crop of eight CRC allocations ${ }^{2}$ is illustrative of recent changes instituted for these allocations, and their impact on current recruitment processes (see Graphic on page 15 and Appendix 1).

[^4]Concordia


## 2. Self-assessment Team

Concordia University benefits from the most robust EDI staffing network of any Québec-based university. In addition to dedicated staff in the OPVPA (i.e., staff and academic leaders whose portfolios directly address EDI issues) over a dozen individuals across the University devote a portion of their time to EDI issues-or are called upon to do so as needed by dedicated staff. The result is a coordinated team of staff and academic leaders that can inform and contribute to EDI initiatives such as this one. This structure is particularly useful in two crucial ways. Firstly, it spans many units across the University-allowing for broad impact and insight. Secondly, it is comprised of individuals immersed in and familiar with the detailed administrative processes of the University. As such, their participation allows for both highly strategic and concrete insight, enabling the coordinated design of practical initiatives with greatest impact on the lived experience of faculty and staff from underrepresented groups.

As for the University's administration of the CRC program, the allocation, recruitment and nomination processes are the joint responsibility of the OVPRGS and OPVPA. Each respective unit administers different stages of the process-with both units collaborating on strategic directives impacting the management of the CRC program.

As such, in building its self-assessment team (see Graphic on page 9), the University relied principally on the OVPRGS and OPVPA. A core group of staff and academic leaders from these two units-representing four of the six equity-seeking groups in Concordia's equity census-comprised the selfassessment team. They were tasked with crafting this plan, by consulting and/or enlisting all relevant stakeholders across the University. Their work was informed by a host of collaborators and supported by administrative units such as the Institutional Planning Office and Human Resources. Finally, a series of consultations with internal and external stakeholders were conducted to design and implement the reviews that informed the plan.

## Econcordia

## INSTITUTIONAL SELF-ASSESSMENT TEAM

## - CORE team

O Contributors
O Internal Stakeholders
O External Stakeholders

Robert Cassidy, Directo
Centre for Teaching and Learning:
Kelly Collins, Manager
Kelly Coliins, Manager, Office;
International Students
shely Crouch, Interfaith Facilitato
Multi-faith and Spirituality Centre
Jennifer Drummond, Coordinator,
Sexual Assault Resource Centre
William G. Lindsay,
Senior Director, Indigenous Directions
Lisa White, Director,
Office of Rights and Responsibilities


## 3. Canada Research Chair Targets

Concordia University is currently meeting the CRC target for representation of visible minorities. We are $5 \%$ below the current target for representation of women. In keeping with the Privacy Act, which requires that numbers less than five be withheld, we cannot provide specific numbers for representation of persons with a disability or Indigenous peoples. A summary of our current status in relation to CRC program targets is provided in the table below:

Figure 1 - Canada Research Chairs from the DGs at Concordia as of September 27, 2019

27 Chairs currently occupied or nominated (8 Chairs currently vacant)

| Designated Group | CRC Program Target | Concordia Occupancy | Gap (\# of Chairs) |
| :--- | :---: | :---: | :---: |
| Women | $31 \%$ | $7(26 \%)$ | 1 |
| Visible Minorities | $15 \%$ | $6(22 \%)$ | *No gap |
| Persons with a Disability | $4 \%$ | ${ }^{*}$ *No gap | *No gap |
| Indigenous Peoples | $1 \%$ | *No gap | *No gap |

*Please note that cells with fewer than 5 responses cannot be reported for confidentiality.

## 4. Reviews

## 4.a. Employment Systems Review

This Employment Systems Review was conducted by the OPVPA in close consultation with the self-assessment team. The choice of the OPVPA was motivated by its role as a nexus for academic personnel processes; it works in close collaboration with both the OVPRGS and Human Resources to manage the lifecycle of academic personnel (which includes full-time faculty, part-time faculty, and teaching assistants). The OPVPA is responsible for the negotiation of and compliance with the three collective agreements governing the employment of academic personnel at Concordia University. As such, it both drives and enforces policies impacting the recruitment of faculty members-and benefits from the most thorough perspective on the institution's recruitment and nomination processes from start to finish.

| STAGES | POLICY/ COLLECTIVE AGREEMENT ARTICLE <br> (where applicable) | APPENDIX <br> (where applicable) | OVERVIEW / DESCRIPTION | BARRIERS | ACTION \# (Section 5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Organizational allocation and planning | Procedures and Guidelines for Research Chairs | Appendix 6 | When a CRC becomes available, either through a vacancy or a new allocation, the OVPRGS issues an open call to the academic community for letters of intent (LOIs). Letters of intent are reviewed by their respective Faculty Research Committees (FRCs), who forward a selection to the VPRGS for consideration. | Since the process requires advocacy on behalf of the departments, it is susceptible to bias. Faculty members from designated groups may be less likely to advocate for their research areas-which may additionally be regarded as less of a priority for the University research community. | 1 |
|  | Procedures and Guidelines for Research Chairs | Appendix 6 | The University Research Committee (URC) reviews LOIs and allocates available CRCs. | As with all research chairs, the stated criteria for allocation of available CRCs are research excellence and fit with the University's Strategic Research Plan. As such, the allocation of chairs is susceptible to systemic bias in resourcing, and | 3 |


|  |  |  |  | advocacy bias in the application pool. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Collective <br> Agreement between Concordia University and The Concordia University Faculty Association (CUFA) article 12 |  | The allocation of a CRC to a department pursuant to the submission of an LOI gives rise to the creation of a hiring license, which then follows the recruitment process of a regular tenure-track hire per article 12 of the CUFA Collective Agreement. | The exclusive use of the hiring process for the allocation of CRCs makes the process particularly susceptible to systemic bias and limits the potential interventions by senior administrator and dedicated staff on EDI grounds. | 3 |
| Job postings | CUFA article 12.02F) | Appendix 1 | The CUFA Collective Agreement mandates posting in "appropriate journals and newspapers", including the CAUT Bulletin, but is otherwise silent on the language and distribution of postings. <br> Until recently, job postings were largely drafted by Department Chairs prior to the formation of the DHC, limiting opportunities for the DHC to craft inclusive ads and dedicated EDI staff to have input on inclusivity. <br> Since 2019, all full-time faculty postings must be approved by the OPVPA and include mandatory EDI language about career interruptions, accommodations and self-identification. | Although a substantial amount of time and effort is invested in training, hiring committees have access to limited budgets-and no dedicated administrative supportto engage in active recruitment efforts. | No more actions to be taken, see Memo re: 20192020 tenuretrack hire allocations: Advertisement templates, position tracking and equity, diversity and inclusion aspects |
| Search for candidates | CUFA articles 12.02 M and 12.020 |  | DHCs benefit from a great deal of discretion over the recruitment process, with input solicited from departmental colleagues on shortlisted candidates. The wide distribution of job postings, which is necessary to ensure the building of a wide and diverse pool, is largely left to departmental colleagues. | Some departments and units have insufficient budgets to advertise within discipline-specific publications; active recruitment efforts (if not undertaken by colleagues) fall on overburdened departmental administrative staff | 4 |
| Hiring committee | CUFA articles 11.11 and 12.02R |  | Since the spring of 2018, all DHC members involved in CRC recruitment initiatives have taken a ninety-minute mandatory EDI training session. In the fall of 2019, this mandatory training requirement was extended to all full-time faculty recruitment initiatives. <br> In the current CRC recruitment cycle, the OPVPA required Department Chairs to submit the composition of each CRC DHC for prior approval, in order to ensure both representation (without overburden) of underrepresented groups but also openness to EDI goals. | Uneven levels of awareness and commitment to EDI across the university | 5 |


|  |  |  | The EDI measures implemented thus far ensure that the program's recruitment and nomination requirements are respected, but they do not ensure exposure at all levels of decision-making. Namely, beyond the DHC to the DPCs, Deans' offices, etc. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Interview | Concordia Canada Research Chair Hiring Guidelines (March 2019) | Appendix 1 | DHCs receive training on designing and conducting inclusive interviews. <br> All job postings indicate a dedicated senior administrator (the Vice-Provost, Faculty Development and Inclusion), to intervene on candidates' behalf-in confidence-to ensure accessibility and inclusivity by providing accommodations. <br> DHCs are encouraged during mandatory EDI training, and by their respective equity advocates throughout recruitment initiatives, to ensure recruitment processes are by design inclusive (for example, by submitting candidates to various evaluative methods and paying attention to scheduling and transport) so as to relieve candidates from the need to request accommodations. Emphasis is also placed on ensuring that all candidates-not just those requiring accommodations - are subjected to the same process in order to ensure equitable evaluations. | The formality, inflexibility and adversarial nature of conventional interview processes can discourage participation from certain candidates | 6 |
| Hiring decisions | CUFA articles 11.02 and 12.02T) |  | DHCs must produce a reasoned report. <br> As of the current CRC recruitment cycle, all CRC DHCs are accompanied by an equity advocate appointed by the Dean or the OPVPA. | The primacy granted to collegial decision-making in the recruitment process means there is little room for formal interventions on EDI grounds prior to the formulation of a hiring recommendation, when doing so might be more formative. This makes interventions on EDI grounds (i.e., the rejection, by the Dean or OPVPA) more drastic-and makes them far more costly in terms of delays and lost candidates-risking resentment and adversity between colleagues and senior administration | 7 |
| Retention and promotion | CUFA articles 11.06 and 38 |  | Dean's offices may petition the Salary Review Committee (SARC) for the granting of an individual supplement on retention grounds. Since the process | Faculty members from DGs may not be in a position to entertain competing offers, and may be less | 10 |


|  |  |  | requires advocacy on behalf of faculty members and <br> Deans, it is susceptible to bias. | likely to formulate retention <br> arguments to their Chairs and Deans |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Self- <br> identification | Memo re: 2019- <br> 2020 tenure-track <br> hire allocations: <br> Advertisement <br> templates, position <br> tracking and equity, <br> diversity and <br> inclusion aspects | Appendix 1 | All applicants for full-time faculty positions-including <br> potential CRCs-are invited to complete a survey to <br> self-identify as one of the five provincially designated <br> groups or as members of the LGBTQ+ community. <br> In the 2019-2020 academic cycle, the University is <br> conducting an equity census of all current faculty <br> members. The equity census will invite faculty <br> members to identify the nature of their disability and <br> provide racial and ethnic ancestry information. With its <br> equity census, which has been reviewed by the <br> Commission des droits de la personne, the University <br> will become the first post-secondary institution in <br> Québec to break down equity-seeking groups in order <br> to address the issue of inter-group representation. | Québec labour law has limited the <br> use of data obtained through <br> applicant surveys, restricting their <br> use to an assessment of the diversity <br> of the pool |



## 4.b. Comparative Review

The OVPRGS undertook a preliminary comparative analysis of compensation and research support for the University's 26 current CRCs in 2017, and repeated the exercise in 2019 with confirmation of salary grid placement and course remission credits from the Faculty Resource Information System, gathered by IT data experts from the OPVPA and the OVPRGS. In addition to compensation and course remissions, the 2019 analysis included CFI funding and professional development allowances, and was supplemented by interview data (see Section 4.c. below) from a majority representative sample of CRCs concerning administrative release and access to grant and research support. Information was correlated to available self-identification data to determine whether CRCs belonging to the four designated groups face barriers in terms of institutional support. Both the 2017 and the 2019 analysis yielded the same general results.

Comparative analysis of salary support was also informed by the ongoing work of the Joint Compensation Equity Exercise Committee (JCEEC), a joint University-Faculty Association (CUFA) initiative to determine whether a gender-based discrepancy exists in the compensation of the University's full-time faculty corps. Preliminary findings of the JCEEC suggest that the University is protected from the large variances that some of its peers have found due to the existence of a salary grid, which limits the discretionary components of compensation and, therefore, potential inequities. The existence of the Salary Review Committee (SARC), which automatically reviews and approves discretionary recruitment and retention supplements, respectively, also provides a safeguard against marked inequities in compensation.

Infrastructure/research support: Concordia provides one three-credit course remission per year for each CRC, without distinction, through the CRC program. The amount of research support through the CRC program funding is also identical for all CRC Tier 2 s ( $\$ 45 \mathrm{~K}$ per year) and for all CRC Tier 1s ( $\$ 90 \mathrm{~K}$ per year), as stipulated in the Procedures. Chairholders also hold uniformly calculated CRC-associated salary stipends, depending on Tier and Faculty affiliation. Allocations for CFI-JELF are generally standardized for CRCs; normally, a Tier 2 receives a \$100K JELF contribution and a Tier 1 receives a $\$ 140 \mathrm{~K}$ JELF contribution. In some cases, due to justified, specific infrastructure requirements of a proposed CRC program, additional contributions were offered; of the current CRC-affiliated JELFs, three of the four awards that were substantially higher than the standard amounts all went to CRCs who are members of at least one of the DGs. These increased allocations were not a result of a targeting policy, but indicate an environment at Concordia in which receiving CFI-JELF allocations appears not to be a current challenge for CRCs who are members of the DGs.

Additional support (cash or in-kind) for research costs, equipment or laboratory renovation, salary supplements, and additional protected time for research is dealt with on a case-by-case basis through the hiring process. This involves the Faculty Administration (Deans and Associate Deans), the heads of academic and (if applicable) research units where the appointments will be held, as well as the OPVPA and the OVPRGS. This process is potentially susceptible to impacts of systemic bias, and of the documented trend of statistically greater reticence of DG than nonDG candidates to "self-promote" during negotiations. For current CRCs, start-up funding above the standardized amount was not common, but when granted, in most, but not all, cases it was granted to men. These exceptions were associated with higher costs of research in certain fields, but it is nevertheless the case that there were almost no women CRCs in departments that grant larger than usual start-ups. Release time from
teaching, professional development allocations, and availability of grant support from the OVPRGS appear to be identical for all current CRCs. All CRCs interviewed reported being released from all or most administrative duties with the exception of hiring committees.

Compensation: Upon identification of the preferred candidate, the collective agreement between CUFA and the University specifies a standardized salary structure that determines the salary offer for the appointment. The salary structure has three components:

- The step in the standardized salary grid upon which candidates are placed based on their education and years of teaching experience (CUFA Appendix 4; Article 39.2, 39.04-08, 40): non-discretionary.
- A standardized market supplement for certain specific departments (CUFA Appendix 3): non-discretionary.
- Individual supplements (CUFA Article 39.01, 39.09, 38.03-04): discretionary, but must be approved by the Salary Review Committee (SARC).

Within each Faculty, agency and Tier, there are too few CRCs to generate statistically significant results about compensation with respect to DGs, given that Concordia currently has only 26 Chairs ( 8 Tier 1 Chairs and 18 Tier 2 Chairs) divided between the three agencies and spread over four Faculties. Our reviews were, therefore, based on a collation of intra-Tier, inter- and intra-Faculty, and inter- and intra-departmental comparisons; and examined salary at hire (and step on the salary grid at which CRCs started). This review showed that, while there are variations among same-Tier Chairholders' salaries between Faculties, in general there is only a narrow range of variation among same-Tier CRCs within each Faculty; and that salary grid appointment was entirely consistent for all CRCs. Intra-Faculty variation appears to have no correlation to being a member of a DG. Inter-Faculty variation, however - as also Tier 1: Tier 2 and senior professor: junior professor - is very much correlated to compensation imbalances with respect to gender (though not at all to visible minority status): Concordia's male CRCs earn more, on average, than Concordia's female CRCs, by a wide margin.

While compensation and research-funding components related to the OVPRGS are all standardized, and the current review shows no significant intra-Faculty compensation discrepancies between CRCs by DG, each Faculty conducts its own negotiations for discretionary stipends and additional internal research funding, which is a potential barrier to compensation equity. Conversely, these negotiations for discretionary stipends and additional research funding are also key to safeguarding equal opportunity for DG CRCs through tailored support, where required.

## Summary of barriers identified in comparative review (Action numbers refer to Section 5, below):

- Negotiations for discretionary stipends may be impacted by unconscious bias as well as reticence to "self-promote" (i.e. assertively negotiate) on the part of members of DGs (see Action 8)
- While University policies appear to have supported pay equity for Chairholders within Departments and Faculties, disparities between Faculties are in some cases substantial, with women underrepresented in those Faculties that offer higher compensation (through market and/or individual supplements). As a result the overall mean and median salary of female Chairholders is significantly lower than that of male Chairholders (see Action 9)


## 4.c. Environmental Scan

The following environmental scan is the result of two parallel analyses carried out to gauge the level of satisfaction with Concordia's workplace environment specifically for Concordia's current CRCs, and for the broader university community.

In order to assess the workplace environment affecting CRCs within the institution, a series of consultations with the current chairs was conducted. All 26 current CRCs received a written survey (Appendix 7) and, following or in lieu of its completion, an invitation to participate in a one-hour interview (questions listed in Appendix 8) conducted by a member of the self-assessment team or a third party consultant (at the discretion of the Chairholder). This exercise resulted in the participation of 23 of the 26 CRCs, for a response rate of $88 \%$. A summary of the survey and interview - which was based, with permission, on the York University CRC Individual Interview Guide—responses, is presented in Appendix 9, while key points are summarized below. For purposes of guarding the confidentiality of interview participants, particularly given the small number of Chairholders in question, no information about specific departments has been included.

In parallel, the self-assessment team worked with the Advisory Group on EDI on a climate assessment of the broader University community. This advisory process was designed in two phases. The first, which involved a broad consultative process with a number of internal and external stakeholders, took place during the winter 2019 semester. After conducting a comprehensive review of the various models of administrative structures and resourcing of EDI initiatives throughout North American universities, a series of community-wide consultations were launched to assess the preoccupations and objectives of University community members. A creative consultant, Percolab, designed a series of consultative activities-which were carried out during the semester. Additionally, more than thirty-nine stakeholder groups were canvassed.

The Advisory Group reviewed and summarized the feedback obtained from seventeen stakeholder groups, four open forums, a series of structured interviews, and ethnographic listening activities. The Advisory Group's report is included as Appendix 10, while a summary of key findings is presented below.

Chairholder Surveys and Interviews - Key Points
Overall, there is a high level of satisfaction among Chairholders with the CRC-related funding that supports reduced teaching loads and substantial research activities, including opportunities for research networking and collaboration. CRCs are also generally satisfied with the collegial and supportive environment provided at the University, although female respondents reported being somewhat less satisfied. One area of strong consensus was around the need for improved mentorship practices, particularly at the Tier 2 level. In general, while most DG and nonDG Chairholders reported feeling well-supported and included by their departments, there was also mention of frustration with what sometimes seems like the opacity of broader University practices with respect to EDI. Some Chairholders (more women than men) reported impacts of
ethics protocol wait-times on their research. Recommendations from Chairholders (both DG and non-DG) on improving search and retention processes included being more proactive in encouraging and seeking out applications from members of the DGs and allocating future chairs to departments that have demonstrated their commitment to inclusive excellence with well-established diversity practices and a record of success in diverse hiring. It was noted in this respect that faculty members of some departments more than others put EDI principles into practice in their own research practices, but that the fruits of these practices - including Indigenous and community-based research - may be undervalued or marginalized. A much fuller summary of all Chairholder responses may be found in Appendix 9.

## Report of the Advisory Group on Equity, Diversity and Inclusion - Key Findings

The Advisory Group on EDI, in collaboration with stakeholders, identified five priority areas to include in the scan conducted in Phase 1 of their work: 1) Policies and Processes; 2) Hiring; 3) Training and Education; 4) Leadership and University Responsibility; and 5) Campus Culture. The findings of the Advisory Group are extremely broad-ranging, and will serve as the groundwork of a separate, University-wide EDI Action Plan during Phase 2 of the Group's mandate (September 2019-May 2020). The Advisory Group's Phase 1 report is presented in Appendix 10. Highlights of EDI progress at Concordia from the Advisory Group's scan include: the value and importance given to diversity on campus; strong representation of women in senior leadership roles at the University; and increased emphasis on encouraging diversity of faculty resulting in research labs also emphasizing collaborative and diverse environments. The scan also showed that present levels of diversity among faculty members do not match the diversity of the student population, and there is insufficient representation among faculty members of women, visible minorities, persons with disabilities, and Indigenous peoples. Insufficient representation of Indigenous students was also noted. Finally a need for Concordia to increase its focus on accessibility and accommodation of persons with a disability among faculty and staff was strongly noted.

## Quantitative Demographic Metrics

There is a significant deficit of quantitative data available on overall faculty diversity, which limits our current capacity to identify all members of DGs within the faculty as a whole. Although Human Resources (HR) has been collecting diversity data on staff members, including faculty, via the employee web portal since 2010 (and by other means before that), data collection is limited to narrow criteria and depends on the voluntary participation of employees. Of 940 current full-time faculty, the overwhelming majority (over $66 \%$ ) either did not participate in the equity survey or specifically declined to respond to questions relating to self-identification as one of the DGs; this reluctance to self-identify represents a barrier to Concordia's EDI efforts.

## Summary of barriers identified in environmental scan (Action numbers refer to Section 5, below):

- Allocation of CRCs susceptible to bias of exclusive research excellence (Action 2)
- Challenges of sub-optimal working environment related to institutional-level processes (See Action 12)
- Limited comprehension by CRCs of how to integrate EDI in their research programs (See Action 13)
- Mentorship is lacking, unstructured, and suboptimal for CRCs (See Action 14)
- Insufficient faculty representation and inclusion of women, visible minorities, and persons with a disability (See Action 10)
- Insufficient representation and inclusion of Indigenous scholars (See Action 15)
- Insufficient representation and inclusion of Indigenous graduate students (See Action 16) ${ }^{3}$
- Marginalization of Indigenous-led and community-based research, and need for greater engagement of Indigenous peoples and Indigenous communities more broadly (See Action 17)
- Process of research ethics protocols seems to disproportionately delay or divert research in fields in which DG representation is typically higher than non-DG representation (See Action 18)
- Limited access and accommodation of the needs of disabled faculty and staff members (See Action 19)

[^5]
## 5. Actions and Timelines

The following Actions and Timelines have been developed in response to the barriers listed above. Each action responds to an objective identified as necessary to overcoming or preventing a specific barrier. In most cases, multiple offices are or will be implicated in bringing an Action to fruition; we provide here the Office/s that is/are ultimately responsible for each individual Action.

## Acronyms:

CDSWG: Critical Disabilities Studies Working Group
FRC: Faculty Research Committee
JEEC: Joint Employment Equity Committee
OCE: Office of Community Engagement
OPVPA: Office of the Provost and Vice-president, Academic
OVPRGS: Office of the Vice-president, Research and Graduate Studies
OVPS: Office of the Vice-president, Services
SARC: Salary Review Committee
Special Advisor AIK: Special Advisor to the Provost on Advancing Indigenous Knowledges
URC: University Research Committee

While assessing potential actions that could be taken in order to meet the CRC Program's targets, the University considered limiting applications for certain positions to underrepresented groups. However, after thoroughly verifying the legality of such action, which includes verification with the Commission des droits de la personne et des droits de la jeunesse (Québec's Human Rights Commission), the University was advised that such restrictions contained in postings for any position would not comply with provincial human rights legislation. In light of the foregoing, the University believes that the actions put forth in the present Action Plan employ the best practices, strategies and tools at the University's disposal taking into account the legal framework to which it must comply.

| \# | Stage | Barrier | Objectives | Actions | Indicators | Timeline | Responsible |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Organizational allocation and planning (University-wide, impacts CRCs) | - Since the process of CRC allocation requires advocacy on behalf of the departments, it is susceptible to bias. Faculty members from designated groups may be | -To collect robust, accurate demographic data regarding representation of DGs, as well as people of minority sexual orientation and gender identity, for current faculty members of | - New demographic surveys for all current faculty and faculty applicants have been designed and will be launched - Intersectional comparative data analysis will be conducted annually | - Availability of accurate data on the representation of DGs and other groups; | - Surveys to be launched Fall 2019, with an expected rolling duration of | OPVPA |


|  |  | less likely to advocate for their research areas-which may additionally be regarded as less of a priority for the University research community. | Concordia and faculty applicant pools. This data provides the basis for Article 12.01e of the CUFA Collection Agreement to potentially be invoked (Section 1). <br> -To attain capacity for intersectional comparative data analysis, and to begin upstream allocation process based on underrepresentation within certain disciplines. Data on the distribution of faculty members from underrepresented groups within disciplines and research areas can be used to guide strategic planning and increase the likelihood of equitable hiring |  | - Capacity to conduct intersectional comparative data analysis on an ongoing interannual basis | approximately one year. <br> - Annual reporting of trends |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Organizational allocation and planning (CRC-specific) | Allocation of CRCs susceptible to bias of exclusive research excellence. | -To ensure that parameters and criteria of inclusive excellence are applied from the earliest stages of planning and allocation | - OVPRGS will evaluate other universities' approaches to reconfiguring evaluation of research excellence <br> - OVPRGS will develop a document of guiding principles for configuring new parameters and criteria of research excellence, for use by Departments <br> - Individual Departments will, in consultation with the OVPRGS, and EDI team in the OPVPA, produce parameters and criteria tailored to their specific fields | - Evaluation of external approaches <br> - Guiding document of principles <br> - Departmental elaborations of "inclusive excellence", by every Department at Concordia <br> - Recognition and promotion of nonconventional research accomplishments | - Evaluation of external approaches: March 2020 <br> - Guiding document of principles: June 2020 <br> - Departmental elaboration of "inclusive excellence": 2020-21 academic year | OVPRGS, OPVPA, Faculties, and Departments |
| 3 | Organizational allocation and planning <br> (CRC-specific) | As with all research chairs, the stated criteria for allocation of available CRCs are research excellence and fit with the University's Strategic Research Plan. As | -To ensure that EDI considerations are fully applied from the earliest stages of CRC planning and allocation | - Mandatory training for FRC and URC members involved in CRC allocations, and a greater emphasis on EDI in the assessment of LOIs. <br> - Use data on the representation of DGs within disciplines and research areas, to guide | - All FRC and URC members trained in EDI considerations <br> - Increased representation of | Mandatory EDI and unconscious bias implemented for 2020 CRC | OPVPA |


|  |  | such, the allocation of chairs is susceptible to systemic bias in the resourcing and advocacy bias in the application pool. |  | strategic planning and increase the likelihood of equitable hiring | DGs in CRC allocations | recruitments, <br> April 2020 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | Search Committee (CRC-specific) | Some departments and units have insufficient budgets to advertise within disciplinespecific publications; active recruitment efforts (if not undertaken by colleagues) fall on overburdened departmental administrative staff | -To implement and normalize active recruitment efforts for diverse and equitable hiring. | - After the 2019-2020 recruitment cycle, conduct an assessment of the impact of the use of active recruitment efforts on the size and diversity of applicant pools (using applicant survey data) to determine efficacy <br> - Assess the creation of discretionary recruitment funds to supplement regular recruitment funding as a means of increasing diversity of applicant pool | - An increase in the diversity and equitability of the applicant pool | Assessment to be conducted at the end of the 2019-2020 CRC recruitment cycle | OVPRGS, OPVPA |
| 5 | Hiring Committee (CRC-specific) | Uneven levels of awareness and commitment to EDI across the university | - To sensitize hiring committees to the importance of unconscious bias, EDI, and inclusive excellence- | - Expand mandatory EDI and unconscious bias training requirements to DPCs <br> - Develop and embed EDI training resources in the onboarding of new faculty members and offer standing (i.e., not committee-specific) EDI training sessions to ensure broad exposure to concepts and avoid over dependence on EDI staff. | - Number of faculty members who attend EDI and unconscious bias training workshops | January 2020, and continuing | OPVPA |
| 6 | Interview <br> (University-wide, impacts CRCs) | The formality, inflexibility and adversarial nature of conventional interview processes can discourage participation from certain candidates | - To facilitate a welcoming interview process that is sensitive to the unique challenges of candidates from diverse backgrounds and make appropriate accommodations for them | - More work is needed to make the process more accessible to persons with invisible disabilities, <br> - Avail of survey data to determine the percentage of faculty members and faculty applicants who identify as persons with invisible disabilities <br> - Gather testimonies about their experience with academic recruitment processes and put forward recommendations to support a more positive interview experience | - Increase in number of DGs who accept offers of hire | Assessment to be conducted at the end of the 2019-2020 recruitment cycle | OPVPA |
| 7 | Hiring Decisions (University-wide, impacts CRCs) | The primacy granted to collegial decision-making in the recruitment process means there is little room for formal interventions on EDI grounds prior to the formulation of a hiring | - To sensitize hiring committees to the importance of EDI at earlier stage in hiring discussions and decisions | - In collaboration with CUFA, the University is investigating an expanded role for the JEEC. Rather than a committee of three faculty members who would review hiring decisions at the end of the process, a larger committee of specially-trained faculty members would be | -Letter of agreement signed between CUFA and the University | Letter signed during 2021 collective agreement negotiations | OPVPA; CUFA |


|  |  | recommendation, when doing so might be more formative. This makes interventions on EDI grounds (i.e., the rejection, by the Dean or OPVPA) more drastic-and makes them far more costly in terms of delays and lost candidates-risking resentment and adversity between colleagues and senior administration |  | cross-appointed to serve as observing equity champions throughout the entire DHC process. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | Hiring Decisions <br> (University-wide, impacts CRCs) | Negotiations for discretionary stipends may be impacted by unconscious bias as well as reticence to "self-promote" (i.e. assertively negotiate) on the part of members of underrepresented groups | -To raise awareness of the importance of compensation equity and identify areas to monitor in this respect | - Guidelines are currently being reviewed and revised by the Salary Review Committee (SARC) to ensure that all discretionary stipends, for all full-time faculty, are allocated according to equity principles. | -SARC guidelines to be drafted and ratified as amendment to CUFA Agreement | Amendment ratification Fall 2021 | OPVPA; <br> Concordia <br> University <br> Faculty <br> Association |
| 9 | Hiring Decisions <br> (University-wide, impacts CRCs) | While University policies appear to have supported pay equity for Chairholders within Departments and Faculties, disparities between Faculties are in some cases substantial, with women underrepresented in those Faculties that offer higher compensation (through market and/or individual supplements). As a result the overall mean and median salary of female Chairholders is significantly lower than that of male Chairholders | -To obtain detailed knowledge of the extent of compensation disparities; and track and maintain compensation equity for all full-time faculty | - A joint university-CUFA committee is conducting a gender-based compensation equity analysis for Concordia faculty as a whole | - Comprehensive data on compensation equity supporting greater pay equity across all Chairholders | General findings are anticipated Fall 2020, with comprehensive results by Fall 2021. | OPVPA; <br> Concordia <br> University <br> Faculty <br> Association |
| 10 | Retention and Promotion (CRC-specific) | Faculty members from DGs may not be in a position to entertain competing offers, and may be less likely to formulate retention | - To solicit feedback from CRCs on their overall experience as a CRC, including their input on EDI considerations <br> - To provide opportunity for CRCs who consider leaving | - Conduct exit interviews at the end of each CRC's term | - Exit interviews for all CRCs who have completed their terms | December 2020 (next anticipated CRC second term | OVPRGS |


|  |  | arguments to their Chairs and Deans | before the end of their term to alert Senior Administration to factors contributing to their decision to stay/leave |  |  | conclusion) and continuing |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | Self-identification (CRC-specific) | - -Insufficient faculty representation and inclusion of women, visible minorities, persons with disabilities, and Indigenous peoples <br> - Québec labour law has limited the use of data obtained through applicant survey, limiting its application to an assessment of the diversity of the pool | - To identify ways to facilitate self-disclosure of DGs within the applicant pool <br> - To obtain robust demographic information about the full spectrum of diversity within the faculty, and the extent of underrepresentation of DGs and LGBTQ2+ | - In the 2020-2021 application cycle, applicants will be able to self-disclose to hiring committees by way of an applicant survey <br> - Working with the Commission des droits de la personne and the Réseau interuniversitaire québécois pour l'équité, la diversité et I'inclusion (RIQEDI) to obtain a sector-specific dispensation to facilitate self-disclosure and an exemption for the use of self-identification data in faculty recruitment <br> - Equity census (see Section 4.a "Selfidentification", above) | - An increase in the self-disclosure of DGs among CRC applicants <br> - Maximal number of participants in equity census | Implemented <br> for the 2020- <br> 2021 <br> application <br> cycle <br> Equity census: <br> Winter 2020 | OPVPA |
| 12 | Environment <br> (CRC-specific) | Challenges of sub-optimal working environment related to institutional-level processes | -To create equitable, inclusive, and productive working conditions for CRCs | - Annual survey for all current CRCs, with an invitation for an in-person interview with OVPRGS staff | -Annual surveys and interviews identifying particular obstacles/barriers experienced by CRCs | April 20 -June <br> 30, 2020, and <br> annually <br> (aligned with annual CRC reports) | OVPRGS |
| 13 | Environment (CRC-specific) | Limited comprehension by CRCs of how to integrate EDI in their research program | - To ensure that researchers fully understand how EDI considerations should be integrated in their research programs | - Train CRCs and their respective teams in EDI <br> - Mandate EDI reporting for CRC research programs | - Integration of EDI considerations into research program - EDI considerations addressed in CRC research reporting | Ongoing | OPVPA and OVPRGS |
| 14 | Environment (CRC-specific) | Mentorship is lacking, unstructured, and suboptimal for CRCs | - To ensure that mentorship is available and responsive to the unique experiences and needs of CRCs, and particularly members of DGs | - Formalize mentorship arrangements for incoming CRCs; upon hire of a new CRC, the OVPRGS will convene a meeting with the CRC, the department Chair, and the Faculty Associate Dean, Research, to clarify expectations, processes, timelines, resources, and mentoring arrangements <br> -In collaboration with the CRC, one or more mentors will be assigned to the CRC - from the pool of active 2nd term CRCs from the same | - The assignment of one or more mentors to each CRC with opportunities (through the annual surveys) for reporting on the effectiveness of the mentorships | Formal implementatio n to coincide with next CRC hires, April 2020, | OVPRGS (in collaboration with Faculties and Departments). |


|  |  |  |  | Tier, former CRCs, other Concordia Research Chairs, and tenured departmental faculty |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 | Environment (University-wide, impacts CRCs) | Insufficient representation and inclusion of Indigenous Peoples and communities within the university (in addition to the CRC program) | -To take concrete steps towards decolonizing and Indigenizing the university, including recalibrating and transforming the University's internal and external relationships with Indigenous Peoples and communities | - Implement Concordia's 38-point Indigenous Directions Action Plan (IDAP) including enriching the University's capacity and support for Indigenous-led and community-based research | Multiple actions, including: <br> - The establishment of an Indigenous Research Centre <br> - Public recognition and documentation of the research efforts of Indigenous faculty and students using the University's communications platforms. | Spring 2019- <br> Spring 2022 | OPVPA and OVPRGS |
| 16 | Environment <br> (University-wide, impacts CRCs) <br> From IDAP <br> Recommended Action 6.2 | Insufficient representation and inclusion of Indigenous graduate students | -To recruit, engage and hire exceptional Indigenous graduate students to work on innovative Indigenous research | - Create a 5 -year fund ( $\$ 300,000$ in 2018-19; $\$ 500,000$ in 2019-20) for attractive entrance scholarship for prospective Indigenous graduate students <br> - Various actions tied to IDAP that would enhance the inclusion of Indigenous graduate students | - Increased number of Indigenous graduate students - Increased inclusion of Indigenous graduate students as reflected in their higher retention | January 2019, and ongoing | Special Advisor to the Provost on Advancing Indigenous Knowledges (AIK); OPVPA; OVPRGS; Library; Faculty Deans; |
| 17 | Environment <br> (University-wide, impacts CRCs) <br> From IDAP <br> Recommended Action 6.4 | Marginalization of Indigenous-led and community-based research and need for greater engagement of Indigenous peoples and Indigenous communities more broadly | - To support Indigenous faculty and graduate students to undertake meaningful research in partnership with Indigenous communities. <br> - To create strategic plans that engage Indigenous students in Indigenous-led research projects that respect and benefit Indigenous communities. | - Create a pool of matching funds that enable faculty members to involve Indigenous students in meaningful research opportunities - Develop new ways to engage students in innovative Indigenous-led research. | - Increased number of Indigenous-led and communitybased research projects <br> - Indigenous-led and communitybased research funded and celebrated | Spring 2019, and ongoing | OVPRGS; School of Graduate Studies; Departments and Faculties; Special Advisor AIK, OCE |


| 18 | Environment (University-wide, impacts CRCs) | Approval process for research ethics seems to disproportionately delay or impact research in fields (e.g. health sciences) with higher DG representation (see Appendix 11 | - To expedite ethics approval while preserving the rigor and thoroughness of review process | - Research development advisors to communicate with researchers about requirements, peak periods, and wait times for ethics approvals <br> - Refresher training sessions to be conducted by the Ethics Unit within OVPRGS to clarify ethics requirements <br> - Mandatory completion by all researchers of the TCPS Online Tutorial as a requirement prior to a first ethics submission currently under consideration <br> - Build robust demographic knowledge about researchers requiring ethics protocols | - Reduction in number of unnecessary assessments <br> - Reduction in review period and wait times for protocol approvals <br> - Comprehensive data on ethics protocols with respect to DGs | Communicatio ns <br> improvement: <br> November <br> 2019, and <br> continuing <br> - Training <br> sessions: <br> January 2020, <br> and annually <br> thereafter <br> - TCPS <br> assessment: <br> January 2020 - <br> June 2020 <br> - Data <br> collection <br> method <br> development: <br> December <br> 2019 | OVPRGS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | Environment (University-wide, impacts CRCs) | Limited access and accommodation of the needs of disabled faculty and staff members | - To embed accessibility considerations in University processes, and facilitate communication between faculty/staff with disabilities and University administration <br> - Involve federal granting agencies, and other federal and provincial government stakeholders, in investing in the financial costs of accessibility and accommodation <br> - Attain specific, thorough knowledge of extent and priority of accessibility challenges | - Establish an accessibility contact for faculty and staff. <br> - Form an inter-university forum for potential negotiations with provincial and federal governments to financially support the substantial investment required to make Concordia - and universities in general genuinely accessible. Also with Tri-council to include accessibility-related funds attached to - but over and above - all current research funding opportunities offered through NSERC, CIHR, and SSHRC. CDSWG will take a lead role. <br> - Concordia physical accessibility audit: phase 2 | - Contact identified <br> - Building by building analysis of accessibility challenges <br> - Priority ranking of accessibility projects | - Accessibility Officer: <br> October 31, 2019 <br> - Working Group: January 2020-June 2020 | OVPRGS, OPVPA, and OVPS |

## 6. Management of Canada Research Chair Positions

## 6.a.i. Recruitment Policies and Procedures

Since Concordia uses its CRC allocations exclusively to recruit new faculty members, internal candidates are not eligible to be nominated for a CRC. The allocation process, which normally begins with the University having (or anticipating having) one or more vacant CRC positions within the next 12 to 24 months is as follows:

- A call for letters of intent (LOIs) is issued by the VPRGS to all Deans for distribution to the heads of academic units, and to Universityrecognized research units.
- The call (see example in Appendix 1) describes the CRC program, lists which chair allocations are vacant, and details the LOI adjudication process, required documents and deadlines to submit to the University Research Committee (URC). The call refers to the appropriate University policies, procedures, and collective agreements, emphasizes the importance of Concordia's strategic plan and of the CRC-EDI Action Plan, and specifically states the importance and necessity of addressing equity for, and diverse candidature of, the four DGs (women, persons with a disability, Indigenous Peoples, and visible minorities).
- Further to the call, interested academic and research units then submit LOIs to their Faculty Research Committee (FRC), which then reviews and selects which of these letters should be forwarded to the URC.
- The URC then reviews these LOIs and decides on the allocation(s) within the University.

Given that new CRCs are always new hires at Concordia, the general hiring procedures for faculty appointments, governed by CUFA, apply as well (CUFA 12.08.g.), including:
[T]he Parties agree to encourage an increase in the proportion of members of under-represented designated groups as defined in the relevant legislation, to improve their employment status, and to ensure their full participation in the University community. The Parties therefore endorse the principle of equity in employment and agree to cooperate in the identification and removal of all barriers to the recruitment, selection, hiring, retention, and promotion of these designated groups... (CUFA 12.01.c.)

## 6.a.ii. Safeguards for Open and Transparent Recruitment Practices

Recent initiatives include the development of the Equity, Diversity and Inclusion Action Plan for faculty hiring, retention and development begun in September 2018, and finalized in July 2019 (see Appendix 12). The Plan's objectives include: implementing evidence-based EDI best practices for the recruitment and retention of faculty and academic administrators; developing, implementing, and regularly adapting surveys for Concordia's professorial corps and pool of applicants to faculty positions about their membership from underrepresented groups with the aim of
establishing minimum representation targets for all groups within the professorial corps, and timelines to meet them; and raising awareness within the university community of the importance of diversity and inclusion for the success of our mission and of the role that all community members have in supporting it.

