

# **SENATE**

# **NOTICE OF MEETING**

January 17, 2020

Please be advised that the next regular meeting of Senate will be 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.

Kindly confirm your attendance to Evelyne Loo as soon as possible at <a href="mailto:evelyne.loo@concordia.ca">evelyne.loo@concordia.ca</a> or at 514-848-2424, ext. 4814. You may also contact Evelyne if you have any problems accessing the documents.

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Danielle Tessier Secretary of Senate



# AGENDA 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

Item		Presenter/s	Action
1.	Call to order	G. Carr	
1.1	Adoption of the Agenda	G. Carr	Approval
1.2	Adoption of December 13, 2019 Minutes	G. Carr	Approval
2.	Business arising from the Minutes not included on the Agenda	G. Carr	
3.	President's remarks	G. Carr	Information
4.	Academic update (Document US-2020-1-D1)	A. Whitelaw	Information
<u>CON</u>	<u>ISENT</u>		
5.	Committee appointments (Document US-2020-1-D2)		Approval
6.	Academic Programs Committee - Report and recommendations ( <i>Document US-2020-1-D3</i> )		Approval
6.1	Undergraduate curriculum proposals - Faculty of Arts and Science		
	Certificate in Arts and Science (Document US-2020-1-D4)		
6.1.2	Department of Applied Human Sciences ( <i>Document US-2020-1-D5</i> )		
6.1.3	School of Irish Studies (Document US-2020-1-D6)		
	Department of Education (Document US-2020-1-D7)		
6.1.5	Simone de Beauvoir Institute (Document US-2020-1-D8)		

6.2	Undergraduate curriculum proposal– Faculty of Fine Arts – Department of Design and Computation Arts ( <i>Document US-2020-1-D9</i> )		
	Graduate curriculum proposals – Faculty of Arts and Science Department of Biology ( <i>Document US-2020-1-D10</i> ) Department of Education ( <i>Document US-2020-1-D11</i> )		
	Graduate curriculum proposals – Gina Cody School of Engineering and Computer Science Concordia Institute for Information Systems Engineering (Document US-2020-1-D12)  Department of Electrical and Computer Engineering (Documents US-2020-1-D13 and D14)		
REG	<u>ULAR</u>		
7.	Undergraduate curriculum proposal – Faculty of Arts and Science - Department of Journalism – New Minor in Science Journalism ( <i>Document US-2020-1-D15</i> )	A. Roy/ D. Secko	Approval
8.	Presentation on Time and Space	A. Whitelaw/ S. de Celles	Information
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, December 13, 2019, at 2 p.m. in the Norman D. Hébert, LLD Meeting Room (Room EV 2.260) on the SGW Campus

# **PRESENT**

<u>Voting members</u>: Graham Carr (*Chair*); Ali Akgunduz; Amir Asif; Maryam Bagherzadeh; Leslie Barker; Matthew Barker; Guylaine Beaudry; Pascale Biron; Elizabeth Bloodgood; Catherine Bolton; Sue Callender; Sally Cooke; Mark Corwin; Frank Crooks; Alex De Visscher; Jill Didur (*Acting for André Roy*); Rebecca Duclos; Ariela Freedman; Vince Graziano; Christophe Guy; Jarrad Hass; Chris Kalafatidis; Jooseop Lim (*Acting for Anne-Marie Croteau*); Esther Morand; Helena Osana; Gilles Peslherbe; Martin Pugh; Patrick Quinn; Marguerite Rolland; Bayan Abu Safieh; Matt Soar; Robert Soroka; Ron Stern; Alex Stojda; Victoria Videira; Jean-Philippe Warren; Anne Whitelaw; Paula Wood-Adams; Radu Zmeureanu

<u>Non-voting members</u>: Johanne Beaudoin; Philippe Beauregard; Roger Côté; Stéphanie de Celles; Isabel Dunnigan; Nadia Hardy; Tom Hughes; Candace Jacobs; Frederica Jacobs

## ABSENT

<u>Voting members</u>: Shimon Amir; Bakry Alsaieq; Arshdeep Singh Batia; Christopher Brett; Ricardo Dal Farra; Linda Dyer; Medhi Farashahi; Colin Philip; Timir Baran Roy; Catherine Russell; Reza Soleymani; Elizabeth Tasong; Marlena Valenta

Non-voting members: Paul Chesser; Denis Cossette

#### 1. Call to order

The meeting was called to order at 2:07 p.m.

# 1.1 Approval of Agenda

R-2019-7-1 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 November 8, 2019

R-2019-7-2 Upon motion duly moved and seconded, it was unanimously resolved that the Minutes of the Open Session meeting of November 8, 2019, be approved.

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

There was no business arising from the Minutes not included on the Agenda.

#### 3. President's remarks

The highlights of the President's remarks are summarized as follows:

- Over 1,000 students graduated at the November 18 convocation ceremonies.
- He thanked Philippe Beauregard, Nadia Bhuiyan, Denis Cossette and Suzanne Kaye for their work in making this year's Centraide campaign the most successful ever, which will have raised about \$190,000 once matching gifts will have been received.
- Referring to the letter included in the mailing, he urged Senators to consider donating to the Student Emergency and Food Fund.
- Concordia graduate Manon Tremblay has been appointed Senior Director, Indigenous Directions. Donna Kahérakwas Goodleaf, who served as interim Senior Director, has been appointed to the new role of Director, Decolonizing Curriculum and Pedagogy.
- December 6 marked the 30<sup>th</sup> anniversary of the École Polytechnique massacre. Several commemorative events were held.
- District 3 joined the City of Montreal to organize and host the Biohealth Innovation Week from December 2 to 6.
- He acknowledged the success of Concordia's athletic teams.

## **4. Academic update** (Document US-2019-7-D1)

As complementary information to her written report, Dr. Whitelaw was pleased to apprise Senate that Bloomberg Businessweek has ranked the JMSB MBA fourth in Canada and best in Quebec and also placed it first in Canada for entrepreneurship.

## 5. Committee reports

- **5.1 Library** (Document US-2019-7-D2)
- **5.2** Research (Document US-2019-7-D3)

There were no questions on these reports which are provided for information.

# **CONSENT**

- **6. Committee appointments** (Document US-2019-7-D4 Revised)
- *R*-2019-7-3 That the committee appointments, outlined in Document US-2019-7-D4 Revised, be approved.
- 7. **Academic Programs Committee Report and recommendations** (Document US-2019-7-D5)
- 7.1 Undergraduate curriculum proposals Faculty of Arts and Science
- **7.1.1 Department of Applied Human Sciences** (Document US-2019-7-D6)
- **7.1.2 Department of Economics** (Document US-2019-7-D7)
- 7.1.3 Department of Health, Kinesiology and Applied Physiology (Document US-2019-7-D8)
- 7.1.4 Department of Geography, Planning and Environment (Document US-2019-7-D9)
- **7.1.5 Department of Theological Studies (**Document US-2019-7-D10)
- R-2019-7-4 That the undergraduate curriculum proposals in the Faculty of Arts and Science be approved.
- 7.2 Undergraduate curriculum proposal- Faculty of Fine Arts Department of Theatre (Document US-2019-7-D11)
- R-2019-7-5 That the undergraduate curriculum proposals in the Faculty of Fine Arts be approved.
- 7.3 Undergraduate curriculum proposals Gina Cody School of Engineering and Computer Science
- **7.3.1 Requirements** (Document US-2019-7-D12)
- 7.3.2 Department of Electrical and Computer Engineering (Document US-2019-7-D13)
- **7.3.3 Department of Building, Civil and Environmental Engineering** (Document US-2019-7-D14)
- 7.3.4 Department of Electrical and Computer Engineering (Document US-2019-7-D15)
- **7.3.5 Department of Mechanical, Industrial and Aerospace Engineering** (Document US-2019-7-D16)
- R-2019-7-6 That the undergraduate curriculum proposals in the Gina Cody School of Engineering and Computer Science be approved.

## REGULAR

- **8. Motion regarding Concordia University Foundation** (Document US-2019-7-D17)
- R-2019-7-7 Upon motion duly moved and seconded, it was unanimously resolved:

Whereas during the presentation at the November 8, 2019 meeting of Senate on the Concordia University Foundation, commitments by the latter were announced regarding divestment in fossil fuels, impact investing and sustainable investment;

BE IT RESOLVED:

That Senate applaud the Concordia University Foundation for its decision on sustainable investment; and

That Senate also express its deep appreciation for the research work and tireless advocacy efforts of the University's students, faculty and staff who have been engaged with the topic of responsible investing through various groups and interventions over the years.

# 9. Undergraduate curriculum proposal – Office of the Registrar – Baccalaureate by Accumulation (Documents US-2019-7-D18 and D19)

In the course of her presentation, Sandra Gabriele, Vice-Provost, Innovation in Teaching and Learning, noted that faced with a changing landscape, many universities around the world are trying to address the issue by thinking about how they deliver programs. Therefore, this is at the heart of today's proposal. She spoke of the non-university organizations and the well-established post-secondary institutions which have broken down learning into micro-chunks and are creating challenges to university credentials. Micro-credentials are gaining relevance and prominence in the changing workforce. She urged Senators to read the reports and studies, a link to which is provided in the package.

Stackable degrees have been offered in the French university system for over 20 years. Dr. Gabriele said that the *Bac par cumul avec appellation* (BACCAP) is what is being proposed, which constitutes a defined pathway that most resembles a conventional undergraduate degree, in that it is in a defined area, the degree is named, and the pathway for the student is laid out. She shared some examples of predetermined BACCAP at Université de Montréal, HEC and Polytechnique.

Dr. Gabriele conveyed the rigorous consultation process. She underlined the key elements of the proposed changes to Sections 16.2.2 and 16.2.4 as follows:

- ✓ Defined pathways of eligible certificates need to be developed by the Faculties and would be subject to the standard curriculum approval process.
- ✓ Faculties retain control of admissions and set the standards for GPA.
- ✓ One certificate could now be combined with a 60-credit Major.
- ✓ Extended Credit Programs (120 credits) are possible (4 certificates are possible).
- ✓ Mature Entry Programs (108 credits) would be comprised of 3 certificates and 18 credits.
- ✓ No double counting of credits towards more than one program of study.

Going forward, implementation and development will go hand in hand. Dr. Gabriele apprised Senate that the certificates will continue to go through the same approval process as other curriculum changes (Department and Faculty curriculum committees and councils, Academic Programs Committee, Senate, and in the case of graduate certificates, the School of Graduate Studies). She made the point that currently certificates are not subject to the formal review process mandated by the Ministry for existing degree programs. However, as certain certificates may now become eligible to be applied towards a degree program, these certificates will need to be incorporated into the formal

review process currently established for existing degree programs. She also noted that student fees will go to the Faculty where the certificate will be offered.

She presented some speculative ideas not yet vetted by the Departments, solely as examples that arose from conversations with Deans and Associate Deans about what they could see emerging from this new structure. She concluded by conveying that this proposal constitutes the first phase to create the foundations by removing the barriers to this work, the second phase involving working on development and implementation.

A discussion ensued, the main questions or concerns summarized as follows:

- How many U15 have baccalaureate by accumulation? Université de Montréal and Université Laval offer the Bac par cumul, while University of Calgary, University of Alberta, Queen's and UBC offer the ladder approach.
- Some certificates only include 200 300 level courses. The point was made that under current requirements Majors do not always require a 400-level course. The defined combinations of certificates leading towards a Baccalaureate by Accumulation will mirror the standard number of credits for upper level courses required in existing Major and Honours programs. For example, if each certificate includes one 3-credit course at the 400-level, the total degree would include 9 credits of courses at the 400-level, which is on par with the current standard for many Honours programs at Concordia.
- Were current or prospective students consulted? Students would be consulted in the development phase, as part of the regular curriculum process.
- More resources will be needed for advisers in Faculties, classroom sizes might also be impacted? This proposal removes barrier and opens a pathway, so there will be minimal impact on advising. The three certificates will be designed to respond to student and societal needs.
- Redesign existing program? Current certificates would likely need to be redesigned, and 30-credit Minors could also be converted into certificates, depending on the nature what is being proposed and the ability to deliver.
- A concern was expressed about what will happen to Majors. This proposal does not touch the structure of degrees. Down the road, there could be distinct markets for each.
- There is no double counting of credits, but there could be an option to explore allowing this under specific circumstances, in consultation with the Departments and Faculties.
- Yes, employers will take these degrees seriously.
- If a job requires a BA, will this degree count? Yes, the diploma will indicate BA or BSc by Accumulation; for example, a BA in English by Accumulation of certificates.
- It was confirmed that at this point, students will need to apply for each certificate as they are distinct certificate. However, through the next phase of consultation, options to facilitate students' transitions from a certificate to a Major program may also be considered. This may take the form of "laddering" models offered by a number of English language universities in Canada.

- The BACCAP is a proven model which has worked in Quebec for over 20 years, and trend towards introducing micro-credentials is growing in post-secondary institutions all around the world.
- Class scheduling is an issue in every single program, and work will be done to meet the needs of students.
- A concern was expressed that this type of degree is geared towards professional degrees and its long-term effect on academic degrees. It was reiterated that this is simply another pathway for students. Nothing is diluted. It allows students to broaden their knowledge base.
- R-2019-7-8 Upon motion duly moved and seconded, it was resolved that the undergraduate curriculum proposal in the Office of Registrar regarding the Baccalaureate by Accumulation be approved.
- Graduate curriculum proposal New program Faculty of Fine Arts Department of Creative Arts Therapies - Graduate Certificate in Play Therapy (Document US-2019-7-D20)

Deans Wood-Adams and Duclos introduced this proposal for a 15-credit Graduate Certificate in Play Therapy which will be offered in the Summer term by the Department of Creative Arts Therapies, as part of the Faculty of Fine Arts' long-term plan to develop and offer graduate-level certificates with a focus on professional development, skills training and experiential learning opportunities. Department Chair Guylaine Vaillancourt noted that this certificate will be the first of its kind in Canada and North America and that the Department of Arts Therapies possesses the expertise.

Prof. Bonnie Harnden explained that this program will provide clinicians with the training and the tools to effectively intervene with children who have suffered complex trauma. She emphasized the need for training in this area and that the five courses have been scientifically proven to help children.

In response to questions, the following elements were clarified:

- The funding from the Provost's Office is in addition to the FTE funding and will be provided for the first three years.
- The visiting scholar will provide support for the initial phase of the program.
- The number of projected enrolments is indeed based on analysis.
- R-2019-7-9 Upon motion duly moved and seconded, it was resolved that the new Graduate Certificate in Play Therapy, in the Department of Creative Arts Therapies, Faculty of Fine Art, be approved.
- 11. Research Committee recommendation: University Recognition of Research Unit Thermal Spray and Surface Engineering Research Centre (TSSE) (Document US-2019-7-D21)

R-2019-7-10 Upon motion duly moved and seconded, it was unanimously resolved that, on recommendation of the Research Committee, Senate grant the university-recognized status, in the category of emerging research centre, to the Thermal Spray and Surface Engineering Research Centre (TSSE), in accordance with the Policy on Research Units (VPRGS-8).

# 12. Presentation on Time and Space

This presentation is deferred to the next meeting.

# 13. Question period

Ms. Morand asked that the territorial acknowledgment be read at the beginning of each Senate meeting. The President responded that this request would be taken up with Steering Committee.

## 14. Other business

There was no other business to bring before Senate.

# 15. Adjournment

The meeting adjourned at 3:40 p.m.

Danielle Tessier Secretary of Senate

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# Internal Memorandum

To: Members of Senate

**From:** Anne Whitelaw, Provost and Vice-President, Academic

Date: January 16, 2020
Re: Academic Update

I want to take this opportunity to wish everyone a Happy New Year. I hope the holiday break was restful and rejuvenating. We're only a few weeks into the new year and there is already a lot on the go.

Faculty and Staff were honoured at 47<sup>th</sup> Long Service and Retirement Luncheon. This year's event, held on December 9 at the Loews Hôtel Vogue, celebrated 250 honourees who have given 20 years or more of service to Concordia. Retirees were also fêted for their service to the University.

The Learning Square opened its doors on January 6. Thousands of Concordia students and instructors experienced for the first time Concordia's pop up building, which is made up of eight large classrooms, accommodating approximately 80 people per class. Each is equipped with two projectors, large whiteboards and movable tables and chairs. There is also a call button on each podium in case professors need assistance with equipment. The ground floor of the building is wheelchair accessible, including the individual-use washroom. Those without special mobility needs will be encouraged to use the washroom on the upper floor, which features Concordia's largest gender-neutral facility so far. It includes stalls with floor-to-ceiling doors and a common area with sinks and mirrors.

engAGE, Concordia's Centre for Research on Aging, is launching its Creative Living Lab at the Cavendish Mall in the Montreal-area municipality of Côte-Saint-Luc this month. The aim is to combat social isolation among older adults and build inclusive communities across generations and cultures. The project is funded by the *Fonds de recherche du Québec (FRQ) - Santé, Plateforme de financements de la recherche intersectorielle sur le vieillissement*. The grand opening of the interactive space for collaborative research with older adults is January 16.

Concordia and Le Devoir have partnered to offer a paid eight-week internship from mid-June to the end of August. Students from across the four faculties can apply for the internship that will give the recipient an intensive experience working with the French-language media outlet. Interested students in any discipline can apply before February 28, 2020 online at <a href="https://www.ledevoir.com/bourse-stage-concordia">https://www.ledevoir.com/bourse-stage-concordia</a>

On January 10, 15 and 17, a new performance piece called *The Murder Next Door* was featured at 4<sup>TH</sup> SPACE and focuses on healing from community trauma. Using live performance and actual interviews to examine what happens when violence comes close to home, the performance draws from material gathered through three case studies and features four actors who will portray people impacted by a murder in their own community.

Concordia is sending its biggest team ever to the 46<sup>th</sup> Great Northern Concrete Toboggan Race January 29 to February 2 in Toronto. Concordia has a multidisciplinary team of 30-plus students that competes annually in the longest and largest Canadian undergraduate engineering competition of its kind. Students have to design and build a toboggan that can safely hold five riders with an enclosed superstructure, fully functional steering and braking systems and reinforced concrete skis as a running surface.

Students from the Department of Art History and the Landscape of Hope are working on projects to reimagine the Montreal Museum of Fine Arts (MMFA) experience by examining the connections between climate change, decolonization and cultural institutions. The MMFA partnered with Concordia's Department of Art History to present a public symposium on December 12, entitled "Climate Futures and Contemporary Art: 6 Curatorial Propositions." As contemporary art that focuses on the climate emergency grows in significance, galleries and curators are responding in kind. The symposium presented six curatorial proposals to generate new ways to see and engage with the environmental crisis. In parallel, Concordia graduate students of art education, drama therapy and communication studies participated in a workshop series a part of Landscape of Hope — a youth led digital art initiative — at the MMFA to reimagine the museum space.

The 39<sup>th</sup> annual John Molson MBA International Case Competition was held from January 6 to 10. It is the longest running and largest competition of its kind. Thirty-six teams of four MBA students each present their solutions to business cases in front of over 300 judges representing the business community. The first-place winner this year was the University of Cape Town. Second- and third-place winners were the teams from the University of Paderborn and the Nanyang Business School, respectively.

Teach for tomorrow: Concordia's Winterfest 2020 kicks off on January 24. The annual pedagogical panel discussion series is open to all Concordia faculty. This year's theme, *Leadership and Learning: Ready, Steady, Teach for Tomorrow*, delves into innovation in academia. Participants will hear from faculty who have reflected on opportunities, strategies and methods of innovating and who have put them into practice. They'll also hear from those who have contributed to furthering the development of teaching and pedagogy in their departments and faculties. Information on workshops and how to register is available online at <a href="http://www.concordia.ca/offices/ctl/workshops.html">http://www.concordia.ca/offices/ctl/workshops.html</a>



# **COMMITTEE APPOINTMENTS**

Committee	Appointee	<u>Term</u>
Academic Programs	Michelle Nokken (GCS)	2019/2022
Special Graduation Awards	Karan Pande (GSA)	2019/2020
Appointments requiring Senate ratification	Appointee	<u>Term</u>
<del></del>	Appointee  Ivan Contreras (SGS)	Term  Jan. 2020/ 2022

January 16, 2020



# ACADEMIC PROGRAMS COMMITTEE REPORT TO SENATE Sandra Gabriele, PhD January 24, 2020

# The Academic Programs Committee requests that Senate consider the following undergraduate changes for the 2020-21 Undergraduate Calendar:

Following approval of Faculty Councils, on December 10, 2019, APC members reviewed the undergraduate curriculum submissions from the Faculty of Arts and Science and the Faculty of Fine Arts. As a result of discussions, APC resolved that the following undergraduate curriculum proposals be forwarded to Senate for approval:

### **Faculty of Arts and Science**

(For May 2020 Implementation) (US-2020-1-D4)

[The proposal involves a change in regulations to remove the limit that students may only transfer 12 credits from an incomplete baccalaureate degree to the Certificate in Arts and Science.]

Regulations

# Department of Applied Human Sciences

(For May 2020 Implementation) (US-2020-1-D5)

[The proposal involves a change in regulations to remove the limit that students may only transfer 12 credits from an incomplete baccalaureate degree to the Certificate in Community Service and the Certificate in Family Life Education.]

• Regulations

## School of Irish Studies

(For May 2020 Implementation) (US-2020-1-D6)

[The proposal involves the removal of the exclusion note to IRST 228 and changes to the prerequisite requirements for IRST 390 to ensure that students have the appropriate academic preparedness.]

Courses

# Department of Education

(For May 2020 Implementation) (US-2020-1-D7)

[The proposal involves a change in regulations to remove the limit that students may only transfer 12 credits from an incomplete baccalaureate degree to the Certificate in Adult Education.]

Regulations

# Department of Journalism

(For May 2020 Implementation) - New program (US-2020-1-D15)

[The proposal involves the introduction of a new Minor in Science Journalism aimed to attract science students and to offer an opportunity for students to develop skills in the effective communication of science to society.]

- Requirements
- Courses

Simone de Beauvoir Institute

(For May 2020 Implementation) (US-2020-1-D8)

[The proposal involves a change in regulations to remove the limit that students may only transfer 12 credits from an incomplete baccalaureate degree the Certificate in Women's Studies.]

• Regulations

### **Faculty of Fine Arts**

Department of Design and Computation Arts

(For September 2021 Implementation) (US-2020-1-D9)

[The proposal involves changes to program requirements for the BFA Specialization in Computation Arts; changes to course titles, descriptions, prerequisites; the deletion of three courses; and the creation of two new courses.]

- 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, APC members reviewed the graduate curriculum submission from the Faculty of Fine Arts. As a result of discussions, APC resolved that the following graduate curriculum proposal be forwarded to Senate for approval:

### **Faculty of Arts and Science**

Department of Biology

(For May 2020 Implementation) (US-2020-1-D10)

[The proposal involves updates to course descriptions and prerequisites for the Graduate Diploma in Biotechnology and Genomics to reflect current course content and to facilitate registration.]

- Requirements
- Courses

# Department of Education

(For May 2020 Implementation) (US-2020-1-D11)

[The proposal involves an amendment to the introductory program text to indicate that all elective courses are offered on a rotating basis, removing the exception that CHST 630 is offered every year.]

- Requirements
- Courses

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

Concordia Institute for Information Systems Engineering (For January 2020 Implementation) (US-2020-1-D12)

[The proposal involves a revision to the breakdown of required credits for the PhD, MASc and MEng in Information and Systems Engineering, and for the MASc and MEng in Quality Systems Engineering.]

- Requirements
- Courses

Department of Electrical and Computer Engineering (For May 2020 Implementation) (US-2020-1-D13)

[The proposal involves the introduction of a new course, ENGR 6121 Control of Multi-Agent Systems.]

- Requirements
- Courses

Department of Electrical and Computer Engineering (For May 2020 Implementation) (US-2020-1-D14)

[The proposal involves changes to the course descriptions for ELEC 6961 and 6412.]

- Requirements
- Courses

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Sandra Gabriele, PhD Vice-Provost, Innovation in Teaching and Learning December 16, 2019



## **INTERNAL MEMORANDUM**

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

Office of the Provost and Vice-President, Academic Affairs

Chair, Academic Programs Committee

**FROM:** Dr André Roy, Dean, Faculty of Arts and Science

Chair, Arts and Science Faculty Council

DATE: November 15, 2019

**SUBJECT:** 2020-21 Undergraduate Calendar Curriculum Changes

**Interdisciplinary Studies** 

INTE-18

Transfer credit statement modified under the Certificate in Arts and

Science and Certificate in Science Foundations

The following proposal was reviewed and approved at the Arts and Science Faculty Council meeting of November 15, 2019. We request that this proposal be considered at the next meeting of APC.

The **Faculty of Arts and Science** is proceeding to a requirement change in its Certificate in Arts and Science and Certificate in Science Foundations, in order to permit credit transfer between a bachelor's/baccalaureate program and a certificate program. The current limit that students may only transfer 12 credits from an incomplete degree towards the certificate prohibits students from leaving the university with a credential, even in cases where they have completed all of the required courses for the certificate program. Removing this barrier will allow students in these circumstances to earn a certificate, provided that they complete all of the required courses.

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

Reference documents: FCC 2019.2/INTE-18 ASFC 2019-7M-H

# **Interdisciplinary Studies**

# INTE-18

# Requirement change

Certificate in Arts and Science

Certificate in Science Foundations

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: INTE-18 VERSION: 1

PROGRAM CHANGE: Certificate in Arts and Science

**Proposed** [X] Undergraduate or [] Graduate Curriculum Changes

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

Faculty/School: Arts and Science **Department:** Interdisciplinary Studies Certificate in Arts and Science **Program:** 

Degree:

Calendar Section/Graduate Page Number: 31.170

## Type of Change:

[ ] Editorial [X] Requirements [ ] Regulations [ ] Program Deletion [] New Program

#### Present Text (from 2019/2020) calendar

#### CERTIFICATE IN ARTS AND SCIENCE

The Certificate in Arts and Science is a non-degree program that caters to students who qualify for undergraduate degree programs, but whose preference is to follow a shorter program of study. It may also be of interest to those who already have an undergraduate degree, but wish to update their knowledge or learn new skills.

The certificate requires successful completion of 30 credits. At least 24 of these credits must be chosen from courses offered by not more than three departments in the Faculty of Arts and Science.

Students may transfer into the certificate program up to 12 credits earned in an incomplete Students may transfer into the certificate program credits earned in an incomplete degree degree or certificate program or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

Students who are admitted to the Certificate in Arts and Science, and who wish to continue in a degree program, should apply for admission to their program within the first 30 credits.

For advising assistance, students should contact Student Academic Services at 514-848-2424, ext. 2104.

# **Proposed Text**

#### CERTIFICATE IN ARTS AND SCIENCE

The Certificate in Arts and Science is a *non-degree program* that caters to students who qualify for undergraduate degree programs, but whose preference is to follow a shorter program of study. It may also be of interest to those who already have an undergraduate degree, but wish to update their knowledge or learn new skills.

The certificate requires successful completion of 30 credits. At least 24 of these credits must be chosen from courses offered by not more than three departments in the Faculty of Arts and Science.

or certificate program or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

Students who are admitted to the Certificate in Arts and Science, and who wish to continue in a degree program, should apply for admission to their program within the first 30 credits.