This University-wide plan is supplemented by the specifically CRC-focused Concordia Canada Research Chair Hiring Guidelines, finalized in March 2019 (see Appendix 1).

In all calls for CRC LOIs since 2018, the OVPRGS has encouraged units submitting LOIs to consider how a pool of qualified candidates, including the DGs, will be attracted. Further, in the most recent call, there was an increased emphasis on the importance of active recruitment of DGs, including a mandatory meeting of hiring committees with OVPRGS and OPVPA staff to fully understand the relevant CRC guidelines, and to receive EDI and unconscious bias training. As noted above, EDI and unconscious bias training is mandatory for all members of CRC hiring committees (since 2018), and for all full-time faculty hiring committees at Concordia (since 2019). Scrupulous record-keeping of the of the entire recruitment process, beginning with the call for LOIs, is also mandatory for CRC hiring, and includes records of the flexible but objective hiring criteria, members of the hiring committee, EDI training, job posting, equity advisor reviews, strategies used to attract a diverse pool of candidates, applicant data collection efforts, assessments of merit, and decisions. With the new CRC Hiring Guidelines (March 2019), the OPVPA and the OVPRGS have mandated that these records be kept by departments involved in a clear and systematic fashion, and available to be communicated to the CRC Secretariat within 48 hours of receiving a request for information.

## 6.b. Management of Allocations

Concordia University's allocation of Canada Research Chairs is managed by the OVPRGS. The internal allocation process is governed by the University Senate-approved Policy on Research Chairs (VPRGS-7) and its related Procedures and Guidelines for Research Chairs. The allocation process also involves the OPVPA, the URC, the FRCs of Concordia's four Faculties and their Deans and Associate Deans, Research, and the heads of all academic and research units within the University.

## 6.c. and 6.d. Process for Allocating Chairs to Department/Faculty and Using the Corridor of Flexibility

For the most recent CRC allocation exercise (six new Chairs and one vacant), the OVPRGS implemented a novel approach to the call for LOIs. Having been granted unlimited flex moves by the CRCP for these Chairs, it was decided to leave the call open to all Tri-Agency areas, and first evaluate the LOIs submitted before using the flex moves to adjust the available allocations to the most promising, EDI-designed, LOIs. This allowed us to achieve a more ambitious goal than we might have otherwise, potentially overcoming a significant barrier with respect to equity and fields of research: more than simply meeting or exceeding DG targets for CRC, Concordia is on track to do so while at the same time establishing CRCs in STEM fields, with research programs specifically designed to attract a highly diverse pool of applicants. Concordia used those flex-moves to also have all vacant chairs be Tier 2, in order to ensure that we were accessing the considerably more diverse recent-PhD applicant pools. In the context of Québec legislation, which does not permit targeted hiring to the exclusion of non-designated groups (institutions may make significant and targeted inclusionary, but no exclusionary, efforts - see Section 2.e., below), accessing and attracting
these more diverse pools seemed vital to the challenge of meeting the short-term targets for DGs set by the CRC, in both a fruitful and a legal manner.

## 6.e. Renewal Criteria

The Policy on Research Chairs and its related Procedures_describe the process for review of CRCs, which includes annual reports, a mid-term review and a renewal evaluation. The criteria used for the renewal evaluation of Tier 1 and Tier 2 Chairs are provided to incoming CRCs when they are hired (the grids may be found in Appendix 13). The relevant FRC (or a subset of the committee) conducts the review, and the process involves the Chairholder submitting a report of activities along with a presentation to the Committee (including a Q\&A). The FRC then meets in camera to assess the Chairholder's dossier and to make a recommendation (to renew or not to renew) to the URC. The URC will then review the recommendation and dossier, incorporating in its review the elements relevant to the overall University context and the Equity, Diversity and Inclusion Action Plan to make its decision on whether to allow the application for renewal of the chair to the CRC Program. Should the URC not authorize the renewal of a Chair, the position would revert to the pool and be subject to a new allocation process as described above. The same practice has also been applied when a CRC renewal application submitted to the CRC program was not awarded, although this is not currently specified in the Policy and related Procedures.

## 6.f. Advancement Criteria

Because Concordia always uses its CRC allocations to recruit new faculty members, and not for internal promotion, a Tier 2 CRC cannot be advanced to Tier 1.

## 6.g. Criteria for Phase-outs

Concordia has only lost Chairs three times through re-allocation exercises. However, in all three instances, there was a vacant/unused Chair that could be targeted without having to phase out an existing Chairholder, so these re-allocation decisions were easily made. The OVPRGS is addressing Concordia's current lack of a Policy-defined plan for re-allocation without a vacancy during its revision of the Policy on Research Chairs and the related Procedures. The proposed criteria for phase-out in the new policy (subject to further review, and approval by Senate) are:

- Availability of an unallocated Chair allocation;
- Possibility to use "flex moves" as defined by the CRC Program Secretariat;
- Chairholder term and proximity of term end date;
- Impact on research activity, in alignment with the Concordia Strategic Research Plan;
- Impact on Concordia's CRC EDI targets; and
- Economic impact on Department, Faculty and University.

As a first layer of review, and in consultation with the CRC Secretariat, the URC would review its current CRC allocation to determine if:

1) With priority, there is an unallocated vacant chair allocation available to designate as the allocation to return. The use of "flex moves" as defined by the CRCP Secretariat may be considered by the URC to designate a vacant chair of the same Tier but from a different agency, or to group/split vacant chairs to meet the requirements of the CRC re-allocation process.
2) Should no vacant chair be available for designation as the allocation to return, to identify an active chair of the same Agency and Tier that is nearing its end date, and which could be supported by the phase out process through which partial CRC funding is available. If applicable, the use of 'flex moves' may be considered, as above.

Should the first two options not be feasible, the URC would review current active chairs and make a decision to end a chair term early. Relevant FRCs would be asked to review the current list of active chairs and recommend to the URC which chair(s) should be phased out as per the CRC program request. The URC would use the same criteria it uses to renew CRCs to make its decision, but would also consider the impact on Concordia's CRC EDI targets.

## 6.h. Process for Determining Level of Support Provided to Chairholders

See Sections 4.a. "Employment Systems Review" and 4.b. "Comparative Review", above.
6.i. Safeguards to Ensure Members of FDGs Are Not Disadvantaged in Negotiations re: Level of Support

See Section 4.b. "Comparative Review", above.
6.j. and 6.k. Ensuring Career Leaves Do Not Disadvantage Applicants to Chair Positions and Training and Development Activities

As of September 2018, the CRC Secretariat instituted comprehensive new institutional requirements for recruiting and nominating Canada Research Chairs (http://www.chairs-chaires.gc.ca/program-programme/equity-equite/recruitment-recrutement-eng.aspx ). Concordia's Vice President, Research and Graduate Studies, is responsible for ensuring compliance with these requirements; and Concordia's CRC Hiring Guidelines mandate that departments involved in CRC recruitment efforts must describe (and keep careful record of) the measures used to ensure that individuals who experienced career interruptions, or who required accommodation during the hiring and nomination process, were not disadvantaged during that process. The Senior Lead, Equity and Diversity, from the OPVPA, organizes and provides EDI and unconscious bias training, and is available as a resource person for committees. In addition, CUFA mandates that every hiring dossier be reviewed by the Joint Employment Equity Committee (JEEC, CUFA Article 11.15), whose purpose is to ensure that fair hiring practices are observed with respect to members of designated groups.

Additional best practices have been incorporated into the training sessions presented by the Senior Lead, Equity and Diversity, and at the end of each hiring cycle, representatives of the OVPRGS, OPVPA, and representatives from the hiring committees, who are also members of the DGs,
will debrief and prepare revised sets of best practices for use in the next hiring cycle. Some examples of practices that have been implemented in the allocation cycle currently under way include:

- A toolkit provided by the OPVPA for committees to reference for guidance in: creating job descriptions that accurately identify the necessary skills, abilities, experience, and qualities of candidates; how to evaluate applications that include nontraditional components (with a list of contacts on Concordia's EDI team, as well as in the Office of Research, who can provide further advice); Concordia's equity and diversity targets and gaps, EDI commitment, and action plan; and formulating provisions to ensure the decision-making process is fair and $100 \%$ transparent.
- Substantial communication between departmental committees creating LOIs and the EDI team, and substantial assistance provided for the former by the latter (see Appendix 1)
- The opportunity for potential candidates to submit a full career or extended CV in cases where they have had career interruptions.
- A hiring committee budget that supports the travel costs of potential DG candidates (particularly Indigenous candidates) so that they can attend an interview at Concordia and experience and evaluate the University's environment.
- Provisions during search processes for anyone requesting accommodation, clearly advertised both in job ads and invitations for interviews.
- Opportunities for each candidate to meet with diverse members of the Concordia community. This includes but is not limited to a diversity of representation on each CRC position's departmental hiring committee (CUFA 11.01; Concordia CRC - Hiring Guidelines, pp. 4-5).


## 7. Collection of Equity and Diversity Data

## 7.a.i. Collecting and Protecting Self-identification Data from Applicants

CRC applicants are invited to complete a self-identification survey in which they may identify as a member of one or more DGs. In the interest of broadening self-identification categories and information and permitting intersectional analysis, the OPVPA has added an opportunity to selfidentify as a person of minority sexual orientation or gender identity (see Appendix 1). Survey responses remain confidential, and no identifying information about candidates is shared with the hiring committees (applicants are invited to self-identify directly with the hiring committee should they so desire). The complete data set is accessible to a single individual from the University's Instructional and Information Technology Services (IITS). This individual removes all personally identifiable information from the data set, including any and all nominal information and the email address used to complete the survey. Only aggregate data is available for statistical analyses.

## 7.a.ii. Collecting and Protecting Self-identification Data from Chairholders

The OVPRGS has conducted a Chairholder survey, encouraging DG Chairholders to self-identify, and will protect the survey responses as strictly confidential. The surveys are sent and stored on a secure server, to which only the OVPRGS team working on the Action Plan have access. Interviews were conducted in confidence, and transcriptions are stored on the same secure server. All personnel with access to the responses
and interview transcriptions have an obligation to respect confidentiality by virtue of their employment relationship with the University. Following a six-month retention period, all records of the survey responses and interview transcriptions will be destroyed.

## 7.b. Encouraging Individuals to Self-identify

The OPVPA currently runs an applicant survey as a matter of course for all full-time faculty positions. In the winter 2020 semester, an equity census of all full-time faculty members will be conducted.

In order to combat the low response rate that habitually plagues these initiatives, we will conduct this equity census using a paper survey. The survey will be conducted in person, with an OPVPA EDI representative present, by visiting each of the department councils of the University. As such, professionals will be on hand to answer any and all questions-and address any concerns-related to participation in the survey. Once completed, paper surveys will be placed in sealed envelopes and run through a Scantron machine. The data will be anonymized, with a censusspecific unique identifier used instead of identification numbers or other identifiable information.

It is hoped that this paper-based, in-person, approach-although much more labour intensive than an online equity census-will encourage participation and yield a response rate that supports statistical significance.

## 7.c. Example of Concordia's Self-identification Form

See Appendix 1.

## 8. Retention, Inclusivity and Resources

## 8.a.i. Providing a Supportive and Inclusive Workplace

See Background and Context (Section 1, above) and Procedures, Policies, and Supports (Section 8.b, below) for extensive discussion of initiatives in place and development to provide a supportive and inclusive workplace for all Chairholders, with specific focus on supports for and inclusion of members of designated groups.

In addition to these, as Concordia faculty members, all Chairholders receive a competitive compensation and benefits package covering health insurance, pension, and retirement benefits, paid parental leave, and savings programs. In the last ten years, no Chairholder has resigned their post before their CRC term(s) ended, nor, with the exception of those who retired, resigned from Concordia after their term as Chairholder was completed.

## 8.a.ii. Monitoring Support and Inclusivity

Concordia's efforts to obtain data on the climate of equity and diversity in the University as a whole (see Section 6, above) are directed toward monitoring the barriers to inclusivity existing (or that might emerge) in the overall institutional climate. Likewise, Concordia's EDI Advisory Group has regularly - and in multiple, creative, and open-ended ways - solicited the broadest possible consultation from students, staff, and faculty (including CRCs), with respect to the levels, kinds, and variations of inclusivity experienced by individuals within the community and subcommunities at Concordia. As an ongoing monitoring strategy, the OVPRGS's Chairholder survey and interview process undertaken for this Action Plan will be repeated annually.

All Chairholders' annual reports to the CRCP are also reviewed by the OVPRGS, and carefully monitored for both positive and negative experiences identified by Chairholders with respect to their lived experience of inclusion or exclusion within their environments. The Administrator, Strategic and Institutional Programs and Infrastructure, in the OVPRGS oversees all post-hire CRC arrangements, meets personally with each incoming Chairholder, and is available to help Chairholders resolve any challenges they might face during their transitions into their terms.

Both the Office of Rights and Responsibilities and the EDI Team in the OPVPA also receive, monitor, and respond to issues surrounding inclusivity and support that are raised by any member of the Concordia community, including CRCs. Each of these offices is mandated to investigate concerns in this respect, to coordinate appropriate and targeted responses, and to flag more general issues and trends of concern for broader actions.

## 8.b. Retention of Individuals from the Four DGs: Procedures, Policies and Supports

- Tenure criteria must be clearly articulated and applied by each Department Tenure Committee (DTC), and the University Appeals Board (UAB) may be petitioned to hear an appeal of a tenure decision (CUFA Article 21). The UAB is composed of members from each Faculty as well as the Library (Article 11).
- Several types of leave are available to faculty members, including compassionate leave (Article 33); maternity leave, paternity leave, and parental leave (Article 35); and unpaid salary leave (Article 32).
- Reduced-time appointments for up to two years (up to three times) are available to all tenured faculty members (Article 25), with no tenure interruption entailed (Article 18). Compassionate reduced-time appointments (Article 33) and parental reduced-time appointments (which extend maternity/paternity leave for up to 30 months - Article 35) are available to all faculty members, with or without tenure. The collective agreement guarantees the entitlement to return to work on a full-time basis following reduced-time appointments.
- Tenure candidates may request a deferral, for a variety of reasons, of mandatory tenure review ("tenure clock-stopping"). In the case of a request to defer tenure review based on maternity, paternity, or parental leave, or on compassionate leave over 45 days, the deferral request is automatically granted (Article 18).
- Spousal appointments are directly addressed in the collective agreement (Article 12)
- Concordia has two subsidized daycare facilities available for very young children of faculty, staff, and students, and offers free shuttle bus service (adapted for persons with disabilities) between its two campuses for faculty, staff, and students, and children travelling with them.
- Spouses and children of eligible faculty and staff receive tuition waivers for Concordia credit courses.
- Subject to a satisfactory review of first-term activities and continued eligibility, all Chairholders may apply for renewal of either a Tier 1 or a Tier 2 CRC during the penultimate year of their first term (see Section 2.e. of this Plan).
- The Concordia University Research Chairs program is available to internal candidates, including CRCs who have reached their limit for renewals or who are phased out, and is a mechanism that helps retain excellent researchers.
- In September 2019, EDI and unconscious bias training was conducted for research administrators working in the OVPRGS/Office of Research as part of ongoing efforts to ensure that researchers are informed and supported in their efforts to address EDI within their research programs.


## 8.c. Managing Complaints from Chairholders/Faculty Related to Equity

Each step in the process of recruitment and hiring of CRCs is monitored and approved by the OVPRGS, with careful attention to review of EDI fulfillment before proceeding. Specific equity complaints, both during recruitment and post-hire, may be directed to the Vice-Provost, Faculty Development and Inclusion (see Section 8.d. and 8.e.ii., below). Because responsibility for CRC recruitment and hiring is shared between the OVPRGS and the OPVPA at Concordia, managing specific complaints involves both offices.

Additionally, CUFA mandates a standing Joint Employment Equity Committee, whose purpose is "to ensure that fair hiring practices are observed with respect to members of designated groups, including women, visible minorities, persons with disabilities and Indigenous persons" (CUFA Article 11.02.a). CUFA also mandates a Joint Grievance Committee (JGC) for the purpose of addressing and redressing equity complaints from full-time faculty members (CUFA Articles 11.03 and 22). The JGC specifically hears grievances including, but not limited to, "reappointment, tenure, promotion, and denial of career development increment or step increase [...] if the subject matter of the dispute concerns academic freedom (Article 6) or discrimination (Article 7)" (CUFA Article 22.b.i.).

## 8.d. Senior Personnel Responsible for Addressing Equity Concerns and Complaints: Contact Information

Vice-Provost, Faculty Development and Inclusion:
Dr. Nadia Hardy
Office of the Provost and Vice-President, Academic
Tel: 514-848-2424, ext. 4323

Fax: 514-848-8766
Email: vpfdi@concordia.ca
1455 De Maisonneuve Blvd. W.
Montreal, Quebec, Canada
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Manager, Academic Leadership and Inclusion:
Téo L. Blackburn
Office of the Provost and Vice-President, Academic
Tel: 514-848-2424, ext. 7704
Fax: $514-848-8766$
Email: manager.ali@concordia.ca
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Montreal, Quebec, Canada
H3G 1M8

## 8.e.i. Monitoring and Addressing Concerns and Complaints

There is more than one avenue available to Chairholders/faculty who may wish to lodge an equity-related complaint. Two primary options are the University's Office of Rights and Responsibilities, which administers the Code of Rights and Responsibilities, or the Ombuds Office, which is mandated to assist in informal resolutions of concerns and complaints related to the application of all University policies, rules, and procedures. The Code of Rights and Responsibilities is Concordia's policy on behaviour, and provides a mechanism for members (faculty, staff, and students) to file complaints related to discrimination and/or harassment based on the grounds specified in the Québec Charter of Human Rights and Freedoms (race, religion, gender identity, etc.). It also specifies the procedures for resolving these complaints (e.g. Section IX). The Ombuds Office conducts independent and objective inquiries into complaints that have already exhausted the usual avenues for grievance and appeals. Following the inquiry, the Ombudsperson will recommend solutions to help resolve concerns and complaints as well as recommend improvements to university policies, rules, and procedures that are unclear or unfair.

In addition, all CRCs file annual reports, which are reviewed by the OVPRGS and sent to the CRCP. Any EDI concerns or complaints raised by a Chairholder in these reports are addressed and monitored by the OVPRGS, with the involvement of specific Faculties and departments, and/or the OPVPA, according to the requirements of the particular concern or complaint. See also Section 8.e.ii., below.

## 8.e.ii. Reporting Concerns and Complaints to Senior Management

In addition to the offices noted above (Section 8.e.i.), all equity, diversity, and inclusion concerns and requests for guidance and/or counseling can be brought to or reported to Concordia's Manager, Academic Leadership and Inclusion; and any equity, diversity and inclusion complaints may be reported to the Vice-Provost, Faculty Development and Inclusion (see Section 8.d., above).

## Conclusion

We believe that, as a forward-thinking, next-generation university it is our responsibility to not simply meet the prescribed CRC targets but to exceed them wherever possible. Critical to the success of such a commitment is to not only move forward on the actions identified in this CRCfocused EDI Action Plan but to continue to work towards making diversity and inclusion a defining aspect of the overall Concordia culture. We believe we are making great strides in this direction, including appointing personnel specifically dedicated to EDI, forming an Advisory Committee on EDI, supporting the development of an Indigenous Directions Action Plan, and by including EDI training on appointments at both the Faculty and the Senior Administrative personnel level (among other initiatives outlined in this plan). Continued success will require a concerted effort at all levels of the University from faculty to staff to senior administration. Further, these interventions cannot be limited but, rather, must be seen as an institutional imperative in all aspects of the academic life cycle from hiring of new faculty and staff, and attracting and training of highly qualified personnel, to knowledge mobilization, knowledge transfer, and community partnerships and outreach wherever and whenever applicable.

## LIST OF APPENDICES

1. 2019-2020 CRC Allocation Recruitment Chronology

- Timeline
- Call for LOIs for CRC Nominations, Memos, Meeting Notes
- Concordia CRC EDI Hiring Guidelines, 2019
- Tools for Equity in CRC Recruitment Workshop Slides
- CRC Applicant Equity Survey

2. EDI and Unconscious Bias Training Programs
3. Indigenous Directions Action Plan
4. Equity Census, 2020
5. Policy on Research Chairs (VPRGS-7)
6. Procedures and Guidelines for Research Chairs
7. Chairholder Survey Questions
8. Chairholder Interview Guide
9. Chairholder Survey and Interview Response Summary
10. Advisory Group on Equity, Diversity and Inclusion Report, 2019
11. Research Ethics Gender Demographics, 2019
12. EDI Action Plan for faculty hiring, retention and development
13. Criteria for CRC Renewals

# ACADEMIC PLANNING AND PRIORITIES COMMITTEE <br> REPORT TO SENATE <br> Dr. Anne Whitelaw <br> April 24, 2020 

The Academic Planning and Priorities Committee met on February 5, 2020.

The Academic Planning and Priorities committee met on February 5, 2020. The committee was updated on the progress of the ad hoc committee on internships. They heard how the draft report has been circulated to the members of the Ad Hoc committee for their review. A copy of the report will be provided to the members of the APPC at the next meeting.

Dr. Lisa Ostiguy, Special Advisor to the Provost on Campus Life gave a presentation on Concordia's working group on Equity, Diversity and Inclusion. She is also the Chair of the committee. The presentation included information on the three phases of the process in working to improve equity, diversity and inclusion on campus. She went over the progress in phase one and two and the process of implementation for phase three.

## LIBRARY

# REPORT TO SENATE <br> <br> FROM THE <br> <br> FROM THE LIBRARY COMMITTEE 

(Senate Meeting - April 24, 2020)

## 1. Concordia Library: Most visited academic library in Québec

Dr. Beaudry informed the committee that Concordia libraries had last year a total of 2.6 million visits, which makes Concordia the most visited academic library in Québec. The second most visited academic library is McGill with a good 100,000 visits less than us. This success is most probably a direct impact of the library renovations and the changes in the library spaces.

## 2. Next cycle of strategic planning: Consultations this summer and fall

Dr. Beaudry informed the members that the library team will embark in the coming months in another cycle of strategic planning. Consultations with students, faculty and library team members will start this summer and continue in the fall semester. The project is led by Lorie Kloda and three members of the team. The report is planned for November and will be shared with this committee.

## 3. Library Activity Trends

Lorie Kloda, Associate University Librarian, Planning and Communication Relations, presented on the Library activity trends for many services. About 85,000 loans are recorded for the general circulating collection. We also count about the same number of loans $(85,000)$ per year for the course reserve collection. In 2018-2019, the number of lends for equipment is again very impressive: 45,709 laptops and 10,024 tablets (iPad). The reserves collection is much smaller than the regular collection, so fewer books being borrowed more frequently. This data shows a relative decrease of the circulation of our general collection, but a very heavy usage of the print reserves items. In 2018-2019, 389 instruction sessions were delivered by librarians and other professionals to a total of 9,146 students. Of those, 32 were offered by the Technology Sandbox. On a yearly basis, about 31 million downloads of documents from the digital collections are counted. In 2018-2019, 24,539 reference questions were answered by our library staff and librarians, either in-person or online (email or chat Ask a librarian). The Interlibrary Loans service lent 176,455 print books from all around the world to members of our community. The electronic reserves system is more and more used by faculty members. Last year, we counted 411,082 downloads of e-reserves items. Dr. Beaudry presented the library's budget in comparison to other universities in Québec.

## 4. Collections Service Update 2019/2020

Pat Riva reported on the completion of the Circulating Book Inventory, held in summer 2018 in the Vanier Library and summer 2019 in the Webster Library. Approximately 92\% of the Library's monograph collections have been inventoried, and thousands of database issues have been corrected, improving the findability of collections for users. In conjunction with the migration to WMS, the shared library services platform, Collection Services has also undertaken a number of database management projects related to data migration. Pat Riva also provided an update on budget and expenditures for collections in the 2018/2019 fiscal year, and the projected budget for the current 2019/2020 fiscal year. The library received special targeted funding $(\$ 53,000)$ this year for Indigenous Directions which has been used to acquire streaming video with Canadian content and start a subscription to the Bibliography of Native North Americans

Respectfully submitted,
Dr. Guylaine Beaudry
Vice-Provost, Digital Strategy and University Librarian
8 April 2020

## COMMITTEE APPOINTMENTS

Committee
Special Graduation Awards

## Appointee

Maha Siddiqui (CSU)

## Appointee

Bellaoui, Fatna (CSU)
Navi-Mazor, Shai (CSU)
Payette, Arnau (CSU)

Term
Winter 2020

Appointments requiring
Senate ratification
Faculty Tribunal Pool

# ACADEMIC PROGRAMS COMMITTEE <br> REPORT TO SENATE <br> Sandra Gabriele, PhD <br> April 24, 2020 

## The Academic Programs Committee requests that Senate consider the following undergraduate changes for the 2021-22 Undergraduate Calendar:

Following approval of Faculty Councils, on February 20, 2020, APC members reviewed the undergraduate curriculum submissions from the Faculty of Fine Arts and the Gina Cody School of Engineering and Computer Science. As a result of discussions, APC resolved that the following undergraduate curriculum proposals be forwarded to Senate for approval:

## Faculty of Arts and Science

Department of English
US-2020-2-D8 (For September 2020 Implementation)
[The proposal involves changes to course titles and descriptions to improve the cohesiveness of courses offered as part of the Minor in Professional Writing, as well as the addition of EDUC 270 to the list of course options for students enrolled in the minor.]

- Requirements
- Courses


## Faculty of Fine Arts

Department of Studio Arts
US-2020-2-D9 (For September 2021 Implementation)
[The proposal involves the removal of references to outdated technology in course descriptions, and a change of title for ten courses to reflect the move from the former program title "Intermedia/Cyberarts" to the current title "Intermedia (Video, Performance and Electronic Arts)."]

- Requirements
- Courses


## Gina Cody School of Engineering and Computer Science

Department of Computer Science and Software Engineering
US-2020-2-D10 (For May 2020 Implementation)
[The proposal involves the removal of Options from the BCompSc and BEng in Software Engineering degrees, the addition of four new courses, and a prerequisite change for course SOEN 341.]

- Requirements
- Courses


## The Academic Programs Committee requests that Senate consider the following graduate changes for the Fall 2020 Graduate Calendar:

Following approval of Faculty Councils and the Graduate Curriculum Committee, on November 12, 2019, and on February 20 and April 2, 2020, APC members reviewed the graduate curriculum submissions from the Faculty of Arts and Science, the Faculty of Fine Arts, the Gina Cody School of Engineering and Computer Science and the John Molson School of Business. As a result of discussions, APC resolved that the following graduate curriculum proposals be forwarded to Senate for approval:

## Faculty of Arts and Science

Department of Applied Human Sciences

## US-2020-2-D11 (For September 2020 Implementation)

[The proposal involves the removal the one-week residential Basic Human Interaction Laboratory from the admission requirements for the MA in Human Systems Intervention, as the skills acquired in this laboratory are acquired through courses AHSC 610 and 620.]

- Requirements

Department of English

## US-2020-2-D12 (For September 2020 Implementation)

[The proposal involves minor modifications to the MA in English Literature with Thesis (Options A and B), and the MA in English - Creative Writing with Thesis (Option C), to clarify the designation "Thesis" according to the regulation changes put in place by the FRQ-SC and MEESJ.

- Requirements
- Courses

Department of Health, Kinesiology and Applied Physiology
US-2020-2-D13 (For September 2020 Implementation)
[The proposal involves the addition of HEXS 851 Research Proposal in Health and Exercise Science as a prerequisite for HEXS 890 Research and Thesis in Health and Exercise Science to clarify the requirements for undertaking a thesis within the PhD in Health and Exercise Science.]

- Courses


## Faculty of Fine Arts

Department of Art Education

## US-2020-2-D14 (For September 2020 Implementation)

[The proposal involves the creation of a new course, ARTE 880, which is cross listed with ARTE 680.]

- Courses

Department of Creative Arts Therapies
US-2020-2-D15 (For September 2020 Implementation)
[The proposal involves the addition of new course MTHY 698: Music Therapy Advanced Capstone Project and the removal of CATS 611 and 610 from both the Research with Thesis and Advanced Music Therapy Practice options within the MA in Music Therapy, to better recognize the amount of work that students undertake in completing their project requirements.]

- Requirements
- Courses


## Gina Cody School of Engineering and Computer Science

Department of Computer Science and Software Engineering
US-2020-2-D16 (For September 2020 Implementation)
[The proposal involves revisions to the MApCompSc and MEng (SOEN) programs, including the removal of the Concurrent Qualifying Program, the introduction of a new core course, a second project course and a new elective course; and revisions to the admission requirements for the Diploma in Computer Science and Software Engineering.]

- Requirements
- Courses

Department of Computer Science and Software Engineering

## US-2020-2-D17 (For May 2020 Implementation)

[The proposal involves the addition of two new courses, COMP 6371 Immersive Technologies and SOEN 6111 Big Data Analytics.]

- Requirements
- Courses

Department of Electrical and Computer Engineering
US-2020-2-D18 (For September 2020 Implementation)
[The proposal involves changes to the degree structure including 1) a reduction of the minimum requirement of 36 credits of 6000 -level courses to a minimum of 32 credits, 2) increased flexibility allowing students to take a second 4-credit project in addition to the required 5-credit project, and 3) the conversion of a 4-credit complementary course to a mandatory one.]

- Requirements


## John Molson School of Business

Graduate Diploma in Business Administration

## US-2020-2-D19 (For September 2020 Implementation)

[The proposal involves the introduction of GDBA 543 Project Management as a new elective course available to students enrolled in the Graduate Diploma in Business Administration.]

- Requirements
- Courses

Department of Supply Chain and Business Technology Management

## US-2020-2-D20 (For GDBA January 2021 Implementation)

[The proposal involves renaming and increasing the credit value of the research component of the Master of Supply Chain Management, as well as a reduction in the number of elective seminars required.]

- Requirements
- Courses


## Institute for Co-operative Education

## US-2020-2-D21 (For September 2020 Implementation)

[The proposal involves the addition of a section for the Institute of Co-operative Education in the General Information section of the Graduate Calendar, and the addition of descriptions for Work-Integrated Learning (WIL) courses, for improved transparency and to facilitate the accurate assignment of CAFF codes.]

- Requirements
- Courses


Sandra Gabriele, PhD
Vice-Provost, Innovation in Teaching and Learning April 8, 2020

## INTERNAL MEMORANDUM

| TO: | Dr Sandra Gabriele, Vice-Provost, Innovation in Teaching and Learning <br> Office of the Provost and Vice-President, Academic Affairs <br> Chair, Academic Programs Committee |
| :--- | :--- |
| FROM: | Dr André Roy, Dean, Faculty of Arts and Science <br> Chair, Arts and Science Faculty Council |
| DATE: | January 27, 2020 |

SUBJECT: 2021-22 Undergraduate Calendar Curriculum Changes Department of English
ENGL-31
Changes to Minor in Professional Writing; ENGL 213, 214, 215, 216, 396, 397

The following proposal was reviewed and approved at the Arts and Science Faculty Council meeting of January 24,2020 . We request that this proposal be considered at the next meeting of APC.

The Department of English is proposing title and description changes for better cohesiveness across multiple courses within the Minor in Professional Writing. As with all title and description revisions, the intent is to better reflect course content. Courses ENGL 214, 215, 216, 396 and 397 are thus updated. Of note, as many students in the minor are intending to pursue a career in the field of education, the EDUC 270 Educational Communication is now added to the list of course options. The Department of Education has agreed to hold seats for students enrolled in the Minor in Professional Writing. Finally, changes are made to the note under ENGL 213 to reflect the new title of ENGL 396 Content Creation and Management in Professional Writing.

Thank you for your consideration of this proposal for which there are no additional resource implications.

## Department of English

## ENGL-31

## Memo from Chair

## Program change

Minor in Professional Writing

Editorial change to course description and note

ENGL 213 English Composition - Stage I

Course title and description change

ENGL 214 Editing I: Grammar, Usage, and Style

ENGL 215 Editing II: Principles and Practice of Editing
ENGL 216 Audience and Purpose in Professional Writing

ENGL 396 Content Creation and Management in Professional Writing (6 credits)

Course title change
ENGL 397 Writing for Business

# INTERNAL MEMORANDUM 

## TO: Dr. Richard Courtemanche, Associate Dean, Academic Programs, Faculty of Arts and Science

FROM: Dr. Manish Sharma, Chair, Department of English

DATE: December 4, 2019

## SUBJECT: Changes to Minor in Professional Writing

At the Department of English Departmental Meeting of November 22, 2019, the following changes to the Minor in Professional Writing were proposed and approved:

The first change proposed is that the course title for ENGL 214, Grammar, Usage, and Style, be modified to Editing I: Grammar, Usage, and Style and that the course description be altered slightly. Both of these changes make clearer the connection of ENGL 214 to ENGL 215, Editing II: Principles and Practice of Editing (the former also serves as a prerequisite for the latter).

The second change proposed is that the course title for ENGL 215, Principles and Practice of Editing, be modified to Editing II: Principles and Practice of Editing and that the course description be altered slightly. These changes also make clearer the connection of ENGL 214 and ENGL 215 and increase the cohesiveness of the Minor.

The third change proposed is that the course title for ENGL 216, Writing for Diverse Audiences, be modified to Audience and Purpose in Professional Writing and the course description be altered slightly. In this way, ENGL 216 will better reflect the place of the course in the Professional Writing Minor and make clearer learning objectives and course content.

The fourth change proposed is that the course title of ENGL 396, Advanced Composition and Professional Writing, be modified to Content Creation and Management in Professional Writing and the course description be altered. In this way, learning objectives and course content are clarified and ENGL 396 will better advertise how it prepares students for working in a professional milieu. Our Coordinator of Professional Writing and Composition will advise TESL and Études Françaises about these modifications. The title of ENGL 396 is also modified in the second note under ENGL 213 English Composition - Stage II as it is mentioned there.

The fifth change proposed is that the course title of ENGL 397, Business Writing, be modified to Writing for Business. The rationale for this change is to avoid confusion about course content, as "Business Writing" only vaguely qualifies the learning objectives of the course. The John Molson School of Business will be advised of this name change.

The sixth change proposed is that EDUC 270, Educational Communication, will serve as an option in the Minor in Professional Writing, with a view toward cross-listing this course between EDUC and ENGL in the future. In this way, the Department of English increases the diversity of course offerings within the Minor. Moreover, many students enrolled in the Minor are preparing for a career in Education. Offering EDUC 270 as an option in the Minor in Professional Writing has been discussed with members of the Education Department: course creator, Dr. Saul Carliner, and Chair, Dr. Sara Kennedy.

Thank you for considering these changes for which there are no resource implications.


PROGRAM CHANGE: Minor in Professional Writing
Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes
Calendar for academic year: 2021/2022

| Faculty/School: | Arts and Science |
| :--- | :--- |
| Department: | English |
| Program: | Minor in Professional Writing |
| Degree: | Minor |
| Calendar Section/Graduate Page Number: | 31.100 |



Rationale:
Students currently in the Minor in Professional Writing need more course options. The Department of Education supports offering EDUC 270 as a course option and will hold twenty seats for students in the Minor in Professional Writing program, as many students enrolled in the Minor in Professional Writing are preparing for a career in Education.

Resource Implications:
None.







## INTERNAL MEMORANDUM

To: Manish Sharma, Chair, Department of English<br>Maggie McDonnell, Director, Minor in Professional Writing

From: Sara Kennedy, Chair, Department of Education

Date: January 8, 2020

RE: ENGL-31: Minor in Professional Writing - Add EDUC 270 Educational Communications as an Elective Course

The Department supports the proposal of the Department of English (Dossier ENGL-31) in the use of EDUC 270 Educational Communications (3 credits) as an elective course for the Minor in Professional Writing. We generally offer this course two times per year and it is currently delivered via eConcordia platform.

From:

## Sent:

To:
Subject:

Angela Alleyne
Wednesday, January 8, 2020 3:36 PM
Nicole Freeman
FW: Upcoming changes to ENGL 396

From: Maggie McDonnell [maggie.mcdonnell@concordia.ca](mailto:maggie.mcdonnell@concordia.ca)
Sent: Thursday, December 5, 2019 4:26 PM
To: Christine York [christine.york@concordia.ca](mailto:christine.york@concordia.ca)
Cc: Angela Alleyne [angela.alleyne@concordia.ca](mailto:angela.alleyne@concordia.ca); Manish Sharma [manish.sharma@concordia.ca](mailto:manish.sharma@concordia.ca); Olivia Ward [olivia.ward@concordia.ca](mailto:olivia.ward@concordia.ca)
Subject: Upcoming changes to ENGL 396
Good afternoon Christine,
My apologies if this message should have been directed elsewhere; please do let me know if you'd like me to send it to someone else.

I am in the process of developing the Professional Writing program; I wanted to reach out to you, to let you know that one of the changes our Curriculum Committee has approved involves a course that is an option for students in the Translation BA program, ENGL 396.

We felt that the name and description of this course in the academic calendar no longer reflects the actual content and direction of the course. The change that we are proposing is as follows:

> ENGL 396 Advanced-Composition-and ProfessionalWriting (6 credits)
> Prerequisite: ENGL 213 or placement test. This course is intended for students already in control of the essentials of composition who wish to develop their ability to write effectively for professional purposes. Emphasis is placed on writing for specific audiences within a variety of rhetorical situations and on peer revision and editing in a workshop format.
> NOTE: Students who have received credit for this course may not subsequently take ENGL 206-213 for credit.

ENGL 396 Content Creation and Management in Professional Writing (6 credits)
Prerequisite: ENGL 213 or placement test. This course is intended for students who have mastered the essentials of composition and who wish to develop their ability to write effectively for professional purposes. Emphasis is placed on working with media platforms, working in teams, and managing writing projects.
NOTE: Students who have received credit for this course may not subsequently take ENGL 206-213 for credit.

Given that the same trends in professional writing that precipitated this change are no doubt influencing the world of translation, we feel that the course will still be of interest and benefit to your students. I would be happy to discuss further, and certainly, I welcome any suggestions you may have.

Please do let me know if there are any questions or concerns.
Many thanks, Maggie

Maggie McDonnell
Lecturer/Program Coordinator, Composition and Professional Writing Academic Director, PREX
English Department, Concordia University LB-642-00

| From: | Angela Alleyne |
| :--- | :--- |
| Sent: | Wednesday, January 8, 2020 3:37 PM |
| To: | Nicole Freeman |
| Subject: | FW: Changes to ENGL 396 |
|  |  |
| Follow Up Flag: | Follow up |
| Flag Status: | Flagged |

From: Maggie McDonnell [maggie.mcdonnell@concordia.ca](mailto:maggie.mcdonnell@concordia.ca)
Sent: Thursday, December 5, 2019 4:34 PM
To: Sarah Loubiri [sarah.loubiri@concordia.ca](mailto:sarah.loubiri@concordia.ca)
Cc: Manish Sharma [manish.sharma@concordia.ca](mailto:manish.sharma@concordia.ca); Olivia Ward [olivia.ward@concordia.ca](mailto:olivia.ward@concordia.ca); Angela Alleyne [angela.alleyne@concordia.ca](mailto:angela.alleyne@concordia.ca)
Subject: Changes to ENGL 396
Good afternoon Sarah,
My apologies if this message should have been directed elsewhere; please do let me know if you'd like me to send it to someone else.

I am in the process of developing the Professional Writing program; I wanted to reach out to you, to let you know that one of the changes our Curriculum Committee has approved involves a course that is an option for students in the TESL BA program, ENGL 396.

We felt that the name and description of this course in the academic calendar no longer reflect the actual content and direction of the course. The change that we are proposing is as follows:
ENGL $396 \quad$ Advanced-Composition-and
Professional Writing (6 credits)
Prerequisite: ENGL 213 or placement test. This
course is intended for students already in control of
the essentials of composition who wish to develop
their ability to write effectively for professional
purposes. Emphasis is placed on writing for specific
audiences within a variety of rhetorical situations
and on peer revision and editing in a workshop
format.
NOTE: Students who have received credit for this
course may not subsequently take ENGL 206-213
for credit.

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> Prerequisite: ENGL 213 or placement test. This course is intended for students who have mastered the essentials of composition and who wish to develop their ability to write effectively for professional purposes. Emphasis is placed on working with media plafforms, working in teams, and managing writing projects.
> NOTE: Students who have received credit for this course may not subsequently take ENGL 206-213 for credit.

Given the increasing presence of digital tools, resources, and even classrooms, we feel that the course will still be of interest and benefit to your students. I would be happy to discuss further, and certainly, I welcome any suggestions you may have.

Please do let me know if there are any questions or concerns.