For advising assistance, students should contact Student Academic Services at 514-848-2424, ext. 2104.

#### Rationale:

In some cases, students begin an undergraduate degree program but are unable to complete the full requirements for their degree. However, they may have completed all of the requirements for a certificate program. The current limit that students may only transfer 12 credits from an incomplete degree towards the certificate prohibits students from leaving the university with a credential, even in cases where they have completed all of the required courses for the certificate program. Removing this barrier will allow students in these circumstances to earn a certificate, provided that they complete all of the required courses. In practice, some students have been permitted to transfer more than 12 credits from an incomplete degree towards a certificate program with special permission, however requests are assessed on a case by case basis. Removing this limitation from the calendar text will open this opportunity to all students in a more fair and transparent manner.

Resource In	iplications:
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None.

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: INTE-18 VERSION: 1

**PROGRAM CHANGE:** Certificate in Science Foundations

**Proposed** [X] Undergraduate or [] Graduate Curriculum Changes

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

**Faculty/School:** Arts and Science **Department:** Interdisciplinary Studies

**Program:** Certificate in Science Foundations

Degree:

Calendar Section/Graduate Page Number: 31.170

**Type of Change:** 

[] Editorial [X] Requirements [] Regulations [] Program Deletion [] New Program

#### Present Text (from 2019/2020) calendar

#### CERTIFICATE IN SCIENCE FOUNDATIONS

The Certificate in Science Foundations is a non-degree program that caters to students who wish to develop the necessary background for further study in undergraduate degree programs in Science. It also may be of interest to students whose preference is to follow a shorter program of study or who wish to update their knowledge or learn important basics of Science. The certificate requires successful completion of 30 credits.

Students may transfer into the certificate program up to 12 credits earned in an incomplete degree or certificate program or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program. Students who are admitted to the Certificate in Science Foundations, and who wish to continue in a degree program, should apply for admission to their program within the first 30 credits.

#### 30 Certificate in Science Foundations

- 3 BIOL 201<sup>3</sup>
- 6 CHEM 205<sup>3</sup>, 206<sup>3</sup>
- 9 MATH 203<sup>3</sup>, 204<sup>3</sup>, 205<sup>3</sup>
- 12 PHYS 204<sup>3</sup>, 205<sup>3</sup>, 206<sup>3</sup>, 224<sup>1</sup>, 225<sup>1</sup>, 226<sup>1</sup>

NOTE: In the event that a student is awarded an exemption from a required course, it will be necessary for the student to replace that course with another relevant to the program, chosen from the following list or in consultation with an academic advisor.

BIOL 225<sup>3</sup>, 226<sup>3</sup>; CHEM 221<sup>3</sup>, 222<sup>3</sup>, 271<sup>3</sup>; GEOG 260<sup>3</sup>; GEOL 210<sup>3</sup>; MAST 217<sup>3</sup>, 218<sup>3</sup>, 221<sup>3</sup>, 234<sup>3</sup>; PHYS 232<sup>3</sup>, 252<sup>3</sup>, 252<sup>3</sup>

# **Proposed Text**

#### CERTIFICATE IN SCIENCE FOUNDATIONS

The Certificate in Science Foundations is a non-degree program that caters to students who wish to develop the necessary background for further study in undergraduate degree programs in Science. It also may be of interest to students whose preference is to follow a shorter program of study or who wish to update their knowledge or learn important basics of Science. The certificate requires successful completion of 30 credits.

Students may transfer into the certificate program earned in an incomplete degree or certificate program or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program. Students who are admitted to the Certificate in Science Foundations, and who wish to continue in a degree program, should apply for admission to their program within the first 30 credits.

#### 30 Certificate in Science Foundations

- 3 BIOL 201<sup>3</sup>
- 6 CHEM 205<sup>3</sup>, 206<sup>3</sup>
- 9 MATH 203<sup>3</sup>, 204<sup>3</sup>, 205<sup>3</sup>
- 12 PHYS 204<sup>3</sup>, 205<sup>3</sup>, 206<sup>3</sup>, 224<sup>1</sup>, 225<sup>1</sup>, 226<sup>1</sup>

NOTE: In the event that a student is awarded an exemption from a required course, it will be necessary for the student to replace that course with another relevant to the program, chosen from the following list or in consultation with an academic advisor.

BIOL 225 $^3$ , 226 $^3$ ; CHEM 221 $^3$ , 222 $^3$ , 271 $^3$ ; GEOG 260 $^3$ ; GEOL 210 $^3$ ; MAST 217 $^3$ , 218 $^3$ , 221 $^3$ , 234 $^3$ ; PHYS 232 $^3$ , 252 $^3$ , 253 $^3$ 

#### Rationale:

In some cases, students begin an undergraduate degree program but are unable to complete the full requirements for their degree. However, they may have completed all of the requirements for a certificate program. The current limit that students may only transfer 12 credits from an incomplete degree towards the certificate prohibits students from leaving the

university with a credential, even in cases where they have completed all of the required courses for the certificate program. Removing this barrier will allow students in these
circumstances to earn a certificate, provided that they complete all of the required courses. In practice, some students have been permitted to transfer more than 12 credits from an
incomplete degree towards a certificate program with special permission, however requests are assessed on a case by case basis. Removing this limitation from the calendar text will
open this opportunity to all students in a more fair and transparent manner.

Resource Implications: None.



## **INTERNAL MEMORANDUM**

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

Office of the Provost and Vice-President, Academic Affairs

Chair, Academic Programs Committee

**FROM:** Dr André Roy, Dean, Faculty of Arts and Science

Chair, Arts and Science Faculty Council

DATE: November 15, 2019

**SUBJECT:** 2020-21 Undergraduate Calendar Curriculum Changes

Department of Applied Human Sciences

AHSC-33

Transfer credit statement modified under Certificate in Community

Service and Certificate in Family Life Education

The following proposal was reviewed and approved at the Arts and Science Faculty Council meeting of November 15, 2019. We request that this proposal be considered at the next meeting of APC.

The **Department of Applied Human Sciences** is proceeding to a requirement change in its Certificate in Community Service and Certificate in Family Life Education, in order to permit credit transfer between a bachelor's/baccalaureate program and a certificate program. The current limit that students may only transfer 12 credits from an incomplete degree towards the certificate prohibits students from leaving the university with a credential, even in cases where they have completed all of the required courses for the certificate program. Removing this barrier will allow students in these circumstances to earn a certificate, provided that they complete all of the required courses.

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

Reference documents: FCC 2019.2/AHSC-33 ASFC 2019-7M-F

# **Department of Applied Human Sciences**

# AHSC-33

# **Requirement change**

Certificate in Community Service

Certificate in Family Life Education

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: AHSC-33 VERSION: 1

PROGRAM CHANGE: Certificate in Community Service

**Proposed** [X] Undergraduate or [] Graduate Curriculum Changes

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

Faculty/School: Arts and Science

**Department:** Applied Human Sciences

**Program:** Certificate in Community Service

Degree:

Calendar Section/Graduate Page Number: 31.010

## **Type of Change:**

Present Text (from 2019/2020) calendar

Proposed Text

Certificate in Community Service
The Department of Applied Human Sciences offers a 30-credit program leading to the Concordia University Certificate in Community Service. Students may transfer into the

The Department of Applied Human Sciences offers a 30-credit program leading to the Concordia University Certificate in Community Service. Students may transfer into the certificate program up to 12 credits, as approved by a departmental undergraduate advisor, earned in an incomplete degree or certificate program or as an Independent student provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

### Admission Requirements

Students are required to complete the 0.00G entrance profile to enter the certificate. Mature Entry students require the prerequisite: ENGL 212<sup>3</sup>.

### 30 Certificate in Community Service

NOTE: AHSC 230<sup>3</sup>, 232<sup>3</sup>, and 270<sup>3</sup> are prerequisites for courses included in this certificate.

Phase I

- 6 AHSC 260<sup>3</sup>, 370<sup>3</sup>
  - Phase II
- 9 AHSC 315<sup>3</sup>, 330<sup>6</sup> Phase III
- 6 Chosen from AHSC 332<sup>3</sup> and 425<sup>3</sup>; or 343<sup>3</sup> and 445<sup>3</sup>; or 460<sup>6</sup>
- 9 Elective credits chosen from AHSC 220<sup>3</sup>, 225<sup>3</sup>, 311<sup>3</sup>, 314<sup>3</sup>, 316<sup>3</sup>, 319<sup>3</sup>, 335<sup>3</sup> NOTE: In the event that a student is awarded an exemption from a required course, it will be necessary for the student to replace that course with another relevant to the program, chosen in consultation with the coordinator of undergraduate programs.

The Department of Applied Human Sciences offers a 30-credit program leading to the Concordia University Certificate in Community Service. Students may transfer into the certificate program credits earned in an incomplete degree or certificate program or as an Independent student, as approved by a departmental undergraduate advisor, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

# Admission Requirements

Students are required to complete the 0.00G entrance profile to enter the certificate. Mature Entry students require the prerequisite: ENGL 212<sup>3</sup>.

# 30 Certificate in Community Service

NOTE: AHSC  $230^3$ ,  $232^3$ , and  $270^3$  are prerequisites for courses included in this certificate.

Phase I

- 6 AHSC 260<sup>3</sup>, 370<sup>3</sup> Phase II
- 9 AHSC 315<sup>3</sup>, 330<sup>6</sup> Phase III
- 6 Chosen from AHSC 332<sup>3</sup> and 425<sup>3</sup>; or 343<sup>3</sup> and 445<sup>3</sup>; or 460<sup>6</sup>
- 9 Elective credits chosen from AHSC 220<sup>3</sup>, 225<sup>3</sup>, 311<sup>3</sup>, 314<sup>3</sup>, 316<sup>3</sup>, 319<sup>3</sup>, 335<sup>3</sup> NOTE: In the event that a student is awarded an exemption from a required course, it will be necessary for the student to replace that course with another relevant to the program, chosen in consultation with the coordinator of undergraduate programs.

#### Rationale:

In some cases, students begin an undergraduate degree program but are unable to complete the full requirements for their degree. However, they may have completed all of the requirements for a certificate program. The current limit that students may only transfer 12 credits from an incomplete degree towards the certificate prohibits students from leaving the university with a credential, even in cases where they have completed all of the required courses for the certificate program. Removing this barrier will allow students in these circumstances to earn a certificate, provided that they complete all of the required courses. In practice, some students have been permitted to transfer more than 12 credits from an

incomplete degree towards a certificate program with special permission, however requests are assessed on a case by case basis. Removing this limitation from the calendar to open this opportunity to all students in a more fair and transparent manner.	ext will
Resource Implications: None.	

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: AHSC-33 VERSION: 1

**PROGRAM CHANGE:** Certificate in Family Life Education

**Proposed** [X] Undergraduate or [] Graduate Curriculum Changes

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

**Faculty/School:** Arts and Science

**Department:** Applied Human Sciences

**Program:** Certificate in Family Life Education

Degree:

Calendar Section/Graduate Page Number: 31.010

**Type of Change:** 

[] Editorial [X] Requirements [] Regulations [] Program Deletion [] New Program

#### Present Text (from 2019/2020) calendar

#### **Certificate in Family Life Education**

The Department of Applied Human Sciences offers a 30-credit program leading to the Concordia University Certificate in Family Life Education. Students may transfer into the certificate program up to 12 credits, as approved by a departmental undergraduate advisor, earned in an incomplete degree or certificate program or as an Independent student provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

#### Admission Requirements

Students are required to complete the 0.00G entrance profile to enter the certificate. Mature Entry students require the prerequisite: ENGL 212<sup>3</sup>.

#### 30 Certificate in Family Life Education

NOTE: AHSC 220<sup>3</sup>, 230<sup>3</sup>, and 232<sup>3</sup> are prerequisites for courses included in this certificate.

Phase I

12 AHSC 260<sup>3</sup>, 312<sup>3</sup>, 313<sup>3</sup>, 355<sup>3</sup>

Phase II

6 AHSC 330<sup>6</sup> Phase III

3 AHSC 435<sup>3</sup>

9 Elective credits chosen from AHSC  $225^3$ ,  $270^3$ ,  $311^3$ ,  $314^3$ ,  $315^3$ ,  $316^3$ ,  $319^3$ ,  $335^3$ ,  $360^3$ ,  $460^6$ 

NOTE: In the event that a student is awarded an exemption from a required course, it will be necessary for the student to replace that course with another relevant to the program, chosen in consultation with the coordinator of undergraduate programs.

# Proposed Text

#### **Certificate in Family Life Education**

The Department of Applied Human Sciences offers a 30-credit program leading to the Concordia University Certificate in Family Life Education. Students may transfer into the certificate program credits earned in an incomplete degree or certificate program or as an Independent student, as approved by a departmental undergraduate advisor, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

# Admission Requirements

Students are required to complete the 0.00G entrance profile to enter the certificate. Mature Entry students require the prerequisite: ENGL 212<sup>3</sup>.

## 30 Certificate in Family Life Education

NOTE: AHSC  $220^3$ ,  $230^3$ , and  $232^3$  are prerequisites for courses included in this certificate.

Phase I

12 AHSC 260<sup>3</sup>, 312<sup>3</sup>, 313<sup>3</sup>, 355<sup>3</sup> *Phase II* 

6 AHSC 330<sup>6</sup> Phase III

AHSC 435<sup>3</sup>

9 Elective credits chosen from AHSC 225 $^3$ , 270 $^3$ , 311 $^3$ , 314 $^3$ , 315 $^3$ , 316 $^3$ , 319 $^3$ , 335 $^3$ , 360 $^3$ , 460 $^6$ 

NOTE: In the event that a student is awarded an exemption from a required course, it will be necessary for the student to replace that course with another relevant to the program, chosen in consultation with the coordinator of undergraduate programs.