Many thanks,
Maggie
Maggie McDonnell
Lecturer/Program Coordinator, Composition and Professional Writing
Academic Director, PREX
English Department, Concordia University
LB-642-00

## Nicole Freeman

From:

## Angela Alleyne

Sent: Wednesday, January 8, 2020 3:36 PM
To:
Nicole Freeman
Subject:
FW: Notification of change to ENGL 397

From: Maggie McDonnell [maggie.mcdonnell@concordia.ca](mailto:maggie.mcdonnell@concordia.ca)
Sent: Thursday, December 5, 2019 4:16 PM
To: Lynn Kinelski [Lynn.Kinelski@concordia.ca](mailto:Lynn.Kinelski@concordia.ca)
Cc: Angela Alleyne [angela.alleyne@concordia.ca](mailto:angela.alleyne@concordia.ca); Manish Sharma [manish.sharma@concordia.ca](mailto:manish.sharma@concordia.ca); Olivia Ward [olivia.ward@concordia.ca](mailto:olivia.ward@concordia.ca)
Subject: Notification of change to ENGL 397
Good afternoon Lynn,
My apologies if this message should have been directed elsewhere; please do let me know if you'd like me to send it to someone else.

I am in the process of developing the Professional Writing program; for now, our changes are relatively small, but I did want to reach out to JMSB as a courtesy, to let you know that one the changes our Curriculum Committee has approved is a name change for an existing course.

The course, ENGL 397, was originally called "Business Writing." Under the proposed change, this would become "Writing for Business." I felt it was collegial to notify JMSB about this change, as the title perhaps more clearly distinguishes it from the COMM 205 course, "Business Communication."

Note that there are no changes to the course content, and that as I say, the course already exists.
Please do let me know if there are any questions or concerns.
Many thanks, Maggie

Maggie McDonnell
Lecturer/Program Coordinator, Composition and Professional Writing
Academic Director, PREX
English Department, Concordia University
LB-642-00

## FACULTY OF FINE ARTS

## Internal Memorandum

To: Dr. Sandra Gabriele, Chair, Academic Programs Committee
From: Dr. Rebecca Duclos, Dean, Faculty of Fine Arts

Cc: Dr. Elaine Paterson, Associate Dean Academic, Faculty of Fine Arts
Date: January 23, 2020

RE: Curriculum Dossier for the Department of Studio Arts, ARTU-13

As Dean of the Faculty of Fine Arts, I fully support the curriculum changes proposed in ARTU-13. The dossier was reviewed and approved unanimously by the Fine Arts Faculty Council at its meeting on January 17, 2020.

There are no resource implications.


Rebecca Duclos
Dean, Faculty of Fine Arts
Rebecca.Duclos@concordia.ca
848-2424 ext. 4602

FACULTY OF FINE ARTS

# Internal Memorandum 

To: $\quad$ Rebecca Duclos, Dean, Faculty of Fine Arts
From: Elaine Paterson, Associate Dean, Academic
Date: $\quad$ November 29, 2019
Re: Curriculum dossier for the Department of Studio Arts, ARTU-13

The Faculty of Fine Arts Curriculum Committee has reviewed and approved the ARTU-13 curriculum dossier from the Department of Studio Arts on November 27, 2019. We hereby submit this dossier for review by the Faculty Council on January 17, 2020.

This document proposes two types of changes:

- To remove references to outdated technology and software listed in three IMCA course descriptions (IMCA 210, 310, and 332).
- To change the title of ten IMCA courses in order to reflect the move from the former program title, "Intermedia/Cyberarts," to the current title, "Intermedia (Video, Performance and Electronic Arts)." This change will impact IMCA 398, 399, 470, 471, 472, 480, 481, 482, 498, and 499.
- Please note that the current program title was approved by Senate in 2014 and first published in the Undergraduate Calendar in September 2015 (dossier ARTU-01).

There are no resource implications.

With thanks for your consideration.


Elaine Paterson, PhD
Associate Dean, Academic
Faculty of Fine Arts
elaine.paterson@concordia.ca

## Fine Arts

## INTERNAL MEMORANDUM

TO: Dr. Elaine Cheasley Paterson, Associate Dean Academic, Faculty of Fine Arts
FROM: Leila Sujir, Associate Professor \& Chair, Department of Studio Arts
DATE: $\quad$ October $10^{\text {th }}, 2019$
SUBJECT: Intermedia (Video, Performance and Electronic Arts) (ARTU-13)

Please accept the following curriculum changes from the Department of Studio Arts with regard to minor changes to the Intermedia (Video, Performance and Electronic Arts) program. These changes were approved by the Studio Arts Department Council at its meeting on September 27th, 2019.

The Intermedia (Video, Performance and Electronic Arts) program requests minor editorials to its curriculum which recommends Intermedia students complete some of their Fine Arts electives within the Computation Arts course offerings. This is misleading, as Intermedia students do not have reserved spaces within the CART classes. There are also revisions to remove references to outdated technology and software. These revisions are for IMCA 210, 310, and 332. The course titles that list the previous title of the program, "Intermedia/Cyberarts", are being changed in order to reflect the current program title, "Intermedia (Video, Performance and Electronic Arts)". These revisions are for IMCA 398, 399, 470, 471, 472, 480, 481, 482, 498, 499.

The following grid gives a consolidated view of the proposed changes.

| Course | Program <br> Change | New Course | Title | Prerequisite | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| IMCA 210 |  |  |  |  | X |
| IMCA 310 |  |  |  |  | X |
| IMCA 332 |  |  |  |  | X |
| IMCA 398 |  |  | X |  |  |
| IMCA 399 |  |  | X |  |  |
| IMCA 470 |  |  | X |  |  |
| IMCA 471 |  |  | X |  |  |
| IMCA 472 |  |  | X |  |  |
| IMCA 480 |  |  | X |  |  |
| IMCA 481 |  |  | X |  |  |
| IMCA 482 |  |  | X |  |  |
| IMCA 498 |  |  | X |  |  |
| IMCA 499 |  |  |  |  |  |

Sincerely,
deila Sujn
Leila Sujir, Associate Professor \& Chair, Department of Studio Arts

Montreal, October 3rd, 2019

## Leila Sujir, Chair

Department of Studio Arts
Faculty of Fine Arts
Concordia University

Re: Summary of Curriculum Changes Request for Studio Arts. /Intermedia

Dear Leila,

Here is a brief summary of the curriculum changes we are proposing for Intermedia (IMCA).
IMCA requests minor revisions to remove references to outdated technology and software that is no longer taught. These revisions are to IMCA 210, 310, and 332.

IMCA requests minor revisions to course titles that list the old title of the program, "Intermedia / Cyberarts", to remove the word "cyberarts" and replace it with the correct current title of the program "Intermedia (Video, Performance and Electronic Arts)". These revisions are to IMCA 398, 399, 470, 471, 472, 480, 481, 482, 498, 499.

Best regards,


[^6]PROGRAM CHANGE: Program recommended course
Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes
Calendar for academic year: 2021/2022


Resource Implications:
None.


## PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: ARTU-13 VERSION: 7














GINA CODY
SCHOOL OF ENGINEERING

## INTERNAL MEMORANDUM

TO: Dr. Sandra Gabriele, Vice- Provost, Innovation in Teaching and Learning<br>FROM: Dr. A. Asif, Dean; Chair, GCS Council<br>DATE: $\quad$ October 4, 2019

RE: Changes to the undergraduate programs in the CSSE Department

Please find attached the changes made to the following programs in the Department of Computer Science and Software Engineering.

## COMPUTER SCIENCE:

## Program Change:

- Department has decided to remove all options from its computer science program.


## SOFTWARE ENGINEERING:

## Program Change:

- Department has decided to remove all options from its software engineering program.


## COURSE CHANGES:

- Four new courses are introduced
- Prerequisite and editorial changes are made on a course


## IMPACT TO OTHER PROGRAMS

The proposed changes to the Computer Science degree impacts two programs outside of the Gina Cody School: Computation Arts and Computer Science (Section 71.80) and Mathematics and Statistics and Computer Applications (section 71.85). The Department of Computer Science and Software Engineering has informed the respective departments. As a result, both departments have agreed to make the necessary changes to their calendars. Moreover, a meeting with the university registrar, Ms. Stéphanie de Celles and her team; took place on December 17, 2019 to resolve technical issues concerning SIS and reporting. These issues have now been fully addressed.
This proposal was approved by the Engineering and Computer Science Undergraduate Studies Committee (ECSUSC) on September 25, 2019 and by the GCS Council on October 4, 2019. GCS agrees to cover expenses due to the introduction of new courses.
I would be grateful if you could put it on the agenda of the next APC meeting.

GINA CODY
SCHOOL OF ENGINEERING

## INTERNAL MEMORANDUM

TO: Dr. A. Asif, Dean; Chair, GCS Council

FROM: Dr. A. Akgunduz, Associate Dean, Academic Programs and Ugrad Activities
DATE: $\quad$ September 27, 2019

RE: $\quad$ Curriculum changes to the undergraduate programs in the Department of Computer Science and Software Engineering (COMP-101)

Please find attached the curriculum proposals from the Department of Computer Science and Software Engineering. The department has decided to remove options from both of their undergraduate programs. Accordingly, degree requirements for both Computer Science and Software Engineering undergraduate degrees have been updated.

The details of the aforementioned changes are provided in the attached COMP-101 dossier.
This proposal was approved by the Engineering and Computer Science Undergraduate Studies Committee on September 25, 2019. I would be grateful if you could put it on the agenda of the next GCS Council.

INTERNAL MEMORANDUM

# TO: Ali Akgunduz, Associate Dean, Academic Programs, Faculty of Engineering and Computer Science 

FROM: Dr. Lata Narayanan, Chair Department of Computer Science and Software Engineering
DATE: Friday, September 20, 2019
SUBJECT: Undergraduate curriculum changes.

Please find attached the curriculum package COMP-101 for the Computer Science and Software Engineering (CSE) Department. These changes have been approved by the COMP Curriculum Committee, as well as the Department Council on September 20, 2019.

In the present package, we propose the removal of Options from both the BCompSc and BEng (SOEN) degrees. We also present four new permanent courses and a minor prerequisite change for SOEN 341.

## Reasoning for Removal of Options from BCompSc and BEng (SOEN)

Enrollment figures show a steady decline of interest in almost all our options, and an increase in the General option. Also, many students, once in the program, switch from other options to the General option, as this gives them the most flexibility in choosing electives. Finally, the scheduling of course sequences for all options is very rigid, which means it is very difficult to change course schedules without impacting the timely graduation of students in some options.

The removal of all options will increase flexibility in choosing electives for students and will ease course scheduling and be easier to administer. The grouping of courses by subject matter provides students guidance on choosing electives in areas of interest, while not forcing them to take all electives in the group before graduation. Adding or deleting new groups of electives can be done more easily and in a timelier way as there are no associated accreditation issues.

Note that the options are being removed in both the Software Engineering BEng and Computer Science BCompSc and that both sets of proposed changes have been done with required consistency in mind. Re. the two Joint Majors (with Mathematics and Statistics, and with Computation Arts), there is no change at all to the content, however small changes need to be made in the calendar sections referring to these since the old versions refer to the Computer Applications option which will no longer exist. The concerned departments have agreed to make these changes, and have initiated the changes in provotrack documents MATH-31 and DART21.

## Overview of Changes

The changes in this package (with references to Provo-Track document page numbering, e.g., D1) are summarized below.

Changes to Undergraduate Programs
Pages D1 - D5. BCompSc \& BEng (SOEN): The proposed changes on these pages for admission requirements (Mature students and regular) are very minor changes required to implement the removal of Options from the BCompSc.
Resource Implications: None.
Pages D6 - D15. BCompSc Degree Requirements: The proposed changes implement the removal of Options from the BCompSc degree. Instead, Computer Science Electives are listed in groups to facilitate the selection of courses in a particular area of the field. There is no requirement to take a minimum number of credits from a group.
Resource Implications: The removal of options from the BCompSc degree is not expected to change the number of students enrolled in the degree or the number of sections of courses to be offered, so there are no resource implications.

Pages D16 - D20. BCompSc: The proposed changes on these pages for Extended Credit Program, Honours Program, and Programs Related to Computer Science are very minor changes required to implement the removal of Options from the BCompSc.
Resource Implications: None.
Pages D21-D26. BEng (SOEN) Degree Requirements: The proposed changes implement the removal of Options from the BEng (SOEN) degree. Instead, electives are listed in groups to facilitate the selection of courses in a particular area of the field. There is no requirement to take a minimum number of credits from a group. Also, the course SOEN 363 replaces SOEN 344 in the Software Engineering Core. Finally, the titles of many courses have been modified to more accurately reflect current teaching practice.
Resource Implications: The removal of options from the BEng (SOEN) degree is not expected to change the number of students enrolled in the degree or the number sections of courses to be offered, so there are no resource implications.

Pages D27-D28. BCompSc Computation Arts and Computer Science Joint Major:
The proposed changes to the Comp Arts / BCompSc Joint Major are very minor changes required to implement the removal of Options from the BCompSc.
Resource Implications: None.

Pages D29 - D31. BCompSc Mathematics and Statistics and Computer Science Joint Major: The proposed to the Math and Stats / BCompSc Joint Major are very minor changes required to implement the removal of Options from the BCompSc.
Resource Implications: None.

## Changes to Undergraduate Courses

Page D32. COMP 333: COMP 333 Data Analytics is a new permanent course replacing a slot course on the same topic which has been taught twice.
Resource Implications: Teaching load will be covered from the current teaching capacity in the Gina Cody School of Engineering and Computer Science.

Page D 33. COMP 432: COMP 432 Machine Learning is a new permanent course in an area of great interest to students.
Resource Implications: Teaching load will be covered from the current teaching capacity in the Gina Cody School of Engineering and Computer Science. A Laboratory Instructor is required.

Pages D 34 - D 35. COMP 475: COMP 475 Immersive Technologies is a new permanent course. This course is cross-listed with COMP 6371 Immersive Technologies (*) proposed in provotrack document COMP-99.
Resource Implications: Teaching load will be covered from the current teaching capacity in the Gina Cody School of Engineering and Computer Science.

Page D36. SOEN 341: The proposed change of allowing the prerequisite COMP 352 be taken concurrently with SOEN 341 allows students to take COMP 352 at the same time as SOEN 341 in the Winter term if COMP 352 is taught by a Professional Engineer. Resource Implications: None.

Page D 37 - D38. SOEN 471: SOEN 471 Big Data Analytics is a new permanent course replacing a slot course on the same topic which has been taught four times. This course is cross-listed with SOEN 6111 Big Data Analytics (*) proposed in provotrack document COMP-99. Resource Implications: Teaching load will be covered from the current teaching capacity in the Gina Cody School of Engineering and Computer Science.

We would be grateful if you could put this on the agenda of the next ENCS Undergraduate Studies Committee meeting.

## PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: COMP-101 VERSION: 10

PROGRAM CHANGE: 14.2.3 Mature Entry Program
Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes
Calendar for academic year: 2021/2022
Implementation Month/Year: May 2020

| Faculty/School: | Gina Cody School of Engineering and Computer Science |
| :--- | :--- |
| Department: | Computer Science and Software Engineering |
| Program: | Computer Science |
| Degree: | BCompSc |
| Calendar Section/Graduate Page Number: | 14.2 .3 |

Calendar Section/Graduate Page Number: 14.2.3

Type of Change:
[X] Editorial [X] Requirements [] Regulations [] Program Deletion New Program

| Present Text (from 2019/2020) calendar |
| :--- | :--- |
| 14.2.3 Gina Cody School of Engineering and Computer Scienc |

## Engineering

Mature Entrants to the BEng degree, which requires the completion of a minimum of 120 credits, are also required to complete all outstanding required prerequisites in addition to their program. Prerequisite courses are as follows:

CHEM $205^{3}$
MATH $203^{3}, 204^{3}, 205^{3}$
PHYS $204^{3}, 205^{3}$
Six credits chosen from courses in the humanities and social sciences.
ESL courses and courses that focus on the acquisition of a language may not be used to meet this requirement. Students should refer to §71.110 when selecting these courses.

NOTE: In all programs, students may need one or more of MATH $200^{3}$ and MATH $201^{3}$ NOTE: Some students may require courses in English as a Second Language, as determined by language proficiency testing.

## Computer Science

Mature Entry students accepted to the BCompSc must include in their degree program (minimum 108 credits) the following courses, depending upon their chosen option:
a. Computer Systems Option:

MATH $203^{3}, 204^{3}, 205^{3}$
PHYS 204 ${ }^{3}, 205^{3}$
GHEM $205^{3}$
and six credits chosen from courses in the Humanities or Social Sciences as noted in Section 71.110. ESL courses and courses that focus on the acquisition of a language may not be used to meet this requirement.

## Proposed Text

### 14.2.3 Gina Cody School of Engineering and Computer Science

## Engineering

Mature Entrants to the BEng degree, which requires the completion of a minimum of 120 credits, are also required to complete all outstanding required prerequisites in addition to their program. Prerequisite courses are as follows:

CHEM $205^{3}$
MATH $203^{3}, 204^{3}, 205^{3}$
PHYS $204^{3}, 205^{3}$
Six credits chosen from courses in the humanities and social sciences.
ESL courses and courses that focus on the acquisition of a language may not be used to meet this requirement. Students should refer to $\S 71.110$ when selecting these courses.

NOTE: In all programs, students may need one or more of MATH $200^{3}$ and MATH $201^{3}$. NOTE: Some students may require courses in English as a Second Language, as determined by language proficiency testing.

## Computer Science

Mature Entry students accepted to the BCompSc must include in their degree program (minimum 108 credits) the following courses, depending upon their chosen program:
a. BCompSc Joint Major in Computation Arts and Computer Science:

MATH $203^{3}, 204^{3}, 205^{3}$
and six credits chosen in consultation with an academic advisor from the
Department of Design and Computation Arts and three elective credits may be chosen as follows.
b. Computation Arts Option:

MATH $203^{3}, 204^{3}, 205^{3}$
and six credits chosen in consultation with an academic advisor from the Department of Design and Computation Arts and three elective credits may be chosen as follows.

- General Education Electives found in Complementary Studies for Engineering and Computer Science Students.
- Basic and Natural Science Courses found in Degree Requirements for the BEng in Software Engineering.
- Courses not included in the above lists may be taken with prior approval of the undergraduate program director.

6. All other options (Computer Applications, Computer Games, Information

Systoms, Mathomatics and Statistics, Softwaro-Systoms, and Wob-Sorvicos and Applications Options):
MATH $203^{3}, 204^{3}, 205^{3}$
and six credits chosen from courses in the Humanities or Social Sciences as noted in Section 71.110 and three elective credits may be chosen as follows. ESL courses and courses that focus on the acquisition of a language may not be used to meet this requirement.

- General Education Electives found in Complementary Studies for Engineering and Computer Science Students.
- Basic and Natural Science Courses found in Degree Requirements for the BEng in Software Engineering.
- Courses not included in the above lists may be taken with prior approval of the undergraduate program director.

Depending on the number of free electives in their eption, Mature Entry Computer Science students may use up to a maximum of 24 credits of prerequisites (including the above courses) within the 108-credit program.

A maximum of six credits of prerequisites may be used within the regular 90-credit program.
NOTE: In all programs, students may need one or more of MATH $200^{3}$ and MATH $201^{3}$
NOTE: Some students may require courses in English as a Second Language, as determined by language proficiency testing.

- General Education Electives found in Complementary Studies for Engineering and Computer Science Students.
- Basic and Natural Science Courses found in Degree Requirements for the BEng in Software Engineering.
- Courses not included in the above lists may be taken with prior approval of the undergraduate program director.
b. BCompSc and

BCompSc Joint Major in Mathematics and Statistics and Computer Science:
MATH $203{ }^{3}, 204^{3}, 205^{3}$
and six credits chosen from courses in the Humanities or Social Sciences as noted in Section 71.110 and three elective credits may be chosen as follows. ESL courses and courses that focus on the acquisition of a language may not be used to meet this requirement.

- General Education Electives found in Complementary Studies for Engineering and Computer Science Students.
- Basic and Natural Science Courses found in Degree Requirements for the BEng in Software Engineering.
- Courses not included in the above lists may be taken with prior approval of the undergraduate program director.

Depending on the number of free electives in their program, Mature Entry Computer Science students may use up to a maximum of 24 credits of prerequisites (including the above courses) within the 108-credit program.

A maximum of six credits of prerequisites may be used within the regular 90-credit program.
NOTE: In all programs, students may need one or more of MATH $200^{3}$ and MATH $201^{3}$. NOTE: Some students may require courses in English as a Second Language, as determined by language proficiency testing.

[^7]
## the next Faculty Council meeting in February.

Resource Implications:
None.

PROGRAM CHANGE: 71.10.2 Admission Requirements
Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes

Calendar for academic year: 2021/2022
Implementation Month/Year: May 2020

| Faculty/School: | Gina Cody School of Engineering and Computer Science |
| :--- | :--- |
| Department: | Computer Science and Software Engineering |
| Program: | Computer Science |
| Degree: | BCompSc |
| Calendar Section/Graduate Page Number: | 71.70 .2 |

Type of Change:
[X] Editorial [X] Requirements [ ] Regulations [] Program Deletion New Program

## Present Text (from 2019/2020) calendar

### 71.10.2 Admission Requirements

General admission requirements are listed in §13
In addition, the following specific requirements exist for the various programs. Applicants should specify their choice of program on their application.
Students entering the Gina Cody School of Engineering and Computer Science are presumed to have acquired some familiarity with computers and programming, either through a course or through time spent working with a personal or other computer.

## APPLICANTS FROM QUEBEC INSTITUTIONS

Successful completion of a two-year pre-university Cegep program is required, including the specific courses in the appropriate
profile, as follows:

1. BEng (all programs)

BCompSc (Computer Systems-Option)

## Cegep Profile

Mathematics 201 -
103 or NYA, 105 or NYC, 203 or NYB
Physics 203 -
101 or NYA, 201 or NYB
Chemistry 202 -
101 or NYA
2. BCompSc (Computer Applications, Computation Arts, Computer Games, Information Systems, Mathematics and Statistics, Software Systems, and Web-Services and Applications-Options;and Minor in-Computer Science)

## Cegep Profile 10.12

Mathematics 201 -
103 or NYA, 105 or NYC, 203 or NYB

## Proposed Text

### 71.10.2 Admission Requirements

General admission requirements are listed in §13
In addition, the following specific requirements exist for the various programs. Applicants should specify their choice of program on their application.
Students entering the Gina Cody School of Engineering and Computer Science are presumed to have acquired some familiarity with computers and programming, either through a course or through time spent working with a personal or other computer.

## APPLICANTS FROM QUEBEC INSTITUTIONS

Successful completion of a two-year pre-university Cegep program is required, including the specific courses in the appropriate
profile, as follows:

## 1. BEng (all programs)

## Cegep Profile

Mathematics 201 -
103 or NYA, 105 or NYC, 203 or NYB
Physics 203 -
101 or NYA, 201 or NYB
Chemistry 202 -
101 or NYA
2. BCompSc

BCompSc Joint Major in Mathematics and Statistics and Computer Science BCompSc Joint Major in Computation Arts and Computer Science Minor in Computer Science

## Cegep Profile 10.12

Mathematics 201 -
103 or NYA, 105 or NYC, 203 or NYB

Applications from graduates of Cegep technology programs will also be considered. Program requirements for successful applicants will be determined on an individual basis.

## APPLICANTS FROM OUTSIDE QUEBEC

Academic qualifications presented by students applying from institutions outside Quebec should be comparable to those expected of students applying from within Quebec.
Where the pre-university education is shorter than in Quebec, students may be considered for admission to the first year of the Extended Credit Program. (See §13.3.2 to 13.3.6, §71.20.2, and 71.70.3)

Applications from graduates of Cegep technology programs will also be considered Program requirements for successful applicants will be determined on an individual basis.

## APPLICANTS FROM OUTSIDE QUEBEC

Academic qualifications presented by students applying from institutions outside Quebec should be comparable to those expected of students applying from within Quebec. Where the pre-university education is shorter than in Quebec, students may be considered for admission to the first year of the Extended Credit Program. (See §13.3.2 to 13.3.6, §71.20.2, and 71.70.3)

## MATURE ENTRY

Admission requirements are listed in §14.

## MATURE ENTRY

Admission requirements are listed in $\S 14$.

The changes reflect the admission requirements of the revised BCompSc program with Options removed.

## Resource Implications

None.

PROGRAM CHANGE: 71.70.1 Curriculum for BCompSc
Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes
Calendar for academic year: 2021/2022
Implementation Month/Year: May 2020

| Faculty/School: | Gina Cody School of Engineering and Computer Science |
| :--- | :--- |
| Department: | Computer Science and Software Engineering |
| Program: | Computer Science |
| Degree: | BCompSc |
| Calendar Section/Graduate Page Number: | 71.70 .1 |

Calendar Section/Graduate Page Number: 71.70.1
Type of Change:
[] Editorial [X] Requirements [] Regulations [] Program Deletion New Program

| Present Text (from 2019/2020) calendar |
| :--- | :--- |
| 71.70.1 Curriculum for the Degree of Bachelor of/Baccalaureate in Computer | Science


| Proposed Text |
| :--- |
| 71.70.1 Curriculum for the Degree of Bachelor of/Baccalaureate in Computer <br> Science |

The Computer Science program emphasizes fundamentals and techniques that remain relevant and useful for many years after graduation. The program consists of a combination of core courses in computer science, elective courses in computer science and mathematics, and some free electives. The Computer Science Core provides a basic and broad study of theory, mathematical basics, programming methodology, computer architecture, data structures, operating systems, and software engineering. The option courses are designed to provide an integrated yet specialized training in particular application areas of the discipline. Students may choose either the General Program or one of eight options. Each option involves the study of selected advanced elective courses in computer science to provide further depth in computer science and the particular application area.
The General Program and each option constitute a 90 -credit program that consists of courses in the following groups: Computer Science-Core, Complementary Core, Option-Specific Courses, Computer Science Electives, Mathematics Electives, and General Electives:

1. The General Program is a major in Computer Science that emphasizes an exposure to a breadth of topics in Computer Science.
2. The Computer Games option is a major in Computer Science that deals with the design and implementation of computer games, and the tools and techniques thatare useful in developing software for computer games.
3. The Web Services-and Applications option is a major in Computer Science that deals with the analysis, design, and implementation of services and applications delivered over the web.
4. The Computer Systems option is a major in Computer Science that focuses on state-of-the-art hardware-and software platforms and on the tools and techniques necessary to develop software on such platforms.

The Computer Science program emphasizes fundamentals and techniques that remain relevant and useful for many years after graduation. The program consists of a combination of core courses in computer science, elective courses in computer science and mathematics, and some free electives. The Computer Science Core provides a basic and broad study of theory, mathematical basics, programming methodology, computer architecture, data structures, operating systems, and software engineering. Elective courses are presented in groups to guide students in the selection of advanced elective courses in computer science to provide further depth in computer science and the particular application area.
The Joint Major in Computation Arts and Computer Science combines a comprehensive education in both computer science and the design of interactive multimedia (see §71.80).
The Joint Major in Mathematics and Statistics and Computer Science combines a comprehensive education in both computer science and mathematics and statistics (see §71.85).
There is an honours program corresponding to BCompSc (and associated Joint Majors) (see §71.70.4). In addition, all programs are offered in the co-operative format, with alternating study and work terms, for a limited number of students with suitable qualifications (see §24).
5. The Software Systems option is a major in Computor Scionce that gives a firm grounding in diverse tools and techniques required for a wide variety of software systoms.
6. The Information Systems option combines a major in Computer Science with approximately a third of the crodits from the John Motson School of Businoss to ereate a program focusing on business applications of computer systems.
7. Tho-Computer Applications-option combines a major in-Computor Scionce with a minor in a discipline of the student's choice.
8. The-Computation Arts-option combines a major in Computor Scionce with a major in Fine Arts specializing in the design of interactive multimedia.
9. The Mathematics and Statistics-option combines a major in Computor Science with a major in Mathematics and Statistics.
There is an honours program corresponding to the-General Program and each eption (see §71.70.4). In addition, all programs are offered in the co-operative format, with alternating study and work terms, for a limited number of students with suitable qualifications (see §24).

## Rationale:

These changes reflect the removal of options from the BCompSc program.
Resource Implications:
None.

PROGRAM CHANGE: 71.70.2 Degree Reqs for COMP
Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes
Calendar for academic year: 2021/2022
Implementation Month/Year: May 2020

| Faculty/School: | Gina Cody School of Engineering and Computer Science |
| :--- | :--- |
| Department: | Computer Science and Software Engineering |
| Program: | Computer Science |
| Degree: | BCompSc |
| Calendar Section/Graduate Page Number: | 71.70 .2 |

Type of Change:
[] Editorial [X] Requirements [] Regulations [X] Program Deletion New Program

| Present Text (from 2019/2020) calendar |
| :--- | :--- |
| 71.70.2 Degree Requirements |
| To be recommended for the degree of BCompSc, students must satisfactorily complete an |
| approved program of at least 90 credits comprising the courses of the Computer Science | approved program of at least 90 credits comprising the courses of the Computer Science Core and those courses specified for their particular program in accordance with the graduation requirements of $\S 71.10 .5$.

Students may not register for a 400-level course before completing all of the 200-level Computer Science Core courses of their program.
The Gina Cody School of Engineering and Computer Science is committed to ensuring that its students possess good writing skills. Hence, every student in an undergraduate degree program is required to demonstrate competence in writing English or French prior to graduation.
All students admitted to the Gina Cody School of Engineering and Computer Science must meet the writing skills requirement as outlined in §71.20.7 (Writing Skills Requirement). If a student has satisfied the writing skills requirement prior to transferring to the Gina Cody School of Engineering and Computer Science, that student is deemed to have satisfied the writing skills requirement.
Newly admitted students are strongly encouraged to meet the requirement very early in their program (fall term of first year for students starting in September or winter term of first year for students starting in January) to avoid the risk of delayed graduation should remedial work prove necessary. Students who are required to take ESL courses should meet the Faculty writing skills requirements in the term following completion of their ESL courses.
Students registered in the Computer Science program must complete a minimum of 90 credits. The program offers the General Program and eight options (see §71.70.1). All options consist of the Computer Science Core ( 33 credits), the Complementary Core (6) credits), Option-Specific Courses, Computer Science Electives, Mathematics Electives, and General Electives.

| Computer Science Core ( $\mathbf{3}$ credits) | Credits |  |
| :--- | :--- | :--- |
| COMP 228 | System Hardware | 3.00 |

## Proposed Text

### 71.70.2 Degree Requirements (BCompSc)

To be recommended for the degree of BCompSc, students must satisfactorily complete an approved program of at least 90 credits comprising the courses of the Computer Science Core, the Complementary Core, Computer Science Electives, Mathematics Electives, and the remaining courses comprised of a Minor and/or General Electives in accordance with the graduation requirements of $\S 71.10 .5$. The program also offers the BCompSc degree in the form of two joint major degrees (see §71.70.1).
Students may not register for a 400-level course before completing all of the 200-level Computer Science Core courses of their program.
The Gina Cody School of Engineering and Computer Science is committed to ensuring that its students possess good writing skills. Hence, every student in an undergraduate degree program is required to demonstrate competence in writing English or French prior to graduation.
All students admitted to the Gina Cody School of Engineering and Computer Science must meet the writing skills requirement as outlined in §71.20.7 (Writing Skills Requirement). If a student has satisfied the writing skills requirement prior to transferring to the Gina Cody School of Engineering and Computer Science, that student is deemed to have satisfied the writing skills requirement.
Newly admitted students are strongly encouraged to meet the requirement very early in their program (fall term of first year for students starting in September or winter term of first year for students starting in January) to avoid the risk of delayed graduation should remedial work prove necessary. Students who are required to take ESL courses should meet the Faculty writing skills requirements in the term following completion of their ESL courses.

| BCompSc | $\underline{\text { Credits }}$ |  |
| :--- | :--- | :--- |
|  | $\underline{\text { Computer Science Core }}$ | $\underline{33.00}$ |
|  | $\underline{\text { Complementary Core }}$ | $\underline{6.00}$ |
|  | $\underline{\text { Computer Science Electives }}$ | $\underline{18.00}$ |




|  | Computer Science Core | 33.00 | SOEN 387 | Web-Based Enterprise Application Design | 3.00 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gomplomentary Core | 6.00 | SOEN 487 | Web Services and Applications | 4.00 |
|  | Gomputar Gamos Electives | 24.00 |  |  |  |
|  | Computer Science Electives | 6.00 | Mathematics Electives |  |  |
|  | Mathematics Electives* | 6.00 | Mathematics Electives must be chosen from the following list: |  | Credits |
|  | General Electives or Minor in Game Design** | 15.00 | COMP 339* | Combinatorics | 3.00 |
|  |  |  | COMP 361* | Elementary Numerical Methods | 3.00 |
|  |  | 90.00 | COMP 367* | Techniques in Symbolic Computation | 3.00 |
| *Noto: Studonts must takeCOMP 361 as part of thoir Mathomatics Eloctives. |  |  | ENGR 213 | Applied Ordinary Differential Equations | 3.00 |
| **Note: A maximum of 15 credits from the Minor in Game Design (see §81.90) may be counted towards the Gonoral Electives. |  |  | ENGR 233 | Applied Advanced Calculus | 3.00 |
|  |  |  | MAST 218 | Multivariable Calculus I | 3.00 |
| Computer Games Electives |  |  | MAST 219 | Multivariable Calculus II | 3.00 |
| Students must complete six courses (24 credits) from the following list of courses, including all the courses marked*. |  |  | MAST 234 | Linear Algebra and Applications I | 3.00 |
|  |  |  | MAST 235 | Linear Algebra and Applications II | 3.00 |
|  |  | Gredits | MAST 324 | Introduction to Optimization | 3.00 |
|  |  |  | MAST 332* | Techniques in Symbolic Computation | 3.00 |
| GOMP 345* | Advanced Program Design with C+土 | 4.00 | MAST 334* | Numerical Analysis | 3.00 |
| GOMP 353 | Databases | 4.00 | MATH 251 | Linear Algebra I | 3.00 |
| GOMP 371* | Gomputer Graphics | 4.00 | MATH 252 | Linear Algebra II | 3.00 |
| GOMP 376* | Introduction to Game Development | 4.00 | MATH 339* | Combinatorics | 3.00 |
| GOMAP 172 | Artificial/Intolligence | 4.00 | MATH 392 | Elementary Number Theory | 3.00 |
| GOMP 176 | Advancod Gamo Dovolopment | 4.00 |  |  |  |
| GOMP 477 | Animation for Computer Games | 4.00 | Any credits exceeding the required number of Mathematics Elective credits will accrue towards the General Elective credits. <br> *Students cannot receive credit for both COMP 339 and MATH 339; COMP 361 and MAST 334; COMP 367 and MAST 332. |  |  |
| 3. Web Services and Applications-Option |  | Gredits | MAST 334; COMP 367 and MAST 332. |  |  |
|  | Computer Science Core | 33.00 | General Electives |  |  |
|  | Complementary Core | 6.00 | General Elect | must be chosen from the following list: |  |
|  | Web Services and Applications Electives | 22.00 |  |  |  |
|  | Computer Science Electives | 8.00 | - Con | er Science Electives as mentioned above. |  |
|  | Mathematics Eloctives | 6.00 | - Gen | Education Electives found in §71.110. |  |
|  | Gonoral Electivos | 15.00 | - Bas | nd Natural Science Courses list found in §71. |  |
| $90.00$ <br> Web-Services-and-Applications Electives <br> Students must complete-six courses (22 credits) from the following list of courses, including all the coursos markod*. |  |  | A course outside this list may qualify as a General Elective only with prior written permission on a GCS Student Request form, obtainable from the Office of Student Academic Services in the Gina Cody School of Engineering and Computer Science. |  |  |
|  |  |  | Joint Major in Computation Arts and Computer Science See §71.80 for details. |  |  |


|  |  | Gredits | Joint Major in Mathematics and Statistics and Computer Science See §71.85 for details. |
| :---: | :---: | :---: | :---: |
| GOMP 353* | Databases | 4.00 |  |
| GOMP 445 | Data-Communication and Computor Notworks | 4.00 |  |
| COMP 479 | Information Retrieval and Web Search | 4.00 |  |
| SOEN 287* | Web Programming | 3.00 |  |
| SOEN 387* | Web-Based Enterprise Application Design | 3.00 |  |
| SOEN-423 | Distributed Systems | 4.00 |  |
| SOEN 487 | Web Services and Applications | 4.00 |  |
| 4. Computer Systems Option |  | Gredits |  |
|  | Gomputer Scionco-6ore | 33.00 |  |
|  | Complementary Core | 6.00 |  |
|  | Computer Systems Electives | 22.00 |  |
|  | Computer Science Electives | 8.00 |  |
|  | Mathematics Electives | 6.00 |  |
|  | General Electives | 15.00 |  |
|  |  | 20.00 |  |
| Computer Systems Electives <br> Students must complete six courses (22 credits) from the following list of courses, including all the courses marked*. |  |  |  |
|  |  | Grodits |  |
| COMP 326* | Computer Architecture | 3.00 |  |
| COMP 345* | Advanced Program Design with C+4 | 4.00 |  |
| GOMP 426 | Multicore Programming | 4.00 |  |
| GOMP 428 | Parallel Programming | 4.00 |  |
| GOMP 445 | Data Communication and Computer Networks | 4.00 |  |
| SOEN 422* | Embedded Systems and Software | 4.00 |  |
| SOEN-123 | Distributed Systoms | 4.00 |  |
| 5. Software-Systems-Option |  | Grodits |  |


|  | Gomputor Scionco-Gore | 33.00 |
| :---: | :---: | :---: |
|  | Gomplomentary-Core | 6.00 |
|  | Software Systems Core | 20.00 |
|  | Computer Science Electives | 13.00 |
|  | Mathematics Electives | 6.00 |
|  | General Electives | 12.00 |
|  |  | 90.00 |
| Software-Systems-Gore |  | Grodits |
| GOMP 326 | Gomputor Architecture | 3.00 |
| GOMP 339 | Combinatorics | 3.00 |
| COMP 353 | Databases | 4.00 |
| GOMP 361 | Elementary Numerical Methods | 3.00 |
| GOMP 445 | Data-Communication and Computer Notworks | 4.00 |
| GOMP 465 | Design and Analysis of Algorithms | 3.00 |
|  |  | 20.00 |
| 6. Information Systems-Option |  | Grodits |
|  | Computer Science Core | 33.00 |
|  | Complementary Core | 6.00 |
|  | Information Systems Electives | 31.00 |
|  | Computer Science Electives | 14.00 |
|  | Mathematics Electives | 6.00 |
|  |  | 90.00 |
| Information Systems Electives <br> Students must complete 10 courses (31 credits) from the following list of courses, including all the courses marked *. |  |  |
|  |  | Grodits |
| ACCO 220* | Financial and Managerial/Accounting | 3.00 |
| BSTA 445 | Statistical Software for Data Management and Analysis | 3.00 |



Note that the options are being removed in both the Software Engineering BEng and Computer Science BCompSc and that both sets of proposed changes have been done with required consistency in mind.

Rationale for Artificial Intelligence Group of Electives: In the last few years, there has been a world-wide surge of interest in the field of Artificial Intelligence (AI) and Machine Learning (ML) in particular. Evidence of this interest can directly be seen in our classrooms, as AI-related courses such as COMP 472 and COMP 473 have doubled ( 310 students versus 155 students in COMP 472 and COMP 473 alone) in enrollment compared to only 4 years ago, and have reached enrollment numbers of at least 100 in each of the 2019-20 Fall and Winter semesters. With the current state of the Canadian AI ecosystem, and the Montreal area in particular, it is important for Concordia to train highly skilled students who will be easily employable given this new demand from the industry for knowledgeable computer scientists in this area. This new AI group of electives directly addresses this need by offering a coherent set of courses that are relevant to this new AI demand and will provide students with the theoretical as well as hands-on experience in the field.

Rationale for Data Analytics Group of Electives: Data science has permeated into every industry, government, and business function. The future will need data-driven approaches for all fields of human endeavour. The challenges in handling massive datasets and performing the computations for analysis to transition from raw data to information to knowledge and to application are many and varied. Progress in this area will impact every facet of human life.

COMP 333 Data Analytics, COMP 432 Machine Learning, COMP 475 Immersive Technology, and SOEN 471 Big Data Analytics are new proposed permanent courses added to their respective group of electives.

Rationale for Implementation Date: The Implementation Date of May 2020 is purposeful for incoming students of Fall 2020, as said students will not be remitted with Options as of the 2020-21 academic year. Said changes are being communicated to Admissions and the Student Information Systems program in advance of the Undergraduate Calendar change.

As of May 2020, the Options wills no longer be offered, so the September 2020 incoming cohort of students will not be enrolled in the Options. They will instead be enrolled in the General Program. Students who are currently enrolled in the Options will be able to graduate with the Option. Mona Himo is following up on the admissions to ensure that the Fall 2020 cohort is tranferred into the General program.