#### Rationale:

In some cases, students begin an undergraduate degree program but are unable to complete the full requirements for their degree. However, they may have completed all of the requirements for a certificate program. The current limit that students may only transfer 12 credits from an incomplete degree towards the certificate prohibits students from leaving the

university with a credential, even in cases where they have completed all of the required courses for the certificate program. Removing this barrier will allow students in these
circumstances to earn a certificate, provided that they complete all of the required courses. In practice, some students have been permitted to transfer more than 12 credits from an
incomplete degree towards a certificate program with special permission, however requests are assessed on a case by case basis. Removing this limitation from the calendar text will
open this opportunity to all students in a more fair and transparent manner.

Resource Implications: None.

# **Associate Dean Academic Programs (FAS)**

From: Associate Dean Academic Programs (FAS)
Sent: Thursday, October 24, 2019 4:23 PM

**To:** Peter Morden

Cc: Rita Buono; AHSC Chair; AHSC Undergraduate Asst; Adsas Fas

**Subject:** Certificate in Community Service & Certificate and Certificate in Family Life Education

and transfer credits

**Attachments:** 20191024\_AHSC-33.pdf

**Importance:** High

#### Dr. Morden,

Please find attached curriculum changes that pertain to your section of the calendar regarding the removal of the restriction that students can only apply 12 credits from an incomplete degree towards the completion of a certificate. Of the 15 certificates offered under the Faculty of Arts and Science, six contain this restriction, however, in practice, departments have waived the 12-credit transfer limit so that required courses already taken as part of an unfinished degree may be applied to the certificate.

The Provost's office is requesting that these restrictions be removed from the 2020-21 Undergraduate calendar. As such, we will be moving the changes forward at the next meeting of Faculty Council on November 15, 2019. On behalf of Richard Courtemanche, Associate Dean, Academic Programs and Philippe Caignon, Associate Dean, Student Academic Affairs, we wanted to make you aware of this change.

Please confirm that this information will be disseminated to your curriculum committee and/or department council.

Kind regards,

Richard Courtemanche
Associate Dean, Academic Programs
Faculty of Arts and Science
Concordia University
Adapro.fas@concordia.ca



#### INTERNAL MEMORANDUM

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

Office of the Provost and Vice-President, Academic Affairs

Chair, Academic Programs Committee

**FROM:** Dr André Roy, Dean, Faculty of Arts and Science

Chair, Arts and Science Faculty Council

**DATE:** November 15, 2019

**SUBJECT:** 2021-22 Undergraduate Calendar Curriculum Changes

School of Irish Studies

**CCIS-18** 

Changes to IRST 228 and IRST 390

The following proposal was reviewed and approved at the Arts and Science Faculty Council meeting of November 15, 2019. We request that this proposal be considered at the next meeting of APC.

The **School of Irish Studies** is modifying the exclusion note to IRST 228 (also listed as THEO 228) Celtic Christianity to mirror changes that have been previously approved at APC on October 15, 2019 under THEO-22. The note is outdated as THEO 208 Celtic Christianity and THEO 327 Celtic Christianity have not been offered over several years.

Also, changes to the prerequisite requiring a cumulative GPA of 3.30 and completion of 30 credits in Irish Studies under IRST 390 *Field Studies in Ireland* ensures that students have the appropriate academic preparedness for the independent project.

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

Reference documents: FCC 2019.2/CCIS-18 ASFC 2019-7M-E

# **School of Irish Studies**

# **CCIS-18**

# **Memo from Principal**

# **Exclusion note change**

IRST 228 (also listed as THEO 228)

Celtic Christianity

# Prerequisite change and exclusion note removed

IRST 390 Field Studies in Ireland



# FACULTY OF ARTS AND SCIENCE

School of Irish Studies



# **MEMORANDUM**

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

Arts and Science

FROM: Michael Kenneally, Principal, School of Irish Studies

DATE: October 15, 2019

RE: Curriculum Proposal CCIS-18

On October 15, 2019, the School of Irish Studies approved the following curriculum changes in its Departmental Meeting.

Course changes:

# **IRST 228 / THEO 228**

Following a change submitted by the Department of Theological Studies, we are proposing to edit the exclusionary note for this course to delete reference to IRST 298 and THEO 298 special topic slot courses for this topic, which have not been offered for many years.

#### **IRST 390**

We are proposing a change to the prerequisite of this course to further restrict it for students in our Major, with high academic excellence and who are very close to completion. We also want students to only be permitted to go on one field school project given the time and resources involved in supervision and funding.

COURSE CHANGE: IRST 228	New Course Number:			
Proposed [X] Undergraduate or []				
Faculty/School: Department:	Arts and Science School of Irish Studies		Calendar for academic year: 2021/202 Implementation Month/Year: May 202	
Program: Degree: Calendar Section/Graduate Page	Major, Minor, Certificate in Irish Studies BA Number: 31.530			
Type of Change:  [ ] Course Number [ ] Course Description [ ] Course Deletion	[ ] Course Title [ ] Editorial [X] Other - Specify: edit of exclusionary note	[] Credit Value [] New Course	[] Prerequisite	
Present Text (from 2019/2020) ca	llendar	Proposed Text		
beliefs with the early Christian Chui the Celtic people in the context of C NOTE: Students who have received under an IRST 298 or THEO 298 n Rationale:	credits) to show the connections of the pre-Christian Celtic rch of Celtic countries. It focuses on the spirituality of celtic history and culture. d credit for THEO 208, 228 or 327, or for this topic umber, may not take this course for credit.  ence to IRST 298 or THEO 298 as these courses have r	IRST 228 (also listed as THEO 228) Celtic Christianity (3 credits) This course follows a historical line to show the beliefs with the early Christian Church of Celtiche Celtic people in the context of Celtichisto NOTE: Students who have received credit for credit.	ic countries. It focuses on the spirituality of ry and culture.  THEO 228 may not take this course for	
Resource Implications: None.				
<ul> <li>Other Programs within which course</li> <li>BA Honours in Theological</li> <li>BA Major in Theological</li> <li>Minor in Theological Studies</li> </ul>	cal Studies			
Certificate in Christian S				

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: CCIS-18 VERSION: 3 **COURSE CHANGE: IRST 390** New Course Number: **Proposed** [X] Undergraduate or [] Graduate Curriculum Changes Calendar for academic year: 2020/2021 Implementation Month/Year: May 2020 **Faculty/School:** Arts and Science **Department:** School of Irish Studies **Program:** Major in Irish Studies Degree: BA Calendar Section/Graduate Page Number: 31.530 Type of Change: [] Course Title [] Course Number [ ] Credit Value [X] Prerequisite [ ] Course Description [ ] Editorial [ ] New Course [X] Other - Specify: exclusionary note removed [ ] Course Deletion Present Text (from 2019/2020) calendar **Proposed Text IRST 390** IRST 390 Field Studies in Ireland (3 credits) Field Studies in Ireland (3 credits) Prerequisite: Enrolment in a program in Irish Studies, submission of a detailed proposal Prerequisite: Enrolment in the Major in Irish Studies, a cumulative GPA of 3.30, completion of 30 credits in Irish Studies, submission of a detailed proposal, and and permission of the School. This course is designed to allow students to conduct focused study of a given subject (e.g. literature, history, language, music, film) in an Irish permission of the School. This course is designed to allow students to conduct focused context. The experience in Ireland may be in the context of a structured school study of a given subject (e.g. literature, history, language, music, film) in an Irish context. The experience in Ireland may be in the context of a structured school environment or may environment or may take the form of a more independent exploration. Based upon take the form of a more independent exploration. Based upon preparatory readings and preparatory readings and assignments done at Concordia, students enrich their learning experience in Ireland, followed by assignments completed upon their return to Concordia. assignments done at Concordia, students enrich their learning experience in Ireland, All course content and requirements are established in consultation with the School. followed by assignments completed upon their return to Concordia. All course content and NOTE: Students may take this course two times for credit provided the subject matter is requirements are established in consultation with the School. different. Rationale: Students should have completed most of the courses in their Major in order to be fully prepared for their independent project. The School has also been in a position to be able to fund accepted proposals. Given the amount of time and resources the School and individual faculty members provide to these students, restricting the course to those in our Major and with high academic excellence and only allowing students to complete only one field studies project, further ensures commitment. The rationale was to attract excellent students so that we could ensure the success of the project. For students who fall below that GPA who have other impressive qualifications we would, on that holist basis, consider making

exceptions.

Resource Implications: None.	
Other Programs within which course is listed:	
None.	



#### **INTERNAL MEMORANDUM**

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

Office of the Provost and Vice-President, Academic Affairs

Chair, Academic Programs Committee

**FROM:** Dr André Roy, Dean, Faculty of Arts and Science

Chair, Arts and Science Faculty Council

DATE: November 15, 2019

**SUBJECT:** 2020-21 Undergraduate Calendar Curriculum Changes

Department of Education

EDUC-75

Transfer credit statement modified under the Certificate in Adult

Education

The following proposal was reviewed and approved at the Arts and Science Faculty Council meeting of November 15, 2019. We request that this proposal be considered at the next meeting of APC.

The **Department of Education** is proceeding to a requirement change in its Certificate in Adult Education, in order to permit credit transfer between a bachelor's/baccalaureate program and a certificate program. The current limit that students may only transfer 12 credits from an incomplete degree towards the certificate prohibits students from leaving the university with a credential, even in cases where they have completed all of the required courses for the certificate program. Removing this barrier will allow students in these circumstances to earn a certificate, provided that they complete all of the required courses.

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

Reference documents: FCC 2019.2/EDUC-75 ASFC 2019-7M-G

# **Department of Education**

# EDUC-75

# Requirement change

Certificate in Adult Education

**PROGRAM CHANGE:** Certificate in Adult Education

**Proposed** [X] Undergraduate or [] Graduate Curriculum Changes

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

[] New Program

Faculty/School: Arts and Science

[X] Requirements

**Department:** Education

**Program:** Certificate in Adult Education

Degree:

Calendar Section/Graduate Page Number: 31.090

#### **Type of Change:**

[ ] Editorial

Present Text (from 2019/2020) calendar	Proposed Text	
30 Certificate in Adult Education Certificate Admission Requirements General admission requirements are listed in §13. Applicants will be interviewed prior to admission.	30 Certificate in Adult Education Certificate Admission Requirements General admission requirements are listed in §13. Applicants will be interviewed prior to admission.	
Students must take:  9 ADED 201 <sup>3</sup> , 202 <sup>3</sup> , 220 <sup>3</sup> 12 Chosen from the Adult Education (ADED) offerings  3 Chosen from cognate courses with the permission of the program director  6 ADED 496 <sup>3</sup> , 497 <sup>3</sup> , Integrative Internships I and II  Students may transfer into the certificate program up to 12 credits earned in an incomplete degree or certificate program or as an Independent student provided they are students in good standing. The credits that may be so transferred are determined by the University at	Students must take:  9 ADED 201 <sup>3</sup> , 202 <sup>3</sup> , 220 <sup>3</sup> 12 Chosen from the Adult Education (ADED) offerings  3 Chosen from cognate courses with the permission of the program director  6 ADED 496 <sup>3</sup> , 497 <sup>3</sup> , Integrative Internships I and II  Students may transfer into the certificate program credits earned in an incomplete degree or certificate program or as an Independent student provided they are students in good standing. The credits that may be so transferred are determined by the University at the	

[ ] Program Deletion

point of entry into the program.

[ ] Regulations

#### Rationale:

In some cases, students begin an undergraduate degree program but are unable to complete the full requirements for their degree. However, they may have completed all of the requirements for a certificate program. The current limit that students may only transfer 12 credits from an incomplete degree towards the certificate prohibits students from leaving the university with a credential, even in cases where they have completed all of the required courses for the certificate program. Removing this barrier will allow students in these circumstances to earn a certificate, provided that they complete all of the required courses. In practice, some students have been permitted to transfer more than 12 credits from an incomplete degree towards a certificate program with special permission, however requests are assessed on a case by case basis. Removing this limitation from the calendar text will open this opportunity to all students in a more fair and transparent manner.

#### **Resource Implications:**

the point of entry into the program.

None.

# **Associate Dean Academic Programs (FAS)**

From: Tamara Beresford

Sent: Thursday, October 24, 2019 4:32 PM

**To:** Associate Dean Academic Programs (FAS); Sara Kennedy

**Cc:** Adsas Fas; Nicole Freeman

**Subject:** Re: Certificate in Adult Education and credit transfers

#### Dear Richard,

We will circulate this information to our Department Council for any potential feedback. In a brief discussion with the Program Director, they agreed if the University was removing the 12-credit restriction across all programs, they were in agreement in principal.

Best, Tamara

Tamara Beresford
Department Administrator
Department of Education, FG 5.150
Concordia University

civic address: 1610 St. Catherine W., Montreal, QC H3H 2S2

mailing address: 1455, de Maisonneuve Blvd. W. Montreal, QC H3G 1M8

tel: (514) 848-2424 ext. 2023

email: tamara.beresford@concordia.ca

http://doe.concordia.ca/

From: "Associate Dean Academic Programs (FAS)" <adapro.fas@concordia.ca>

**Date:** Thursday, October 24, 2019 at 4:17 PM **To:** Sara Kennedy <a href="mailto:sara">sara Kennedy</a> <a href="mailto:sara">sara Kenn

Cc: Tamara Beresford <tamara.beresford@concordia.ca>, Adsas Fas <adsas.fas@concordia.ca>

Subject: Certificate in Adult Education and credit transfers

#### Dr. Kennedy,

Please find attached curriculum changes that pertain to your section of the calendar regarding the removal of the restriction that students can only apply 12 credits from an incomplete degree towards the completion of a certificate. Of the 15 certificates offered under the Faculty of Arts and Science, six contain this restriction, however, in practice, departments have waived the 12-credit transfer limit so that required courses already taken as part of an unfinished degree may be applied to the certificate.

The Provost's office is requesting that these restrictions be removed from the 2020-21 Undergraduate calendar. As such, we will be moving the changes forward at the next meeting of Faculty Council on November 15, 2019. On behalf of Richard Courtemanche, Associate Dean, Academic Programs and Philippe Caignon, Associate Dean, Student Academic Affairs, we wanted to make you aware of this change.

Please confirm that this information will be disseminated to your curriculum committee and/or department council.

# Kind regards,

Richard Courtemanche
Associate Dean, Academic Programs
Faculty of Arts and Science
Concordia University
Adapro.fas@concordia.ca



#### **INTERNAL MEMORANDUM**

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

Office of the Provost and Vice-President, Academic Affairs

Chair, Academic Programs Committee

**FROM:** Dr André Roy, Dean, Faculty of Arts and Science

Chair, Arts and Science Faculty Council

DATE: November 15, 2019

**SUBJECT:** 2020-21 Undergraduate Calendar Curriculum Changes

Simone de Beauvoir Institute and Women's Studies

**WSDB-13** 

Transfer credit statement modified under Certificate in Women's

Studies

The following proposal was reviewed and approved at the Arts and Science Faculty Council meeting of November 15, 2019. We request that this proposal be considered at the next meeting of APC.

The **Simone de Beauvoir Institute and Women's Studies** is proceeding to a requirement change in its Certificate in Women's Studies, in order to permit credit transfer between a bachelor's/baccalaureate program and a certificate program. The current limit that students may only transfer 12 credits from an incomplete degree towards the certificate prohibits students from leaving the university with a credential, even in cases where they have completed all of the required courses for the certificate program. Removing this barrier will allow students in these circumstances to earn a certificate, provided that they complete all of the required courses.

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

Reference documents: FCC 2019.2/WSDB-13 ASFC 2019-7M-I

# Simone de Beauvoir Institute and Women's Studies

# **WSDB-13**

# Requirement change

Certificate in Women's Studies

**PROGRAM CHANGE:** Certificate in Women's Studies

**Proposed** [X] Undergraduate or [] Graduate Curriculum Changes

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

Faculty/School: Arts and Science

**Department:** Simone de Beauvoir Institute and Women's Studies

**Program:** Certificate in Women's Studies

Degree:

Calendar Section/Graduate Page Number: 31.560

## **Type of Change:**

Type of Change: [ ] Editorial	[X] Requirements	[] Regulations	] Progr	ram Deletion	[] New Program
Present Text (from 2019/2020) calendar			Proposed Text		
9 WSDB 29 15 Chosen fr 6 Chosen fr Students may tra degree or certific good standing. T	ate program or as an Independe	1 <sup>3</sup> , 392 <sup>3</sup> , 393 <sup>3</sup> , 491 <sup>3</sup> , 492 <sup>3</sup> In up to 12 credits earned in an incomplete ent student, provided they are students in erred are determined by the University at	9 15 6 Studer or cert standir	Chosen from the list of Opents may transfer into the celificate program or as an Inc	<sup>3</sup> , 384 <sup>3</sup> , 390 <sup>3</sup> , 391 <sup>3</sup> , 392 <sup>3</sup> , 393 <sup>3</sup> , 491 <sup>3</sup> , 492 <sup>3</sup>
requirements for	a certificate program. The currer	nt limit that students may only transfer 12 of	redits f	rom an incomplete degree	egree. However, they may have completed all of the towards the certificate prohibits students from leaving the Removing this barrier will allow students in these

circumstances to earn a certificate, provided that they complete all of the required courses. In practice, some students have been permitted to transfer more than 12 credits from an incomplete degree towards a certificate program with special permission, however requests are assessed on a case by case basis. Removing this limitation from the calendar text will

# open this opportunity to all students in a more fair and transparent manner.

Resource Implications: None.

# **Associate Dean Academic Programs (FAS)**

From: Associate Dean Academic Programs (FAS)
Sent: Thursday, October 24, 2019 4:15 PM

To: Kimberley Manning
Cc: Belinda Bowes; Adsas Fas

**Subject:** Certificate in Women's Studies and transfer credits

**Attachments:** WSDB-13\_v0.pdf

Importance: High

#### Dr. Manning,

Please find attached curriculum changes that pertain to your section of the calendar regarding the removal of the restriction that students can only apply 12 credits from an incomplete degree towards the completion of a certificate. Of the 15 certificates offered under the Faculty of Arts and Science, six contain this restriction, however, in practice, departments have waived the 12-credit transfer limit so that required courses already taken as part of an unfinished degree may be applied to the certificate.

The Provost's office is requesting that these restrictions be removed from the 2020-21 Undergraduate calendar. As such, we will be moving the changes forward at the next meeting of Faculty Council on November 15, 2019. On behalf of Richard Courtemanche, Associate Dean, Academic Programs and Philippe Caignon, Associate Dean, Student Academic Affairs, we wanted to make you aware of this change.

Please confirm that this information will be disseminated to your curriculum committee and/or department council.

Kind regards,

Richard Courtemanche
Associate Dean, Academic Programs
Faculty of Arts and Science
Concordia University
Adapro.fas@concordia.ca



#### **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: November 8, 2019

RE: Curriculum Dossier for the Department of Design and Computation Arts, DART-18

As Dean of the Faculty of Fine Arts, I fully support the curriculum changes proposed in DART-18. The dossier was reviewed and approved unanimously by the Fine Arts Faculty Council at its meeting on November 8, 2019.

There are no resource implications.

Valebecca Ouce

Rebecca Duclos

Dean, Faculty of Fine Arts

Rebecca.Duclos@concordia.ca

848-2424 ext. 4602



#### **FACULTY OF FINE ARTS**

## Internal Memorandum

**To:** Rebecca Duclos, Dean, Faculty of Fine Arts

From: Elaine Paterson, Associate Dean, Academic

**Date:** October 19, 2019

**Re:** Curriculum dossier for the Department of Design and Computation Arts, DART-18

The Faculty of Fine Arts Curriculum Committee has reviewed and approved the DART-18 curriculum dossier from the Department of Design and Computation Arts. We hereby submit this dossier for review at Faculty Council on November 8, 2019.

The proposed changes include course title and description changes to better reflect the course content as it has been taught in the last five years, changes to prerequisites, as well as the addition and deletion of courses. These changes will impact the Major in Design, the Specialization and the Major in Computation Arts, and the Minor in Computation Arts.

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 Paterson, Associate Dean, Academic, Faculty of Fine Arts

FROM: pk langshaw, Chair

DATE: June 30, 2019

SUBJECT: Curriculum Changes for the Major in Design, the Specialization and the Major in

Computation Arts and the Minor in Computation Arts (DART-18)

Please accept the following curriculum changes from the Department of Design and Computation Arts concerning the Major in Design, the Specialization and the Major in Computation Arts and the Minor in Computation Arts. These changes were approved by the Department Council on May 2nd, 2019. These changes consist of minor editorial, prerequisites, course title, descriptions, deletions and new course offerings to best reflect the content and the deliverables as they have been/are being taught. There will be no additional resource implications.

#### Course Change – Major in Design:

- Prerequisite Removal:
  - o The DART 381 Digital Media and Moving Images prerequisite is removed from the below courses because the technical skill sets from DART 381 are not relevant:
    - DART 335 Interpretive Public Spaces
    - DART 445 The Narrative Object
- Course Title and Description Changes:
  - DART 391 Social-Cultural Research and Practice Title change to include 'Environmental', which unifies sustainability as integrated Socio-Cultural Environmental Research and Practice I. Editing changes and wording in the description to best reflect the content, methodology, technical skill sets and deliverables of the course as it has been taught in the last five years.
  - DART 392 Environmental Research and Practice Title change to include 'Socio-Cultural', which unifies sustainability as integrated Socio-Cultural Environmental Research and Practice II. Editing changes and wording in the description to best reflect the carry over to content, methodology, technical skill sets and deliverables of the course as it has been taught in the last five years.



o DART 441 Culture of Images. This course is taught as a studio course so the editorial change is a correction rather than a change.

#### • New Course:

o DART 499 Special Topics to accommodate students who would like to enroll in a six-credit special topics course in the DART program.

#### • Course Deletions:

- DART 443 Print, Meaning and Process, as this course has not been offered since fall
   2012
- o DART 451 Interaction Design, as this course has not been offered since fall 2009.
- DART 452 Immersive Media to delete from the Major, as this course has not been offered in the last ten years.

#### • Prerequisite Changes:

- DART 492 Discursive Design Research II to be deleted as a prerequisite course: The methodology and subject matter of DART 492 has been made redundant by a change in focus in DART 491 Discursive Design Research I, which now encompasses the previous course content of DART 492. Moreover, DART 493 Post-Graduation Strategies in Design, a new compulsory course that has been taught since winter 2018, and replaces DART 492 in our course curriculum, is a redirection of departmental goals inasmuch as it more successfully addresses crucial issues in students' future design practice and/or (graduate) studies.
- O Deletion of the exclusion note from all courses (in brackets listed below) as they have not been taught in the past ten years:
  - DART 441 Culture of Images (DART 422)
  - DART 442 Scenarios for Typography (DART 422)
  - DART 444 Portfolio Design (DART 424)
  - DART 445 The Narrative Object (DART 423)
  - DART 446 Studies in the Built Environment (DART 423)
  - DART 447 The Future Life of Objects (DART 425)
  - DART 448 Nature-Inspired Environments (DART 425)



Program Change – Specialization in Computation Arts:

• Removing the word "CART" in the program list on the line "9 Chosen from CART, DART, ..." in order to have consistency within both programs and because students have used this requirement in order to exceed the number of required credits at the 300-level which has caused an overload in courses. A similar issue happened in the design program (Dossier #16) and by rewording the text; it helped to alleviate the overloading of 300-level design elective courses thus encouraging our students to seek courses outside their program but within the faculty.

Course Change – Specialization, Major and Minor in Computation Arts:

- Prerequisite Change:
  - CART 414 Media and Matter still has the old prerequisite course number CART 255 instead of CART 210, which was not updated in a previous curriculum change (dossier CART-15).
- New Course:
  - o CART 499 Special Topics to accommodate students who would like to enroll in a six-credit special topics course in the CART program.

Regards,

pk langshaw Chair

**PROGRAM CHANGE:** Change to the Specialization in Computation Arts

Proposed [X] Undergraduate or [] Graduate Curriculum Changes

Calendar for academic year: 2021/2022 Implementation Month/Year: September 2021

**Faculty/School:** Fine Arts

Department:Design and Computation ArtsProgram:Specialization in Computation Arts

**Degree:** BFA **Calendar Section/Graduate Page Number:** 81.90.2

## **Type of Change:**

[] Edi	itorial	[X] Requirements	[ ] Regulations	[ ] Pro	gram Deletion [] New Program
Prese	ent Text (fr	om 2019/2020) calendar		Proposed Text	
Progi	rams			Prog	grams
Students are responsible for fulfilling their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.  The superscript indicates credit value.		follo	Students are responsible for fulfilling their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.  The superscript indicates credit value.		
60 18 3 12 3 9 9	CART 210 CART 310 Chosen fro CART 410 Chosen fro Chosen fro	om 300-level CART courses	Arts electives	60 18 3 12 3 9 9	BFA Specialization in Computation Arts  CART 210 <sup>3</sup> , 211 <sup>3</sup> , 212 <sup>3</sup> , 214 <sup>3</sup> , 253 <sup>3</sup> , 263 <sup>3</sup> CART 310 <sup>3</sup> Chosen from 300-level CART courses  CART 410 <sup>3</sup> Chosen from 400-level CART courses  Chosen from any Fine Arts electives (including Design)  Chosen from other Fine Arts non-studio electives
This I	Rationale: This line modification was done in the design program (DOSSIER #16) and by rewording the text, it helped to alleviate the overloading of 300-level design elective courses which are limited by encouraging students to seek courses outside their program but within the faculty. The department would like to have consistency between the DART and CART programs.				
Resou None	urce Implica	ations:			

COURSE CHANGE: CART 414	New Course Number:		
Proposed [X] Undergraduate or [] Gra	duate Curriculum Changes		Calendar for academic year: 2021/2022 Implementation Month/Year: September 2021
Faculty/School: Department: Program: Degree: Calendar Section/Graduate Page Nui	Fine Arts Design and Computation Arts Specialization in Computation Arts BFA nber: 81.90.2		Implementation wonth Tear. September 2021
Type of Change:  ] Course Number ] Course Description ] Course Deletion	[ ] Course Title [ ] Editorial [ ] Other - Specify:	[] Credit Value [] New Course	[X] Prerequisite
Present Text (from 2019/2020) calen	dar	Proposed Text	
CART 414 Matter and Media (3 credits)  Prerequisite: CART 255; 48 credits completed in a Computation Arts program; or written permission of the Department. This seminar prepares students for professional creation/ research via analog or computational media and material arts, informed by philosophy of technology, art, and design. Topics may include continuity, transformation, distributed agency, responsivity, and tangibility.  NOTE: Students who have received credit for this topic under a CART 454 number may not take this course for credit.		Prerequisite: CART 210; 48 permission of the Departmeresearch via analog or comtechnology, art, and design agency, responsivity, and t	received credit for this topic under a CART 454 number may
Rationale: In a previous dossier (CART #15), the in CART 414 and was never corrected		ated to reflect renumbering to	CART 210 New Media Theory. This course is a prerequisite
Resource Implications: None			
Other Programs within which course is	s listed:		
Major in Computation Arts Minor in Computation Arts			