## Resource Implications:

The removal of options from the BCompSc degree is not expected to change the number of students enrolled in the degree, so there are no resource implications.

## PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: COMP-101 VERSION: 10

PROGRAM CHANGE: 71.70.3 ECP

Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes
Calendar for academic year: 2021/2022
Implementation Month/Year: May 2020

| Faculty/School: | Gina Cody School of Engineering and Computer Science |
| :--- | :--- |
| Department: | Computer Science and Software Engineering |
| Program: | Computer Science |
| Degree: | BCompSc |
| Calendar Section/Graduate Page Number: | 71.70 .3 |

Calendar Section/Graduate Page Number: 71.70.3

Type of Change:


## GHEM 2053

PHYS 2043,2053
and-6-olective-credits chosen-from-outside the-Gina-Gody School-of Engineoring and Computer Science (see Note).
Note: ECP elective credits may be chosen as follows:

- General Education Electives found in §71.110.
- Basic and Natural Science Courses found in §71.70.9.
- Courses not included in the above lists may be taken with prior approval of the undergraduate program director.
Rationale:
Proposed editorial changes reflect the removal of Options from the BCompSc degree.
Resource Implications:
None.

PROGRAM CHANGE: 71.70.4 Honours Program
Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes
Calendar for academic year: 2021/2022
Implementation Month/Year: May 2020

| Faculty/School: | Gina Cody School of Engineering and Computer Science |
| :--- | :--- |
| Department: | Computer Science and Software Engineering |
| Program: | Computer Science |
| Degree: | BCompSc |
| Calendar Section/Graduate Page Number: | 71.70 .4 |

Type of Change:
[X] Editorial [] Requirements []Regulations [] Program Deletion New Program

## Present Text (from 2019/2020) calendar

### 71.70.4 Honours Program

Students should refer to §16.2.4 of the Calendar for academic regulations for the honours program. The following regulations are additional requirements for the Honours BCompSc program.

1. Applications to enter an honours program must be submitted to the Office of the Associate Dean (Student Academic Services) at least three months before the start of the term in which the student wishes to enter an honours program.
2. Students must complete at least 30 credits towards their degree before entering an honours program.
3. Students who are required to withdraw from an honours program may continue in the regular program of their option or General Program provided they are in acceptable or conditional standing according to the academic regulations in §71.10.3.

## Course Requirements for Honours Programs

Honours students must fulfill the requirements of their option. In addition, to receive an honours degree:

1. The student must have a final graduation GPA of at least 3.30 .
2. Students must successfully complete the course COMP 490 as one of the Computer Science electives for their option.
3. For students in the General Program, and the Computer Games, Computer Systems, and Web-Services-and Applications-Options, at least six of the General Electives credits must be-chosen from the list of Computer Science Electives with at least two of the following: COMP 339, COMP 465, and COMP or SOEN courses with a number between 6000 and 6951 not marked with (*).

## Proposed Text

### 71.70.4 Honours Program

Students should refer to §16.2.4 of the Calendar for academic regulations for the honours program. The following regulations are additional requirements for the Honours BCompSc program.

1. Applications to enter an honours program must be submitted to the Office of the Associate Dean (Student Academic Services) at least three months before the start of the term in which the student wishes to enter an honours program.
2. Students must complete at least 30 credits towards their degree before entering an honours program.
3. Students who are required to withdraw from an honours program may continue in the BCompSc degree provided they are in acceptable or conditional standing according to the academic regulations in §71.10.3.

## Course Requirements for Honours Programs

Honours students must fulfill the requirements of the BCompSc degree. In addition, to receive an honours degree:

1. Students must have a final graduation GPA of at least 3.30 .
2. Students must successfully complete the course COMP 490 as one of the Computer Science electives for the BCompSc.
3. Students must successfully complete at least six of the General Electives credits chosen from the list of Computer Science Electives with at least two of the following: COMP 339, COMP 465, and COMP or SOEN courses with a number between 6000 and 6951 not marked with (*).
4. For students in the Software-Systems Option, at least six of the Generat
Electives credits must be chosen from the list of Computer Science Electives
with at least one of the following: SOEN 331, and COAMP or SOEN courses with
a number between 6000 and 6951 not marked with (*).

PROGRAM CHANGE: 71.70.6 Related Programs
Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes
Calendar for academic year: 2021/2022
Faculty/School:
Gina Cody School of Engineering and Computer Science
Department:
Computer Science and Software Engineering
Program:
Computer Science
BCompSc
Degree:
Calendar Section/Graduate Page Number: 71.70.6

Type of Change:
[X] Editorial [] Requirements [] Regulations [] Program Deletion New Program

## Present Text (from 2019/2020) calendar

71.70.6 Programs Related to Computer Science

Both major and minor programs in Management Information Systems can be found in the dohnMolson School of Business Section of the Undergraduate Calendar, §61.
The Faculty of Fine Arts and the Department of Computer Science and Software
Engineering offer complementary major programs. Students who take the Computer
Applications Option (see §71.70.2 above) can also take the Major in Computation Arts and Computer Science-(see §71.80, and the Fine Arts Section, §81) or the Joint Major in
Mathematics and Statistics and Computer Applications (see §71.85, and the Mathematics and Statistics-Section, §31.200).

## Rationale:

Proposed editorial changes reflect the removal of Options from the BCompSc degree. The Management Information Systems Minor/Major in JMSB does not exist anymore.
Resource Implications:
None.

| [X] Editorial [] Requirements [] Regulations |
| :--- |
| Present Text (from 2019/2020) calendar <br> 71.70 .6 Programs Related to Computer Science <br> Both major and minor programs in Management Information Systems can be found in the <br> JohnMolson School of Business Section of the Undergraduate Catendar, §61. <br> The Faculty of Fine Arts and the Department of Computer Science and Software <br> Engineering offer complementary major programs. Students who take the Computer <br> Applications Option (see §71.70.2 above)can also take the Major in Computation Arts and <br> Gomputer Science-(see §71.80, and the Fine Arts Section, §81) or the Joint Major in <br> Mathematics and Statistics and Computer Applications (see $\S 71.85$, and the Mathematics |

## Proposed Text

### 71.70.6 Programs Related to Computer Science

The Faculty of Fine Arts and the Department of Computer Science and Software Engineering offer the Joint Major in Computation Arts and Computer Science (see §71.80, and Fine Arts - Design and Computation Arts, §81.90). The Faculty of Arts and Science and the Department of Computer Science and Software Engineering offer the Joint Major in Mathematics and Statistics and Computer Science (see §71.85, and Arts and Science Mathematics and Statistics, §31.200).

PROGRAM CHANGE: 71.70.8 Curriculum for BEng SOEN
Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes
Calendar for academic year: 2021/2022
Implementation Month/Year: May 2020

| Faculty/School: | Gina Cody School of Engineering and Computer Science |
| :--- | :--- |
| Department: | Computer Science and Software Engineering |
| Program: | Software Engineering |
| Degree: | BEng (SOEN) |
| Car |  |

## Calendar Section/Graduate Page Number: 71.70.8

Type of Change:
[X] Editorial [] Requirements [] Regulations [] New Program Deletion

| Present Text (from 2019/2020) calendar |  |
| :--- | :--- |
| 71.70.8 Curriculum for the Degree of BEng in Software Engineering |  |

The Software Engineering program is built on the fundamentals of computer science, an engineering core, and a discipline core in Software Engineering to cover the engineering approach to all phases of the software process and related topics.
The curriculum builds on the traditional computer science core topics of computer mathematics, theory, programming methodology, and mainstream applications to provide the computing theory and practice which underlie the discipline. The engineering core covers basic science, professional topics, and introduces the engineering approach to problem solving. The program core in Software Engineering includes advanced programming techniques, software specification, design, architecture, as well as metrics, security, project management, and quality control. The eptions cover a broad range of advanced topics, from formal methods to distributed systems.

## Extended Credit Program

The requirements of the Extended Credit Program (ECP) are set out in Section 71.20.2.

## Proposed Text

### 71.70.8 Curriculum for the Degree of BEng in Software Engineering

The Software Engineering program is built on the fundamentals of computer science, an engineering core, and a discipline core in Software Engineering to cover the engineering approach to all phases of the software process and related topics.
The curriculum builds on the traditional computer science core topics of computer mathematics, theory, programming methodology, and mainstream applications to provide the computing theory and practice which underlie the discipline. The engineering core covers basic science, professional topics, and introduces the engineering approach to problem solving. The program core in Software Engineering includes advanced programming techniques, software specification, design, architecture, as well as metrics, security, project management, and quality control. The electives cover a broad range of advanced topics, from formal methods to distributed systems.

## Extended Credit Program

The requirements of the Extended Credit Program (ECP) are set out in Section 71.20.2.

[^8]
## Resource Implications:

None.

## PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: COMP-101 VERSION: 10

PROGRAM CHANGE: 71.70.9 Degree Reqs for SOEN
Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes
Calendar for academic year: 2021/2022
Implementation Month/Year: May 2020

| Faculty/School: | Gina Cody School of Engineering and Computer Science |
| :--- | :--- |
| Department: | Computer Science and Software Engineering |
| Program: | Software Engineering |
| Degree: | BEng (SOEN) |
| Calendar Section/Graduate Page Number: | 71.70 .9 |

Type of Change:


|  | Computer Science Group |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Two Basic and Natural Science courses | 23.00 |  |  |


| Options |  |  |  |  | Credits |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Students must complete at least 16 credits with a minimum of 15 credits from one of the options listed bolow, including all the coursos marked *, and at least one courso markod **, and the remainder chosen from the electives list. |  |  | AERO 480 | Flight Control Systems | $\underline{3.50}$ |
|  |  |  | AERO 482 | Avionic Navigation Systems | 3.00 |
| Computer Games (CG) Option |  | Gredits | COEN 320 | Introduction to Real-Time Systems | 3.00 |
| GOMP 345 | Advanced Program Dosign with-C++ | 4.00 | COMP 333 | Data Analytics | 3.00 |
| GOMP 371* | Computor Graphics | 4.00 | COMP 339 | Combinatorics | 3.00 |
| COMP 376* | Introduction to Game Devolopment | 4.00 | COMP 345 | Advanced Program Design with C++ | 4.00 |
| COMP 472 | Artificial Intelligence | 4.00 | COMP 353 | Databases | 4.00 |
| COMP 476** | Advanced Game Development | 4.00 | COMP 371 | Computer Graphics | 4.00 |
| GOMP 477** | Animation for Computer Games | 4.00 | COMP 376 | Introduction to Game Development | $\underline{4.00}$ |
| Web-Services and Applications (WSA) Option |  | Crodits | COMP 425 | Computer Vision | 4.00 |
|  |  | Grealis | COMP 426 | Multicore Programming | 4.00 |
| COMP 353* | Databases | 4.00 | COMP 428 | Parallel Programming | 4.00 |
| COMP 445 | Data-Communication and Computer Networks | 4.00 | COMP 432 | Machine Learning | 4.00 |
| GOMP 479** | Information Retrieval and Web Search | 4.00 | COMP 442 | Compiler Design | 4.00 |
| SOEN 387* | Web-Based Enterprise Application Design | 3.00 |  |  |  |
| SOEN 487** | Web Services and Applications | 4.00 | COMP 444 | System Software Design | $\underline{4.00}$ |
|  |  |  | COMP 445 | Data Communication and Computer Networks | 4.00 |
| Real-Time, Embedded, and Avionics-Software (REA) Option |  | Crodits | COMP 451 | Database Design | 4.00 |
| AERO-480** | Flight Control Systems | 3.50 | COMP 465 | Design and Analysis of Algorithms | 3.00 |
| AERO-482** | Avionic Navigation Systems | 3.00 | COMP 472 | Artificial Intelligence | 4.00 |
| GOEN 320 | Introduction to Real-Time Systems | 3.00 | COMP 473 | Pattern Recognition | 4.00 |
| GOMP 345 | Advanced Program Dosign with-4+* | 4.00 | COMP 474 | Intelligent Systems | 4.00 |
| GOMP 444 | Systom-Software Design | 4.00 | COMP 475 | Immersive Technologies | 4.00 |
| SOEN 422* | Embedded Systems and Software | 4.00 | COMP 476 | Advanced Game Development | 4.00 |
| SOEN 423* | Distributed Systems | 4.00 | COMP 477 | Animation for Computer Games | $\underline{4.00}$ |
|  |  |  | COMP 478 | Image Processing | 4.00 |
| Electives |  | Credits | COMP 479 | Information Retrieval and Web Search | 4.00 |
| COMP 345 | Advanced Program Design with C++ | 4.00 | COMP 498 | Topics in Computer Science | 3.00 |
| COMP 353 | Databases | 4.00 | COMP 499 | Topics in Computer Science with Lab | 4.00 |
| COMP 371 | Computer Graphics | 4.00 | SOEN 298 | System Hardware Lab | 1.00 |
| COMP 425 | Computer Vision | 4.00 | SOEN 344 | Advanced Software Architecture and Design | 3.00 |
| COMP 426 | Multicore Programming | 4.00 | SOEN 387 | Web-Based Enterprise Application Design | 3.00 |
| COMP 428 | Parallel Programming | 4.00 | SOEN 422 | Embedded Systems and Software | 4.00 |
| COMP 442 | Compiler Design | 4.00 | SOEN 423 | Distributed Systems | 4.00 |
| COMP 445 | Data Communication and Computer Networks | 4.00 | SOEN 448 | Management of Evolving Systems | 3.00 |
| COMP 451 | Database Design | 4.00 | SOEN 471 | Big Data Analytics | $\underline{4.00}$ |


| COMP 465 | Design and Analysis of Algorithms | 3.00 | SOEN 487 | Web Services and Applications | 4.00 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| COMP 472 | Artificial Intelligence | 4.00 | SOEN 491 | Software Engineering Project | 1.00 |
| COMP 473 | Pattern Recognition | 4.00 | SOEN 498 | Topics in Software Engineering | 3.00 |
| COMP 474 | Intelligent Systems | 4.00 | SOEN 499 | Topics in Software Engineering with Lab | 4.00 |
| COMP 478 | Image Processing | 4.00 | ENGR 411 | Special Technical Report | 1.00 |
| COMP 479 | Information Retrieval and Web Search | 4.00 |  |  |  |
| SOEN 298 | System Hardware Lab | 1.00 | Computer Games Group |  | Credits |
| SOEN 422 | Embedded Systems and Software | 4.00 | COMP 345 | $\underline{\text { Advanced Program Design with } \mathrm{C}++}$ | 4.00 |
| SOEN 423 | Distributed Systems | 4.00 | COMP 371 | Computer Graphics | 4.00 |
| SOEN 448 | Management of Evolving Systems | 3.00 | COMP 376 | Introduction to Game Development | $\underline{4.00}$ |
| SOEN 491 | Software Engineering Project | 1.00 | COMP 475 | Immersive Technologies | 4.00 |
| SOEN 498 | Topics in Software Engineering | 3.00 | COMP 476 | Advanced Game Development | 4.00 |
| SOEN 499 | Topics in Software Engineering | 4.00 | COMP 477 | Animation for Computer Games | $\underline{4.00}$ |
| ENGR 411 | Special Technical Report | 1.00 | Data Engineering Group |  | Credits |
|  |  |  | COMP 333 | Data Analytics | 3.00 |
|  |  |  | COMP 353 | Databases | 4.00 |
|  |  |  | COMP 432 | Machine Learning | 4.00 |
|  |  |  | COMP 479 | Information Retrieval and Web Search | 4.00 |
|  |  |  | SOEN 471 | Big Data Analytics | 4.00 |
|  |  |  | Real-Time, Embedded, and Avionics Software Group |  | Credits |
|  |  |  | AERO 480 | Flight Control Systems | 3.50 |
|  |  |  | AERO 482 | Avionic Navigation Systems | 3.00 |
|  |  |  | COEN 320 | Introduction to Real-Time Systems | 3.00 |
|  |  |  | COMP 345 | Advanced Program Design with C++ | 4.00 |
|  |  |  | COMP 444 | System Software Design | 4.00 |
|  |  |  | SOEN 422 | Embedded Systems and Software | 4.00 |
|  |  |  | SOEN 423 | Distributed Systems | 4.00 |
|  |  |  | Web Services and Applications Group |  | Credits |
|  |  |  | COMP 353 | Databases | 4.00 |
|  |  |  | COMP 445 | Data Communication and Computer Networks | 4.00 |
|  |  |  | COMP 479 | Information Retrieval and Web Search | 4.00 |
|  |  |  | SOEN 387 | Web-Based Enterprise Application Design | 3.00 |
|  |  |  | SOEN 487 | Web Services and Applications | 4.00 |
| Rationale: |  |  |  |  |  |

Enrollment figures show a steady decline of interest in almost all our options, and an increase in the General option. Also, many students, once in the program, switch from other options to the General option, as this gives them the most flexibility in choosing electives. Finally, the scheduling of course sequences for all options is very rigid, which means it is very difficult to change course schedules without impacting the timely graduation of students in some options.

The removal of all options will increase flexibility in choosing electives for students and will ease course scheduling and be easier to administer. The grouping of courses into groups of electives provides students guidance on choosing electives in areas of interest, while not forcing them to take all electives in the group before graduation. Adding or deleting new groups of electives can be done more easily and in a more timely way as there are no associated accreditation issues.

Note that the options are being removed in both the Software Engineering BEng and Computer Science BCompSc and that both sets of proposed changes have been done with required consistency in mind.

Rationale for addition of Data Engineering Group of Electives: Data is becoming a central component of software systems. The data engineering group of electives will prepare our students to deal with the increasing role of data in software systems. Data engineer is a job title and role that many software engineers take in the industry today.

Additional proposed changes:

- COMP 465 was already on the elective list, but its prerequisite is COMP 339. As required by the Associate Dean, COMP 339 is added to the elective list.
- Examples of COMP 499 (Introduction to Data Analytics) and COMP 498 (Foundations of Visual Computing) are advanced slot courses offered by the department. Some students showed interest in taking them. Therefore, the general slot course group of COMP 498 and COMP 499 are added to the list of SOEN elective courses.
- COMP 333 Data Analytics, COMP 432 Machine Learning, COMP 475 Immersive Technology, and SOEN 471 Big Data Analytics are new proposed permanent courses added to their respective group of electives.
- All electives not already in overall Electives list are also added to the Electives list.
- The title of SOEN 499 is corrected to its actual title (overlooked in a previous curriculum revision).


## Resource Implications:

The removal of options from the BEng (SOEN) degree is not expected to change the number of students enrolled in the degree, so there are no resource implications.

PROGRAM CHANGE: 71.80 Comp Arts Joint Major
Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes
Calendar for academic year: 2021/2022
Implementation Month/Year: May 2020

| Faculty/School: | Gina Cody School of Engineering and Computer Science |
| :--- | :--- |
| Department: | Computer Science and Software Engineering |
| Program: | Computer Science |
| Degree: | BCompSc |
| Calendar Section/Graduate Page Number: | 71.80 |

Calendar Section/Graduate Page Number: 71.80
Type of Change:
[X] Editorial [] Requirements []Regulations [] Program Deletion New Program

## Present Text (from 2019/2020) calendar

## Objectives

The Gina Cody School of Engineering and Computer Science and the Faculty of Fine Arts have created a program of study which combines a comprehensive education in computer science and a complementary set of courses of equivalent value in the fine arts. This program resides in both Faculties. In the Gina Cody School of Engineering and Computer Science, it is offered under the aegis of the Bachelor of/Baccalaureate in Computer Science,-Computer Applications-Option. According to their preferences and aspirations, students may apply either for a Bachelor of/Baccalaureate in Computer Science program, or a Bachelor of/Baccalaureate in Fine Arts program. The Fine Arts offering is described in $\S 81.90$. The Computer Science program is described below.

## Curriculum

The Computer Applications Option may be taken with a Major in Computation Arts. It consists of 45 credits in Computer Science complemented by 45 credits of study in Fine Arts.It provides a foundation for the integration of the arts and computer science as hybrid digital media arts and multimedia productions.
The Computation Arts core focuses on three areas of digital media: image works, sound exploration, and 3D modelling/animation. Through the integration of theory and practice, the programs aim at developing interdisciplinary cultural and technological practices, for independent arts initiatives, industry, and client-based productions.
The core courses are open-ended and flexible to accommodate change that will run parallel to technological advancements in industry and give students a strong base in multimedia research. Design Art, Electroacoustics, Film Animation, and the Studio Electronic Arts provide the Fine Arts electives, which further supports the crossdisciplinary nature of the program directives. This program will give graduates the conceptual abilities and technical skills they need to practise as hybrid cultural workers in the rapidly expanding field of multimedia. Students will have many more options to finetune a multimedia program according to their individual needs and expectations. Courses have been restructured into three credits to facilitate computer lab access, and flexibility in course sequencing and offerings, as well as to accommodate completion of the program

## Proposed Text

## Objectives

The Gina Cody School of Engineering and Computer Science and the Faculty of Fine Arts have created a program of study which combines a comprehensive education in computer science and a complementary set of courses of equivalent value in the fine arts. This program resides in both Faculties. In the Gina Cody School of Engineering and Computer Science, it is offered under the aegis of the Bachelor of/Baccalaureate in Computer Science ( BCompSc ). According to their preferences and aspirations, students may apply either for a Bachelor of/Baccalaureate in Computer Science program, or a Bachelor of/ Baccalaureate in Fine Arts program. The Fine Arts offering is described in $\S 81.90$. The Computer Science program is described below.

## Curriculum

The BCompSc Joint Major in Computation Arts and Computer Science consists of 45 credits in Computer Science complemented by 45 credits of study in Fine Arts. It provides a foundation for the integration of the arts and computer science as hybrid digital media arts and multimedia productions.
The Computation Arts core focuses on three areas of digital media: image works, sound exploration, and 3D modelling/animation. Through the integration of theory and practice, the programs aim at developing interdisciplinary cultural and technological practices, for independent arts initiatives, industry, and client-based productions.
The core courses are open-ended and flexible to accommodate change that will run parallel to technological advancements in industry and give students a strong base in multimedia research. Design Art, Electroacoustics, Film Animation, and the Studio Electronic Arts provide the Fine Arts electives, which further supports the crossdisciplinary nature of the program directives. This program will give graduates the conceptual abilities and technical skills they need to practise as hybrid cultural workers in the rapidly expanding field of multimedia. Students will have many more options to finetune a multimedia program according to their individual needs and expectations. Courses have been restructured into three credits to facilitate computer lab access, and flexibility in course sequencing and offerings, as well as to accommodate completion of the program

## within a co-op structure.

Students of Computation Arts must bear the costs of annual laboratory fees.

## Structure of the Program

## Computation Arts Option

The program consists of 45 credits in Computer Science and 45 credits in Fine Arts, as described below:

|  |  | Credits |
| :---: | :---: | :---: |
|  | Computer Science Core (see §71.70.2) | 33.00 |
|  | Computation Arts Core (see §81.90.2) | 45.00 |
| COMP 345 | Advanced Program Design with C++ | 4.00 |
| COMP 371 | Computer Graphics | 4.00 |
| ENCS 282 | Technical Writing and Communication | 3.00 |
| ENGR 411 | Special Technical Report | 1.00 |
|  |  | 90.00 |
| Admission Requirements |  |  |
| The Computation Arts Major is limited to students who are enrolled in or simultaneously applying for the Gomputer ScioncoApplications Option and who are qualified for the Fine Arts component. Applicants must fulfill the admission requirements for the Computer Scionco-Option in ComputerApplications (see §71.10.2) and be accepted into the Computer Applications Option. <br> In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Computation Arts. All applicants must submit a portfolio following the instructions outlined on the Design and Computation Arts website at concordia.ca/finearts/design. |  |  |

within a co-op structure.
Students of Computation Arts must bear the costs of annual laboratory fees.

## Structure of the Program

## Joint Major in Computation Arts and Computer Science

The program consists of 45 credits in Computer Science and 45 credits in Fine Arts, as described below:

## Admission Requirements

The Joint Major in Computation Arts and Computer Science is limited to students who are enrolled in or simultaneously applying for the BCompSc and who are qualified for the Fine Arts component. Applicants must fulfill the admission requirements for the BCompSc (see §71.10.2) and be accepted into the BCompSc.
In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Computation Arts. All applicants must submit a portfolio following the instructions outlined on the Design and Computation Arts website at concordia.ca/finearts/design.

## Rationale:

The proposed changes reflect the removal of Options from the BCompSc offerings.

## Resource Implications: <br> None.

| PROGRAM CHANGE: 71.85 Math and Stats / BCompSc |  |
| :---: | :---: |
| Proposed [X] Undergraduate or [ ] Graduate Curriculum Changes |  |
|  | Calendar for academic year: 2021/2022 <br> Implementation Month/Year: May 2020 |
| Faculty/School: Gina Cody School of Engineering and Comp | uter Science |
| Department: Computer Science and Software Engineering |  |
| Program: Computer Science |  |
| Degree: BCompSc |  |
| Calendar Section/Graduate Page Number: 71.85 |  |
| Type of Change: |  |
| [X] Editorial [] Requirements [] Regulations | [] Program Deletion [ ] New Program |
| Present Text (from 2019/2020) calendar | Proposed Text |
| Mathematics and Statistics and |  |
| Section 71.85 | Section 71.85 |
| Faculty | Faculty |
| Undergraduate Program Director | Undergraduate Program Director |
| GREGORY BUTLER, PhD University of Sydney; Professor | GREGORY BUTLER, PhD University of Sydney; Professor |
| Location | Location |
| Sir George Williams Campus | Sir George Williams Campus |
| Engineering, Computer Science and Visual Arts Complex, Room: EV 003.139 514-848-2424, ext. 3000 | Engineering, Computer Science and Visual Arts Complex, Room: EV 003.139 514-848-2424, ext. 3000 |
| Objectives | Objectives |
| The Gina Cody School of Engineering and Computer Science and the Faculty of Arts and Science have created a program of study which combines a comprehensive education in computer science and mathematics. This program resides in both Faculties. In the Gina | The Gina Cody School of Engineering and Computer Science and the Faculty of Arts and Science have created a program of study which combines a comprehensive education in computer science and mathematics. This program resides in both Faculties. In the Gina |

Cody School of Engineering and Computer Science, it is offered under the aegis of the Bachelor of/Baccalaureate in Computer Science,Computer Applications-Option.
According to their preferences and aspirations, students may apply either for a Bachelor of/Baccalaureate in Computer Science program, Bachelor of/Baccalaureate in Science program, or Bachelor of/Baccalaureate in Arts program. The Arts and Science offering is described in $\S 31.200$. The Computer Science program is described below.

## Curriculum

The Computer Applications Option may be taken with a Major in Mathematics and Statistics. Itprovides a foundation for integrated studies in computer science and mathematics.
The mathematics component of the program includes topics that overlap with computer science, such as modelling, symbolic computation, and combinatorics, as well as the standard topics of a mathematical curriculum.

## Structure of the Program

The program consists of 90 credits.

## Mathematics and Statistics Option

Credits
Computer Science Core (see §71.70.2)*
33.00

Complementary Core (see §71.70.2)
Mathematics and Statistics Core
36.00

Computer Science Electives (see §71.70.2)
General Electives (see §71.70.2)
*COMP 232 may be replaced by MAST 217. COMP 233 must be replaced by MAST 221.

| Mathematics and Statistics Core | Credits |  |
| :--- | :--- | :--- |
| COMP 339 | Combinatorics* | 3.00 |
| COMP 361 | Elementary Numerical Methods** | 3.00 |
| COMP 367 | Techniques in Symbolic Computation*** | 3.00 |
| COMP 465 | Design and Analysis of Algorithms | 3.00 |
| MAST 218 | Multivariable Calculus I | 3.00 |
| MAST 219 | Multivariable Calculus II | 3.00 |
| MAST 232 | Mathematics with Computer Algebra | 3.00 |
| MAST 234 | Linear Algebra and Applications I | 3.00 |
| MAST 235 | Linear Algebra and Applications II | 3.00 |
| MAST 324 | Introduction to Optimization | 3.00 |
| MAST 331 | Mathematical Modelling | 3.00 |
| MAST 333 | Applied Statistics | 3.00 |

Cody School of Engineering and Computer Science, it is offered under the aegis of the Bachelor of/Baccalaureate in Computer Science_(BCompSc). According to their
preferences and aspirations, students may apply either for a Bachelor of/Baccalaureate in Computer Science program, Bachelor of/Baccalaureate in Science program, or Bachelor of/Baccalaureate in Arts program. The Arts and Science offering is described in §31.200. The Computer Science program is described below.

## Curriculum

The BCompSc Joint Major in Mathematics and Statistics and Computer Science provides a foundation for integrated studies in computer science and mathematics. The mathematics component of the program includes topics that overlap with computer science, such as modelling, symbolic computation, and combinatorics, as well as the standard topics of a mathematical curriculum.

## Structure of the Program

The program consists of 90 credits.
Joint Major in Mathematics and Statistics and Computer Science Credits
Computer Science Core (see §71.70.2)* 33.00
Complementary Core (see §71.70.2) 6.00
Mathematics and Statistics Core (see §31.200) 36.00
Computer Science Electives (see §71.70.2) 3.00
General Electives (see §71.70.2) 12.00
90.00
*COMP 232 may be replaced by MAST 217. COMP 233 must be replaced by MAST 221.

| Mathematics and Statistics Core | Credits |  |
| :--- | :--- | :--- |
| COMP 339 | Combinatorics* $^{*}$ | 3.00 |
| COMP 361 | Elementary Numerical Methods** | 3.00 |
| COMP 367 | Techniques in Symbolic Computation*** | 3.00 |
| COMP 465 | Design and Analysis of Algorithms | 3.00 |
| MAST 218 | Multivariable Calculus I | 3.00 |
| MAST 219 | Multivariable Calculus II | 3.00 |
| MAST 232 | Mathematics with Computer Algebra | 3.00 |
| MAST 234 | Linear Algebra and Applications I | 3.00 |
| MAST 235 | Linear Algebra and Applications II | 3.00 |
| MAST 324 | Introduction to Optimization | 3.00 |
| MAST 331 | Mathematical Modelling | 3.00 |
| MAST 333 | Applied Statistics | 3.00 |





$\square$



## A Laboratory Instructor is required.

Other Programs within which course is listed:

## Support Documents for COMP 101

1. Support from the Faculty of Fine Arts concerning the Joint Program in Computation Arts
2. Support from the Department of Math and Statistics concerning the Join Program in Computer Applications
3. Course outlines for the new courses:
a. COMP 333: Data Analytics
b. COMP 432: Machine Learning
c. COMP 475: Immersive Technologies
d. SOEN 471: Big Data Analytics

| From: | Elaine Cheasley Paterson |
| :--- | :--- |
| To: | Ali Akgunduz |
| Subject: | Re: COMP-101 Dossier |
| Date: | Friday, January 10, 2020 11:55:55 AM |

# Dear Ali - Happy new year to you too! These changes to the Computation Arts side are moving through the various levels of curricular approval on our side too. The dossier is scheduled for the Feb Faculty Council then April APC (as there is no March one?). Hope this is ok. Best, Elaine 

## Dr Elaine Cheasley Paterson

Associate Dean, Academic Affairs
Associate Professor, Department of Art History
Faculty of Fine Arts, Concordia University, Montréal, EV 2.735
Twitter@mtlcraftprof
I acknowledge that Concordia University is located on unceded Indigenous lands. The Kanien'kehá:ka Nation is recognized as the custodians of the lands and waters we now call Montreal. Je reconnais que l'Université Concordia est située en territoire autochtone non cédé et que la nation Kanien'kehá:ka est la gardienne des terres et des eaux formant aujourd'hui Montréal. [Indigenous Directions Leadership Group, Concordia University, February 2017]

On Jan 10, 2020, at 11:22 AM, Ali Akgunduz [ali.akgunduz@concordia.ca](mailto:ali.akgunduz@concordia.ca) wrote:

Dear Elaine,

Happy New Year. I hope you had a nice holiday.

One of our departments, Computer Science and Software Engineering would like to remove options from their undergraduate programs (both Software Engineering and Computer Science). The Computer Science program runs a joint degree (in the calendar refers as "program of study") with Computation Arts. Currently the joint program has reference to "Bachelor of/Baccalaureate in Computer Science, Computer Applications Option". Once the Computer Science department removes the options from its programs, the joint degree needs to refer to only "Computer Science". As you can see in the attached dossier (page 31 on the pdf), we have made the necessary changes. We have been in communication with the Computation Arts for the past few months. Our original intention was to bring this dossier to the APC meeting in October. However for different reasons (SIS cannot accommodate these changes), APC has decided to table it until we resolve the SIS issues. We will bring this dossier to the APC meeting on February and our objective is to start implementing these change on September 2020 and reflect them in the calendar in 2021. In order to keep everything in order in the calendar, we need Computation Arts to make the necessary changes in their section of the calendar. The changes that we are making will not impact the joint degree at all. Just an editorial change from their side.

We have the green light from Computation Arts. I do not think there will be an issue. I am just letting you know about these changes.

All the best

Ali

Dr. Ali Akgunduz, Ph.D., M.B.A., PEO
Associate Dean, Academic Programs and Undergraduate Activities
GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE
CONCORDIA UNIVERSITY, MONTREAL, QC, CANADA

Phone: (514) 8482424 ext. 3073 or 3179

From: Chair-CSE (Lata Narayanan) [mailto:chair@cse.concordia.ca]
Sent: Thursday, January 9, 2020 4:07 PM
To: Ali Akgunduz [ali.akgunduz@concordia.ca](mailto:ali.akgunduz@concordia.ca)
Subject: Fwd: COMP-101 Dossier

Begin forwarded message:
From: Jonathan Lessard [glandeurlessard@gmail.com](mailto:glandeurlessard@gmail.com) Subject: Re: Fwd: COMP-101 Dossier
Date: November 19, 2019 at 2:09:04 PM GMT-5
To: Chair-CSE [chair@cse.concordia.ca](mailto:chair@cse.concordia.ca)
All right, you have our blessing to proceed with the curriculum change!

Sorry for the time it took, but next time put us in the loop earlier!
best,
jonathan
Le 11/18/2019 à 12:17 PM, Chair-CSE a écrit :
Hi Jonathan,
Here is the provotrack.
—Lata

From: Hal Proppe [hal.proppe@concordia.ca](mailto:hal.proppe@concordia.ca)
Date: January 20, 2020 at 11:27:43 PM GMT+4
To: Lata Narayanan [lata@cse.concordia.ca](mailto:lata@cse.concordia.ca)
Cc: Cody Hyndman [cody.hyndman@concordia.ca](mailto:cody.hyndman@concordia.ca)
Subject: Joint Program

Dear Lata,

This morning we had a meeting of our Curriculum Committee and approved the changes required in our portion of the undergraduate calendar (section 31.200) to rename our joint program: "BA or BSc Joint Major in Mathematics and Statistics and Computer Applications Science"; and in the Note under the course listing we have deleted the phrase "... Computer Applications Option".

As per our discussion, I am also writing to let you know that these changes will be submitted soon via Provotrack under Dossier \# MATH 31.

Best regards,

Hal

Dr. Hal Proppe
Professor and Associate Chair
Department of Mathematics and Statistics
LB 1041.23
Concordia University
1445 De Maisonneuve West,
Montreal, Que. H3G 1M8
(514) 848-2424 ext. 3217
(514) 848-2831 fax

# Department of Computer Science and Software Engineering Concordia University 

New Course Proposal<br>COMP 333 - Data Analytics (3 credits)

## Calendar Description

## COMP 333 Data Analytics (3 credits)

Prerequisite: ENCS 282; COMP 233 or ENGR 371; COMP 352. The course introduces the process of data analytics with the aid of examples from several disciplines. It covers data wrangling: extract-transform-load (ETL), cleaning, structuring, integration; data analytics activities: description, prescription, modeling, simulation, optimization, story-telling; and the Python ecosystem: language, libraries, and Jupyter environment. Lectures: three hours per week.

## Course Objectives and Motivation

Big Data and Data Analytics has permeated into every industry, government, and business function. The future will need data-driven approaches for all fields of human endeavour. The challenges in handling massive datasets and performing the computations for analysis to transition from raw data to information to knowledge and to application are many and varied. Data analytics is at the core of interdisciplinary collaboration with the social sciences, humanities, health and life sciences, ecology and the environment, culture and heritage, and engineering.
The aim of this course is to introduce students to the Python programming language and related tools for data analytics; and to expose them to a broad range of data analysis problems across a range of disciplines.

## Learning Outcomes

The learning outcomes of the course are:

- To know, and be able to carry out, the data analytics process from beginning to end.
- To know the terminology of the field.
- To understand the various types of data, and the issues in analysing each type of data.
- To know the techniques used for each step, and when a technique is appropriate.
- To know how to use the tools available in the Python ecosystem.


## Lecture Schedule

Week Topics<br>1 Introduction: Course, Data Analytics Process, Examples<br>2 Data, Numbers, Datasets, Descriptive Data Analysis<br>3 Confirmatory Data Analysis, Scientific Method, Hypothesis Testing<br>4 Data Warehouses, Online Analytical Processing, Business Intelligence<br>5 Data Formats and Schemas; Python pandas<br>6 Descriptive Data Analysis (recap); Data Wrangling; OpenRefine<br>7 Data Cleaning: Outliers, Missing Values, Unification, Normalization<br>8 Correlation; Causality; Significance<br>$9 \quad$ Visualization; Story Telling<br>10 Exploratory Data Analysis: Process, Feature Engineering, Clustering<br>11 Models: Regression, Classification, Prediction, Simulation<br>12 Machine Learning: Overview, Process, Guidelines, scikit-learn<br>13 Deployment: Dashboards, Big Data Infrastructure

## Evaluation

| Deliverable | \% of final grade |
| :--- | :---: |
| Assignments | $35 \%$ |
| Midterm | $15 \%$ |
| Final Examination | $50 \%$ |

There is no standard correspondence between the numerical marks and the final letter grades. Students must pass the examinations, combined, in order to pass the course. Students must pass the assignments, combined, in order to pass the course.

## Textbook

Python for Data Analysis: Data Wrangling with Pandas, NumPy, and IPython, 2nd Edition, by Wes McKinney, O’Reilly Media, 2017.

## Graduate Attributes

A Knowledge Base for Engineering: Demonstrated competence in university level mathematics, natural sciences, engineering fundamentals, and specialized engineering knowledge appropriate to the program. Data wrangling: Extract-Transform-Load, data cleaning, data integration. Data analytics: description, prescription, modeling, simulation, optimization, story-telling.
Problem analysis: An ability to use appropriate knowledge and skills to identify, analyze, and solve complex problems in order to reach substantiated conclusions. To perform
data wrangling, exploratory data analysis, model building and visualization on a relatively complex dataset through selection and application of appropriate tools.

Use of tools is the ability to create, select, apply, adapt, and extend appropriate techniques, resources, and modern engineering tools to a range of engineering activities, from simple to complex, with an understanding of the associated limitations. Python ecosystem: language; libraries numpy, scipy, pandas, matplotlib, seaborn, scikit-learn; Jupyter environment.

Individual and Team Work: An ability to work independently and as a member and leader in diverse teams and in multi-disciplinary settings. To work individually to analysis a relatively complex dataset. To perform data wrangling, exploratory data analysis, model building and visualization on a relatively complex dataset through selection and application of appropriate tools.

Communication Skills: An ability to communicate complex engineering concepts within the profession and with society at large. Such abilities include reading, writing, speaking and listening, and the ability to comprehend and write effective reports and design documentation, and to give and effectively respond to clear instructions. To present a report on a data analytics task as a Jupyter notebook, that tells a story, delivers a message, connects to the audience, with appropriate visualizations.

## Relationship to Other Courses

COMP 479 - Information Retrieval and Web Search: The proposed course has minimal text mining content.

COMP 6321 - Machine Learning: The proposed course has an overview of machine learning, but not depth on the techniques and theory. The proposed course covers the data preparation steps for machine learning, and provides a context.

INDU 431 - Quantitative Methods in Healthcare Systems: This other course focuses on operational aspects of healthcare. The proposed course focuses on data analytics and is not discipline-specific.
INDU 6611 - Applied Industrial Systems Analytics: The proposed course is undergraduate, and is not discipline-specific.
SOEN 471/6111 - Big Data Analytics: This other newly proposed course focuses on the specialized case of analysis of datasets of extreme size, which requires specific hardware/software solutions.

# Department of Computer Science and Software Engineering Concordia University 

New Course Proposal<br>COMP 432 - Machine Learning (4 credits)

## Calendar Description

COMP 432 Machine Learning (4 credits)
Prerequisite: COMP 352. This course introduces conceptual and practical aspects of machine learning. Concepts include regression, classification, maximum likelihood estimation, discriminative versus generative modeling, generalization, supervised learning, unsupervised learning, semi-supervised learning and transfer learning. Methods include linear models, mixture models, nearest neighbours, support vector machines, random forests, boosting, and basics of deep learning. A project is required. Lectures: three hours per week. Laboratory: two hours per week.