COURSE CHANGE: CART 499	New Course Number:			
Proposed [X] Undergraduate or [] Grad	uate Curriculum Changes		Calendar for academic year: 2021/2022	
			Implementation Month/Year: September 2021	
Faculty/School:	Fine Arts		1	
Department:	Design and Computation Arts			
Program:	Specialization in Computation Arts			
Degree:	BFA			
Calendar Section/Graduate Page Num	ber: 81.90.2			
Гуре of Change:				
Course Number	[] Course Title	[] Credit Value	[] Prerequisite	
Course Description	[] Editorial	[X] New Course	[ ] Frerequisite	
Course Deletion	Other - Specify:	[]		
Present Text (from 20XX/20XX) caler	ndar	Proposed Text		
		CART 499 Special Topics in Computation Arts (6 credits) Prerequisite: 48 credits in the Computation Arts program or written permission of the Department. An advanced course which provides an opportunity for the study of specialized aspects and applications in digital arts. Specific topics for this course, and prerequisites relevant in each case, are stated in the Undergraduate Class Schedule.  NOTE: Students who have received credit for the same topic under DART 498, 499 or CART 498 may not take this course for credit.		
Rationale: Creation of a new course number to allo	w students to enrol in a six-credit special topics	course.		
Resource Implications: None				
Other Programs within which course is	listed:			
Major in Computation Arts Minor in Computation Arts				

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: DART-18 VERSION: 8 **COURSE CHANGE:** DART 335 New Course Number: **Proposed** [X] Undergraduate or [] Graduate Curriculum Changes Calendar for academic year: 2021/2022 Implementation Month/Year: September 2021 **Faculty/School:** Fine Arts **Department: Design and Computation Arts** Major in Design **Program:** Degree: BFA Calendar Section/Graduate Page Number: 81.90.2 Type of Change: [] Course Number [ ] Course Title [ ] Credit Value [X] Prerequisite [ ] Course Description [] Editorial [] New Course [ ] Course Deletion Other - Specify: Present Text (from 2019/2020) calendar **Proposed Text DART 335** Interpretive Public Spaces (3 credits) **DART 335** Interpretive Public Spaces (3 credits) Prerequisite: DART 380 or 381; DART 391, 392 previously or concurrently; or written Prerequisite: DART 380; DART 391, 392 previously or concurrently; or written permission permission of the Department. This studio course develops strategies for interactions in of the Department. This studio course develops strategies for interactions in the public the public sphere. The application of scenography, planning of space and the integration sphere. The application of scenography, planning of space and the integration of content of content orients the student towards the design of museum installations, mobile orients the student towards the design of museum installations, mobile exhibitions, and exhibitions, and performative events. performative events. Rationale:

The course DART 381 Digital Media and Moving Images has not been offered in the past five years and the skill sets are not relevant for this course.

None

**Resource Implications:** 

Other Programs within which course is listed:

COURSE CHANGE: DART 391	New Course Number:		
Proposed [X] Undergraduate or [] Gra	aduate Curriculum Changes		Calendar for academic year: 2021/2022
Faculty/School: Department: Program: Degree: Calendar Section/Graduate Page Nu	Fine Arts Design and Computation Arts Major in Design BFA mber: 81.90.2	Im	nplementation Month/Year: September 2021
Type of Change:  ] Course Number  X] Course Description  ] Course Deletion	[X] Course Title [] Editorial [X] Other - Specify: Removal of notation	[] Credit Value [] New Course	[] Prerequisite
Present Text (from 2019/2020) caler		Proposed Text	
Prerequisite: DART 221, 261, 262 or 263, 280, 291, 292; 24 credits in the Major in Design; or written permission of the Department. This studio course emphasizes the significance of research and context in the development of socio-cultural sustainability and collaborative design practice. Students-experiment with word-image relationships exploring diverse mediums including small-scale publishing, soft surface design,		Prerequisite: DART 221, 261, 262 or 263, 280, Design; or written permission of the Departmen significance of research in the development of spractice. Students work in collaboration to explow Workshops introduce textile and cloth exploration printing, and body wear.	nt. This studio course contextualizes the socio-cultural environmental design ore soft surface concepts and making.
	er reflect the course content as it has been taught in th 10 and DART 390 courses have not been offered in th		ulum.
Resource Implications: None			
Other Programs within which course is	s listed:		
None			

COURSE CHANGE: DART 392	New Course Number:		
Proposed [X] Undergraduate or [] Gra	aduate Curriculum Changes		Calendar for academic year: 2021/2022
			Implementation Month/Year: September 2021
Faculty/School:	Fine Arts		
<b>Department:</b>	Design and Computation Arts		
Program:	Major in Design		
Degree:	BFA		
Calendar Section/Graduate Page Nu	mber: 81.90.2		
Type of Change:			
[ ] Course Number	[X] Course Title	[] Credit Value	[ ] Prerequisite
[X] Course Description	[] Editorial	[] New Course	
[ ] Course Deletion	[X] Other - Specify: Removal of notation		
Present Text (from 2019/2020) caler	ndar	Proposed Text	
Prerequisite: DART 261, 262 or 263, 2 written permission of the Department. design-research and support application sustainable projects and community in different stakeholders in the research, of project design.  NOTE: Students who have received conforcedit.	rch and Practice (3 credits) 291, 292, 391; 24 credits in the Major in Design; or This studio course develops students' expertise in ons-for the built environment, through specific nitiatives. Students work in collaboration with conceptualization, construction, and analysis stages redit for DART 310 or 390 may not take this course	Prerequisite: DART 261, 262 or 263, 291, 2 written permission of the Department. This	stainable projects and community initiatives. t stakeholders in the research,
	er reflect the course content as it has been taught in the 10 and DART 390 courses have not been offered in the		ırriculum.
Resource Implications: None			
Other Programs within which course	is listed:		
None			

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: DART-18 VERSION: 8 **COURSE CHANGE:** DART 441 New Course Number: **Proposed** [X] Undergraduate or [] Graduate Curriculum Changes Calendar for academic year: 2021/2022 Implementation Month/Year: September 2021 **Faculty/School:** Fine Arts **Department:** Design and Computation Arts **Program:** Major in Design Degree: BFA Calendar Section/Graduate Page Number: 81.90.2 **Type of Change:** [] Course Number [ ] Course Title [] Credit Value [X] Prerequisite [X] Course Description [ ] Editorial [] New Course [ ] Course Deletion [X] Other - Specify: Removal of notation Present Text (from 2019/2020) calendar **Proposed Text DART 441 The Culture of Images** (3 credits) **DART 441** The Culture of Images (3 credits) Prerequisite: DART 491, 492 previously or concurrently; 48 credits in the Major in Design; Prerequisite: DART 491 previously or concurrently; 48 credits in the Major in Design; or or written permission of the Department. In this theory course students analyze the impact written permission of the Department. In this studio course students analyze the impact of of images through the study of popular culture and the persuasiveness of advertising in images through the study of popular culture and the persuasiveness of advertising in image-saturated and information-dense societies. Projects address strategies for effective image-saturated and information-dense societies. Projects address strategies for effective visual communication as catalysts towards transformative socio-cultural environments. visual communication as catalysts towards transformative socio-cultural environments. NOTE: Students who have received credit for DART 422 may not take this course for credit.

#### Rationale:

The DART 492 course is not offered. The methodology and subject matter has been made redundant by a change in focus in DART 491 Discursive Design Research I. A new compulsory course has been introduced, DART 493 Post-Graduation Strategies in Design since winter 2018.

Removal of the notation. The DART 422 course has not been offered in the past ten years and is no longer in the curriculum.

COURSE CHANGE: DART 442	New Course Number:		
Proposed [X] Undergraduate or [] Gr	raduate Curriculum Changes		
	•		Calendar for academic year: 2021/2022 Implementation Month/Year: September 202
Faculty/School: Department: Program: Degree: Calendar Section/Graduate Page No	Fine Arts Design and Computation Arts Major in Design BFA umber: 81.90.2		Implementation World Feat. September 202
Type of Change: ] Course Number ] Course Description ] Course Deletion	[] Course Title [] Editorial [X] Other - Specify: Removal of notation	[] Credit Value [] New Course	[X] Prerequisite
Present Text (from 2019/2020) cale	endar	Proposed Text	
DART 442 Scenarios for Typography (3 credits)  Prerequisite: DART 491, 492 previously or concurrently; 48 credits in the Major in Design; or written permission of the Department. This studio course engages students to explore the diversity of typographic expression within a visual and literary context. Assignments are designed to address the significance and complexity of words for persuasive messaging, multilingual information exchange, and typographic play in visual communication.  NOTE: Students who have received credit for DART 422 may not take this course for credit.		DART 442 Scenarios for Typography (3 credits) Prerequisite: DART 491 previously or concurrently; 48 credits in the Major in Design; or written permission of the Department. This studio course engages students to explore the diversity of typographic expression within a visual and literary context. Assignments are designed to address the significance and complexity of words for persuasive messaging, multilingual information exchange, and typographic play in visual communication.	
compulsory course has been introduc	The methodology and subject matter has been made ced, DART 493 Post-Graduation Strategies in Design strategies has not been offered in the past ten years a	since winter 2018.	491 Discursive Design Research I. A new
Resource Implications: None			
Other Programs within which course	is listed:		
None			

COURSE CHANGE: DART 443	New Course Number:		
Proposed [X] Undergraduate or [] Gra	duate Curriculum Changes		Calendar for academic year: 2021/2022 Implementation Month/Year: September 2021
Faculty/School:	Fine Arts		implementation would rear: September 2021
Department:	Design and Computation Arts		
Program:	Major in Design		
Degree:	BFA		
Calendar Section/Graduate Page Nur			
Type of Change:			
Course Number	[] Course Title	[] Credit Value	[] Prerequisite
Course Description	[] Editorial	New Course	
[X] Course Deletion	[] Other - Specify:		
Present Text (from 2019/2020) calen	dar	Proposed Text	
Prerequisite: DART 491, 492 previously or concurrently; 48 credits in the Major in Design; or written permission of the Department. This computer lab course focuses on graphic design in publishing systems. The implications of mass production, the responsible use of resources, and alternative print and packaging processes are key factors in the ecology of image production.  NOTE: Students who have received credit for DART 424 may not take this course for credit.			
Rationale: This course is no longer offered. Has n	ot been taught since Fall 2012.		
Resource Implications: None			
Other Programs within which course is listed:			
None			

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: DART-18 VERSION: 8 **COURSE CHANGE:** DART 444 New Course Number: **Proposed** [X] Undergraduate or [] Graduate Curriculum Changes Calendar for academic year: 2021/2022 Implementation Month/Year: September 2021 **Faculty/School:** Fine Arts **Department: Design and Computation Arts Program:** Major in Design Degree: **BFA** Calendar Section/Graduate Page Number: 81.90.2 **Type of Change:** [] Course Number [ ] Course Title [ ] Credit Value [X] Prerequisite [ ] Course Description [] Editorial [] New Course [ ] Course Deletion [X] Other - Specify: Removal of notation Present Text (from 2019/2020) calendar **Proposed Text DART 444** DART 444 Portfolio Design (3 credits) Portfolio Design (3 credits) Prerequisite: DART 491, 492 previously or concurrently; 48 credits in the Major in Design; Prerequisite: DART 491 previously or concurrently; 48 credits in the Major in Design; or or written permission of the Department. In this studio course, students represent their written permission of the Department. In this studio course, students represent their design practice in a series of portfolio materials. Visual and written documentation are design practice in a series of portfolio materials. Visual and written documentation are developed for print, digital media, and exhibition. developed for print, digital media, and exhibition. NOTE: Students who have received credit for DART 424 may not take this course for <del>credit.</del>

#### Rationale:

The DART 492 course is not offered. The methodology and subject matter has been made redundant by a change in focus in DART 491 Discursive Design Research I. A new compulsory course has been introduced, DART 493 Post-Graduation Strategies in Design since winter 2018.

Removal of the notation. The DART 424 course has not been offered in the past ten years and is no longer in the curriculum.

Resource Implications:	
lone	

None

Other Programs within which course is listed:

None

COURSE CHANGE: DART 445	New Course Number:		
Proposed [X] Undergraduate or [] G	raduate Curriculum Changes		
			Calendar for academic year: 2021/20
Faculty/School:	Fine Arts		Implementation Month/Year: September 20
Department:	Design and Computation Arts		
Program:	Major in Design		
Degree:	BFA		
Calendar Section/Graduate Page N	umber: 81.90.2		
Type of Change:			
[ ] Course Number	[] Course Title	[] Credit Value	[X] Prerequisite
[] Course Description	[] Editorial	[] New Course	
[] Course Deletion	[X] Other - Specify: Removal of notation		
Present Text (from 2019/2020) cale	endar	Proposed Text	
Prerequisite: DART 380-or 381; DART 491, 492 previously or concurrently; 48 credits in the Major in Design; or written permission of the Department. In this studio course, the mythic potential of objects as personal and cultural markers is considered in the context of everyday life. Students construct meaning through objects, responding to the potential for expression inherent in materials, structure, and form. The rigour of observation, analysis, and interpretation of object stimulates opportunities for multiple readings.  NOTE: Students who have received credit for DART 423 may not take this course for credit.		Design; or written permission of the Dep of objects as personal and cultural mark Students construct meaning through ob	eviously or concurrently; 48 credits in the Major in partment. In this studio course, the mythic potential kers is considered in the context of everyday life. ojects, responding to the potential for expression m. The rigour of observation, analysis, and
compulsory course has been introdu	nired for this course. The methodology and subject matter has been made ced, DART 493 Post-Graduation Strategies in Design s 423 course has not been offered in the past ten years a	since winter 2018.	491 Discursive Design Research I. A new
Resource Implications:			
	to Note at		
Other Programs within which course	e is used:		
None			

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: DART-18 VERSION: 8 **COURSE CHANGE:** DART 446 New Course Number: **Proposed** [X] Undergraduate or [] Graduate Curriculum Changes Calendar for academic year: 2021/2022 Implementation Month/Year: September 2021 **Faculty/School:** Fine Arts **Department: Design and Computation Arts Program:** Major in Design Degree: BFA Calendar Section/Graduate Page Number: 81.90.2 **Type of Change:** [] Course Number [ ] Course Title [ ] Credit Value [X] Prerequisite [ ] Course Description [ ] Editorial [ ] New Course [ ] Course Deletion [X] Other - Specify: Removal of notation Present Text (from 2019/2020) calendar **Proposed Text DART 446** Studies in the Built Environment (3 credits) **DART 446** Studies in the Built Environment (3 credits) Prerequisite: DART 491, 492 previously or concurrently; 48 credits in the Major in Design; Prerequisite: DART 491 previously or concurrently; 48 credits in the Major in Design; or or written permission of the Department. In this theory course, students explore physical written permission of the Department. In this theory course, students explore physical space as a complex dynamic in which nature, architecture, things, and people space as a complex dynamic in which nature, architecture, things, and people continuously interact and influence each other. Students develop skills to explore such continuously interact and influence each other. Students develop skills to explore such concepts as spatiality and materiality, to enhance their understanding of, and contributions concepts as spatiality and materiality, to enhance their understanding of, and contributions to, the built environment. to, the built environment.

#### Rationale:

Resource Implications:

credit.

The DART 492 course is not offered. The methodology and subject matter has been made redundant by a change in focus in DART 491 Discursive Design Research I. A new compulsory course has been introduced, DART 493 Post-Graduation Strategies in Design since winter 2018.

Removal of the notation. The DART 423 course has not been offered in the past ten years and is no longer in the curriculum.

NOTE: Students who have received credit for DART 423 may not take this course for

None	
Other Programs within which course is listed:	
None	

# PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: **DART-18** VERSION: 8 COURSE CHANGE: DART 447 New Course Number:

**Proposed** [X] Undergraduate or [] Graduate Curriculum Changes

Calendar for academic year: 2021/2022 Implementation Month/Year: September 2021

Faculty/School: Fine Arts

**Department:** Design and Computation Arts

**Program:** Major in Design

**Degree:** BFA **Calendar Section/Graduate Page Number:** 81.90.2

<b>Type</b>	of	Change
-------------	----	--------

[] Course Number [] Course Title [] Credit Value [X] Prerequisite

[] Course Description [] Editorial [] New Course

[ ] Course Deletion [X] Other - Specify: Removal of notation

# Present Text (from 2019/2020) calendar

## DART 447 The Future Life of Objects (3 credits)

Prerequisite: DART 380; DART 491, 492 previously or concurrently; 48 credits in the Major in Design; or written permission of the Department. This studio course encourages students to analyze the integration and impact of digital technologies in the production of three-dimensional objects and space design. Students examine current technologies and production and explore concepts for objects, enhancing the long-term value and use of objects within the built environment.

NOTE: Students who have received credit for DART 425 may not take this course for credit

#### **Proposed Text**

#### **DART 447** The Future Life of Objects (3 credits)

Prerequisite: DART 380; DART 491 previously or concurrently; 48 credits in the Major in Design; or written permission of the Department. This studio course encourages students to analyze the integration and impact of digital technologies in the production of three-dimensional objects and space design. Students examine current technologies and production and explore concepts for objects, enhancing the long-term value and use of objects within the built environment.

#### Rationale:

The DART 492 course is not offered. The methodology and subject matter has been made redundant by a change in focus in DART 491 Discursive Design Research I. A new compulsory course has been introduced, DART 493 Post-Graduation Strategies in Design since winter 2018.

Removal of the notation. The DART 425 course has not been offered in the past ten years and is no longer in the curriculum.

**Resource Implications:** 

None

Other Programs within which course is listed:

None

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: DART-18 VERSION: 8 **COURSE CHANGE:** DART 448 New Course Number: **Proposed** [X] Undergraduate or [] Graduate Curriculum Changes Calendar for academic year: 2021/2022 Implementation Month/Year: September 2021 **Faculty/School:** Fine Arts **Department:** Design and Computation Arts **Program:** Major in Design Degree: BFA Calendar Section/Graduate Page Number: 81.90.2 **Type of Change:** [] Course Number [ ] Course Title [ ] Credit Value [X] Prerequisite [ ] Course Description [] Editorial [ ] New Course [ ] Course Deletion [X] Other - Specify: Removal of notation Present Text (from 2019/2020) calendar **Proposed Text DART 448** Nature-Inspired Environments (3 credits) **DART 448** Nature-Inspired Environments (3 credits) Prerequisite: DART 380; DART 491, 492 previously or concurrently; 48 credits in the Prerequisite: DART 380; DART 491 previously or concurrently; 48 credits in the Major in Major in Design; or written permission of the Department. In this studio course, students Design; or written permission of the Department. In this studio course, students examine examine natural systems to uncover design potential for the built environment. Students natural systems to uncover design potential for the built environment. Students develop innovative approaches that advance sustainable design thinking through the study of develop innovative approaches that advance sustainable design thinking through the study of intrinsic environmental geometries, behaviours, narratives, and life-cycle flows. intrinsic environmental geometries, behaviours, narratives, and life-cycle flows. NOTE: Students who have received credit for DART 425 may not take this course for credit. Rationale: The DART 492 course is not offered. The methodology and subject matter has been made redundant by a change in focus in DART 491 Discursive Design Research I. A new

compulsory course has been introduced, DART 493 Post-Graduation Strategies in Design since winter 2018.

Removal of the notation. The DART 425 course has not been offered in the past ten years and is no longer in the curriculum.

Resource Implications:	
None	

Other Programs within which course is listed:

None

Proposed [X] Undergraduate or [] Graduate Curriculum Changes  Calendar fo	or academic year: 2021/2022	
	Month/Year: September 2021	
Course Description [] Editorial [] New Course		
X Course Deletion [] Other - Specify:		
Present Text (from 2019/2020) calendar Proposed Text		
DART 451 — Digital Interaction (3 credits)  Prerequisite: DART 381; DART 491, 492 previously or concurrently; 48 credits in the Major in Design; or written permission of the Department. This lab course considers the rhetoric of interactivity. The ubiquity of the graphic user interface is problematized through the use of non-linear narrative and metaphor. Students develop and select new paradigms for human-computer interaction.  NOTE: Students who have received credit for DART 410 or 411 may not take this course for credit.		
Rationale: This course has not been offered since Fall 2009.		
Resource Implications: None		
Other Programs within which course is listed:		
None		

COURSE CHANGE: DART 452	New Course Number:			
<b>Proposed</b> [X] Undergraduate or [] Grad	duate Curriculum Changes		Calendar for academic year: 2021/20 Implementation Month/Year: September 20	
Faculty/School:	Fine Arts		implementation wonting real. September 20	21
Department:	Design and Computation Arts			
Program:	Major in Design			
Degree:	BFA			
Calendar Section/Graduate Page Nun				
Type of Change:				
Description Change.  Course Number	[] Course Title	[] Credit Value	[] Prerequisite	
Course Description	[] Editorial	New Course	[ ] I rerequisite	
[X] Course Deletion	Other - Specify:	[] Ivew Course		
Present Text (from 2019/2020) calend		Proposed Text		1
Prerequisite: DART 381; DART 491, 492 previously or concurrently; 48 credits in the Major in Design; or written permission of the Department. Students in this interdisciplinary lab course consider the expanded use of technologies for digital media in the context of 3D objects and environments. Through collaborative projects, students explore immersive installations integrating sound, video, interactivity, and performative events.  NOTE: Students who have received credit for DART 410 or 411 may not take this course for credit.				
Rationale: This course has not been offered in the last ten years.				
Resource Implications: None				
Other Programs within which course is listed:				
None				

# PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: DART-18 VERSION: 8 **COURSE CHANGE:** DART 499 New Course Number: **Proposed** [X] Undergraduate or [] Graduate Curriculum Changes Calendar for academic year: 2021/2022 Implementation Month/Year: September 2021 Faculty/School: Fine Arts **Department:** Design and Computation Arts **Program:** Major in Design Degree: BFA Calendar Section/Graduate Page Number: 81.90.2 **Type of Change:** [] Course Number [] Course Title [] Credit Value [] Prerequisite [] Course Description [] Editorial [X] New Course [] Course Deletion [] Other - Specify: Present Text (from 20XX/20XX) calendar Proposed Text

	DART 499 Special Topics in Design (6 credits) Prerequisite: 48 credits in the Major in Design or written permission of the Department. A course for advanced students which provides an opportunity for the study of special issues in design. Specific topics for this course, and prerequisites relevant in each case, are stated in the Undergraduate Class Schedule.  NOTE: Students who have received credit for the same topic under CART 498, 499 or DART 498 may not take this course for credit.	
Rationale: Creation of a new course number to allow students to enrol in a six-credit special topics cou	urse.	
Resource Implications: None		
Other Programs within which course is listed:		
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: October 16, 2019

**SUBJECT: GRADUATE CURRICULUM CHANGES (BIOL-26)** 

> (CALENDAR - 2019/2020)**DEPARTMENT OF BIOLOGY**

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 Biology is proposing to update course descriptions and prerequisites in the Graduate Diploma in Biotechnology and Genomics to reflect current course content and facilitate registration.

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

R. Courtemanche, Associate Dean, Academic Programs, Faculty of Arts and Science cc:

J. Johnston, University Curriculum Administrator, Office of the Provost and Vice-President,

Academic Affairs



#### **INTERNAL MEMORANDUM**

**TO:** Dr Bradley Nelson

Associate Dean, School of Graduate Studies Chair, Graduate Curriculum Committee

FROM: Dr André Roy, Dean, Faculty of Arts and Science

Chair, Arts and Science Faculty Council

**DATE:** September 27, 2019

**SUBJECT:** Graduate Calendar Curriculum Changes

Department of Biology

BIOL-26

Changes to courses under Graduate Diploma in Biotechnology and

Genomics

The following proposal was reviewed and approved at the Arts and Science Faculty Council meeting of September 20, 2019. We request that this proposal be considered at the next Graduate Curriculum Committee meeting.

The **Department of Biology** is updating courses under its Graduate Diploma in Biotechnology and Genomics as the field of bioinformatics has expanded since the implementation of the program. Undergraduate prerequisites have also been removed from a number of courses (BIOL 510, 516, PHIL 530) as students admitted to the graduate program are already vetted for the appropriate undergraduate educational background. The removal of these prerequisites will facilitate smoother registration. Of note, the description of BIOL 510 *Bioinformatics* has been updated to refer to its added content in computational biology and new bioinformatics approaches. In addition, BIOL 511 *Structural Genomics* is retitled *Genome Structure* to better emphasize the course's focus on the structure of genomes (theory and practice) and their mapping (and remove potential confusion with the coverage protein structure), and BIOL 512 and 516 have been updated as well with recent techniques and themes.

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

Reference documents: FCC 2019.1\_BIOL-26 ASFC 2019-5M-S

## **Department of Biology**

### BIOL-26

### **Memo from Chair**

## **Program changes**

Graduate Diploma in Biotechnology and Genomics

## Prerequisite and course description change

BIOL 510 Bioinformatics

BIOL 516 Project in Biotechnology and Genomics (6 credits)

## **Course title change**

BIOL 511 Genome Structure

## **Course description change**

BIOL 512 Functional Genomics

## Prerequisite change

PHIL 530 Ethical, Legal, and Social Implications of Biotechnology



#### **FACULTY OF ARTS AND SCIENCE**

Department of Biology

To: Dr. Richard Courtemanche, Associate Dean, Academic Programs

From: Dr. Patrick Gulick, Chair, Department of Biology

Date: August 15, 2019 (revised Sept. 23, 2019)

Re: Graduate Calendar changes

The Department of Biology Curriculum Committee discussed the changes in the current proposal (BIOL-26). Specifically, they include both updating the course descriptions for BIOL 510, BIOL 512 and BIOL 516, and removing the prerequisite requirements for BIOL 510 and PHIL 530, and changing the title of BIOL 511. All of the submitted changes were approved by the committee on August 13, 2019, and approved at the Department of Biology Faculty meeting on Sept. 23, 2019.

It was agreed that all prerequisites should be removed from the courses offered in the graduate Diploma in Biotechnology and Genomics since students without the proper background would not be admitted to the program. The previous listing of prerequisites necessitated the manual registration of program students in courses, if their undergraduate degree had not been completed at Concordia.

The title of BIOL 511 (Structural Genomics) is changed to Genome Structure. The previous course title could be misinterpreted to include the study of protein structures, a topic not covered in the course. The course examines the structure of genomes and investigates how genomes are analyzed.

Bioinformatics has evolved quite rapidly over the preceding decade. The course description for BIOL 510 (Bioinformatics) was in need of updating to reflect the newer approaches used in this field. The course description is changed. The new description will not only give our students a better idea of what is covered but, importantly, will indicate to students who are considering applying to the program that this course exposes them to modern approaches.

Likewise, ways of analyzing the functions of gene products have changed continuously in recent years and changes to the course description for BIOL 512 (Functional Genomics) reflects these.

Regarding BIOL 516, (Project in Biotechnology and Genomics) the practicum portion of this program, the four-month option was removed since it is rarely used and can be implemented on an *ad hoc* basis when appropriate. The nature of the work in this project is such that students, in fact, need two semesters to produce results of value. In exceptional circumstances, the program director and the course coordinator will

allow for a shorter period but this will depend upon the nature of the work and the student's abilities.