## Course Objectives and Motivation

Machine learning is central aspect of many of the latest technological breakthrough such as self-driving cars, cyber fraud detection, and online recommendation engines used on many successful internet applications. Due to the popularity of the results achieved by such applications, there has been a recent explosion of demand for courses teaching machine learning techniques. In the wake of this wave of interest, we have seen a sharp increase in the registrations for our Artificial Intelligence, which is related to but does not focus on Machine Learning. We thus propose the creation of a Machine Learning course to route the student demand to a course focused exactly on what they are looking for. This will provide an offer to a demand, as well as bring back the Artificial Intelligence course to a manageable size.

## Learning Outcomes

The learning outcomes of the course are:

- To know the terminology of the field.
- To know, be able to discern between, and properly apply a variety of machine learning concepts, models and methods.
- To be able to use state-of-the-art programming languages/libraries/tools for machine learning.


## Lectures Schedule

| Week | Topics |
| :---: | :--- |
| 1 | Overview |
| 2 | Linear regression |
| 3 | Linear classification |
| 4 | Concepts in generalization: fitting, bias, cross-validation |
| 5 | Probabilistic view of linear regression and classification |
| 6 | Support-vector machines |
| 7 | Multi-class classification |
| 8 | Decision trees and ensemble methods |
| 9 | Dimensionality reduction |
| 10 | Deep learning |
| 11 | Unsupervised learning |
| 12 | Machine learning pipelines |
| 13 | Final Project Presentations |

## Evaluation

| Deliverable | \% of final grade |
| :--- | :---: |
| Assignment | $20 \%$ |
| Project | $30 \%$ |
| Midterm Examination | $20 \%$ |
| Final Examination | $30 \%$ |

## Textbooks

- Pattern Recognition and Machine Learning by Christopher M. Bishop (2006)
- Deep Learning by Ian Goodfellow, Yoshua Bengio, and Aaron Courville (2016)


## Graduate Attributes

Knowledge-base: Broad coverage of concepts, different machine learning models and methods. Evaluated in examinations.

Use of tools: Use of appropriate programming languages and software libraries to develop programs that put into practice the foundations of machine as taught in the lectures. Evaluated in assignments and project.

Individual and team work : Work individually on targeted problem-solving assignments. Work as a small team on the development of a machine learning implementation project.

## Relationship to Other Courses

COMP 472 - Artificial Intelligence: This course teaches a combination of classical AI such as heuristic search, path finding and adversarial games, along with neural networks, auto-encoders, decision trees, and natural language processing. It relies on the classic book Artificial Intelligence: A Modern Approach by Russell \& Norvig.

COMP 473 - Pattern Recognition: This course teaches many of the same concepts as the proposed course but with a more statistical and mathematical focus. It is largely based on the classic Pattern Classification book by Duda \& Hart, but includes neural networks and convolutional neural networks. It is also taught using Matlab.
COMP 474 - Intelligent Systems: This course focuses on explicit rule-based systems, knowledge representation, and reasoning under uncertainty. It represents a different paradigm than machine learning and classical pattern recognition, with its own strengths and weaknesses.

COMP 425 - Computer Vision: Machine learning has become an essential technique for computer vision. At the same time, computer vision has vast domain-specific content that does not require any machine learning, such as image processing, camera models, multiview geometry, tracking, segmentation, classical features, and special data sets. There are also many machine learning methods that are tailored to computer vision.

# Department of Computer Science and Software Engineering Concordia University 

New Cross-Listed Course Proposal COMP 475/6371 - Immersive Technologies (4 credits)

## Calendar Description

COMP 475/6371 Immersive Technologies (4 credits)
Prerequisite: COMP 371 / None. The course will cover the fundamentals of immersive technologies, a brief history and overview of immersive technologies, analyze case studies of interactive experiences using immersive technologies, and identify the main challenges of the current state-of-the-art. Furthermore, it will cover the basic principles of 3D graphics for creating virtual assets and environments, and basic concepts and technologies for interaction. A project will provide hands-on experience on the design and development of interactive experiences with the user of immersive technologies. Lectures: three hours per week.

## Course Objectives and Motivation

Immersive technologies enhance the user's presence by adding layers of computer-generated enhancements on top of an existing reality, or by fully immersing them into a computergenerated simulation or recreation of a real or fictional environment. Recent advances in display hardware, and interfaces for multi-sensory input such as haptic, olfactory, etc, have caused the reemergence of immersive technologies [virtual and augmented reality, and everything in between] as one of the more popular areas in computer science. Consequently, this has led to a growing need for interactive, immersive experiences with applications in many areas ranging from education, vocational training, engineering, art, medicine, and recreational games.

The goal of the proposed course is to introduce undergraduate and graduate students to the fundamental issues and concepts relating to immersive technologies through the analysis of algorithms, case studies and presentations of state-of-the-art systems. Furthermore, the course will provide hands-on experience on the design and development of interactive experiences using the full capacity of state-of-the-art immersive technologies.
Immersive Technologies is taught at the undergraduate and graduate level in many Universities worldwide, including the University of Toronto which is weaving immersive technologies into its programs [i.e. Myhal Centre for Engineering Innovation \& Entrepreneurship].
The proposed course will add value to the teaching portfolio of the Department of Computer Science and Software Engineering by complementing the other computer games related courses, e.g. [Introduction to, Advanced] Game Development, Computer Graphics, Animation for Computer Games, etc.

## Learning Outcomes

By the end of this course, students will be able to:

- explain the physiology of human vision and visual perception
- identify and explain the various aspects of immersive technologies including MR and XR
- design and develop an immersive and interactive experience using immersive technologies
- compare, criticize and assess VR/AR systems and experiences


## Lectures Schedule

The table below outlines a tentative schedule for this course over a 13 -week term.

| Week | Topics |
| :---: | :--- |
| 1 | Course overview, The Geometry of Virtual Worlds |
| 2 | Light and Optics, Physiology of Human Vision |
| 3 | Visual Perception, Introduction to Virtual Reality |
| 4 | VR applications, Psychology of VR, Challenges |
| 5 | Interaction and Navigation in VR |
| 6 | Interaction with Objects in VR, Challenges (Interaction, Navigation) |
| 7 | 3D Graphics, Audio |
| 8 | Developing an Interactive experience in VR (hands-on examples) |
| 9 | Introduction to Augmented Reality |
| 10 | Building an AR experience, Challenges |
| 11 | Developing an Interactive experience in AR (hands-on examples) |
| 12 | Evaluating MR Systems and Experiences |
| 13 | Final Project Presentations |

Note: During weeks 8 and 11, students will present their ongoing project work and receive feedback.

## Evaluation

Grades will be based on in-class exams and a project involving the design and development of interactive experiences with the use of immersive technologies. As part of the course project, students will be expected to produce a report detailing their techniques and findings. The students enrolled in the graduate course are required to carry out a significantly more demanding project.

Note: A passing mark on each deliverable is required to get a passing grade for the course.

| Deliverable | \% of final grade |
| :--- | :---: |
| In class exam(s) | $50 \%$ |
| Course project | $50 \%$ |

## Textbooks

The suggested course textbooks are:

1. Virtual Reality by S. LaValle
2. Unreal Engine VR Cookbook: Developing Virtual Reality with UE4 by Mitch McCaffrey
3. Google Daydream VR Cookbook: Building Games and Apps with Google Daydream and Unity by Sam Keene

## Graduate Attributes

For the Undergraduate counterpart of this course, the CEAB/CIPS Accreditation requirements state that graduate attributes be included in the course. The selected graduate attributes for the Undergraduate counterpart are:
Knowledge base: Knowledge of immersive technologies. Introduction to the geometry of virtual worlds, light and optics. Physiology of the human vision and visual perception including color theory. Introduction to Virtual Reality and Augmented Reality. Interaction and Navigation in VR/AR and current limitations and challenges. 3D Graphics and Audio for VR/AR systems. Evaluation of immersive systems and experiences.
Problem analysis: Analyze the requirements and constraints of the problem in order to determine what design and implementation solutions will be used.
Design: Design and compose computer graphics components involving many aspects such as stated in the course description.

Use of tools: Use specific software development APIs to develop complex VR/AR applications, make an educated decision on the tools and APIs to use based on the established requirements, constraints and design.
Individual and team work: Work as a team in the development of an elaborated software development project using game engines and related programming tools. Demonstrate and present the project.

## Relationship to Other Courses

COMP 371 - Computer Graphics: This course provides an introduction to computer graphics and graphics hardware, introduction to graphics API and graphics systems architecture, mathematics of 2D and 3D transformations, and 2D and 3D viewing. The proposed
course will cover complementary topics such as demonstrating the use of -and interaction with- 3D models in interactive experiences.

COMP 6761 - Advanced 3D Graphics for Game Programming: Similar coverage as with COMP 371

COMP 376 - Introduction to Game Development: This course provides an introduction to design and implementation aspects of computer gaming including basic game design, storytelling and narratives, and game genres. Virtual environments, 2D and 3D game engines, and game development tools. Character development, gameplay strategies, level design in games, and user interfaces. Architecture of game consoles, analog and digital controllers, and the incorporation of graphics, sound, and music in game implementations. The proposed course will cover how the aforementioned concepts can be applied within the context of interactive experiences using immersive technologies.

COMP 476/6331 - Advanced Game Development: This course builds upon COMP 376 and focuses more on advanced aspects of game development i.e. game engine design, artificial Intelligence, physics-based techniques, networked gaming, improving realism. The proposed course will cover how the aforementioned concepts can be applied within the context of interactive experiences using immersive technologies.

COMP 477/6311 - Animation for Computer Games: This course covers algorithms, data structures, and techniques used in modeling and rendering dynamic scenes. Topics include principles of traditional animation, production pipeline, animation hardware and software, orientation representation and interpolation, modeling physical and articulated objects, forward and inverse kinematics, motion control and capture, key-frame, procedural, and behavioral animation, camera animation, scripting system, and free-form deformation. The proposed course will cover how the aforementioned concepts can be applied within the context of interactive experiences using immersive technologies.

# Department of Computer Science and Software Engineering Concordia University 

New Cross-Listed Course Proposal SOEN 471/6111 Big Data Analytics (4 credits)

## Calendar Description

## SOEN 471/6111 Big Data Analytics (4 credits)

Prerequisite: COMP 352 / None. This course focuses on the fundamentals of the big data terminology, concepts and technologies. For the technical aspects of big data management systems, the course focuses on big data engines, programming models and file systems. Specific techniques covered include supervised classification, recommender systems, data clustering, frequent itemsets mining, similarity search, data streams and graph analysis. A project will provide extensive hands-on experience. Lectures: three hours per week. Laboratory: two hours per week.

## Course Objectives and Motivation

Big Data analytics has been transforming the industry and science in various domains for the past few years, making possible the processing of Terabytes of data on a daily basis. This was enabled by the joint evolution of programming models, data-analysis algorithms and computing infrastructures. This course introduces the concepts and some algorithms used for Big Data analytics. It presents the principles of Big Data processing engines, and it details the main algorithms for the analysis of large datasets.

## Learning Outcomes

The learning outcomes of the course are:

- To be aware of the terminology used in the field.
- To master the concepts underlying the methods and tools used in the field.
- To be able to choose techniques, methods and tools appropriate to a certain problem.
- To know how to use specific tools currently used in the field to achieve results in a context similar to what is found in real life environments.


## Lecture Schedule

| Week | Topics |
| :---: | :--- |
| 1 | Introduction: definitions, main concepts, Big Data in society. |
| 2 | Big Data Engines and File Systems (I): Map-Reduce and Hadoop Dis- |
|  | tributed File System. |
| 3 | Big Data Engines and File Systems (II): Apache Spark, Dask. |
| 4 | Supervised Classification |
| 5 | Recommender Systems |
| 6 | Clustering |
| 7 | Midterm examination |
| 8 | Frequent Itemsets |
| 9 | Similarity Search |
| 10 | Data Streams |
| 11 | Graph Analysis |
| 12 | Project Presentations |
| 13 | Project Presentations |

## Evaluation

| Deliverable | \% of final grade |
| :--- | :---: |
| Lab Assignments | $30 \%$ |
| Midterm Examination | $10 \%$ |
| Final Examination | $30 \%$ |
| Project | $30 \%$ |

A passing mark on each of the 3 deliverables (lab assignments, examinations and project) is required to get a passing grade for the course. There is no standard relationship between percentages and letter grades assigned. The grading of the course will be done based on the relative percentages assigned to the assignments, project and the exam. There is no definite rule for translation of number grades to letter grades.

## Textbooks

The suggested course resources are:

1. Leskovec, Jure, Anand Rajaraman, and Jeffrey David Ullman. Mining of massive datasets. Cambridge university press, 2014.
2. Dean, Jeffrey, and Sanjay Ghemawat. "MapReduce: simplified data processing on large clusters." Communications of the ACM 51.1 (2008): 107-113.
3. Shvachko, Konstantin, et al. "The Hadoop Distributed File System." IEEE 26th symposium on Mass storage systems and technologies (MSST), 2010.
4. Zaharia, Matei, et al. "Apache spark: a unified engine for big data processing." Communications of the ACM 59.11 (2016): 56-65.
5. Rocklin, Matthew. "Dask: Parallel computation with blocked algorithms and task scheduling." Proceedings of the 14th Python in Science Conference. No. 130-136. 2015.
6. Koren, Yehuda, Robert Bell, and Chris Volinsky. "Matrix factorization techniques for recommender systems." Computer 8 (2009): 30-37.
7. Bahmani, Bahman, et al. "Scalable k-means++." Proceedings of the VLDB Endowment 5.7 (2012): 622-633.
8. Han, Jiawei, Jian Pei, and Yiwen Yin. "Mining frequent patterns without candidate generation." ACM sigmod record. Vol. 29. No. 2. ACM, 2000.
9. Bloom, Burton H. "Space/time trade-offs in hash coding with allowable errors." Communications of the ACM 13.7 (1970): 422-426.
10. J. Kleinberg. Two algorithms for nearest-neighbor search in high dimensions. Proceedings of the Twenty-Ninth Annual ACM Symposium on Theory of Computing, 1997.
11. Page, Lawrence, et al. The PageRank citation ranking: Bringing order to the web. Stanford InfoLab, 1999.

## Graduate Attributes

For the Undergraduate counterpart of this course, the CEAB/CIPS Accreditation requirements state that graduate attributes be included in the course. The selected graduate attributes for the Undergraduate counterpart are:

Knowledge base: Knowledge of the terminology and the concepts and models underlying the methods and tools used in the big data analytics area.

Problem analysis: Analyze the requirements and constraints of the problem in order to determine what design and implementation solutions should be used.
Use of tools: Use specific hardware/software solutions to develop a big data support/analysis platform, make an educated decision on the tools to be use based on the established requirements, constraints and design.
Individual and team work: Work as a team in the development of an elaborated software development project using big data engines and file systems and analytics tools. Demonstrate and present the project in front of the class.

## Relationship to Other Courses

COMP333 - Data Analytics: This other newly proposed course introduces the students to a broad array of techniques used in data analytics in general, as opposed to this course, which has a sharp focus on big data analytics, i.e. specialized hardware/software solutions required for the analysis of datasets of extreme size.

## SCHOOL OF GRADUATE STUDIES

MEMO TO: Sandra Gabriele, Vice-Provost, Innovation in Teaching and Learning

FROM: Brad Nelson, Associate Dean, Academic Programs and Development School of Graduate Studies

DATE: $\quad$ March 2, 2020

## SUBJECT: GRADUATE CURRICULUM CHANGES (AHSC-34)

(CALENDAR - 2019/2020)
DEPARTMENT OF APPLIED HUMAN SCIENCES
FACULTY OF ARTS AND SCIENCE

The Graduate Curriculum Committee (GCC) reviewed the curriculum changes approved by the Arts and Science Faculty Council.

The Department of Applied Human Sciences is proposing to update the admission requirements to the MA in Human Systems Intervention.

The GCC approved the proposed curriculum changes as presented. I therefore recommend that the Academic Programs Committee approve and recommend to Senate the above-mentioned curriculum changes in their final form.

cc: R. Courtemanche, Associate Dean, Academic Programs, Faculty of Arts and Science
J. Johnston, University Curriculum Administrator, Office of the Provost and Vice-President, Academic Affairs

UNIVERSITY

## INTERNAL MEMORANDUM

| TO: | Dr Bradley Nelson <br> Associate Dean, School of Graduate Studies <br> Chair, Graduate Curriculum Committee |
| :--- | :--- |
| FROM: | Dr André Roy, Dean, Faculty of Arts and Science <br> Chair, Arts and Science Faculty Council |
| DATE: | February 11, 2020 |
| SUBJECT: | Graduate Calendar Curriculum Changes <br> Department of Applied Human Sciences <br> AHSC-34 |
|  | MA Human Systems Intervention admission requirement change |

The following proposal was reviewed and approved at the Arts and Science Faculty Council meeting of January 24, 2020. We request that this proposal be considered at the next Graduate Curriculum Committee meeting.

The Department of Applied Human Sciences is removing the requirement of a one week residential Basic Human Interaction Laboratory as skills acquired in this laboratory are acquired in courses offered directly offered within the MA program namely in AHSC 610 Group Process Intervention and AHSC 620 Learning and Individual Change Processes.

Thank you for your consideration of this proposal for which there are no additional resource implications.

# Department of Applied Human Sciences 

AHSC-34

Memo from Chair

## Program change

MA in Human Systems Intervention

Department of Applied Human Sciences

## INTERNAL MEMORANDUM

TO: Richard Courtemanche, Associate Dean, Academic Programs, L-AD 225
FROM: Peter Morden, Chair, Applied Human Sciences, L-VE223-02
DATE: $\quad$ December 6, 2019
SUBJECT: Curriculum Proposal: Removal of entrance requirement, MA in Human Systems Intervention.

Following the approval by the Full-time Faculty Committee at its meeting on December 5, 2019, the Department of Applied Human Sciences is submitting the following graduate curriculum proposal for your consideration:

Remove from "admission requirements":
3. Successful completion of a one week residential Basic Human Interaction Laboratory and have written documentation from laboratory staff that they have competency in interpersonal interaction and facilitation.

The Department is proposing to remove this admission requirement in order to better manage the acquisition and assessment of competencies necessary to complete successfully the Human Systems Intervention program. Over time, the range of programs that students have been able to access to satisfy the prerequisite requirements have diversified in content and approach. Given the difficulty assuring that incoming students have acquired specific interpersonal competencies, it is preferable to assume this responsibility within the context of the program. The acquisition of basic human relations skills and competencies related to self-as-instrument are to be incorporated into AHSC 610, Group Process Intervention, which similarly has a residential component, and AHSC 620, Learning and Individual Change Processes.

Department of Applied Human Sciences

I would be pleased to discuss this matter with you or the members of the Faculty Curriculum Committee, and to answer any questions that you may have.

Thank you in advance for your consideration.


Peter Morden
Chair, Department of Applied Human Sciences
L-VE- 223.02


| 5.Be capable of undertaking all core courses of the first year in the scheduled <br> sequence of the program. | Proficiency in English. Applicants whose primary language is not English must <br> demonstrate that their knowledge of English is sufficient to pursue graduate studies in <br> their chosen field. Please refer to the Graduate Admission page for further information on <br> the Language Proficiency requirements and exemptions. <br> The Graduate Program Director may require a demonstration of English language <br> competencies for international students or students educated abroad. |
| :--- | :--- | :--- |
| Proficiency in English. Applicants whose primary language is not English must <br> demonstrate that their knowledge of English is sufficient to pursue graduate studies in <br> their chosen field. Please refer to the Graduate Admission page for further information on <br> the Language Proficiency requirements and exemptions. <br> The Graduate Program Director may require a demonstration of English language <br> competencies for international students or students educated abroad. | Requirements for the |

## SCHOOL OF GRADUATE STUDIES

MEMO TO: Sandra Gabriele, Vice-Provost, Innovation in Teaching and Learning

FROM: Brad Nelson, Associate Dean, Academic Programs and Development School of Graduate Studies

DATE: $\quad$ March 2, 2020

## SUBJECT: GRADUATE CURRICULUM CHANGES (ENGL-32) <br> (CALENDAR - 2019/2020) <br> DEPARTMENT OF ENGLISH <br> FACULTY OF ARTS AND SCIENCE

The Graduate Curriculum Committee (GCC) reviewed the curriculum changes approved by the Arts and Science Faculty Council.

The Department of English is proposing to update the titles of two of its master's programs. The new proposed titles are MA in English Literature with Thesis (Option A) and MA in Creative Writing with Thesis (Option C).

The GCC approved the proposed curriculum changes as presented. However, there was discussion about the nomenclature used for the research activities and it was suggested that the department consider using existing language in the Thesis Guidelines. I therefore recommend that the Academic Programs Committee approve and recommend to Senate the above-mentioned curriculum changes in their final form.

cc: R. Courtemanche, Associate Dean, Academic Programs, Faculty of Arts and Science J. Johnston, University Curriculum Administrator, Office of the Provost and Vice-President, Academic Affairs

# INTERNAL MEMORANDUM 

TO: $\quad$ Dr Bradley Nelson<br>Associate Dean, School of Graduate Studies<br>Chair, Graduate Curriculum Committee<br>FROM: Dr André Roy, Dean, Faculty of Arts and Science<br>Chair, Arts and Science Faculty Council<br>DATE: February 11, 2020<br>SUBJECT: Graduate Calendar Curriculum Changes<br>Department of English<br>ENGL-32<br>MA English Literature with Thesis (Option A) and MA Creative Writing with Thesis (Option C); changes to ENGL 693, 694

The following proposal was reviewed and approved at the Arts and Science Faculty Council meeting of January 24, 2020. We request that this proposal be considered at the next Graduate Curriculum Committee meeting.

Further to regulation changes put in place by the Fonds de Recherche Québec - Société et Culture (FRQ-SC) and the Ministère de l'Éducation et de l'Enseignement Supérieur (MEES), the Department of English is making curricular label modifications to ensure that their programs keep their designation of being research-based. Hence, the designation 'Thesis' has been clarified within their course titles where appropriate, in the Master of/Magisteriate in Arts English Literature with Thesis (Option A) and Master of/Magisteriate in Arts - Creative Writing with Thesis (Option C) providing a uniform thesis requirement across programs. Consequently, ENGL 694 Research Essay is renamed Research Thesis and the description for this course as well as ENGL 693 Bibliography are modified to replace 'essay' with the label 'thesis'.

Thank you for your consideration of this proposal for which there are no additional resource implications.

## Department of English

## ENGL-32

## Memo from Chair

## Program title change

Master of/Magisteriate in Arts - English Literature with Thesis (Option A) Master of/Magisteriate in Arts - Creative Writing with Thesis (Option C)

Course description change
ENGL 693 Bibliography ( 6 credits)
Course title and description change
ENGL 694 Research Thesis (18 credits)

# INTERNAL MEMORANDUM 

TO: Dr. Richard Courtemanche, Associate Dean, Academic Programs, Office of the Dean

FROM: Dr. Manish Sharma, Chair, Department of English

DATE: December 4, 2019
SUBJECT: MA English Literature with Research Essay (Option A) title change
At the English Departmental meeting of November 22, 2019, the English Department was informed by the Chair that new FRQ-SC and MEES regulations require that for MA programs to be considered "research based" (as opposed to practicum-based), they need to have the word "Thesis" in the title and include a Thesis component worth at least 18 credits. The English Department offers a graduate program (Option A) called "English Literature with Research Essay." It includes a major research paper but does not fulfill the Thesis requirement. Accordingly, the university administration has encouraged the English Department to rename this option so that our Option A can continue to count as research based.

After consulting with the School of Graduate Studies, the department's Graduate Program Director rewrote Option A. One of the issues here is that previously in order to be designated as a thesis, a significant piece of writing required an oral defence requirement, which was a significant part of the rationale for moving from (the now defunct) Option B to Option A. Though this was previously required of all Thesis-based programs, new proposals that will come into effect in December will eliminate the requirement that all Thesis options include an oral defence. Changes to Option A were approved by the Graduate Program Committee on November 18, 2019.

At its assembly on November 22, the English Department approved renaming the "Research Essay" a "Research Thesis" that will not require an oral defence. This will also require the retitling of one course: "ENGL 694 Research Essay" will then become "ENGL 694 Research Thesis".

Thank you for considering the changes, and I should emphasize that there are no resource implications added.

| Faculty/School: |  | Arts and Science |
| :---: | :---: | :---: |
| Department: |  | English |
| Program: |  | English Literature with Research Thesis ( |
| Degree: |  | MA |
| Calendar Section/Graduate Page Number: Winter 2020 |  |  |
| Type of Change: |  |  |
| [] Editorial | [ X ] Requirements | ] Regulations |
| Present Text (from 2019/2020) calendar |  |  |
| English MA |  |  |
| Note: Admissions to Option B hos been |  |  |
| suspended. |  |  |

## Admission Requirements

The Master of Arts program, with the exception of the Creative Writing option, requires an Honours degree or its equivalent in English with a minimum of a B+ (3.30 GPA) average. The Creative Writing option requires a major in English Literature or its equivalent with a minimum of a $B+(3.30 \mathrm{GPA})$ average. Information regarding the portfolio submission can be found at the English Department website. Applicants who lack one or two courses (12 credits or less) towards equivalency of an Honours degree, but who are otherwise well qualified, may be admitted with the provision that they take additional undergraduate courses as part of their master's program. Applicants requiring three or more courses (more than 12 credits) to complete the Honours equivalent be required to take a qualifying program of prescribed undergraduate courses, and reapply to the master's program after successful completion of this course work. Applicants should feel free to consult with all members of the English Department about the program. Specific matters should be addressed to the Graduate Program Director or to the Graduate Program

## English MA

## Note: Admissions to Option B have been suspended.

## Admission Requirements

The Master of Arts program, with the exception of the Creative Writing option, requires an Honours degree or its equivalent in English with a minimum of a $B+(3.30 \mathrm{GPA})$ average. The Creative Writing option requires a major in English Literature or its equivalent with a minimum of a $B+(3.30 \mathrm{GPA})$ average. Information regarding the portfolio submission can be found at the English Department website. Applicants who lack one or two courses (12 credits or less) towards equivalency of an Honours degree, but who are otherwise well qualified, may be admitted with the provision that they take additional undergraduate courses as part of their master's program. Applicants requiring three or more courses (more than 12 credits) to complete the Honours equivalent are required to take a qualifying program of prescribed undergraduate courses, and reapply to the master's program after successful completion of this course work. Applicants should feel free to consult with all members of the English Department about the program. Specific matters should be addressed to the Graduate Program Director or to the Graduate Program

## Assistant.

Proficiency in English. Applicants whose primary language is not English must demonstrate that their knowledge of English is sufficient to pursue graduate studies in their chosen field. Please refer to the Graduate Admission page for further information on the Language Proficiency requirements and exemptions.

## Requirements for the Degree

Credits. A fully-qualified candidate is required to complete a minimum of 45 credits.

## Academic Regulations

1. Academic Standing. Please refer to the Academic Standing section of the Calendar for a detailed review of the Academic Regulations.
2. Residence. All options have a minimum residence requirement of three terms of full-time study or the equivalent in part-time study.
3. Time Limit. Please refer to the Academic Regulation page for further details regarding the Time Limit requirements.
4. Graduation Requirement. In order to graduate, students must have a cumulative GPA of at least 2.70.

## Master of/Magisteriate in Arts — English Literature with Research Essay-(Option A)

This option gives the student the opportunity to study English literature in a range of periods and subjects. Emphasis rests on-course work, the seminar format of which encourages discussion, debate and collaboration. A fully qualified candidate takes a minimum of twenty-one 600-level course credits. In these courses the student is trained in academic research methods, gains knowledge to interpret literary texts and assess scholarship in particular fields, and applies these skills in graduate research papers. A fully qualified candidate is required to take a minimum of six credits from any courses designated by the Graduate Committee as fulfilling the "Period" requirement, and a minimum of three credits from any courses designated as fulfilling the "Theory" requirement. This option requires the preparation of an annotated bibliography of approximately three thousand words (ENGL 693) preliminary to a research essay of approximately ten thousand words (ENGL 694). The bibliography requires the approval of the Graduate Committee before a student is permitted to proceed with the research essay Both are supervised by a member of the department. The bibliography must be submitted to the Graduate Committee by 15 September of the second year. The research essay is

Assistant.
Proficiency in English. Applicants whose primary language is not English must demonstrate that their knowledge of English is sufficient to pursue graduate studies in their chosen field. Please refer to the Graduate Admission page for further information on the Language Proficiency requirements and exemptions.

## Requirements for the Degree

Credits. A fully-qualified candidate is required to complete a minimum of 45 credits

## Academic Regulations

1. Academic Standing. Please refer to the Academic Standing section of the Calendar for a detailed review of the Academic Regulations.
2. Residence. All options have a minimum residence requirement of three terms of full-time study or the equivalent in part-time study.
3. Time Limit. Please refer to the Academic Regulation page for further details regarding the Time Limit requirements.
4. Graduation Requirement. In order to graduate, students must have a cumulative GPA of at least 2.70.

## Master of/Magisteriate in Arts — English Literature with Thesis (Option A)

This option gives the student the opportunity to study English literature in a range of periods and subjects. Emphasis rests on the preparation of a thesis. In preparation for the thesis, a fully qualified candidate takes a minimum of twenty-one 600-level course credits. In these courses the student is trained in academic research methods, gains knowledge to interpret literary texts and assess scholarship in particular fields, and applies these skills in graduate research papers. A fully qualified candidate is required to take a minimum of six credits from any courses designated by the Graduate Committee as fulfilling the "Period" requirement, and a minimum of three credits from any courses designated as fulfilling the "Theory" requirement. This option requires the preparation of an annotated bibliography of approximately three thousand words (ENGL 693) preliminary to a research thesis of approximately ten thousand words (ENGL 694). The bibliography requires the approval of the Graduate Committee before a student is permitted to proceed with the research thesis Both are supervised by a member of the department. The research thesis is assessed by the supervisor and one other member of the department.
submitted by 1 February for spring graduation and 15 June for fall graduation. The research essay is assessed by the supervisor and one other member of the department.

## Master of/Magisteriate in Arts — English Literature with Thesis (Option B)

This option involves course work and intensive research on an original topic, approved by the Graduate Committee. In this option, a fully qualified candidate is required to take a minimum of 21 credits at the 600 -level including a minimum of six credits from any courses designated by the Graduate Committee as fulfilling the "Period" requirement, and a minimum of three credits from any courses designated as fulfilling the "Theory" requirement. A candidate electing the thesis option must satisfy the Graduate Committee of the viability of the topic and secure a member of the department to supervise the thesis. The English Department cannot guarantee the availability of a supervisor on every possible topic. The candidate will make an oral defence of the thesis. Theses must be submitted to the department by May 15 for Fall graduation and by February 1 for Spring graduation. For specific information concerning thesis proposals a student should consult the departmental guidelines. University regulations regarding the thesis may be found in the thesis section of this calendar. For purposes of registration, this work will be designated as ENGL 690 - Thesis.

## Master of/Magisteriate in Arts in English — Creative Writing (Option C)

To elect this option a candidate must have applied specifically for the Creative Writing option. A fully qualified candidate will take a minimum of 12600 -level credits from the regular academic course offerings, and 12 course credits in creative writing drawn from courses numbered ENGL 670-674 (ENGL 670 and ENGL 671 are Creative Writing courses). Only six credits of creative writing workshop (from ENGL 672, 673 or 674) may be elected in any year. Acreative writing thesis of book length, the proposal of which requires approval by the Graduate-Committee, must be submitted to the department by May 15 for Fall graduation and by February 1 for Spring graduation. For purposes of registration, this work will be-designated as ENGL 692 - Creative Writing Thesis. Creative Writing Option students may NOT substitute creative writing courses for any of the required 12 course credits of academic credits.
Note: In addition to the regulations governing the examination of master's theses outlined in this calendar, the Department of English has specific procedures for thesis examinations. Students should consult the Graduate Program Director for details.

## Courses

## Studies in Selected Areas

....
Thesis, Bibliography and Research-Essay
ENGL-690 Thesis (21-credits)

## Master of/Magisteriate in Arts — English Literature with Thesis (Option B)

This option involves course work and intensive research on an original topic, approved by the Graduate Committee. In this option, a fully qualified candidate is required to take a minimum of 21 credits at the 600 -level including a minimum of six credits from any courses designated by the Graduate Committee as fulfilling the "Period" requirement, and a minimum of three credits from any courses designated as fulfilling the "Theory" requirement. A candidate electing the thesis option must satisfy the Graduate Committee of the viability of the topic and secure a member of the department to supervise the thesis. The English Department cannot guarantee the availability of a supervisor on every possible topic. The candidate's thesis is orally defended. For specific information concerning thesis proposals a student should consult the departmental guidelines. University regulations regarding the thesis may be found in the thesis section of this calendar. For purposes of registration, this work is designated as ENGL 690 - Thesis.

## Master of/Magisteriate in Arts in English — Creative Writing with Thesis (Option C)

To elect this option a candidate must have applied specifically for the Creative Writing option. A fully qualified candidate takes a minimum of 12600 -level credits from the regular academic course offerings, and 12 course credits in creative writing drawn from courses numbered ENGL 670-674 (ENGL 670 and ENGL 671 are Creative Writing courses). Only six credits of creative writing workshop (from ENGL 672, 673 or 674) may be elected in any year. The Graduate Committee must approve a proposal for a creative writing thesis of book length. For purposes of registration, this work is designated as ENGL 692Creative Writing Thesis.
Creative Writing Option students may NOT substitute creative writing courses for any of the required 12 course credits of academic credits.
Note: In addition to the regulations governing the examination of master's theses outlined in this calendar, the Department of English has specific procedures for thesis examinations. Students should consult the Graduate Program Director for details.

## Courses

## Studies in Selected Areas ....

Thesis, Bibliography and Research Thesis
Option A:

ENGL 692 Creative Writing Thesis (21 credits)

## ENGL 693 Bibliography ( 6 credits)

The annotated bibliography constitutes a preliminary phase of the research essay. A student must successfully complete the annotated bibliography before producing the research essay. The approximate length of the annotated bibliography is 3,000 words and is supervised by the supervisor of the research essay. The bibliography is assessed on a pass/fail basis.

## ENGL 694 Research Essay (18 credits)

Prerequisite: ENGL 693.
A research essay of approximately 10,000 words is supervised by a member of the department and assessed by another faculty member acting as reader. The essay is assessed on a pass/fail basis.

## ENGL 693 Bibliography (6 credits)

The annotated bibliography constitutes a preliminary phase of the research thesis. A student must successfully complete the annotated bibliography before producing the research thesis. The approximate length of the annotated bibliography is 3,000 words and is supervised by the supervisor of the research thesis. The bibliography is assessed on a pass/fail basis.

## ENGL 694 Research Thesis (18 credits)

Prerequisite: ENGL 693.
A research thesis of approximately 10,000 words is supervised by a member of the department and assessed by another faculty member acting as reader. The thesis is assessed on a pass/fail basis.

## Option B:

ENGL 690 Thesis ( 24 credits)
Option C:

## ENGL 692 Creative Writing Thesis (21 credits)

## Rationale:

The use of 'essay' is replaced by 'thesis' in the MA in English Literature Option A to clarify that this MA option is research thesis based. The addition of 'with Thesis" to Creative Writing Option C uniformly presents a thesis requirement in all three programs, each with their own distinct specifications. Conforming to FCC recommendations, the additional subheadings ('Option B:', 'Option C:', 'Option A:') under the Courses listing clearly identifies the credit value of each thesis requirement in all three programs, further accentuating their distinctions.

These editorial changes reflect the degree requirements that are already in place, and will not require any content change. Rather, these measures are put in place to explicitly convey the thesis requirements of each program systematically.

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Resource Implications:
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None.



## SCHOOL OF GRADUATE STUDIES

MEMO TO: Sandra Gabriele, Vice-Provost, Innovation in Teaching and Learning

FROM: Brad Nelson, Associate Dean, Academic Programs and Development School of Graduate Studies

DATE: March 2, 2020

## SUBJECT: GRADUATE CURRICULUM CHANGES (EXCI-26) (CALENDAR - 2019/2020) <br> DEPARTMENT OF HEALTH, KINESIOLOGY AND APPLIED PHYSIOLOGY FACULTY OF ARTS AND SCIENCE

The Graduate Curriculum Committee (GCC) reviewed the curriculum changes approved by the Arts and Science Faculty Council.

The Department of Health, Kinesiology and Applied Physiology is proposing to add the research proposal course as a prerequisite to the thesis in the PhD in Health and Exercise Science.

The GCC approved the curriculum changes with minor editorial modifications. It requested that a course description be added to the Calendar for HEXS 890. I therefore recommend that the Academic Programs Committee approve and recommend to Senate the above-mentioned curriculum changes in their final form.

cc: R. Courtemanche, Associate Dean, Academic Programs, Faculty of Arts and Science
J. Johnston, University Curriculum Administrator, Office of the Provost and Vice-President, Academic Affairs

UNIVERSITY

## INTERNAL MEMORANDUM

TO: $\quad$ Dr Bradley Nelson<br>Associate Dean, School of Graduate Studies<br>Chair, Graduate Curriculum Committee<br>FROM: Dr André Roy, Dean, Faculty of Arts and Science Chair, Arts and Science Faculty Council<br>DATE: February 11, 2020; revised March 26, 2020<br>SUBJECT: Graduate Calendar Curriculum Changes<br>Department of Health, Kinesiology and Applied Physiology<br>EXCI-26

Prerequisite statement added to HEXS 890

The following proposal was reviewed and approved at the Arts and Science Faculty Council meeting of January 24, 2020. We request that this proposal be considered at the next Graduate Curriculum Committee meeting.

In order to ensure optimal flow between courses in the program, and minimize enrolment issues, the Department of Health, Kinesiology and Applied Physiology is clarifying the prerequisite for one course in the PhD in Health and Exercise Science program; to the course HEXS 890 Research and Thesis in Health and Exercise Science ( 69 credits). A course description is also added for calendar consistency.

Thank you for your consideration of this proposal for which there are no additional resource implications.

# Department of Health, Kinesiology and Applied Physiology 

## EXCI-26

## Memo from Chair

Memo from Department Curriculum Committee
Prerequisite and course description added

HEXS 890 Research and Thesis in Health and Exercise Science (69 credits)

# INTERNAL MEMORANDUM 

TO: Richard Courtemanche, Associate Dean, Academic Programs Faculty of Arts and Science<br>FROM: Véronique Pepin, Chair<br>Department of Health, Kinesiology, and Applied Physiology<br>DATE: November 11, 2019<br>SUBJECT: 2020-21 Graduate Calendar Curriculum Changes Department of Health, Kinesiology, and Applied Physiology EXCI-26<br>Prerequisites for PhD in Health and Exercise Science

Dear Richard,
The Department of Health, Kinesiology, and Applied Physiology submits for consideration the attached dossier (EXCI-26), which includes the following proposition:

- Addition of basic required prerequisite for a course within our PhD curriculum

The DCC has proposed to include a specific prerequisite for HEXS 890 Research and Thesis in Health and Exercise Science (Prerequisite HEXS 851 Research Proposal in Health and Exercise Science). Although this prerequisite is implied as the standard progression, we feel that having this in the calendar would be optimal for clarity.

The full EXCI-26 proposal was approved by the department during the March 15, 2019 faculty meeting.

There are no direct resource implications related to the requested changes.
Thank you for your consideration of this proposal.
Regards,


Véronique Pepin, Ph.D.
Associate Professor and Chair
Department of Health, Kinesiology, and Applied Physiology
Concordia University
Phone: 514-848-2424 x 5806, E-mail: veronique.pepin@concordia.ca


## SCHOOL OF GRADUATE STUDIES

MEMO TO: Sandra Gabriele, Vice-Provost, Innovation in Teaching and Learning

FROM: Brad Nelson, Associate Dean, Academic Programs and Development School of Graduate Studies

DATE: $\quad$ March 2, 2020

## SUBJECT: GRADUATE CURRICULUM CHANGES (ARTE-20) <br> (CALENDAR - 2019/2020) <br> DEPARTMENT OF ART EDUCATION <br> FACULTY OF FINE ARTS

The Graduate Curriculum Committee (GCC) reviewed the curriculum changes approved by the Fine Arts Faculty Council.

The Department of Art Education is proposing to cross-list a Master’s course with a PhD course, which requires the creation of a new course number.

The GCC approved the curriculum changes with minor editorial modifications. I therefore recommend that the Academic Programs Committee approve and recommend to Senate the above-mentioned curriculum changes in their final form.

cc: E. C. Paterson, Associate Dean, Academic Affairs, Faculty of Fine Arts
J. Johnston, University Curriculum Administrator, Office of the Provost and Vice-President, Academic Affairs

## FACULTY OF FINE ARTS

## Internal Memorandum

To: Dr. Brad Nelson, Chair, Graduate Curriculum Committee

From: Dr. Rebecca Duclos, Dean, Faculty of Fine Arts

Cc: Dr. Elaine Paterson, Associate Dean Academic, Faculty of Fine Arts
Date: January 23, 2020

Re: Curriculum Dossier for the Department of Art Education, ARTE-20

As Dean of the Faculty of Fine Arts, I fully support the curriculum changes proposed in ARTE-20. The dossier was reviewed and approved unanimously by the Fine Arts Faculty Council at its meeting on January 17, 2020.

There are no resource implications.


Rebecca Duclos
Dean, Faculty of Fine Arts
Rebecca.Duclos@concordia.ca
848-2424 ext. 4602

## FACULTY OF FINE ARTS

## Internal Memorandum

To: $\quad$ Rebecca Duclos, Dean, Faculty of Fine Arts
From: Elaine Paterson, Associate Dean, Academic
Date: $\quad$ November 29, 2019
Re: Curriculum dossier for the Department Art Education, ARTE-20

The Faculty of Fine Arts Curriculum Committee has reviewed and approved the ARTE-20 curriculum dossier from the Department of Art Education on November 27, 2019. We hereby submit this dossier for review by the Faculty Council on January 17, 2020.

This document proposes to cross-list ARTE 680 with ARTE 880. The cross listing requires the creation of ARTE 880 as a new course.

There are no resource implications.

With thanks for your consideration.


Elaine Paterson, PhD
Associate Dean, Academic
Faculty of Fine Arts
elaine.paterson@concordia.ca

## INTERNAL MEMORANDUM

TO: Dr. Elaine Cheasley Paterson, Associate Dean, Academic and Student Affairs
FROM: Juan Carlos Castro, Chair, Department of Art Education
DATE: November 4, 2019
SUBJECT: Cross-listing ARTE 680 to ARTE 880 (Dossier ARTE-20)

## Dear Associate Dean Cheasley Paterson,

The Department of Art Education respectfully submits this request to cross-list ARTE 680 as ARTE 880. This proposal has received approval of our Department Curriculum Committee, by email from each member on November 1, 2019. Art Education has only one graduate course that is not cross-listed at the 600 and 800 level. This historical gap now requires review.

ARTE 680 is a research methodology course, focusing on qualitative approaches. ARTE 680 is required for both MA and for PhD students, if PhD students do not have a research background when entering the program. As a result, ARTE 680 is frequently a qualification course for the PhD degree. This course is often required for students with MFA degrees and international students.

An informal practice is underway where doctoral students request that ARTE 680 be changed to an 800 level course designation, as they do not want a MA course on their transcript. As PhDs are required to do more work than MAs in 680, this is a reasonable request. The expectations for PhDs in ARTE 680 are consistent with the workload in 800 level courses in our department.

To be consistent with existing protocols in Art Education, all cross-listed 600 and 800 courses use the same course description for both 600 and 800 levels, and in this case, the same course description will be used for 680 and 880 .

Should this request be tabled and approved at the next Faculty Curriculum Committee meeting, the request will be reviewed by Senate in April 2020, and if approved, the changes will appear in the Fall 2020 calendar.

There are no resource implications with this change. Faculty and staff workload remains the same, and Art Education is the only program impacted by this proposed change.
Sincerely,


Juan Carlos Castro, Ph.D.

## Chair

Undergraduate Programs Advisor
Associate Professor
Department of Art Education
Concordia University
(5I4) 848-2424 ex. 4787


Other Programs within which course is listed:

## SCHOOL OF GRADUATE STUDIES

MEMO TO: Sandra Gabriele, Vice-Provost, Innovation in Teaching and Learning

FROM: Brad Nelson, Associate Dean, Academic Programs and Development School of Graduate Studies

DATE: $\quad$ March 2, 2020

## SUBJECT: GRADUATE CURRICULUM CHANGES (CATS-30) (CALENDAR - 2019/2020) <br> DEPARTMENT OF CREATIVE ARTS THERAPIES FACULTY OF FINE ARTS

The Graduate Curriculum Committee (GCC) reviewed the curriculum changes approved by the Fine Arts Faculty Council.

The Department of Creative Arts Therapies is proposing the following course changes in the MA in Music Therapy: the reorganization of the program requirements in both options, a change in credit value to a course and the creation of a new course.

The GCC approved the curriculum changes as presented. I therefore recommend that the Academic Programs Committee approve and recommend to Senate the above-mentioned curriculum changes in their final form.

cc: E. C. Paterson, Associate Dean, Academic Affairs, Faculty of Fine Arts
J. Johnston, University Curriculum Administrator, Office of the Provost and Vice-President, Academic Affairs

## FACULTY OF FINE ARTS

## Internal Memorandum

To: Dr. Brad Nelson, Chair, Graduate Curriculum Committee

From: Dr. Rebecca Duclos, Dean, Faculty of Fine Arts

Cc: Dr. Elaine Paterson, Associate Dean Academic, Faculty of Fine Arts
Date: December 16, 2019

Re: Curriculum Dossier for the Department of Creative Arts Therapies, CATS-30

As Dean of the Faculty of Fine Arts, I fully support the curriculum changes proposed in CATS-30. The dossier was reviewed and approved unanimously by the Fine Arts Faculty Council at its meeting on December 13, 2019.

There are no resource implications.


Rebecca Duclos
Dean, Faculty of Fine Arts
Rebecca.Duclos@concordia.ca
848-2424 ext. 4602

FACULTY OF FINE ARTS

# Internal Memorandum 

To: $\quad$ Rebecca Duclos, Dean, Faculty of Fine Arts
From: Elaine Paterson, Associate Dean, Academic
Date: $\quad$ November 14, 2019
Re: $\quad$ Curriculum dossier for the Department of Creative Arts Therapies, CATS-30

The Faculty of Fine Arts Curriculum Committee has reviewed and approved the CATS-30 curriculum dossier from the Department of Creative Arts Therapies on October 23, 2019. We hereby submit this dossier for review by the Faculty Council on December 13, 2019.

This document proposes three curriculum changes affecting the MA in Music Therapy (Music Therapy Research with Thesis Option and Advanced Music Therapy Practice Option).

- The courses CATS 611: Counselling Skills for Creative Arts Therapists and CATS 610: Introduction to Topics in Clinical Psychology for Creative Arts Therapists are removed from both options. The courses will still be offered in other Creative Art Therapies graduate pre-professional programs.
- The credit weight of MTHY 699: Thesis (Research with Thesis Option) increases from 15 to 21 credits.
- The new course MTHY 698: Music Therapy Advanced Capstone Project (Advanced Practice Option) is created to recognize the amount of work the students are already doing without receiving credits.

There are no resource implications.

With thanks for your consideration.


Elaine Paterson, PhD
Associate Dean, Academic
Faculty of Fine Arts
elaine.paterson@concordia.ca

# INTERNAL MEMORANDUM 

TO: Dr. Elaine Cheasley Paterson, Associate Dean, Academic and Student Affairs
FROM: Guylaine Vaillancourt, Chair, Department of Creative Arts Therapies
DATE: $\quad$ September 17, 2019
SUBJECT: Curriculum Revision for Master of Creative Arts Therapies (Music Therapy Research with Thesis Option and Music Therapy Advanced Practice Option) Dossier CATS-30

Dear Associate Dean Cheasley Paterson,
The Creative Arts Therapies Department Council met on September 17, 2019 and approved unanimously the revision proposal of the Master of Creative Arts Therapies (Music Therapy Research with Thesis Option and Advanced Music Therapy Practice Option). The purpose of this revision is to best meet students' learning needs and to appropriately recognize the amount of work students currently invest in their research theses or capstone projects in the Advanced Music Therapy Practice Option.

Our MA in Music Therapy attracts professional music therapists who want to do research or advance their clinical practice. These students come from our Graduate Diploma in Music Therapy or from other undergraduate music therapy training programs in Canada and abroad.

In 2020-21, the MA in Music Therapy is moving from an in-person to an online/blended format to increase access to graduate studies to the many Canadian and international professional music therapists who cannot leave their music therapy jobs or family to come to Concordia to complete a MA in Music Therapy. The transition towards online/blended teaching was supported by the Vice-Provost, Teaching and Learning in 2017 and supported by the Faculty of Fine Arts. The MA in Music Therapy will be the first program to be offered entirely online at Concordia. It is the only one of its kind in Canada and one of only a handful (5) in the US. The online/blended MA in Music Therapy has the exact same pedagogical, methodological, and professional expectations that the in-person teaching delivery has had since its implementation in 2010 in the Department of Creative Arts Therapies. The online/blended format does not require additional courses or increase the workload and the Full and Part Time Faculty will still be teaching courses.

None of the proposed changes have any financial implications or impact on faculty workload. The total number of credits for both options will remain unchanged at 45 credits.

The first change ( 2 parts) is to remove two courses from the current program (both options): CATS 611 (Counselling Skills for Creative Arts Therapists) and CATS 610 (Introduction to

Topics in Clinical Psychology for Creative Arts Therapists). Students who enter the MA in Music Therapy program (both options) are already qualified music therapists and have previously completed courses on counselling skills and introductory clinical topics in psychology within the required pre-requisite training: 1) a bachelor's/baccalaureate degree in Music Therapy with a 1,000-hour internship (or equivalent); OR 2) a Graduate Certificate or Diploma in Music Therapy (or equivalent). CATS 610 and CATS 611 will continue to be offered in other Creative Arts Therapies graduate pre-professional programs where required: MA Art Therapy, MA Drama Therapy and Graduate Diploma in Music Therapy.

The second change is to increase the credit weight of MTHY 699 Thesis (research with thesis option) from 15 credits to 21 credits. This better reflects the amount of work and scholarly level of the students' thesis research.

The third and final change is to create a new course number and title: MTHY 698 Music Therapy Advanced Capstone Project. This would recognize a significant amount of work that students in the Advanced Music Therapy Practice Option are currently doing without receiving credits. Within their various courses during the Fall and Winter semesters of this one-year program, students enrolled in the Advanced Music Therapy Practice Option focus their assignments on their chosen area of professional or clinical specialization. These assignments include: a literature review (MTHY 600), reflective journaling and musical selfreflection paper (MTHY 633 \& MTHY 634), and self-reflective music experientials/demos (MTHY $602 \&$ MTHY 603). Students receive feedback and support from professors of these MTHY courses on these assignments which form the basis for the development of their capstone project. The students also receive formal approval for their capstone project topic from the three full-time music therapy faculty and the process and final outcomes (business plan, promotional/advocacy materials, experiential/performance pieces) are documented in a summary paper (MTHY 693) and are presented independently in a public forum. The papers and presentations are assessed by the three full-time music therapy faculty for no workload credit. As students conduct their work in different courses, there would be no in-class teaching for MTHY 698 specifically. This course would be graded as Pass or Fail.

Our curriculum review process highlighted the need for these changes in the program at large. The program requirements, with course changes highlighted, are shown in the table included as an appendix.

Sincerely,


Guylaine Vaillancourt, PhD, MTA
Department Chair
Creative Arts Therapies
Concordia University, Montreal, Quebec
(514) 848-2424 ext 5670

PROGRAM CHANGE: Program requirements for MA Music Therapy
Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes
Calendar for academic year: 2020/2021
Implementation Month/Year: Fall 2020

] Program Deletion
[ ] New Program

## Proposed Text

Creative Arts Therapies (Music Therapy) MA
Admission Requirements
...

## Requirements for the Degree

1. Credits. A fully-qualified candidate is required to complete 45 credits.
2. Programs of study.

Research with thesis option:

- 18 credits in core courses (with a 3-credit value, unless otherwise specified): MTHY 600, MTHY 601, MTHY 602 ( 1.5 credits), MTHY 603 ( 1.5 credits), MTHY 693, CATS 639 ( 1 credit), CATS 641 ( 1 credit), CATS 643 (1 credit), and CATS 691.
- 6 credits in specific courses (with a 3-credit value, unless otherwise specified): MTHY 623, MTHY 624.
- 21 credits Thesis: MTHY 699.

Advanced music therapy practice option:

## Courses

## Music Therapy Option Courses

## MTHY 699 Thesis (15-credits)

## Prerequisite: CATS 691 and MTHY 693.

The thesis topic is chosen in consultation with the thesis supervisor, and is approved by the thesis advisory committee. Students conduct an inquiry, produce the thesis, and present it orally to their thesis advisory committee. Guidelines for the thesis are described in Thesis Preparation and Thesis Examination Regulations available from the School of Graduate Studies and the Research Handbook of the Creative Arts Therapies Department.

- 18 credits in core courses (with a 3-credit value, unless otherwise specified): MTHY 600, MTHY 601, MTHY 602 ( 1.5 credits). MTHY 603 ( 1.5 credits). MTHY 693, CATS 639 (1 credit), CATS 641 (1 credit), CATS 643 (1 credit), and CATS 691.
- 12 credits in specific courses: MTHY 633 ( 6 credits), MTHY 634 ( 6 credits).
- 9 credits in elective courses to be chosen in consultation with program coordinator.
- 6 credits Music Therapy Advanced Practice Capstone: MTHY 698.

3. French Language Requirements. While there are no formal French proficiency requirements, students intending to work in Québec are strongly encouraged to develop a working knowledge of French.

## Academic Regulations

## Courses

## Music Therapy Option Courses

...

## MTHY 698 Music Therapy Advanced Capstone Project (6 credits)

This course involves completing an advanced capstone project on an approved topic directly related to the discipline, profession, and/or practice of music therapy. With guidance from faculty members within the context of relevant core courses, students produce a paper and culminating presentation that reflects a deep and applied understanding of the topic. This course is marked on a pass/fail basis.

## MTHY 699 Thesis ( 21 credits)

Prerequisite: CATS 691 and MTHY 693.
The thesis topic is chosen in consultation with the thesis supervisor, and is approved by the thesis advisory committee. Students conduct an inquiry, produce the thesis, and present it orally to their thesis advisory committee. Guidelines for the thesis are described in Thesis Preparation and Thesis Examination Regulations available from the School of Graduate Studies and the Research Handbook of the Creative Arts Therapies Department.

## Rationale:

Regarding changes to section 2. Programs of study: MTHY 625 is an elective course and was never a required course for either option in the Music Therapy MA program. Research with thesis option no longer offers elective courses to its students. Advanced Music Therapy Practice Option offers 9 credits in elective courses, including MTHY 625. The department agreed to remove CATS 610 and CATS 611 from the Music Therapy MA program. Students who enter the Music Therapy MA program (Research with thesis option or Advanced Music Therapy Practice Option) are already qualified music therapists and have previously completed courses/practical training in Counselling Skills within the required pre-
requisite training: 1) a bachelor's/baccalaureate degree in Music Therapy with a 1,000-hour internship (or equivalent); OR 2) a Graduate Certificate in Music Therapy or Graduate Diploma in Music Therapy (or equivalent).
Regarding the changes to Music Therapy Option Courses: Please see pages D3 and D4.
Resource Implications:
None.

$\square$


The program requirements, with course changes highlighted, are shown in the table below.
Creative Arts Therapies (Music Therapy) MA
Two options: Research with thesis (RWT) and Advanced music therapy practice (AMTP)

| Course | Semester | Current <br> Credit <br> Value <br> RWT <br> Option | Proposed Credit Value RWT Option | Current <br> Credit <br> Value <br> AMTP <br> Option | Proposed Credit Value AMTP Option | Rationale | Impact |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CATS 691 <br> Research in the Creative Arts Therapies | Fall | 3 | 3 | 3 | 3 | n/a | n/a |
| CATS 641 <br> Interdisciplinary Topics: Ethics in Clinical Practice in the Creative Arts Therapies | Fall | 1 | 1 | 1 | 1 | n/a | n/a |
| CATS 643 <br> Interdisciplinary Topics: Ethics in Research in the Creative Arts Therapies | Fall | 1 | 1 | 1 | 1 | n/a | n/a |


| Course | Semester | Current <br> Credit <br> Value <br> RWT <br> Option | Proposed <br> Credit <br> Value <br> RWT <br> Option | Current <br> Credit <br> Value <br> AMTP <br> Option | Proposed <br> Credit <br> Value <br> AMTP <br> Option |  | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :--- | :--- |


| Course | Semester | Current <br> Credit <br> Value <br> RWT <br> Option | Proposed <br> Credit <br> Value <br> RWT <br> Option | Current <br> Credit <br> Value <br> AMTP <br> Option | Proposed <br> Credit <br> Value <br> AMTP <br> Option | Rationale | Impact |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MTHY 623 <br> Advanced Music Therapy Practicum I (Research with thesis option) | Fall | 3 | 3 | n/a | n/a | n/a | n/a |
| MTHY 633 <br> Advanced Music Therapy Practice (Advanced music therapy practice option) | Fall | n/a | n/a | 6 | 6 | n/a | n/a |
| CATS-610 <br> Introduction to Topics in Clinical Psychology for Creative Arts Therapists | Winter | 3 | 0 | 3 | 0 | Students who enter the MA in Music Therapy program are already qualified music therapists and have previously completed introductory courses on clinical topics in psychology within the required pre-requisite training: 1) a bachelor's/baccalaureate degree in Music Therapy with a 1,000-hour internship (or equivalent); OR 2) a Graduate Certificate or Diploma in Music Therapy (or equivalent) | No impact on faculty workload or pay. This course will continue to be offered to Art and Drama Therapy students as these programs are pre-professional trainings. |


| Course | Semester | Current <br> Credit <br> Value <br> RWT <br> Option | Proposed <br> Credit <br> Value <br> RWT <br> Option | Current <br> Credit <br> Value <br> AMTP <br> Option | Proposed <br> Credit <br> Value <br> AMTP <br> Option | Rationale | Impact |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CATS 639 <br> Interdisciplinary <br> Topics: Cross- <br> cultural <br> Competence in <br> the Creative <br> Arts Therapies | Winter | 1 | 1 | 1 | 1 | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |
| MTHY 601 <br> Music Therapy <br> Supervision, <br> Teaching, and <br> Learning | Winter | 3 | 3 | 3 | 3 | $\mathrm{n} / \mathrm{a}$ |  |
| MTHY 603 <br> Advanced <br> Clinical <br> Improvisation in <br> Music Therapy <br> II | Winter | 1.5 | 1.5 | 1.5 | 1.5 | $\mathrm{n} / \mathrm{a}$ |  |
| MTHY 624 <br> Advanced <br> Music Therapy <br> Practicum <br> Research with <br> thesis option) | Winter | 3 | 3 | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |  |


| Course | Semester | Current <br> Credit <br> Value <br> RWT <br> Option | Proposed Credit Value RWT Option | Current <br> Credit <br> Value <br> AMTP <br> Option | Proposed <br> Credit <br> Value <br> AMTP <br> Option | Rationale | Impact |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MTHY 634 <br> Advanced Music Therapy Practicum (Advanced music therapy practice option) | Winter | 0 | 0 | 6 | 6 | n/a | n/a |
| MTHY 693 <br> Research in Music Therapy: Qualitative and Quantitative Methods | Winter | 3 | 3 | 3 | 3 | n/a | n/a |
| MTHY 699 <br> Thesis <br> (Research with thesis option) | After prerequisite coursework is completed | 15 | 21 | 0 | 0 | Increased credit weight better reflects the amount of work and scholarly level of the thesis research. | No impact on faculty workload or pay. No impact on student workload or tuition as the 6 credits removed above will now be accounted for here. |
| Three electives chosen by student, approved by program coordinator (Advanced music therapy practice option only) | Various semesters. | n/a | n/a | 9 | 9 | n/a | n/a |


| Course | Semester | Current <br> Credit <br> Value <br> RWT <br> Option | Proposed <br> Credit <br> Value <br> RWT <br> Option | Current <br> Credit <br> Value <br> AMTP <br> Option | Proposed <br> Credit <br> Value <br> AMTP <br> Option | Rationale | Impact |
| :---: | :---: | :---: | :---: | :---: | :---: | :--- | :--- |
| MTHY 698 <br> Music Therapy <br> Advanced <br> Practice <br> Capstone <br> Presentation <br> (Advanced Music <br> Therapy Practice <br> Option) | End of <br> Winter <br> Semester. | n/a | n/a | 0 | 6 | Recognition of significant work <br> that students are currently <br> doing without receiving credits. <br> This involves planning and <br> execution of a Capstone project <br> public presentation. <br> Development of the project <br> itself occurs within the students' <br> other coursework. The planning <br> and execution of the <br> presentation is an independent <br> process. This would be a P/F <br> course. This is a new course | No impact on faculty <br> please see memo. <br> impact on student <br> workload or tuition as <br> the 6 credits removed <br> above will now be <br> accounted for here. |
| Total Credits |  |  |  |  |  |  |  |

## SCHOOL OF GRADUATE STUDIES

MEMO TO: Sandra Gabriele, Vice-Provost, Innovation in Teaching and Learning
FROM: Brad Nelson, Associate Dean, Academic Programs and Development School of Graduate Studies

DATE: $\quad$ November 4, 2019

## SUBJECT: GRADUATE CURRICULUM CHANGES (COMP-98) (CALENDAR - 2019/2020) <br> DEPARTMENT OF COMPUTER SCIENCE AND SOFTWARE ENGINEERING GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

The Graduate Curriculum Committee (GCC) reviewed the curriculum changes approved by the Gina Cody School of Engineering and Computer Science.

The Department of Computer Science and Software Engineering is proposing changes to the degree requirements of the MEng in Software Engineering and the MApComSc in Computer Science namely the removal of Programming Competency Test as a qualifying program, the addition of a second required project report course, and the introduction of one new course.

The GCC approved the curriculum changes with modifications. I therefore recommend that the Academic Programs Committee approve and recommend to Senate the above-mentioned curriculum changes in their final form.

cc: M. Debbabi, Associate Dean, Graduate Programs and Research, Gina Cody School of Engineering and Computer Science
J. Johnston, University Curriculum Administrator, Office of the Provost and Vice-President, Academic Affairs

## GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

## INTERNAL MEMORANDUM

TO: Dr. Bradley Nelson
Chair, Graduate Curriculum Committee
School of Graduate Studies

FROM: Dr. M. Debbabi
Associate Dean, Graduate Programs and Research
Faculty of Engineering and Computer Science
CC: Ms. Frederica Martin
Academic Programs Analyst
School of Graduate Studies
DATE: August 23, 2019
RE: Graduate Curriculum Proposal for the 2019-20 Academic Year (COMP-98) Gina Cody Council of Engineering and Computer Science

At its meeting on May 10th, 2019, the Council of the Gina Cody School of Engineering and Computer Science reviewed and approved, with minor modifications, the graduate curriculum changes in the course-based Master's programs (MEng in SOEN and MApCompSc in CompSc) proposed by the Department of Computer Science and Software Engineering (CSSE).

Details of the curriculum changes are indicated and explained in the internal memorandums and in the COMP-98 dossier.

We kindly request that this dossier be placed on the next agenda of the Graduate Curriculum Committee.

Thank you for your consideration of this proposal.

## INTERNAL MEMORANDUM

GINA CODY
SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

Office of the Dean

TO: Dr. Amir Asif<br>Chair of the Faculty Council<br>Gina Cody School of Engineering and Computer Science<br>FROM: Dr. M. Debbabi<br>Associate Dean, Graduate Programs and Research<br>Gina Cody School of Engineering and Computer Science<br>DATE: April 3, 2018<br>RE: $\quad$ Graduate Curriculum Proposal for the 2019-20 Academic Year (COMP-98) Department of Computer Science and Software Engineering (CSSE)

At its meeting on March 29, 2018, the Engineering and Computer Science Graduate Studies Committee (ECSGSC) reviewed and approved, with minor modifications, the graduate curriculum changes proposed by the CSSE Department. As part of the restructuring of its course-based Masters programs, the Department proposes the following main changes to the degree requirements of the MEng in Software Engineering and MApCompSc in Computer Science programs:

- The removal of the qualifying program, consisting of SOEN 6501 Programming Competency Test (PCT) or COMP 5481. Instead a new course COMP 6481 is being introduced, including the material of the programming competency. The new course COMP 6481 now becomes a core course for both the MEng and MApCompSc students.
- Diploma students taking COMP 5511 that has the cancelled course COMP 5481 as its prerequisite will need to take the undergraduate prerequisite course COMP 248 instead of COMP 6481.
- A second project report COMP 6971 and SOEN 6971 has been added to strengthen the project work of the MApCompSc and MEng (SOEN) students respectively.
- Introduction of a new permanent course SOEN 6591 Software Mining and Analysis that was previously offered as a slot course with increasing enrolments. This course is very popular and will enhance the department's offerings in software maintenance.

Details of the graduate curriculum items are indicated and explained in the Department's internal memorandum and in the COMP \#98 dossier.

We kindly request that this proposal be placed on the next agenda of the GCS Council for approval.

Thank you for your consideration of this proposal.

INTERNAL MEMORANDUM

TO: Mourad Debbabi, Associate Dean, Graduate Programs and Research, Faculty of Engineering and Computer Science

FROM: Lata Narayanan, Chair, Department of Computer Science and Software Engineering
DATE: Friday, March 22, 2019
SUBJECT: Graduate Program Changes

Please find attached a curriculum package for the graduate programs in the Computer Science and Software Engineering (CSE) Department.

## Summary

The present package presents revisions to the requirements of the MApCompSc and MEng(SOEN) programs, aimed at improving the quality of the programs. These revisions are concurrent with efforts to improve the process of admissions to these programs.
1.A major change is the removal of the Concurrent Qualifying Program which consisted of passing either the Programming Competency Test (PCT) or alternatively the course COMP 5481. Instead, a new core course COMP 6481 is introduced into the program. This course will introduce some advanced programming techniques such as graph algorithms, hash tables, and complexity analysis, hold labs that strengthen students' programming skills, and will assure individual programming competency by means of computer-based programming tests.
2. In both MApCompSc and MEng(SOEN) programs, a second project course, COMP 6981 and SOEN 6981, respectively, is introduced to permit more extensive project work
3. A new elective SOEN 6591 (Software Mining and Analysis) is introduced with a corresponding slot course having been taught three times and currently being taught for a fourth time.
4. The prerequisite for the diploma course COMP 5511, and the admission requirements for the diploma program are changed from COMP 5481 to COMP 248, to reflect actual practice.

These changes were reviewed and approved by the COMP Curriculum Committee, as well as the Department Council on March 22, 2019.

## Overview of Changes

The changes in this package (with references to Provo-Track document page numbering, e.g., D1) are summarized below.

Changes to Graduate Programs
Page D1. MApCompSc - Courses: Removal of the Qualifying Program which included the Programming Competency Test (PCT). Instead, a new core course COMP 6481 has been introduced for the MApCompSc program. The new project course COMP 6981 is also added as an elective course.

Resource Implications: The resources required to manage the PCT as a stand-alone qualifying program element are no longer needed. The lab space requirements will be shifted from the qualifying program to the COMP 6481 course.

Page D3. MApCompSc - Extended Project: Introduces a second project course COMP 6981 which is intended to be taken as a follow-on course with the current project course COMP 6971 as a prerequisite to permit more extensive projects.
Resource Implications: COMP 6981 will be managed the same way as COMP 6971 with no extra required resources.

Page D5. MEng(SOEN) - Courses: Removal of the Qualifying Program which included the Programming Competency Test (PCT). Instead, a new core course COMP 6481 has been introduced for the MEng(SOEN) program. The new project course SOEN 6981 is also added as an elective course.

Resource Implications: The resources required to manage the PCT as a stand-alone qualifying program element are no longer needed. The lab space requirements will be shifted from the qualifying program to the COMP 6481 course.
Page D7. MEng(SOEN) - Extended Project: Introduces a second project course SOEN 6981 which is intended to be taken as a follow-on course with the current project course SOEN 6971 as a prerequisite to permit more extensive projects.

Resource Implications: SOEN 6981 will be managed the same way as SOEN 6971 with no extra required resources.
Page D9. CS Diploma - Admission Req: Since it is anticipated that the COMP 5481course will be phased out, the reference in the admission requirements is changed to the actual practice of using COMP 248.

Resource Implications: None.
Page D10. C11 Topic Area: Addition of new permanent course SOEN 6591 to topic area.
Resource Implications: None.
Page D11. C14 Topic Area: Because of the removal of the Concurrent Qualifying Program as a requirement for MApCompSc and $\mathrm{MEng}(\mathrm{SOEN})$ students, the sentence following
the course is removed. The new project courses COMP 6981 and SOEN 6981 are also added to the topic area.
Resource Implications: None, since the resources used for SOEN 6501 will be used for the new core course COMP 6481.

Changes to Graduate Courses

Page D12. COMP 5511: The prerequisite for COMP 5511 is replaced with the equivalent course COMP 248, which reflects the actual practice.
Resource Implications: None
Page D13: COMP 6481: This is a new core course that will introduce some advanced topics, and assure individual programming competency by means of the requirement to pass one or more computer-based programming tests. Students will be assigned a regular letter grade for COMP 6481.

Resource Implications: The lab space requirements will be shifted from the deleted qualifying programs for MApCompSc and MEng(SOEN) to the COMP 6481 course. Teaching load requirement to schedule COMP 6481 will be covered from the current teaching capacity in the Gina Cody School of Engineering and Computer Science.

Page D15. SOEN 6481: The exclusion note refers to an old and previously deleted version of COMP 6481 that no longer exists , and is therefore deleted.

Resource Implications: None
Page D16. SOEN 6591: SOEN 6591 Software Mining and Analysis is a new permanent course replacing a slot course under the topic title "Mining Large Software System Data for DevOps". The latter course will have been taught four times by the end of Winter 2019, so must be converted to a permanent course to be offered in the future.

Resource Implications: Teaching load will be covered from the current teaching capacity in the Gina Cody School of Engineering and Computer Science.

We would be grateful if you could put this on the agenda of the next Engineering and Computer Science Graduate Studies Curriculum Committee meeting.

## PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: COMP-98 VERSION: 7

PROGRAM CHANGE: MApCompSc - Courses
Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes
Calendar for academic year: 2020/2021
Implementation Month/Year: September 2020

| Faculty/School: | Gina Cody School of Engineering and Computer Science |
| :--- | :--- |
| Department: | Computer Science and Software Engineering |
| Program: | Computer Science |
| Degree: | MApCompSc |
| Calendar Section/Graduate Page Number: | Requirements for the Degree |

Calendar Section/Graduate Page Number: Requirements for the Degree

Type of Change:
[] Editorial [X] Requirements []Regulations []Program Deletion New Program

| Present Text (from 2018/2019) calendar |
| :--- |
| 7. Courses. Students must take a minimum of 45 credits of course work consisting of 12 |

7. Courses. Students must take a minimum of 45 credits of course work consisting of 12 credits of core courses (COMP 6231, COMP 6651, and SOEN 6441) and 33 credits of electives including a minimum of 24 credits from Topic Areas C01 through C07. The electives may include ENCS 6931, COMP 6971, or COMP 6961, and a maximum of 8 credits chosen from computer science courses at the 6000 level marked with a (*); 4 credits chosen from COMP 5261 and COMP 5421; and 12 credits from Topic Areas C08 through C13, and C16. All students are required to pass a programming competency qualifying program in addition to and as part of their regular MApCompSe program.
8. Concurrent Qualifying Program. Students must take and pass a Programming Competency Test (PCT). The PCT is taken during their first term of studies after the first registration as full-time (part-time) students in the MApCompSe program. Students who fail the PCT are required to take COMP 5481 the next time it is offered by the Department, and achieve a grade of B or better. Until COMP 5481 has been successfully completed, students are only able to register for the core courses for their program. COMP 5481 counts as a course in addition to their program.

Programming Competency Test. Students take the Programming Competency Test (PCT) by registering for SOEN 6501. Students are assessed on the basis of a written test of their programming competency. The material covered in the PCT is the same as the material covered in COMP 5481. The PCT is normally administered by the Department.

Rationale:
Due to excessive logistic difficulties in managing the Concurrent Qualifying Program mainly due to the course COMP 5481 being a course counted outside the program, and in an effort to improve the quality of the program, the requirement to pass a Programming Competency Test (PCT) has been integrated into the core course COMP 6481 for the MApCompSc program.

The new project course COMP 6981 is also added as an elective course.
Resource Implications:

## Proposed Text

7. Courses. Students must take a minimum of 45 credits of course work consisting of 16 credits of core courses (COMP 6231, COMP 6481, COMP 6651, and SOEN 6441) and $\underline{29}$ credits of electives including a minimum of $\underline{20}$ credits from Topic Areas C01 through C07. The electives may include ENCS 6931, COMP 6971, COMP 6981, or COMP 6961, and a maximum of 8 credits chosen from computer science courses at the 6000 level marked with a (*); 4 credits chosen from COMP 5261 and COMP 5421; and 12 credits from Topic Areas C08 through C13, and C16.

Programming Competency: The programming competency of students is assessed on the basis of computer-based tests, administered in the core course COMP 6481.

Since the PCT is incorporated into a core course that every student in the MApCompSc program must take, the resources required to manage the PCT as a qualifying program element are no longer needed. The lab space requirements will be shifted from the qualifying program to the COMP 6481 course, but will likely be less overall. Teaching load requirement to schedule COMP 6481 will be covered from the current teaching capacity in the Gina Cody School of Engineering and Computer Science.

## PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: COMP-98 VERSION: 7

PROGRAM CHANGE: MApCompSc - Extended Project
Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes
Calendar for academic year: 2020/2021

| Faculty/School: | Gina Cody School of Engineering and Computer Science |
| :--- | :--- |
| Department: | Computer Science and Software Engineering |
| Program: | Computer Science |
| Degree: | MApCompSc |
| Calendar Section/Graduate Page Number: | Requirements for the Degree |

Calendar Section/Graduate Page Number: Requirements for the Degree

Type of Change:

| [] Editorial [X] Requirements [] Regulations | [] Program Deletion [ New Program |
| :---: | :---: |
| Present Text (from 2018/2019) calendar | Proposed Text |
| 9. Project. Students may choose to do a project as part of their program. They do so by registering for COMP 6971. <br> COMP 6971 Project and Report (4 credits). The purpose of the project report is to provide students in the MApCompSc program with an opportunity to carry out independent project work and to present it in an acceptable form. The project may consist of the following: <br> 1. A theoretical study of a computer science problem. <br> 2. A design and/or development project conducted at Concordia. <br> 3. A design and/or development project conducted as part of the student's full-time employment, providing the student's employer furnishes written approval for the pursuit and reporting of the project. <br> Before registration for a project course, students must obtain written consent of a faculty member who acts as advisor for the report. A form for this consent is available in the Department of Computer Science and Software Engineering. <br> A four-credit report is due on the last day of classes of the term (fall, winter, summer) in which students are registered. Students are expected to have a preliminary version of their report approved by their advisor before its final submission. On or before the submission deadline, students must submit three copies of the report to their advisor, who grades the report. One copy of the report is returned to the student, one retained by the advisor, and one by the Department. <br> The report, including an abstract, must be suitably documented and illustrated, should be at least 5000 words in length, must be typewritten on one side of 21.5 cm by 28 cm white paper of quality, and must be enclosed in binding. Students are referred to the latest edition of Form and Style: Thesis, Report, Term Papers by Campbell, Ballou and Stade, published by Houghton Mifflin (Academic). | 8. Projects. Students may choose to do a project as part of their program. They do so by registering for COMP 6971. Students may also choose to extend their project work from COMP 6971 by registering for COMP 6981. <br> COMP 6971 Project and Report $\perp$ ( 4 credits). The purpose of the project report is to provide students in the MApCompSc program with an opportunity to carry out independent project work and to present it in an acceptable form. <br> COMP 6981 Project and Report II (4 credits) <br> Prerequisite: COMP 6971. <br> Same course description as COMP 6971. <br> Note: Students who have received credit for ENCS 6931 may not take this course for credit. |

## Rationale:

This change allows students in the course-based Master's programs to do a more extensive project. By framing the project across two courses, the students are forced to meet a halfway timeline for deliverables before continuing the project in the second course. The design of the courses is meant to support the development of a single large project across two terms, but the student is not constrained to continue the same project in the second course.

An exclusion note is added so students don't take both ENCS 6931 and both COMP 6971 and COMP 6981.
The Projects item is renumbered from 9 to 8 due to the removal of Concurrent Qualifying Program for the degree.
Resource Implications:
The new project course COMP 6981 will be managed in the same way as the current project course COMP 6971 with no extra required resources.

## PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: COMP-98 VERSION: 7

PROGRAM CHANGE: M.Eng.(SOEN) - Courses
Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes
Calendar for academic year: 2020/2021
Implementation Month/Year: September 2020

| Faculty/School: |  | Gina Cody School of Engineering and Comp |
| :---: | :---: | :---: |
| Department: |  | Computer Science and Software Engin |
| Program: |  | Software Engineering |
| Degree: |  | MEng(SOEN) |
| Calendar Section/Graduate Page Number: Requirements for the Degree |  |  |
| Type of Change: |  |  |
| [] Editorial | [X] Requirements | [] Regulations |
| Present Text (from 2018/2019) calendar |  |  |
| 7. Courses. Students must take a minimum of 45 credits of course work consisting of 12 credits of core courses (SOEN 6431, SOEN 6441, SOEN 6461), a minimum of 24 credits from Topic Areas C08 through C13, and the remaining credits from Topic Areas C01 through C13, and C16, SOEN 6971, COMP 6961 and ENCS 6931. All students are required to pass a programming competency qualifying program in addition to and as part of their regular MEng (Software Engineering) program. |  |  |
| 8. Concurrent Qualifying Program. Students must take and pass a Programming Gompetency Test (PCT). The PCT is taken during their first term of studies after the first registration as full-time (part-time) students in the MEng (Software Engineering) program. Students who fail the PCT are required to take-COMP 5481 the next time it is offered by the Department and achieve a grade of B or better. Until COMP 5481 has been successfully completed, students are only-able to register for the core courses for their program. COMP 5481 counts as a course in addition to their program. |  |  |
| Programming (PCT) by regist of their program material covered | tency Test. Stude SOEN 6501. Stu ompetency. The $m$ MMP 5481. The PC | take the Programming Competency Test ts are assessed on the basis of a written test rial covered in the PCT is the same as the normally administered by the Department. |

## Rationale:

Due to excessive logistic difficulties in managing the Concurrent Qualifying Program mainly due to the course COMP 5481 being a course counted outside the program, the requirement to pass a Programming Competency Test (PCT) has been integrated into a core course for the MEng (SOEN) program.

The new project course SOEN 6981 is also added as an elective course.

## Resource Implications

Since the PCT is incorporated into a core course that every student in the MEng (SOEN) program must take, the resources required to manage the PCT as a qualifying program element are no longer needed. The lab space requirements will be shifted from the qualifying program to the COMP 6481 course, but will likely be less overall. Teaching load requirement to schedule COMP 6481 will be covered from the current teaching capacity in the Gina Cody School of Engineering and Computer Science.
$\square$

PROGRAM CHANGE: M.Eng.(SOEN) - Extended Project
Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes
Calendar for academic year: 2020/2021
Implementation Month/Year: September 2020
Faculty/School:
Department:
Program:
Degree:
Calendar Section/Graduate Page Number: Requirements for the Degree
Computer Science and Software Engineering
Software Engineering
MEng (SOEN)

## at least 5000 words in length, must be typewritten on one side of 21.5 cm by 28 cm white

 paper of quality, and must be enclosed in binding. Students are referred to the latestedition of Form and Style: Thesis, Roport, Torm Papers by Campbell, Ballou and Slado, published by Houghton Mifflin (Academic).

Rationale:
This change allows students in the course-based Master's programs to do a more extensive project. By framing the project across two courses, the students are forced to meet a halfway timeline for deliverables before continuing the project in the second course. The design of the courses is meant to support the development of a single large project across two terms, but the student is not constrained to continue the same project in the second course.

An exclusion note is added so students don't take both ENCS 6931 and both SOEN 6971 and SOEN 6981.
The Projects item is renumbered from 9 to 8 due to the removal of Concurrent Qualifying Program for the degree.

## Resource Implications:

The new project course SOEN 6981 will be managed in the same way as the current project course SOEN 6971 with no extra required resources.

## Faculty/School:

Department:
Program:
Degree:
Calendar Section/Graduate Page Number: Admission Requirements

Type of Change:
[] Editorial [X] Requirements [] Regulations Program Deletion New Program

| Present Text (from 2018/2019) calendar | Proposed Text |
| :--- | :--- |

## Admission Requirements

To be considered for admission, applicants must hold a Bachelor's degree with aboveaverage standing, and must have completed GOMP 5481 Programming and Problem Solving or equivalent courses in an object-oriented language such as C++ or Java prior to entry into the Diploma program. Equivalence will be determined by the Diploma Program Director. Applicants deficient in mathematics or English are required to make up their deficiencies before they can be considered for admission. The Gina Cody School reserves the right to set a quota on the number of admissions to the program.

## Rationale:

Since it is anticipated that COMP 5481 will be phased out, the reference in the admission requirements is changed to COMP 248.
Resource Implications:
None.

Calendar for academic year: 2020/2021

| Faculty/School: | Gina Cody School of Engineering and Computer Science |
| :--- | :--- |
| Department: | Computer Science and Software Engineering |
| Program: | Software Engineering |
| Degree: | MEng (SOEN), MASc (SOEN), PhD, MAppCompSc, MCompSc |
| Calendar Section/Graduate Page Number: | Computer Science Courses: C11 |

Type of Change:
[ ] Editorial [ ] Regulations [ ] Program Deletion Requirements [ ] New Program

| Present Text (from 2018/2019) calendar | Proposed Text |
| :--- | :--- |
| C11 - SOFTWARE MAINTENANCE AND QUALITY | C11 - SOFTWARE MAINTENANCE AND QUALITY |
| SOEN 6431 Software Comprehension and Maintenance | SOEN 6431 Software Comprehension and Maintenance |
| SOEN 6491 Software Refactoring | SOEN 6491 Software Refactoring |
| SOEN 6611 Software Measurement | SOEN 6591 Software Mining and Analysis |
| SOEN 7481 Software Verification and Testing | SOEN 6611 Software Measurement |
|  | SOEN 7481 Software Verification and Testing |

Rationale:
Including new permanent course SOEN 6591 in Topic Area C11.
Resource Implications:
None.

Calendar for academic year: 2020/2021
Implementation Month/Year: September 2020

| Faculty/School: Gina Cody School of Engineering and Com | ter Science |
| :---: | :---: |
| Department: Computer Science and Software Engineering |  |
| Program: Computer Science and Software Engineering |  |
| Degree: MEng (SOEN), MApCompSc |  |
| Calendar Section/Graduate Page Number: Computer Science Courses: C14 |  |
| Type of Change: |  |
| [] Editorial [X] Requirements [ ] Regulations | [] Program Deletion [] New Program |
| Present Text (from 2018/2019) calendar | Proposed Text |
| C14-INDUSTRIAL EXPERIENCE, SEMINAR, PROJECT, REPORT AND THESIS <br> COMP 6961 Graduate Seminar in Computer Science (1 credit) <br> COMP 6971 Project and Report (4 credits) <br> SOEN 6971 Project and Report (4 credits) <br> COMP 7941 Master's Research and Thesis (29 credits) <br> ENCS 6931 Industrial Stage and Training (9 credits) <br> SOEN 7941 Master's Research and Thesis (29 credits) <br> SOEN 6501 Programming Competency Test <br> M.Ap.Comp.Sc and M.Eng (SOEN) students must complete SOEN 6501 in their first term after the first registration as full-time (part-time) students in their program. This course is graded on a pass/fail basis and has no credit value. For purposes of registration, this work is designated as SOEN 6501. | C14-INDUSTRIAL EXPERIENCE, SEMINAR, PROJECT, REPORT AND THESIS <br> COMP 6961 Graduate Seminar in Computer Science (1 credit) <br> COMP 6971 Project and Report (4 credits) <br> COMP 6981 Project and Report II (4 credits) <br> SOEN 6971 Project and Report (4 credits) <br> COMP 7941 Master's Research and Thesis (29 credits) <br> ENCS 6931 Industrial Stage and Training (9 credits) <br> SOEN 7941 Master's Research and Thesis ( 29 credits) <br> SOEN 6501 Programming Competency Test <br> SOEN 6981 Project and Report II (4 credits) |
| Rationale: <br> The change reflects the removal of the Concurrent Qualifying Programs that was required Also, the new project courses COMP 6981 and SOEN 6981 are added. | for MApCompSc and MEng (SOEN) students. |
| Resource Implications: <br> Since the PCT is incorporated into the core course COMP 6481 that every student in the M PCT as a qualifying program element are no longer needed, but will be used in the new co | MApCompSc and MEng (SOEN) programs must take, the resources required to manage the re course COMP 6481. |

COURSE CHANGE: COMP 5511 New Course Number:
Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes
Calendar for academic year: 2020/2021


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## SCHOOL OF GRADUATE STUDIES

| MEMO TO: | Sandra Gabriele, Vice-Provost, Innovation in Teaching and Learning |
| :--- | :--- |
| FROM: | Brad Nelson, Associate Dean, Academic Programs and Development <br>  <br>  <br> School of Graduate Studies |

DATE: December 17, 2019

SUBJECT: GRADUATE CURRICULUM CHANGES (COMP-99) (CALENDAR - 2019/2020) DEPARTMENT OF COMPUTER SCIENCE AND SOFTWARE ENGINEERING GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

The Graduate Curriculum Committee (GCC) reviewed the curriculum changes approved by the Gina Cody School of Engineering and Computer Science.

The Department of Computer Science and Software Engineering is proposing to add two new master's level courses.

The GCC approved the curriculum changes with minor modifications. I therefore recommend that the Academic Programs Committee approve and recommend to Senate the above-mentioned curriculum changes in their final form.

cc: M. Debbabi, Associate Dean, Graduate Programs and Research, Gina Cody School of Engineering and Computer Science
J. Johnston, University Curriculum Administrator, Office of the Provost and Vice-President, Academic Affairs

## GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

## INTERNAL MEMORANDUM

TO: Dr. Bradley Nelson<br>Chair, Graduate Curriculum Committee<br>School of Graduate Studies

FROM: Dr. M. Debbabi
Associate Dean, Graduate Programs and Research
Faculty of Engineering and Computer Science
CC: Kristy Clarke
Academic Programs and Development
School of Graduate Studies
DATE: November 4, 2019
RE: Graduate Curriculum Proposal for the 2020-21 Academic Year (COMP-99) Gina Cody Council of Engineering and Computer Science

At its meeting on November 1, 2019, the Council of the Gina Cody School of Engineering and Computer Science reviewed and approved, with minor modifications, the creation of the following two new courses from the Department of Computer Science and Software Engineering (CSSE):

1. COMP 6371 Immersive Technologies. It will be cross-listed with COMP 475 Immersive Technologies (COMP-101 dossier). The proposed course is essential in this ever-changing technological environment with applications in education, engineering, medicine and recreational games. This course complements other computer games related courses.
2. SOEN 6111 Big Data Analytics. It will be cross-listed with SOEN 471 Big Data Analytics (COMP-101 dossier). This course has been previously offered four times as a slot course with increasing enrolment, and thus the Department would like to convert it to a
permanent course. The proposed course will enhance the department's offerings in data management, providing students with the tools and skills in using Big Data for better decision making in businesses, health care organizations, and government agencies.

Students in both graduate courses are expected to do a project individually or in a team of two persons. They may also be assigned different questions in assignments/labs and examinations than the undergraduate students.

Details of the curriculum changes are indicated and explained in the internal memorandums and in the COMP-99 dossier.

We kindly request that this dossier be placed on the next agenda of the Graduate Curriculum Committee.

Thank you for your consideration of this proposal.

## INTERNAL MEMORANDUM

GINA CODY
sCHOOL OF ENGINEERING AND COMPUTER SCIENCE

Office of the Dean

TO: Dr. Amir Asif<br>Chair of the Faculty Council<br>Gina Cody School of Engineering and Computer Science

FROM: Dr. M. Debbabi
Associate Dean, Graduate Programs and Research
Gina Cody School of Engineering and Computer Science
DATE: $\quad$ October 17, 2019
RE: $\quad$ Graduate Curriculum Proposal for the 2020-21 Academic Year (COMP-99) Department of Computer Science and Software Engineering (CSSE)

At its meeting on October 15, 2019, the Engineering and Computer Science Graduate Studies Committee (ECSGSC) reviewed and approved, with minor modifications, the creation of the following two new courses:

1. COMP 6371 Immersive Technologies
2. SOEN 6111 Big Data Analytics

Both courses are cross-listed with undergraduate courses. Graduate students are required to carry out a significantly more demanding project than the undergraduate students. Furthermore, SOEN 6111 has been offered as a slot course with increasing enrolment.

Details of the course proposals are indicated and explained in the Department's internal memorandum and in the COMP \#99 dossier.

We kindly request that this proposal be placed on the next agenda of the GCS Council for approval.

Thank you for your consideration of this proposal.

INTERNAL MEMORANDUM

TO: Mourad Debbabi, Associate Dean, Graduate Programs and Research, Faculty of Engineering and Computer Science

FROM: Lata Narayanan, Chair, Department of Computer Science and Software Engineering
DATE: Friday, September 20, 2019
SUBJECT: Proposed Graduate Courses (COMP-99)

Please find attached a curriculum package for the graduate programs in the Computer Science and Software Engineering (CSSE) Department.

The present package presents a new permanent course COMP 6371, and a course to be converted from slot to permanent, SOEN 6111, along with associated changes to the department topic areas. These changes were reviewed and approved by the COMP Curriculum Committee, as well as the Department Council on September 20, 2019.

## Overview of Changes

The changes in this package (with references to Provo-Track document page numbering, e.g., D1) are summarized below.

Changes to Graduate Programs
Page D1. Topic Area C03: Addition of new permanent course COMP 6371. Topic Area C13: Addition of new permanent course SOEN 6111.

## Changes to Graduate Courses

Page D2. COMP 6371: COMP 6371 Immersive Technologies (*) is a new permanent course. This course is cross-listed with COMP 475 Immersive Technologies proposed in Provotrack document COMP-101. The undergraduate course is also a new complementary course for both the proposed SOEN Computer Games elective group and the proposed COMP Computer Games elective group.
Resource Implications: Teaching load for the course will be covered from the current teaching capacity in the Gina Cody School of Engineering and Computer Science.
Page D3. SOEN 6111: SOEN 6111 Big Data Analytics (*): is a new permanent course replacing a slot course on the same topic. The latter course will have been taught four
times by the end of Winter 2020, so must be converted to a permanent course to be offered in the future. This course is cross-listed with SOEN 471 Big Data Analytics proposed in provotrack document COMP-101. The undergraduate course is also a central course for both the proposed SOEN Data Engineering elective group and the proposed COMP Data Analytics elective group.
Resource Implications: Teaching load for the course will be covered from the current teaching capacity in the Gina Cody School of Engineering and Computer Science. A laboratory instructor is required.

We would be grateful if you could put this on the agenda of the next Engineering and Computer Science Graduate Studies Curriculum Committee meeting.

Faculty/School:
Department:
Program:
Gina Cody School of Engineering and Computer Science

Degree: Cody School of Engineering and Computer Science
Computer Science and Software Engineering
MEng, MASc, PhD, MApCompSc, MCS
Calendar Section/Graduate Page Number: Fall 2019

Type of Change:
[ ] Editorial [X] Requirements [ ] Regulations Program Deletion New Program

| Present Text (from 2019/2020) calendar | Proposed Text |
| :--- | :--- |
| C03 - IMAGE PROCESSING/PATTERN RECOGNITION AND GRAPHICS | C03 - IMAGE PROCESSING/PATTERN RECOGNITION AND GRAPHICS |
| COMP 6311 Animation for Computer Games (*) | COMP 6311 Animation for Computer Games (*) |
| COMP 6321 Machine Learning |  |
| COMP 6341 Computer Vision (*) | COMP 6321 Machine Learning |
| COMP 6711 Computational Geometry | COMP 6341 Computer Vision (*) |
| COMP 6731 Pattern Recognition (*) | COMP 6371 Immersive Technologies (*) |
| COMP 6761 Advanced 3D Graphics for Game Programming | COMP 6711 Computational Geomentry |
| COMP 6771 Image Processing (*) | COMP 6731 Pattern Recognition (*) |
| COMP 7661 Advanced Rendering and Animation | COMP 6761 Advanced 3D Graphics for Game Programming |
| COMP 7751 Advanced Pattern Recognition | COMP 6771 Image Processing (*) |
| COMP 7781 Advanced Image Processing | COMP 7661 Advanced Rendering and Animation |
| COMP 7751 Advanced Pattern Recognition |  |
| C13-SOFTWARE ENGINEERING | COMP 7781 Advanced Image Processing |
| SOEN 6761 Multimedia Computing | C13-5OFTWARE ENGINEERING |
| SOEN 6951 Software Engineering Case Study | SOEN 6111 Big Data Analytics (*) |
| SOEN 6211 Semantic Computing | SOEN 6761 Multimedia Computing |
| SOEN 6941 Software Engineering Research Project | SOEN 6951 Software Engineering Case Study |
|  | SOEN 6211 Semantic Computing |
| SOEN 6941 Software Engineering Research Project |  |

## Rationale:

The changes reflect the addition of two new courses.

## Resource Implications: <br> None.

## PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: COMP-99 VERSION: 6



## PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: COMP-99 VERSION: 6



UN I YERSITY

## SCHOOL OF GRADUATE STUDIES

| MEMO TO: | Sandra Gabriele, Vice-Provost, Innovation in Teaching and Learning |
| :--- | :--- |
| FROM: | Brad Nelson, Associate Dean, Academic Programs and Development <br>  <br>  <br> School of Graduate Studies |

DATE: $\quad$ December 17, 2019

## SUBJECT: GRADUATE CURRICULUM CHANGES (ELEC-113)

 (CALENDAR - 2019/2020) DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING gina cody school of engineering and computer scienceThe Graduate Curriculum Committee (GCC) reviewed the curriculum changes approved by the Gina Cody School of Engineering and Computer Science.

The Department of Electrical and Computer Engineering is proposing changes to the structure of the degree requirements in the MEng program.

The GCC approved the curriculum changes with minor modifications. I therefore recommend that the Academic Programs Committee approve and recommend to Senate the above-mentioned curriculum changes in their final form.

cc: M. Debbabi, Associate Dean, Graduate Programs and Research, Gina Cody School of Engineering and Computer Science
J. Johnston, University Curriculum Administrator, Office of the Provost and Vice-President, Academic Affairs

## GINA CODY sChool of engineering AND COMPUTER SCIENCE

## INTERNAL MEMORANDUM

TO: Dr. Bradley Nelson<br>Chair, Graduate Curriculum Committee<br>School of Graduate Studies

FROM: Dr. M. Debbabi
Associate Dean, Graduate Programs and Research
Faculty of Engineering and Computer Science
CC: Kristy Clarke
Academic Programs and Development
School of Graduate Studies

DATE: November 4, 2019
RE: $\quad$ Graduate Curriculum Proposal for the 2020-21 Academic Year (ELEC-113)

At its meeting on November 1, 2019, the Council of the Gina Cody School of Engineering and Computer Science reviewed and approved, with minor corrections, the changes to the degree requirements of the MEng program in Electrical and Computer Engineering proposed by the Department of Electrical and Computer Engineering (ECE).

Details of the curriculum items are indicated and explained in the internal memorandums and in the ELEC-113 dossier.

We kindly request that this dossier be placed on the next agenda of the Graduate Curriculum Committee.

Thank you for your consideration of this proposal.

## INTERNAL MEMORANDUM

GINA CODY
sCHOOL OF ENGINEERING AND COMPUTER SCIENCE

Office of the Dean

TO: Dr. Amir Asif<br>Chair of the Faculty Council<br>Gina Cody School of Engineering and Computer Science<br>FROM: Dr. M. Debbabi<br>Associate Dean, Graduate Programs and Research<br>Gina Cody School of Engineering and Computer Science<br>DATE: October 17, 2019<br>RE: $\quad$ Graduate Curriculum Proposal for the 2020-21 Academic Year (ELEC-113) Department of Electrical and Computer Engineering (ECE)

At its meeting on October 15, 2019, the Engineering and Computer Science Graduate Studies Committee (ECSGSC) reviewed and approved, the proposed changes to the degree requirements of the MEng program in Electrical and Computer Engineering following the restructuring of the course-based Master's programs.

Details of the graduate curriculum proposal are indicated and explained in the Department's internal memorandum and in the ELEC-113 dossier.

We kindly request that this proposal be placed on the next agenda of the GCS Council for approval.

Thank you for your consideration of this proposal.

DATE: October 3, 2019

TO: Dr. M. Debbabi, Associate Dean Research \& Graduate Studies \& CIISE Professor

FROM: Dr. R. Selmic, Associate Chair Graduate Studies, ECE Department

## SUBJECT: Graduate Curriculum - September 2020

Please find enclosed dossier ELEC-113 submitted by the Department of Electrical and Computer Engineering.

The MEng program consists of 45 credits and it is currently structured as follows:

1. The students are required to complete the minimum of 36 credits consisting of 6000 numbered courses in specific topic areas.
2. For the remaining credits, students may take a maximum of one 5 -credit project.
3. A 4-credit complementary course from Topic Area E09 is required for all the students except the students who take an industrial training course.

The Department agreed to the following MEng program changes:

1. A minimum of 32 credits consisting of 6000 numbered courses has to be completed in specific topic areas.
2. Students have the option of taking a 4-credit project in addition to the required 5-credit project.
3. A 4-credit complementary course from Topic Area E09 becomes a mandatory one.

The changes for the MEng program have been approved at the Graduate Studies Committee meeting held September $16^{\text {th }}, 2019$ and at the ECE Department Council Meeting held September 20 ${ }^{\text {th }}, 2019$.

## PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: ELEC-113 VERSION: 4

PROGRAM CHANGE: Requirements for the Degree
Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes
Calendar for academic year: 2020/2021

| Faculty/School: | Gina Cody School of Engineering and Computer Science |
| :--- | :--- |
| Department: | Department of Electrical and Computer Engineering |
| Program: | Electrical \& Computer Engineering |
| Degree: | MEng |
| Calendar Section/Graduate Page Number: | Fall 2019 |

Type of Change:

| [] Editorial [X] Requirements [] Regulations | [ ] Program Deletion [ ] New Program |
| :---: | :---: |
| Present Text (from 2019/2020) calendar | Proposed Text |
| Students must complete 45 credits distributed as follows: <br> 1. A minimum of 36 -credits consisting of 6000 numbered courses chosen from Topic Areas: E01, E03, E10, E42, E43, E44, E45, E47, E48, F03, and ELEC/COEN courses in E02. <br> These credits should be structured as follows: <br> a. Two concentrations from Topic Areas: E03, E42, E43, E44, E45, E47, E48, F03 should be selected. <br> b. In each of these two Topic Areas, at least 12 credits should be taken. | Students must complete 45 credits distributed as follows: <br> 1. A minimum of 32 credits consisting of 6000 numbered courses chosen from Topic Areas: E01, E03, E10, E42, E43, E44, E45, E47, E48, F03, and ELEC/COEN courses in E02. <br> These credits should be structured as follows: <br> a. Two concentrations from Topic Areas: E03, E42, E43, E44, E45, E47, E48, F03 should be selected. <br> b. In each of these two Topic Areas, at least 12 credits should be taken. |
| Z. The remaining nine (9) credits must be obtained by selecting one of the following: <br> a. ENCS 6931, a 9-credit industrial training course; <br> OR <br> b. A 4-credit complementary course from Topic Area E09 together with ENGR 6991, a 5 -credit project course. <br> OR <br> 6. A 1-credit complementary course from Topic Area E09, the 1-credit seminar course ELEC 6961, together with one-4-credit course from the Engineering Gourses section chosen with the permission of the Department on a case-by-case basis. | 3. Nine (9) credits must be obtained by selecting one of the following: <br> a. ENCS 6931 ( 9 credits), industrial training course; OR <br> b. ENGR 6971 ( 4 credits) and ENGR 6991 (5 credits), project courses; OR <br> c. A 4-credit course from Topic Areas: E01, E03, E10, E42, E43, E44, E45, E47, E48, F03, or ELEC/COEN courses in E02 and a 5-credit project course ENGR 6991. OR <br> d. Two 4-credit courses from Topic Areas: E01, E03, E10, E42, E43, E44, E45, E47, E48, F03, or ELEC/COEN courses in E02 and the 1-credit seminar course ELEC 6961. |

## Rationale:

Based on the recommendations given by Faculty MEng Enhancement Committee, 9 project credits are included as an option in order to offer students an additional project-based learning experience. Also, a mandatory course from Topic Area E09 is included so that the students' leadership and communication skills are improved.

## Resource Implications

None, since the project is optional

## SCHOOL OF GRADUATE STUDIES

MEMO TO: Sandra Gabriele, Vice-Provost, Innovation in Teaching and Learning

FROM: Brad Nelson, Associate Dean, Academic Programs and Development School of Graduate Studies

DATE: $\quad$ March 2, 2020

## SUBJECT: GRADUATE CURRICULUM CHANGES (GDBA-7)

(CALENDAR - 2020/2021)
GRADUATE DIPLOMA IN BUSINESS ADMINISTRATION JOHN MOLSON SCHOOL OF BUSINESS

The Graduate Curriculum Committee (GCC) reviewed the curriculum changes approved by the Council of the John Molson School of Business (JMSB).

JMSB is proposing a new elective course in the Graduate Diploma in Business Administration.

The GCC approved the proposed curriculum change as presented. I therefore recommend that the Academic Programs Committee approve and recommend to Senate the above-mentioned curriculum changes in their final form.

cc: S. Betton, Associate Dean, Professional Graduate Programs, John Molson School of Business J. Johnston, University Curriculum Administrator, Office of the Provost and Vice-President, Academic Affairs

## JOHN r MOLSON <br> SCHOOL OF BUSINESS

$\left.\left.\begin{array}{ll}\text { TO: } & \text { Dr. Bradley Nelson, Associate Dean, Academic Programs and Development } \\ \text { Chair, Graduate Curriculum Committee }\end{array}\right\} \begin{array}{ll}\text { Ms. Gina Beltran, Developer, Graduate Academic Programs } \\ \text { Cchool of Graduate Studies }\end{array}\right\}$
SUBJECT: Proposed change to the Graduate Diploma in Business Administration (GDBA-7)

Please find the proposed addition of a new elective course to the Graduate Diploma in Business Administration Program, Project Management (GDBA 543).

This document was approved by the John Molson School of Business Faculty Council on December 6 ${ }^{\text {th }}, 2019$.

I submit this document to the Graduate Curriculum Committee, so it can be reviewed on February $10^{\text {th }}, 2020$ committee meeting.

Attachment

TO: Anne-Marie Croteau, Dean, JMSB
Cc: Barbara Henchey, Director Office of the Dean, JMSB
FROM: Sandra Betton, Associate Dean, Professional Graduate Programs Chair of the Faculty Academic Programs Committee, JMSB

DATE: December 2, 2019
SUBJECT:Proposed changes to the Graduate Diploma in Business Administration (GDBA-7)

Please find attached the proposed changes to the Graduate Diploma in Business Administration (GDBA-7).

The John Molson School of Business Faculty Academic Programs Committee reviewed and unanimously approved this document on December 2, 2019.

I respectfully request that the proposed changes be presented at the December 2019 meeting of the Faculty Council of the John Molson School of Business for consideration.

Attachment

# JOHN r MOLSON <br> SCHOOL OF BUSINESS 

## Internal Memorandum

To: Sandra Betton, Associate Dean, Professional Graduate Programs
From: Anne Beaudry, Director, MBA and Graduate Programs in Business
Administration
Date: November 19, 2019
Subject: Proposed change to the Graduate Diploma in Business
Administration

The GDBA Program Committee proposes creating a new elective course, Project Management (GDBA 543), to be offered regularly to replace a popular Special Topics course with the same content that has been available in effect as an elective for the last three years.

The GDBA Committee approved the proposed change on November 2, 2019.

I respectfully request you to submit the proposed change to the next Faculty Academic Programs Committee meeting.

PROGRAM CHANGE: Addition of a New Course
Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes
Calendar for academic year: 2020/2021 Implementation Month/Year: January 2021

| Faculty/School: |  | School of Business |
| :---: | :---: | :---: |
| Department: |  |  |
| Program: |  | inistration |
| Degree: |  | oma |
| Calendar Section | duate Page Numbe |  |
| Type of Change: |  |  |
| [] Editorial | [X] Requirements | [] Regulations |
| Present Text (fro | 019/2020) calendar |  |
| Courses |  |  |
| Required Core C | es (27 credits) |  |
| GDBA 530 Busin | Data Analytics |  |
| GDBA 531 Profe | nal Business Skills |  |
| GDBA 532 Accou |  |  |
| GDBA 533 Mana | People in Organiza |  |
| GDBA 534 Mark | Management |  |
| GDBA 535 Finan |  |  |
| GDBA 536 Oper | s Management |  |
| GDBA 537 Mana | Economics |  |
| GDBA 538 Strat | Management |  |
| Elective (3 credits) |  |  |
| GDBA 540 - Entr | neurship |  |
| GDBA 541 - Bus | Law |  |
| GDBA 542 - eMa |  |  |
| GDBA 590 - Spec | Topics in Accountan |  |
| GDBA 591 - Spec | opics in Finance |  |
| GDBA 592 - Spec | Topics in Managem |  |
| GDBA 593 - Spec | Topics in Marketing |  |
| GDBA 594 - Spe GDBA 595 Spec | Topics in Supply Ch pics | ss Technology Ma |

[ ] Program Deletion [ ] New Program

Proposed Text
Courses
Required Core Courses (27 credits)

## GDBA 530 Business Data Analytics

GDBA 531 Professional Business Skills
GDBA 532 Accounting
GDBA 533 Managing People in Organizations
GDBA 534 Marketing Management
GDBA 535 Finance
GDBA 536 Operations Management
GDBA 537 Managerial Economics
GDBA 538 Strategic Management
Electives (3 credits)
GDBA 540 - Entrepreneurship
GDBA 541 - Business Law
GDBA 542 - eMarketing
GDBA 543 - Project Management
GDBA 590 - Special Topics in Accountancy
GDBA 591 - Special Topics in Finance
GDBA 592 - Special Topics in Management
GDBA 593 - Special Topics in Marketing
GDBA 594 - Special Topics in Supply Chain and Business Technology Management GDBA 595 Special Topics

## Rationale:

Calendar change required due to a new course number, name, and description in the Graduate Diploma in Business Administration.
Resource Implications:
The course will be offered within the faculty's current credit allotment.
$\square$


# Course Outline JOHN MOLSON GDBA PROGRAM 

GDBA 594 AA<br>Project Management

Fall 2019
Mo 5:45PM - 8:15PM

Instructor: Anton Kornetskiy
Office: $\quad$ SGW/MB/12/12.363
Tel.: (514) 8482424
E-mail: Anton.Kornetskiy@concordia.ca
Office
Hours: After class

## COURSE DESCRIPTION

Projects are one of the principal means by which we change our world. Whether it is the financial, technology, engineering, construction, education or healthcare sector, achieving the goals and executing the associated tasks successfully are the same for all: Through project management. Project management has become one of the most popular tools for organizations (public and private) to improve internal operations, respond to external opportunities rapidly, and streamline new product development.

This course gives a fast-track approach to managing projects, with an emphasis on information technology projects and covers the essential steps in setting up project plans, scheduling, monitoring progress and exercising control to achieve desired project results. It incorporates multiple project management frameworks from the Project Management Institute (PMI) and PRINCE 2, to provide an important base of knowledge that builds a foundation for efficient and effective project management.

## COURSE OBJECTIVES

The main objective of this course is to provide students with a good understanding of project management concepts and how these concepts can be used to strategically align projects with the organization's strategy a design them to meet the goals of the projects. To that effect, the primary outcomes of the course are:

- To understand basic project management concepts and explain how they are related.
- To understand and explain the impact of the various principles of project management on the organization.
- To demonstrate their ability to create quality project management documents.


## COURSE MATERIALS AND TOOLS

## Textbook:

Project Management: A Managerial Approach. 10th edition, John Wiley \& Sons; Meredith, J. R., and Mantel, S. J. ISBN: 9781119369097

## Other Materials:

- Lectures \& discussions
- Website: Moodle


## Tools:

- In the course, students will also learn to use Microsoft Project / ProjectLibre and use them as part of the course requirements.


## EVALUATION

| 1 | Two (2) in Class Midterms | $\mathbf{2 5 \%}$ each |
| :--- | :--- | ---: |
| $\mathbf{2}$ | In-class Group Presentation (Group activity) | $\mathbf{5 \%}$ |
| $\mathbf{3}$ | Participation in Class Activities | $\mathbf{5 \%}$ |
| $\mathbf{4}$ | Preparation of Business case -BC (Group activity) | $\mathbf{5 \%}$ |
| $\mathbf{5}$ | Preparation of End Project Report - EPR (Group activity) | $\mathbf{5 \%}$ |
| $\mathbf{6}$ | Semester Group Project <br> (Preparation of a Project Initiation Documentation -PID) | $\mathbf{3 0 \%}$ |

Note: Details on each component will be provided in Moodle.

GRADING

| A+ | $90-100 \%$ | B+ | $77-79 \%$ | C | $65-69 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| A | $85-89 \%$ | B | $74-76 \%$ | F | $0-64 \%$ |
| A- | $80-84 \%$ | B- | $70-73 \%$ |  |  |

Late assignments class policy: Late assignments, for any reason, will be subject to a $25 \%$ penalty for the first day. An additional $10 \%$ will be deducted for each additional day.

## IMPORTANT DATES:

September 16, 2019: DNE
November 4, 2019: DISC

LEARNING PLAN

| Class | Date | Topic, Chapter | Chapters | Activity |
| :---: | :--- | :--- | :--- | :--- |
| 1 | 9 September | Introduction to Project Management | Chapter 1 | In-class activity \#1 <br> Explanation of Projects <br> and Presentations |
| 2 | 16 September | PRINCE 2 overview. <br> Project Documentation. <br> Strategic Management and Project Selection. | Chapter 2 | Chapter 3,4 |
| Group Presentation |  |  |  |  |
| 3 | 23 September | The project Manager <br> Stakeholder Analysis and Conflicts | Chapter 5 | Group Presentation |
| 4 | 30 September | The Project in the Organizational Structure | Chapter 6 | Group Presentation |
| 5 | 7 October | Activity Planning | Chapter 7 | Group Presentation |
| 6 | 21 October | Budgeting and Risk Management | Chapter 8 | Group Presentation |
| 7 | 28 October | Project Plan and Scheduling | Chapter 8 <br> Chapter 9 | Group Presentation |
| 8 | 4 November |  | Chapter 11 | Group Presentation |
| 9 | 11 November | Scheduling continues <br> Resource management <br> Chapter 10 | Group Presentation |  |
| 10 | 18 November | Project Control | Chapter 13 | Group Presentation <br> Midterm \#2 |
| 11 | 25 November | Effective Communication and IS | n/a | In class Activity \#2 |
| 12 | 2 December | Project Closure and Benefits Realization |  |  |
| 13 | 3 December | Last Class |  |  |

## Notes:

- All readings, with the exception of the first day of class, are required prior to class lectures.
- BC, EPR, and PID are due on December $10^{\text {th }}$.
- DO NOT COPY, PARAPHRASE OR TRANSLATE ANYTHING FROM ANYWHERE WITHOUT SAYING FROM WHERE YOU GOT IT! DON'T FORGET TO USE QUOTATION MARKS!
- Relax


## ACADEMIC INTEGRITY AND THE ACADEMIC CODE OF CONDUCT

The Code of Conduct (Academic) at Concordia University states that "the integrity of University academic life and of the degrees, diplomas and certificates the University confers is dependent upon the honesty and soundness of the instructor-student learning relationship and, in particular, that of the evaluation process. As such, all students are expected to be honest in all of their academic endeavours and relationships with the University," (Academic Code of Conduct, art. 1).

All students enrolled at Concordia are expected to familiarize themselves with the contents of this Code. You are strongly encouraged to read the pertinent section in the Concordia Graduate Calendar Graduate Calendar available only at http://graduatestudies.concordia.ca/publications/graduatecalendar/current/ and visit the following web address: http://provost.concordia.ca/academicintegrity/ , both of which provide useful information about proper academic conduct.

## DISCLAIMER

The instructor reserves the right to change or update this outline, and any other course related materials, as required. The student will be informed in a timely manner through Moodle and/or announcements during class.

## SCHOOL OF GRADUATE STUDIES

MEMO TO: Sandra Gabriele, Vice-Provost, Innovation in Teaching and Learning

FROM: Brad Nelson, Associate Dean, Academic Programs and Development School of Graduate Studies

DATE: $\quad$ March 2, 2020

## SUBJECT: GRADUATE CURRICULUM CHANGES (MSCM-1)

(CALENDAR - 2020/2021)
MASTER OF SUPPLY CHAIN MANAGEMENT JOHN MOLSON SCHOOL OF BUSINESS

The Graduate Curriculum Committee (GCC) reviewed the curriculum changes approved by the Council of the John Molson School of Business (JMSB).

JMSB is proposing to rename and increase the credit value of the research component of the MSCM and reduce the number of elective seminars.

The GCC approved the curriculum changes with minor editorial modifications. I therefore recommend that the Academic Programs Committee approve and recommend to Senate the above-mentioned curriculum changes in their final form.

cc: S. Betton, Associate Dean, Professional Graduate Programs, John Molson School of Business J. Johnston, University Curriculum Administrator, Office of the Provost and Vice-President, Academic Affairs

## JOHN r MOLSON <br> SCHOOL OF BUSINESS

TO: $\quad \begin{aligned} & \text { Dr. Bradley Nelson, Associate Dean, Academic Programs and Development } \\ & \text { Chair, Graduate Curriculum Committee }\end{aligned}$
Cc: $\quad$ Ms. Gina Beltran, Developer, Graduate Academic Programs School of Graduate Studies

Ms. Julie Johnston, University Curriculum Administrator
FROM: Dr. Anne-Marie Croteau, Dean, Chair of the John Molson School of Business Faceity Council

DATE: January $15^{\text {th }}, 2020$


SUBJECT: Proposed changes to the Master of Supply Chain Management (MSCM-1)

Please find attached the proposed changes to the Master of Supply Chain Management (MSCM-1).

This proposal was unanimously approved by the John Molson School of Business Faculty Council on December 6 ${ }^{\text {th }}, 2019$.

I respectfully request that this dossier be presented at the next meeting of the Graduate Curriculum Committee on February $10{ }^{\text {th }}, 2020$.

Attachment

TO: Anne-Marie Croteau, Dean, JMSB
Cc: Barbara Henchey, Director Office of the Dean, JMSB
FROM: Sandra Betton, Associate Dean, Professional Graduate Programs Chair of the Faculty Academic Programs Committee, JMSB

DATE: December 2, 2019
SUBJECT: Proposed changes to the Master of Supply Chain Management (MSCM-1)

Please find attached the proposed changes to the Master of Supply Chain Management. (MSCM-1).

This document was presented and was unanimously approved by the John Molson School of Business Faculty Academic Programs Committee on December 2, 2019.

I kindly request that the proposed changes be submitted at the December meeting of the Faculty Council of the John Molson School of Business for consideration.

## Attachment

## JOHN r MOLSON

SCHOOL OF BUSINESS

## Internal Memorandum

To: Sandra Betton, Chair, Faculty Academic Programs Committee

From: Rustam Vahidov, Chair of Supply Chain and Business Technology Management

Department

Date: November 26 ${ }^{\text {th }}, 2019$

Subject: Proposed changes to the Master of Supply Chain Management

Dear Dr. Betton,
We have approved the changes in the Master of Supply Chain Management program proposed by the Director of this program (Dr. Satyaveer Chauhan) and supported by the Department Curriculum Committee at the Department meeting held on November $26^{\text {th }}, 2019$. I am submitting the corresponding documents, along with the original memo from Dr. Chauhan for the consideration by the FAPC.

Regards,

Rustam Vahidov

# Internal Memorandum 

To: Rustam Vahidov, Chair, Department and Curriculum committee (SCBTM)

From: Satyaveer Chauhan, Director, Master of Supply Chain Management (MSCM)
Date: November 18 ${ }^{\text {th }}, 2019$

Subject: Proposed changes to the Master of Supply Chain Management Program

Dear Dr. Vahidov,
The MSCM Committee met on November $5^{\text {th }}, 2019$ and proposed the following changes to the MSCM program:

1. Replace MSCM 689, Applied Research Project (15 credits) by MSCA 699, Research Thesis (21 credits).
2. Reduce the number of elective seminars in the MSCM program from three to one.

The committee provided the following justification for these changes:
A successful Applied Research Project (MSCM 689) requires reliable data from industrial partners. Most companies either are hesitant to share all the information associated with costs/workforce/customers/etc. or to ask students to collect such information - which is extremely time-consuming. In the absence of the full information, students revert to theoretical research, develop generalized models, approaches, develop multiple scenarios, and perform extensive numerical experimentation for insights. In addition, the work has to be defended before the examining committee, consisting of a representative from the company and an examiner from the department. The nature of the work and the amount of the effort of the students in MSCM 689 is more consistent with the expectations of a 21 credit thesis than a 15 credit applied research project.

The MSCM program has three primary goals:

1. Analyze the integrative nature of supply chain management to examine and evaluate supply chain strategies
2. Design supply chains more effectively by using quantitative and qualitative methods and software tools
3. Develop appropriate and effective approaches to real-world supply chain issues.

The learning objectives of goals 1 and 2 are primarily satisfied by the various core courses in the program. Learning objectives associated with program goal 3 require the synthesis of existing theoretical models, the development new theoretical models and testable hypotheses, the application of appropriate methodologies and the interpretation and presentation of the results of the analysis.

The current structure of the program as a professional program with an applied research project does not allow the program to fully satisfy learning goal 3 . The applied nature of the project limits the scope of the analysis to the specific immediate needs of the industrial partner rather than developing models that are relevant for the needs of supply-chain management in general.

The move to a research based program structure will allow the program to satisfy the learning goals of the program by requiring students to conduct generalizable research into real-world supply chain issues.

## Transition period

Most MSCM students select elective courses on the recommendation/approval of their supervisor(s) or the MSCM program director. Typically, students only take elective courses after completing all the core courses and concurrently with the applied research project.

The MSCM program will adopt the following policy during the transition period:
All current MSCM students eventually require to register for the 15-credits 'MSCM 689 Applied Research Project'. However, when the program change becomes official, the current students, if they wish, will have the option of registering for the 21-credits 'MSCA 699 Research Thesis' instead. The new cohort of MSCM students from September 2021 entry onward has to register for the 21-credits 'MSc Thesis'.

I respectfully request that the proposed changes be submitted to the next Curriculum meeting and Department meetings.

Sincerely,
Satyaveer S Chauhan

## PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: MSCM-1 VERSION: 4

PROGRAM CHANGE: Program Change Requirements
Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes
Calendar for academic year: 2020/2021

| Faculty/School: | John Molson School of Business |
| :--- | :--- |
| Department: | Supply Chain and Business Technology Management |
| Program: | Supply Chain Management |
| Degree: | Master of/ Magisteriate |
| Calendar Section/Graduate Page Number: | N/A |

Type of Change:
[] Editorial [X] Requirements [] Regulations Program Deletion New Program

| Present Text (from 2019/2020) calendar |  |
| :---: | :---: |
| Requirements for the Degree |  |
|  | Residence. In accordance with standard university policy, the minimum residence requirement for this master's degree is three terms of full-time study, or the equivalent in part-time study. This requirement must be met regardless of the amount of graduate work previously completed in any other program or at any other university. <br> Credits. Fully-qualified candidates are required to complete a minimum of 45 credits. |

## Proposed Text

## Requirements for the Degree

1. Residence. In accordance with standard university policy, the minimum residence requirement for this master's degree is three terms of full-time study, or the equivalent in part-time study. This requirement must be met regardless of the amount of graduate work previously completed in any other program or at any other university.
2. Credits. Fully-qualified candidates are required to complete a minimum of 45 credits.

The degree requirements for the program consist of the following:
6 credits of core seminars:
MSCA 602: Applied Linear Statistical Models (3 credits)
MSCA 615: Research Methodology - Administrative Sciences (3 credits)
15 credits of Supply Chain Management seminars:
MSCM 681: Advanced Modelling and Optimization (3 credits)
MSCM 682: Sourcing and Global Logistics (3 credits)
MSCM 683: Supply Chain Design and Coordination (3 credits)
MSCM 684: Demand Management (3 credits)
MSCM 685: Supply Chain Risk Management (3 credits)
$\underline{3}$ credits of elective seminars: (see Elective Seminars)
21 credits: MSCA 699: Research Thesis

## Rationale:

The already conducted and the on-going applied research projects (MSCM 689) in the program clearly showed that the academic effort and the time required to conduct an applied research and the ensuing written work involves no less effort and time than it is required of a theoretical research in terms of scope and depth of the subject matter studied. The

# proposed MSCA 699 Research Thesis is more reflective of the extent of research work to be done (in terms of the number of credits) and also more accommodating as both an 

 applied and a theoretical problem could be investigated (as stated in the course description of MSCA 699).As such, the number of elective courses is reduced from three courses to one course.

## Resource Implications:

None

$\square$


## SCHOOL OF GRADUATE STUDIES

MEMO TO: Sandra Gabriele, Vice-Provost, Innovation in Teaching and Learning

FROM: Brad Nelson, Associate Dean, Academic Programs and Development School of Graduate Studies

DATE: $\quad$ March 2, 2020

## SUBJECT: GRADUATE CURRICULUM CHANGES (ICE-20) <br> (CALENDAR - 2019/2020) <br> INSTITUTE FOR CO-OPERATIVE EDUCATION

The Graduate Curriculum Committee (GCC) reviewed the curriculum changes put forth by the Institute for Co-operative Education.

The Institute for Co-operative Education is proposing to add an entry in the General Information section of the Graduate Calendar. The Institute's entry in the Calendar provides information on co-op programs at the graduate level and presents a standardized model for departments who wish to offer work-integrated learning opportunities.

The GCC approved the curriculum changes with minor editorial modifications. I therefore recommend that the Academic Programs Committee approve and recommend to Senate the above-mentioned curriculum changes in their final form.

cc: C. Martel, Director, Institute for Co-operative Education
J. Johnston, University Curriculum Administrator, Office of the Provost and Vice-President, Academic Affairs

# INTERNAL MEMORANDUM 

TO: Brad Nelson, Associate Dean, Academic Programs \& Development, Graduate Studies<br>FROM: Claude Martel, Director, Institute for Co-operative Education<br>Cc: $\quad$ Gina Beltran, Developer, Graduate Academic Programs<br>Julie Johnston, University Curriculum Administrator<br>Tristan Khaner, Associate Director, Institute for Co-operative Education<br>DATE: February 6, 2020<br>\section*{SUBJECT: Co-op Calendar Changes for Fall 2020: Adding an Institute section within the Graduate Calendar General Information}

The Institute for Co-operative Education continues to develop offerings for Concordia' graduate programs. As we refine existing offerings and develop new programs, it is important to provide a standardized model to ensure quality programs and adherence to provincial and national guidelines for work-integrated learning programs. The following update is to include standard text in the General Information section to orient graduate students as to high level expectations regarding participation in work-integrated learning (in this case, Graduate Co-op Programs), and to simplify department/faculty entries in the Graduate Calendar by giving a central Institute text to refer to.

## I. Create a section for the Institute for Co-operative Education

## Change requested:

Create a section for the Institute for Co-operative Education within the General Information portion of the Graduate Calendar

## Rationale:

This proposed model, with one central standardized text for all Graduate Co-op Programs to refer to, allows for simpler department and/or faculty calendar entries. This text also ensures Graduate Co-op Programs abide by national and provincial requirements for work-integrated learning, since the text and course descriptions are constructed to adhere to contemporary requirements. Should there be updates to these standards, there will be one place in the Graduate Calendar to edit. Including this standard text in the General Information section also provides one clear section for students to refer to in order to understand high level expectations to participate in a work-integrated learning program.

We look forward to implement these changes for the Fall 2020 Graduate Calendar. Thank you for consideration of the proposal, we trust the above Calendar change request meets your approval.

## Thank you very much,



## Claude Martel

Director / Directeur

## Concordia University/Université Concordia

Institute for Co-operative Education/Institut d'enseignement coopératif
Office/Bureau: 1550, Boul. De Maisonneuve ouest, suite 430
Montréal (Québec), H3G 1M8
T: (514) 848-2424 x 3950 F: (514) 848-2811

PROGRAM CHANGE: Graduate Calendar: Adding ICE section to General Information
Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes
Calendar for academic year: 2020/2021

| Faculty/School: | Institute for Co-operative Education |
| :--- | :--- |
| Department: | Institute for Co-operative Education |
| Program: | $\mathrm{n} / \mathrm{a}$ |
| Degree: | $\mathrm{n} / \mathrm{a}$ |

Calendar Section/Graduate Page Number: General Information

Type of Change:

| [] Editorial [X] Requirements | [] Regulations | [ ] Program Deletion [ ] New Program |
| :---: | :---: | :---: |
| Present Text (from 2020/2021) calendar |  | Proposed Text |
| General Information <br> - University Overview <br> - Academic Calendar <br> - Academic Regulations <br> - Admission <br> - Awards <br> - Classification of Students and Registration <br> - Institute for Co-operative Education |  | General Information <br> - University Overview <br> - Academic Calendar <br> - Academic Regulations <br> - Admission <br> - Awards <br> - Classification of Students and Registration <br> - Institute for Co-operative Education <br> Institute for Co-operative Education <br> Graduate Co-op Program <br> The Graduate Co-op Program is a structured internship program offered through the Institute for Co-operative Education. The program supports work-integrated learning through relevant work experiences that allow students to combine theory and practice, and to transfer knowledge and skills between work and classroom settings. It is an opportunity for students to broaden their perspective, strengthen their skills and better prepare for the job market. <br> When enrolled in a Graduate Co-op Program, the student must complete an internship successfully to receive a degree with a Co-op designation. Graduate students registered in the Faculty of Arts and Science, the Faculty of Fine Arts, the Gina Cody School of Engineering and Computer Science and the John Molson School of Business are eligible to apply to their department's Co-op Program. <br> Work-Integrated Learning (WIL) Internship Courses <br> When participating in an internship offered through the Institute for Co-operative Education, the Institute will enroll students in an internship course to indicate that the |



Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

| Faculty/School: | Institute for Co-operative Education |  |
| :---: | :---: | :---: |
| Department: | Institute for Co-operative Education |  |
| Program: |  |  |
| Degree: |  |  |
| Calendar Section/Graduate Page Numbe | General Information - Institute section |  |
| Type of Change: |  |  |
| [ ] Course Number | [] Course Title | [ ] Credit Value [ ] Prerequisite |
| [ ] Course Description | [] Editorial | [X] New Course |
| [ ] Course Deletion | [ ] Other-Specify: |  |
| Present Text (from 2020/2021) calendar |  | Proposed Text |
|  |  | WILA 600 Graduate Work-Integrated Learning - Applied Sciences and Education Internship I (0 credits) <br> The student is enrolled in this course during their first internship. This course involves completing a work-integrated learning placement directly related to observing, acquiring, or implementing skills related to the student's specific field within Applied Sciences and Education. Students are provided guidance and support in preparing for the internship and identifying a relevant placement. The Institute monitors the student during the internship, and the student is formally evaluated by the Director of the Institute or designate, with input from the employer. Students are paid for the work performed. This course is marked on a pass/fail basis. <br> Note: While this course carries no credit value, enrolment indicates that the student maintains full-time status. |

Rationale:
Optimized nomenclature for reporting purposes

## Resource Implications:

none
Other Programs within which course is listed:

Calendar for academic year: 2020/2021

## Implementation Month/Year: SEPTEMBER 2020

## Proposed Text

 Internship I (0 credits)The student is enrolled in this course during their first internship. This course involves ompleting a work-integrated learning placement directly related to observing, acquiring,
 identifying a relevant placement. The Institute monitors the student during the internship, and the student is formally evaluated by the Director of the Institute or designate, with input from the employer. Students are paid for the work performed. This course is marked maintains full-time status.
COURSE CHANGE: WILA 601 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes
Calendar for academic year: 2020/2021

| Faculty/School: | ICE |
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| Department: | ICE |
| Program: |  |
| Degree: |  |
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| Type of Change: | [ ] Course Title |
| [ ] Course Number | [ ] Editorial |
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## Proposed Text

WILA 601 - Graduate Work-Integrated Learning - Applied Sciences and Education Reflective Learning Activities I (3 credits)
The student is enrolled in this course during their first internship. The student develops career-relevant skills by integrating classroom learning related to the student's specific field within Applied Sciences and Education and a degree-relevant workplace setting. This is a forum for critically examining the workplace, relatability between the student's academic studies and workplace, setting learning goals, reflecting on academic and professional experiences and objectives, self-evaluation, and disciplined inquiry. This course is marked on a pass/fail basis.

Note: This course carries 3 complementary credits, and as such does not count towards fulfilling the academic credit requirements for the student's program of study.

## Rationale:

Optimized nomenclature for reporting purposes
Resource Implications:
none
Other Programs within which course is listed:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

Calendar for academic year: 2020/2021

| Faculty/School: | ICE |
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## Proposed Text

WILA - 700-Graduate Work-Integrated Learning -Applied Sciences and Education Internship II (0 credits)
The student is enrolled in this course during their second internship. This course involves completing a work-integrated learning placement directly related to observing, acquiring, or implementing skills related to the student's specific field within Applied Sciences and Education. Students are provided guidance and support in preparing for the internship and identifying a relevant placement. The Institute monitors the student during the internship, and the student is formally evaluated by the Director of the Institute or designate, with input from the employer. Students are paid for the work performed. This course is marked on a pass/fail basis.

Note: While this course carries no credit value, enrolment indicates that the student maintains full-time status.

Rationale:
Optimized nomenclature for reporting purposes

## Resource Implications:

none
Other Programs within which course is listed:
COURSE CHANGE: WILA 701 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes
Calendar for academic year: 2020/2021

| Faculty/School: | ICE |
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| Department: | ICE |
| Program: |  |
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| Type of Change: | [ ] Course Title |
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## Proposed Text

WILA 701 - Graduate Work-Integrated Learning - Applied Sciences and Education Reflective Learning Activities II (3 credits)

The student is enrolled in this course during their second internship. The student develops career-relevant skills by integrating classroom learning related to the student's specific field within Applied Sciences and Eduaction and a degree-relevant workplace setting. This is a forum for critically examining the workplace, relatability between the student's academic studies and workplace, setting learning goals, reflecting on academic and professional experiences and objectives, self-evaluation, and disciplined inquiry. This course is marked on a pass/fail basis.

Note: This course carries 3 complementary credits, and as such does not count towards fulfilling the academic credit requirements for the student's program of study.

Rationale:
Optimized nomenclature for reporting purposes

## Resource Implications:

none
Other Programs within which course is listed:
COURSE CHANGE: WILB 600 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

Calendar for academic year: 2020/2021

| Faculty/School: | ICE |
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| Department: | ICE |
| Program: |  |
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## Proposed Text

WILB 600 - Graduate Work-Integrated Learning - Business and Administration Internship I (0 credits)
The student is enrolled in this course during their first internship. This course involves completing a work-integrated learning placement directly related to observing, acquiring, or implementing skills related to the student's specific field within Business and Administration. Students are provided guidance and support in preparing for the internship and identifying a relevant placement. The Institute monitors the student during the internship, and the student is formally evaluated by the Director of the Institute or designate, with input from the employer. Students are paid for the work performed. This course is marked on a pass/fail basis.

Note: While this course carries no credit value, enrolment indicates that the student maintains full-time status.

Rationale:
Optimized nomenclature for reporting purposes

## Resource Implications:

none
Other Programs within which course is listed:

COURSE CHANGE: WILB 700 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

Calendar for academic year: 2020/2021

| Faculty/School: | ICE |
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| Department: | ICE |
| Program: |  |
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WILB - 700-Graduate Work-Integrated Learning - Business and Administration II (0 credits)
The student is enrolled in this course during their second internship. This course involves completing a work-integrated learning placement directly related to observing, acquiring, or implementing skills related to the student's specific field within Business and Administration. Students are provided guidance and support in preparing for the internship and identifying a relevant placement. The Institute monitors the student during the internship, and the student is formally evaluated by the Director of the Institute or designate, with input from the employer. Students are paid for the work performed. This course is marked on a pass/fail basis.

Note: While this course carries no credit value, enrolment indicates that the student maintains full-time status.

Rationale:
Optimized nomenclature for reporting purposes

## Resource Implications:

none
Other Programs within which course is listed:


Calendar for academic year: 2020/2021

## [ ] Credit Value <br> [X] New Course

[ ] Prerequisite

| [] Course Number | [ ] Course Title |
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## Proposed Text

WILD 600 Graduate Work-Integrated Learning - Digital Arts Internship I (0 credits) The student is enrolled in this course during their first internship. This course involves completing a work-integrated learning placement directly related to observing, acquiring, or implementing skills related to the student's specific field within Digital Arts. Students are provided guidance and support in preparing for the internship and identifying a relevant placement .The Institute monitors the student during the internship, and the student is formally evaluated by the Director of the Institute or designate, with input from the employer. Students are paid for the work performed. This course is marked on a pass/fail basis.

Note: While this course carries no credit value, enrolment indicates that the student maintains full-time status.

## Rationale:

Optimized nomenclature for reporting purposes
Resource Implications:
none
Other Programs within which course is listed:
COURSE CHANGE: WILD 601 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

Calendar for academic year: 2020/2021

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## Proposed Text

WILD 601 - Graduate Work-Integrated Learning - Digital Arts Reflective Learning Activities I (3 credits)

The student is enrolled in this course during their first internship. The student develops career-relevant skills by integrating classroom learning related to the student's specific field within Digital Arts and a degree-relevant workplace setting. This is a forum for critically examining the workplace, relatability between the student's academic studies and workplace, setting learning goals, reflecting on academic and professional experiences and objectives, self-evaluation, and disciplined inquiry. This course is marked on a pass/ fail basis.

Note: This course carries 3 complementary credits, and as such does not count towards fulfilling the academic credit requirements for the student's program of study.

Rationale:
Optimized nomenclature for reporting purposes

## Resource Implications:

none
Other Programs within which course is listed:

Calendar for academic year: 2020/2021

## [ ] Credit Value <br> [X] New Course

[ ] Prerequisite

| [] Course Number | [ ] Course Title |
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## Proposed Text

WILD - 700-Graduate Work-Integrated Learning - Digital Arts II (0 credits) The student is enrolled in this course during their second internship. This course involves completing a work-integrated learning placement directly related to observing, acquiring, or implementing skills related to the student's specific field within Digital Arts. Students are provided guidance and support in preparing for the internship and identifying a relevant placement. The Institute monitors the student during the internship, and the student is formally evaluated by the Director of the Institute or designate, with input from the employer. Students are paid for the work performed. This course is marked on a pass/fail basis.

Note: While this course carries no credit value, enrolment indicates that the student maintains full-time status.

## Rationale:

Optimized nomenclature for reporting purposes
Resource Implications:
none
Other Programs within which course is listed:

Calendar for academic year: 2020/2021

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[ ] Prerequisite

Type of Change:

| [ ] Course Number | [ ] Course Title |
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## Proposed Text

WILD 701 - Graduate Work-Integrated Learning - Digital Arts Reflective Learning Activities II (3 credits)

The student is enrolled in this course during their second internship. The student develops career-relevant skills by integrating classroom learning related to the student's specific field within Digital Arts and a degree-relevant workplace setting. This is a forum for critically examining the workplace, relatability between the student's academic studies and workplace, setting learning goals, reflecting on academic and professional experiences and objectives, self-evaluation, and disciplined inquiry. This course is marked on a pass/ fail basis.

Note: This course carries 3 complementary credits, and as such does not count towards fulfilling the academic credit requirements for the student's program of study.

Rationale:
Optimized nomenclature for reporting purposes

## Resource Implications:

none
Other Programs within which course is listed:
COURSE CHANGE: WILE 600 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

Calendar for academic year: 2020/2021

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| Type of Change: | [ ] Course Title |
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## [ ] Credit Value <br> [X] New Course

## Proposed Text

WILE 600 Graduate Work-Integrated Learning - Engineering and Computer Science Internship I (0 credits)
The student is enrolled in this course during their first internship. This course involves completing a work-integrated learning placement directly related to observing, acquiring, or implementing skills related to the student's specific field within Engineering and Computer Science. Students are provided guidance and support in preparing for the internship and identifying a relevant placement. The Institute monitors the student during the internship, and the student is formally evaluated by the Director of the Institute or designate, with input from the employer. Students are paid for the work performed. This course is marked on a pass/fail basis.

Note: While this course carries no credit value, enrolment indicates that the student maintains full-time status.

Rationale:
Optimized nomenclature for reporting purposes

## Resource Implications:

none
Other Programs within which course is listed:

Calendar for academic year: 2020/2021

| Faculty/School: | ICE |
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| Department: | ICE |
| Program: |  |

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Calendar Section/Graduate Page Number: General Information - Institute section

| Type of Change: |  |  |
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| [ ] Course Number | [ ] Course Title | [ ] Credit Value |
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\hline \hline & \begin{array}{l}\text { WILE 601 - Graduate Work-Integrated Learning - Engineering and Computer } \\
\text { Science Reflective Learning Activities I (3 credits) }\end{array}
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The student is enrolled in this course during their first internship. The student develops <br>
career-relevant skills by integrating classroom learning related to the student's specific <br>
field within Engineering and Computer Science and a degree-relevant workplace setting. <br>
This is a forum for critically examining the workplace, relatability between the student's <br>
academic studies and workplace, setting learning goals, reflecting on academic and <br>
professional experiences and objectives, self-evaluation, and disciplined inquiry. This <br>

course is marked on a pass/fail basis.\end{array}\right\}\)| Note: This course carries 3 complementary credits, and as such does not count towards |
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| fulfilling the academic credit requirements for the student's program of study. |$|$| Rationale: |
| :--- |
| Restimized nomenclature for reporting purposes <br> none |
| Other Programs within which course is listed: |

COURSE CHANGE: WILE 700 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

Calendar for academic year: 2020/2021

| Faculty/School: | ICE |
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## Proposed Text

WILE - 700-Graduate Work-Integrated Learning - Engineering and Computer Science II (0 credits)
The student is enrolled in this course during their second internship. This course involves completing a work-integrated learning placement directly related to observing, acquiring, or implementing skills related to the student's specific field within Engineering and Computer Science. Students are provided guidance and support in preparing for the internship and identifying a relevant placement. The Institute monitors the student during the internship, and the student is formally evaluated by the Director of the Institute or designate, with input from the employer. Students are paid for the work performed. This course is marked on a pass/fail basis.

Note: While this course carries no credit value, enrolment indicates that the student maintains full-time status.

Rationale:
Optimized nomenclature for reporting purposes

## Resource Implications:

none
Other Programs within which course is listed:

Calendar for academic year: 2020/2021

| Faculty/School: | ICE |
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## Proposed Text

WILE 701 - Graduate Work-Integrated Learning - Engineering and Computer Science Reflective Learning Activities II (3 credits)

The student is enrolled in this course during their second internship. The student develops career-relevant skills by integrating classroom learning related to the student's specific field within Engineering and Computer Science and a degree-relevant workplace setting. This is a forum for critically examining the workplace, relatability between the student's academic studies and workplace, setting learning goals, reflecting on academic and professional experiences and objectives, self-evaluation, and disciplined inquiry. This course is marked on a pass/fail basis.

Note: This course carries 3 complementary credits, and as such does not count towards fulfilling the academic credit requirements for the student's program of study.

Rationale:
Optimized nomenclature for reporting purposes

## Resource Implications:

none
Other Programs within which course is listed:
COURSE CHANGE: WILF 600 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes
Calendar for academic year: 2020/2021

| Faculty/School: | ICE |
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| [ ] Course Number | [] Course Title | [ ] Credit Value [X] New Course | [] Prerequisite |
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| Present Text (from 2020/2021) calendar |  | Proposed Text |  |
|  |  | WILF 600 Graduat The student is enro completing a work-i or implementing skill provided guidance placement. The Ins formally evaluated employer. Students basis. <br> Note: While this co maintains full-time | Learning - Fine Arts Internship I (0 credits) uring their first internship. This course involves placement directly related to observing, acquiring, dent's specific field within Fine Arts. Students are aring for the internship and identifying a relevant student during the internship, and the student is Institute or designate, with input from the rk performed. This course is marked on a pass/fail <br> it value, enrolment indicates that the student |
| Rationale: <br> Optimized nomenclature for reporting purposes |  |  |  |
| Resource Implications: none |  |  |  |
| Other Programs within which course is liste |  |  |  |

COURSE CHANGE: WILF 601 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes
Calendar for academic year: 2020/2021

| Faculty/School: | ICE |
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| Department: | ICE |
| Program: |  |
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## Proposed Text

WILF 601 - Graduate Work-Integrated Learning - Fine Arts Reflective Learning Activities I (3 credits)

The student is enrolled in this course during their first internship. The student develops career-relevant skills by integrating classroom learning related to the student's specific field within Fine Arts and a degree-relevant workplace setting. This is a forum for critically examining the workplace, relatability between the student's academic studies and workplace, setting learning goals, reflecting on academic and professional experiences and objectives, self-evaluation, and disciplined inquiry. This course is marked on a pass/ fail basis.

Note: This course carries 3 complementary credits, and as such does not count towards fulfilling the academic credit requirements for the student's program of study.

Rationale:
Optimized nomenclature for reporting purposes

## Resource Implications:

none
Other Programs within which course is listed:
COURSE CHANGE: WILF 700 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes
Calendar for academic year: 2020/2021

| Faculty/School: | ICE |
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| Department: | ICE |
| Program: |  |
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## Implementation Month/Year: SEPTEMBER 2020

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## Proposed Text

WILF - 700-Graduate Work-Integrated Learning - Fine Arts II (0 credits)
The student is enrolled in this course during their second internship. This course involves completing a work-integrated learning placement directly related to observing, acquiring, or implementing skills related to the student's specific field within Fine Arts. Students are provided guidance and support in preparing for the internship and identifying a relevant placement. The Institute monitors the student during the internship, and the student is formally evaluated by the Director of the Institute or designate, with input from the employer. Students are paid for the work performed. This course is marked on a pass/fail basis.

Note: While this course carries no credit value, enrolment indicates that the student maintains full-time status.

## Rationale:

Optimized nomenclature for reporting purposes
Resource Implications:
none
Other Programs within which course is listed:
COURSE CHANGE: WILF 701 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes
Calendar for academic year: 2020/2021

| Faculty/School: | ICE |
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| Department: | ICE |
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## Proposed Text

WILF 701 - Graduate Work-Integrated Learning - Fine Arts Reflective Learning Activities II (3 credits)

The student is enrolled in this course during their second internship. The student develops career-relevant skills by integrating classroom learning related to the student's specific field within Fine Arts and a degree-relevant workplace setting. This is a forum for critically examining the workplace, relatability between the student's academic studies and workplace, setting learning goals, reflecting on academic and professional experiences and objectives, self-evaluation, and disciplined inquiry. This course is marked on a pass/ fail basis.

Note: This course carries 3 complementary credits, and as such does not count towards fulfilling the academic credit requirements for the student's program of study.

Rationale:
Optimized nomenclature for reporting purposes

## Resource Implications:

none
Other Programs within which course is listed:



Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

Calendar for academic year: 2020/2021

Calendar for academic year: 2020/2021

| Faculty/School: | ICE |
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WILM 601 - Graduate Work-Integrated Learning - Social Sciences, Humanities, and Mathematics Reflective Learning Activities I (3 credits)

The student is enrolled in this course during their first internship. The student develops career-relevant skills by integrating classroom learning related to the student's specific field within Social Sciences, Humanities, and Mathematics and a degree-relevant workplace setting. This is a forum for critically examining the workplace, relatability between the student's academic studies and workplace, setting learning goals, reflecting on academic and professional experiences and objectives, self-evaluation, and disciplined inquiry. This course is marked on a pass/fail basis.

Note: This course carries 3 complementary credits, and as such does not count towards fulfilling the academic credit requirements for the student's program of study.

Rationale:
Optimized nomenclature for reporting purposes

## Resource Implications:

none
Other Programs within which course is listed:

Calendar for academic year: 2020/2021

| Faculty/School: | ICE |
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[ ] Prerequisite

Rationale:
Optimized nomenclature for reporting purposes

## Resource Implications:

none
Other Programs within which course is listed:

Calendar for academic year: 2020/2021

| Faculty/School: | ICE |
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| Department: | ICE |
| Program: |  |
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WILM 701 - Graduate Work-Integrated Learning - Social Sciences, Humanities, and Mathematics Reflective Learning Activities II (3 credits)

The student is enrolled in this course during their second internship. The student develops career-relevant skills by integrating classroom learning related to the student's specific field within Social Sciences, Humanities, and Mathematics and a degree-relevant workplace setting. This is a forum for critically examining the workplace, relatability between the student's academic studies and workplace, setting learning goals, reflecting on academic and professional experiences and objectives, self-evaluation, and disciplined inquiry. This course is marked on a pass/fail basis

Note: This course carries 3 complementary credits, and as such does not count towards fulfilling the academic credit requirements for the student's program of study.

Rationale:
Optimized nomenclature for reporting purposes

## Resource Implications:

none
Other Programs within which course is listed:
COURSE CHANGE: WILP 600 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes
Calendar for academic year: 2020/2021

| Faculty/School: | Institute for Co-operative Education |
| :--- | :--- |
| Department: | Institute for Co-operative Education |
| Program: |  |
| Degree:  <br> Calendar Section/Graduate Page Number:  General Information - Institute section |  |


COURSE CHANGE: WILP 601 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

Calendar for academic year: 2020/2021

| Faculty/School: | ICE |
| :--- | :--- |
| Department: | ICE |
| Program: |  |
| Degree: <br> Calendar Section/Graduate Page Number: |  |
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| Type of Change: |  |
| [ ] Course Number Information - Ins  <br> [ ] Course Description [ ] Course Title <br> [ ] Course Deletion [ ] Editorial | [ ] Other - Specify: |


| Present Text (from 2020/2021) calendar |
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WILP 601 - Graduate Work-Integrated Learning -Psychology Reflective Learning Activities I (3 credits)

The student is enrolled in this course during their first internship. The student develops career-relevant skills by integrating classroom learning related to the student's specific field within Psychology and a degree-relevant workplace setting. This is a forum for critically examining the workplace, relatability between the student's academic studies and workplace, setting learning goals, reflecting on academic and professional experiences and objectives, self-evaluation, and disciplined inquiry. This course is marked on a pass/ fail basis.

Note: This course carries 3 complementary credits, and as such does not count towards fulfilling the academic credit requirements for the student's program of study.

Rationale:
Optimized nomenclature for reporting purposes

## Resource Implications:

none
Other Programs within which course is listed:
COURSE CHANGE: WILP 700 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

Calendar for academic year: 2020/2021

| Faculty/School: | ICE |
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| Department: | ICE |
| Program: |  |
| Degree: <br> Calendar Section/Graduate Page Number: |  |
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| Type of Change: |  |
| [ ] Course Number Information - Ins  <br> [ ] Course Description [ ] Course Title <br> [] Course Deletion [ ] Editorial | [ ] Other - Specify: |


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WILP - 700 - Graduate Work-Integrated Learning - Psychology Internship II (0 credits)
The student is enrolled in this course during their second internship. This course involves completing a work-integrated learning placement directly related to observing, acquiring, or implementing skills related to the student's specific field within Psychology. Students are provided guidance and support in preparing for the internship and identifying a relevant placement. The Institute monitors the student during the internship, and the student is formally evaluated by the Director of the Institute or designate, with input from the employer. Students are paid for the work performed. This course is marked on a pass/ fail basis.

Note: While this course carries no credit value, enrolment indicates that the student maintains full-time status.

Rationale:
Optimized nomenclature for reporting purposes

## Resource Implications:

none
Other Programs within which course is listed:
COURSE CHANGE: WILP 701 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

Calendar for academic year: 2020/2021

| Faculty/School: | ICE |
| :--- | :--- |
| Department: | ICE |
| Program: |  |

## Program:

Degree:
Calendar Section/Graduate Page Number: General Information - Institute section

| Type of Change: |  |  |
| :---: | :---: | :---: |
| [ ] Course Number | [ ] Course Title | [ ] Credit Value [ ] Prerequisite |
| [ ] Course Description | [] Editorial | [X] New Course |
| [ ] Course Deletion | [ ] Other-Specify: |  |
| Present Text (from 2020/2021) calendar |  | Proposed Text |
|  |  | WILP 701 - Graduate Work-Integrated Learning - Psychology Reflective Learning Activities II (3 credits) <br> The student is enrolled in this course during their second internship. The student develops career-relevant skills by integrating classroom learning related to the student's specific field within Psychology and a degree-relevant workplace setting. This is a forum for critically examining the workplace, relatability between the student's academic studies and workplace, setting learning goals, reflecting on academic and professional experiences and objectives, self-evaluation, and disciplined inquiry. This course is marked on a pass/ fail basis. <br> Note: This course carries 3 complementary credits, and as such does not count towards fulfilling the academic credit requirements for the student's program of study. |
| Rationale: <br> Optimized nomenclature for reporting purposes |  |  |
| Resource Implications: none |  |  |
| Other Programs within which course is listed: |  |  |

COURSE CHANGE: WILS 600 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes
Calendar for academic year: 2020/2021

| Faculty/School: | ICE |
| :--- | :---: |
| Department: | ICE |
| Program: |  |
| Degree:  <br> Calendar Section/Graduate Page Number: General Information - Ins  <br>   <br> Type of Change: [ ] Course Title <br> [ ] Course Number [ ] Editorial <br> [ ] Course Description [ ] Other - Specify: <br> [ ] Course Deletion  |  |



## Proposed Text

WILS 600 Graduate Work-Integrated Learning - Pure Sciences Internship I (0 credits) The student is enrolled in this course during their first internship. This course involves completing a work-integrated learning placement directly related to observing, acquiring, or implementing skills related to the student's specific field within Pure Sciences. Students are provided guidance and support in preparing for the internship and identifying a relevant placement. The Institute monitors the student during the internship, and the student is formally evaluated by the Director of the Institute or designate, with input from the employer. Students are paid for the work performed. This course is marked on a pass/ fail basis.

Note: While this course carries no credit value, enrolment indicates that the student maintains full-time status.

## Rationale:

Optimized nomenclature for reporting purposes

## Resource Implications:

none
Other Programs within which course is listed:
COURSE CHANGE: WILS 601 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes
Calendar for academic year: 2020/2021

| Faculty/School: | ICE |
| :--- | :--- |
| Department: | ICE |
| Program: |  |
| Degree: |  |
| Calendar Section/Graduate Page Number: General Information - Ins |  |
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| Type of Change: | [ ] Course Title |
| [ ] Course Number | [ ] Editorial |
| [ ] Course Description | [ Other - Specify: |


| Present Text (from 2020/2021) calendar |  |
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## Proposed Text

WILS 601 - Graduate Work-Integrated Learning - Pure Sciences Reflective Learning Activities I (3 credits)

The student is enrolled in this course during their first internship. The student develops career-relevant skills by integrating classroom learning related to the student's specific field within Pure Sciences and a degree-relevant workplace setting. This is a forum for critically examining the workplace, relatability between the student's academic studies and workplace, setting learning goals, reflecting on academic and professional experiences and objectives, self-evaluation, and disciplined inquiry. This course is marked on a pass/ fail basis.

Note: This course carries 3 complementary credits, and as such does not count towards fulfilling the academic credit requirements for the student's program of study.

Rationale:
Optimized nomenclature for reporting purposes

## Resource Implications:

none
Other Programs within which course is listed:
COURSE CHANGE: WILS 700 New Course Number:

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes
Calendar for academic year: 2020/2021

| Faculty/School: | ICE |
| :--- | :---: |
| Department: | ICE |
| Program: |  |
| Degree: |  |
| Calendar Section/Graduate Page Number: General Information - Ins |  |
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| Type of Change: | [ ] Course Title |
| [ ] Course Number | [ ] Editorial |
| [ ] Course Description | [ ] Other - Specify: |

## Implementation Month/Year: SEPTEMBER 2020



## Proposed Text

WILS - 700-Graduate Work-Integrated Learning - Pure Sciences II (0 credits) The student is enrolled in this course during their second internship. This course involves completing a work-integrated learning placement directly related to observing, acquiring, or implementing skills related to the student's specific field within Pure Sciences. Students are provided guidance and support in preparing for the internship and identifying a relevant placement. The Institute monitors the student during the internship, and the student is formally evaluated by the Director of the Institute or designate, with input from the employer. Students are paid for the work performed. This course is marked on a pass/ fail basis.

Note: While this course carries no credit value, enrolment indicates that the student maintains full-time status.

## Rationale:

Optimized nomenclature for reporting purposes

## Resource Implications:

none
Other Programs within which course is listed:


## SCHOOL OF GRADUATE STUDIES

| MEMO TO: | Danielle Tessier <br> Associate Secretary-General, University Secretariat |
| :--- | :--- |
| FROM: | Faye Diamantoudi <br> Interim Dean of Graduate Studies |
| DATE: | February 12, 2020 |
| SUBJECT: | Graduate Calendar regulation changes |

For Senate's information, please find attached the following documents:
CSGS 19203 D2 The Proaram Repertoire
The Program Repertoire in the Graduate Calendar has been updated for the purposes of clarity and to reflect current regulations, as well as to include the introduction of the term 'microprogram'.

CSGS 19203 D3 Master's Thesis
The requirement for an oral defence of the the Master's thesis has been removed and an evaluation procedure of the thesis has been defined.

These motions were passed, unopposed at the January 27, 2020 meeting of the Council of the School of Graduate Studies.

| Current Winter 2020 Calendar Text | Proposed Fall 2020 Text |
| :---: | :---: |
| The Program Repertoire <br> The graduate programs offered by the University divide into doctoral, master's, diploma and certificate programs. Doctoral programs offer students the opportunity to carry out fundamental and applied research. The results of this research must be presented in the form of a thesis containing an original contribution to knowledge. Doctoral theses must be defended in public examinations. The length and specific format of a doctoral thesis is discipline dependent. All doctoral programs require the passing of comprehensive examinations. All doctoral programs require a minimum of 90 credits of study. At the master's level, the University offers a variety of thesis and non-thesis options. All master's programs-require a minimum of 45 credits. Some master's programs also have a comprehensive examination. The academic goals of the graduate diploma programs are usually somewhat different from those of doctoral and master's programs. They are designed either to offer a further specialization in a field or discipline already studied at the undergraduate level, or to provide the introduction to a new field of study or discipline, with the express intent to develop some level of specialized knowledge. A graduate diploma will consist of a minimum of 30 credits and normally a maximum of 33 eredits. Diploma programs do not require a thesis, although a graduating essay, project or report may be required. Diploma programs may require a comprehensive examination. The University offers a | The Program Repertoire <br> Concordia University's graduate programs encompass doctoral and master's degrees, diploma and certificate programs, as well as micro-programs. The goal of doctoral studies is an original and significant contribution to knowledge through research and/or research creation. Doctoral programs require a minimum of 90 credits of study, including the successful completion of comprehensive examinations and the public defence of a thesis. At the master's level, the University offers a variety of researchand professionally-oriented degree programs of study, all of which require a minimum of 45 credits. This includes the earning of a master's degree by 'accumulation' by combining diploma, certificate, and micro-program courses and credits to meet the 45 -credit minimum required for a master's degree. The academic goals of the graduate diploma include advanced specialization in a field or discipline already studied at the undergraduate level, or the introduction to a new field of study or discipline leading toward the attainment of specialized knowledge. A graduate diploma consists of a minimum of $\underline{30}$ credits. Graduate certificate programs are normally oriented towards working professionals seeking to upgrade and advance their skills and training in an abbreviated time-frame. Graduate certificate programs are normally completed in one to three years and consist of 15 credits. Micro-programs are an organized group of courses and/or experiences between one and 14 credits that allow students to develop and document professional skills and competencies. |

number of graduate certificate programs which are designed to-serve a professionalclientele seeking to upgrade and advance their-graduate training over a shorttime frame. Graduate certificate programs are normally completed in one to three years and consist of 15 credits. All graduate programs offered by the University are listed below. Each description outlines the full-time facultyinvolved in the program, the ebjectives of the program, and the research interests of the faculty. Admission requirements, application procedures, and degree requirements and program options are specified. In addition, all approved courses are listed. In most cases, core courses are described in detail. With the exception of the Special Individualized programs, all graduate programs offered by the University are attached to one of the three Faculties of The John Molson School of Business of the university and are therefore grouped accordingly.

These short courses of study verify, validate and attest that students have acquired specific skills and/or competencies.

## Rationale:

The Program Repertoire has not been updated in several years. This version seeks to accomplish various objectives: 1. Make the definition of degree and non-degree programs more concise and clear; 2. Change the minimum number of credits required in a Diploma program to reflect current usage in the University; 3. Recognize a structure for degrees by accumulation and micro-programs.

| Current Summer 2019 Calendar Text | Proposed Summer 2020 Text |
| :---: | :---: |
| Master's Thesis <br> The Graduate Studies Committee of the student's program, in consultation with his/her supervisor, appoints an Examining Committee. The Examining Committee consists of a minimum of three (3) and a maximum of five (5) members. The student's supervisor(s) must be a member of the Examining Committee. Students in the Individualized Program must have one (1) external member from outside the university on their Examining Committee. Co-author(s) of work included in the thesis cannot serve as an examiner for that thesis except for the supervisor(s). The Examining Committee for students in the Master in Applied Science (MASc) programs in Engineering must have one (1) University member that is <br> external to the student's program or department. Unless otherwise agreed, the defence is generally scheduled by the student's program within two (2) to five (5) weeks from the initial submission of the thesis depending on the program's regulations. <br> The defence is normally anoral examinationconducted by an Examining Committee and chaired by an individual who shall be appointed by the Graduate Studies Committee. Prior to the date of the defence, each member of the Examining Committee must submit the completed Examiner's Evaluation of a Master's Thesis to the Chair. Any member of the University can attend a master's defence. Contractual and/or legalobligations may necessitate that all participants to a thesis defence-sign an undertaking of confidentiality. Procedures related to presentation, question period and deliberations of the defence can be found in the Thesis Preparation Guide. | Master's Thesis <br> The Graduate Studies Committee of the student's program, in consultation with his/her supervisor, appoints an Examining Committee. The Examining Committee consists of a minimum of two (2) members, including the supervisor(s).* The student's supervisor(s) must be a member of the Examining Committee. The Examining Committee must also include a member who is not in a supervisory relationship with the student. Co-author(s) of work included in the thesis cannot serve as an examiner for that thesis except for the supervisor(s). Following evaluation of the thesis, the Examining Committee will arrive at a decision to either Accept or Reject. When an Examining Committee composed of two faculty members renders a split decision, the Graduate Program Director (or Departmental Chair when appropriate) will adjudicate. Once the Examining Committee has arrived at a final decision, it is the responsibility of the Graduate Program to forward to the Thesis Office, generally within 3 weeks from the initial submission of the thesis, a completed Master's Thesis Evaluation Report that reflects the final decision of the Examining Committee. <br> An oral defence of a Master's thesis is not required by the School of Graduate Studies. Programs may elect to have an oral defence as a degree requirement (please see individual program entries in the Calendar). |
| Rationale: *An oral defence of a Master's thesis will no longer by required by the School of Graduate Studies. This change will: (1) provide graduate programs with increased flexibility to tailor their Master's programs to their academic needs; (2) positively impact Time To Completion for Master's degrees, (3) lighten the faculty burden for chairing defences, (4) bring Concordia more in alignment with other universities (such as McGill, UdeM, UQAM, Laval, UBC,etc.) who do not require an oral defence for Master's degrees. |  |


[^0]:    ${ }^{3}$ The Member shall agree in writing to the Reporting Officer's established method of managing and monitoring of the COI.

[^1]:    ${ }^{1}$ All information disclosed will be held in confidence in accordance with University policypolicies and

[^2]:    ${ }^{3}$ The Member shall agree in writing to the Reporting Officer's established method of managing and monitoring of the COI.

[^3]:    ${ }^{1}$ Although Human Resources periodically administers a survey to new and current employees, the response rate currently stands at $33 \%$. Furthermore, in accordance with the law, some of the data (including, especially, the data on visible minorities) is supplemented by identification by the employer (versus by the employees via a self-identification process).

[^4]:    ${ }^{2}$ Pursuant to the 2018 CRC Secretariat re-allocation exercise (which resulted in six new allocations), a vacancy, and the use of flex moves, the University is currently recruiting eight Tier II CRCs. The selection process for these is underway, with shortlists expected by November 2019 and nominations to be submitted to the CRC Secretariat in 2020.

[^5]:    ${ }^{3}$ In keeping with the Truth and Reconciliation Commission's Calls to Action, and in particular its call "to close identified [Indigenous] educational achievement gaps within one generation" (10.1), we have placed special emphasis on Indigenous representation, research, and inclusion.

[^6]:    Bill Zorn
    Professor, Intermedia Program Coordinator
    Department of Studio Arts
    Faculty of Fine Arts
    Concordia University
    Montreal (QC) Canada

[^7]:    Rationale:
    The changes reflect the mature entry program for BCompSc with the Options removed. This implies title changes for the joint majors with Mathematics and Statistics and with Computation Arts. Discussions have taken place with these departments, who both agreed with the title change for these programs. The MATH Department is issuing a proposal for a title change in dossier number MATH-31. This has been accepted by their departmental curriculum committee and is on schedule for approval in the next department committee meeting. The DCART Department is issuing a proposal for a title change in dossier number DART-21.This has been accepted by their departmental committee and is on schedule for

[^8]:    Rationale:
    Proposed editorial change reflect the removal of Options from the BCompSc degree.