The updated course descriptions will enhance the potential to attract students who may have previously viewed this program as outdated. It also allows students accepted in the program to self-register in courses, freeing both the GPA and director of the program from the time-consuming task of manually enrolling students in courses. The director and assistant will be able to focus on other needs in the diploma program.

Patricle ). Sulick

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: BIOL-26 VERSION: 5

PROGRAM CHANGE: Diploma in Biotechnology and Genomics

**Proposed** [ ] Undergraduate or [X] Graduate Curriculum Changes

Calendar for academic year: 2020/2021 Implementation Month/Year: Summer 2020

Faculty/School: Arts and Science

**Department:** Biology

**Program:** Diploma in Biotechnology and Genomics

Diploma
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** 

# Biotechnology and Genomics Graduate Diploma

# **Admission Requirements**

To be considered for admission, students must hold a BSc degree from an accredited university with at least fifteen credits in courses at the 200 or 300 level in the following subjects: genetics, cell biology, molecular biology, biochemistry, and 3 credits of laboratory in one or more of the previous subjects. In addition, applicants should have obtained an undergraduate grade point average (GPA) of 3.00 (on a scale with a maximum of 4.30).

**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.

# **Biotechnology and Genomics Graduate Diploma**

# **Admission Requirements**

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**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 Diploma**

- Credits. Students are required to complete a minimum of 30 credits, comprised of 24 credits of course work and a 6-credit research project. Of the 30 credits required, 21 are designated as core.
- Courses. Credit courses for the diploma program are listed below. All courses are 3 credits unless otherwise indicated.

Core Courses (21 credits)

**BIOL 510 Bioinformatics** 

**BIOL 511 Structural Genomics** 

**BIOL 512 Functional Genomics** 

**BIOL 515 Biotechnology and Genomics Laboratory** 

BIOL 516 Project in Biotechnology and Genomics (6 credits)

PHIL 530 Ethical, Legal and Social Implications of Biotechnology

Elective Courses (9 credits)

**BIOL 521 Industrial and Environmental Biotechnology** 

**BIOL 523 Agriculture and Agri-Food Biotechnology** 

**BIOL 524 High-throughput Instrumentation** 

**BIOL 525 Biological Computing and Synthetic Biology** 

**CHEM 678 Protein Engineering and Design** 

# **Academic Regulations**

- Academic Standing. Please refer to the Academic Standing section of the Calendar for a detailed review of the Academic Regulations.
- Time Limit. Please refer to the Academic Regulation page for further details regarding the Time Limit requirements.
- Graduation Requirement. To graduate, students must have completed all
  course requirements with a cumulative grade point average of at least 3.00.

## **Requirements for the Diploma**

- Credits. Students are required to complete a minimum of 30 credits, comprised of 24 credits of course work and a 6-credit research project. Of the 30 credits required, 21 are designated as core.
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**BIOL 510 Bioinformatics** 

**BIOL 511 Genome Structure** 

**BIOL 512 Functional Genomics** 

**BIOL 515 Biotechnology and Genomics Laboratory** 

BIOL 516 Project in Biotechnology and Genomics (6 credits)

PHIL 530 Ethical, Legal and Social Implications of Biotechnology

Elective Courses (9 credits)

**BIOL 521 Industrial and Environmental Biotechnology** 

**BIOL 523 Agriculture and Agri-Food Biotechnology** 

**BIOL 524 High-throughput Instrumentation** 

**BIOL 525 Biological Computing and Synthetic Biology** 

**CHEM 678 Protein Engineering and Design** 

# **Academic Regulations**

- Academic Standing. Please refer to the Academic Standing section of the Calendar for a detailed review of the Academic Regulations.
- Time Limit. Please refer to the Academic Regulation page for further details regarding the Time Limit requirements.
- Graduation Requirement. To graduate, students must have completed all
  course requirements with a cumulative grade point average of at least 3.00.

## Courses

#### **BIOL 510 Bioinformatics**

Prerequisites: BIOL 367 or equivalent; COMP 228 (System Hardware) or permission of the Diploma Program Director.

This course provides the tools for life scientists to interpret and analyze biological sequence data. It provides a general overview of the growth in availability of genetic information. The course covers the genetic databases; the rapidly-increasing number of genome databases, including the human genome database; the sequence homology search engines and search algorithms; software for the identification of structural sequence components; and the determination of evolutionary relationships between sequences.

#### **BIOL 511 Structural Genomics**

This course provides an overview of genome analysis including: cloning systems; sequencing strategies; methods of detecting genes and approaches to mapping genomes It covers the theory and design of the different approaches, and the analysis of genomic data generated from them.

#### **BIOL 512 Functional Genomics**

This course focuses on the functional analysis of expressed genes and their products. Course content includes the construction and screening of normalized cDNA libraries, analysis of expressed sequence tags (ESTs), functional analysis by gene knock-outs, localization of gene products by gene knowk-ins, transcription profiling, systematic identification of proteins, and functional analysis of proteins by detection of protein-protein interactions.

#### **BIOL 515 Biotechnology and Genomics Laboratory**

This is a hands-on course on techniques used in biotechnology and genomics. Experiments conducted in this course include separation and mapping of high molecular weight DNA fragments, shotgun sequencing, ESTs sequencing, protein production in bacteria and fungi, functional analysis of protein products, protein arrays, and *in vivo* detection of protein interactions. This course incurs an additional fee to cover laboratory supplies and equipment.

#### **BIOL 516 Project in Biotechnology and Genomics** (6 credits)

Prerequisites: BIOL 466; BIOL 368; or permission of the Diploma Program Director.

Each student conducts a project under the supervision of a faculty member at Concordia or other research institutions affiliated with the program. The project topic requires approval by the course coordinator. The project can be taken over an 8-month (10 hours per week) of a 4-month period-(20 hours per week) at Concordia or other approved institutions or companies. The project will be chosen from one or more of the following fields: biotechnology, genomics, bioinformatics, and high-throughput experimentation. The nature of the project can be research, development, or application. A student who is working full-time or part-time can pursue the project in his/her place of employment subject to approval. (Approval will-only be given to projects which are clearly demonstrated to be independent of the regular work requirement). At the end of the project, the student is required to submit a report on the results of the project and present

## Courses

#### **BIOL 510 Bioinformatics**

This course provides students with instruction in the basic techniques of bioinformatics, computational biology and biological data science. There are three major goals. The first goal is to introduce common bioinformatic software, databases and tools for analyzing molecular data. The second, is to provide students with methods from computational biology to test hypotheses using programming techniques. The third, is to provide an introduction to methods from data science for exploring large biological data sets using visualization, statistics and machine learning. This course is conducted through lectures and computer laboratories.

#### **BIOL 511 Genome Structure**

This course provides an overview of genome analysis including: cloning systems; sequencing strategies; methods of detecting genes and approaches to mapping genomes. It covers the theory and design of the different approaches, and the analysis of genomic data generated from them.

#### **BIOL 512 Functional Genomics**

This course focuses on the functional analysis of expressed genes and their products. Course content includes transcription profiling using microarrays and RNA-Seq. systematic identification of proteins using mass spectrometry, functional analysis by gene knock-outs, localization of gene products by gene knock-ins, recombinant protein synthesis and protein-protein interactions using affinity co-purification and protein complementation assays. This course is given through lectures only.

#### BIOL 515 Biotechnology and Genomics Laboratory

This is a hands-on course on techniques used in biotechnology and genomics. Experiments conducted in this course include separation and mapping of high molecular weight DNA fragments, shotgun sequencing, ESTs sequencing, protein production in bacteria and fungi, functional analysis of protein products, protein arrays, and *in vivo* detection of protein interactions. This course incurs an additional fee to cover laboratory supplies and equipment.

#### **BIOL 516 Project in Biotechnology and Genomics** (6 credits)

Each student conducts a project under the supervision of a faculty member at Concordia or other research institutions affiliated with the program. The project topic requires approval by the course coordinator. The project is taken over an 8-month (10 hours per week) period at Concordia or other approved institutions or companies. The project is chosen from one or more of the following fields: biotechnology, genomics, bioinformatics, cell/molecular biology, synthetic biology and high-throughput experimentation. The nature of the project can be research, development, or application. A student who is working full-time or part-time can pursue the project in his/her place of employment subject to approval. (Approval is only given to projects which are clearly demonstrated to be independent of the regular work requirement). At the end of the project, the student is required to submit a report on the results of the project and present the results publicly in the form of a scientific poster or a short talk at a scheduled Genomics/Biotechnology

the results publicly in the form of a scientific poster or a short talk at a scheduled Genomics/Biotechnology Research Day.

#### **BIOL 521 Industrial and Environmental Biotechnology**

Prerequisites: BIOL 511; BIOL 512.

This course provides an in-depth evaluation of current biotechnology tools used in pharmaceutical and forestry industries, and in environmental remediation. New technologies and genomic approaches that can be applied to these processes are also discussed.

#### **BIOL 523 Agriculture and Agri-Food Biotechnology**

Prerequisites: BIOL 511: BIOL 512.

This course provides an overview on the use of biotechnology in agriculture and in the agri-food industry. Plant genomics and genetic manipulation of plants are emphasized. Also discussed are biotechnology methods used in reducing agricultural pollutants and converting agricultural surplus to energy.

#### **BIOL 524 High-throughput Instrumentation**

Prerequisites: BIOL 511; BIOL 512.

This is a hands-on introduction to high-throughput instruments used in biotechnology and genomics. Students are exposed to capillary electrophoresis-based DNA sequencing, microplate-based PCR reactions and purification of PCR products, construction of DNA chips, microarray scanning, and liquid handling robotics. Enrolment in this course is restricted to ten students.

#### BIOL 525 Biological Computing and Synthetic Biology

This is an interdisciplinary course offered to students who are either in Biology or Electrical and Computer Engineering programs. Students are introduced to the emerging field of synthetic biology and learn to design computational machines that can be implemented in biological media. The term is divided into two phases. In Phase I, Biology students learn basic computer hardware and software concepts, while Engineering students are introduced to gene structure and recombinant DNA technology. In Phase II, all students learn the principles and various applications of cell-based computational machines. Students work in teams to create a project proposal to describe the design of a computational machine using gene regulatory networks. A project is required. Note: Students who have received credit for COEN 6211 or for this topic under a BIOL 631 or COEN 691 number may not take this course for credit.

## PHIL 530 Ethical, Legal, and Social Implications of Biotechnology

Prerequisite: BIOL 367 or permission of the Diploma Program Director.

This interdisciplinary course examines some of the ethical, legal, and social implications of recent developments in biotechnology, genomics, and bioinformatics. Students explore current debates about biotechnologies in the fields of agricultural biotechnology, global development, and environmental risk. Issues such as commercialization and intellectual property, the role of media and public perceptions of biotechnologies, and social responsibility and policy formation are also addressed.

#### Rationale:

The rationale for each change is indicated on each individual course form.

**Resource Implications:** 

Research Day.

#### **BIOL 521 Industrial and Environmental Biotechnology**

Prerequisites: BIOL 511; BIOL 512.

This course provides an in-depth evaluation of current biotechnology tools used in pharmaceutical and forestry industries, and in environmental remediation. New technologies and genomic approaches that can be applied to these processes are also discussed.

#### **BIOL 523 Agriculture and Agri-Food Biotechnology**

Prerequisites: BIOL 511: BIOL 512.

This course provides an overview on the use of biotechnology in agriculture and in the agri-food industry. Plant genomics and genetic manipulation of plants are emphasized. Also discussed are biotechnology methods used in reducing agricultural pollutants and converting agricultural surplus to energy.

#### BIOL 524 High-throughput Instrumentation

Prerequisites: BIOL 511; BIOL 512.

This is a hands-on introduction to high-throughput instruments used in biotechnology and genomics. Students are exposed to capillary electrophoresis-based DNA sequencing, microplate-based PCR reactions and purification of PCR products, construction of DNA chips, microarray scanning, and liquid handling robotics. Enrolment in this course is restricted to ten students.

#### BIOL 525 Biological Computing and Synthetic Biology

This is an interdisciplinary course offered to students who are either in Biology or Electrical and Computer Engineering programs. Students are introduced to the emerging field of synthetic biology and learn to design computational machines that can be implemented in biological media. The term is divided into two phases. In Phase I, Biology students learn basic computer hardware and software concepts, while Engineering students are introduced to gene structure and recombinant DNA technology. In Phase II, all students learn the principles and various applications of cell-based computational machines. Students work in teams to create a project proposal to describe the design of a computational machine using gene regulatory networks. A project is required. Note: Students who have received credit for COEN 6211 or for this topic under a BIOL

631 or COEN 691 number may not take this course for credit.

#### PHIL 530 Ethical, Legal, and Social Implications of Biotechnology

This interdisciplinary course examines some of the ethical, legal, and social implications of recent developments in biotechnology, genomics, and bioinformatics. Students explore current debates about biotechnologies in the fields of agricultural biotechnology, global development, and environmental risk. Issues such as commercialization and intellectual property, the role of media and public perceptions of biotechnologies, and social responsibility and policy formation are also addressed.

None.			

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: BIOL-26 VERSION: 5 **COURSE CHANGE:** BIOL 510 New Course Number: **Proposed** [ ] Undergraduate or [X] Graduate Curriculum Changes Calendar for academic year: 2020/2021 **Implementation Month/Year:** Summer 2020 Faculty/School: Arts and Science **Department:** Biology Program: Diploma in Biotechnology and Genomics Degree: Diploma Calendar Section/Graduate Page Number: Fall 2019 **Type of Change:** [ ] Course Number [ ] Course Title [ ] Credit Value [X] Prerequisite [X] Course Description [] Editorial [ ] New Course [ ] Course Deletion Other - Specify: Present Text (from 2019/2020) calendar **Proposed Text BIOL 510 Bioinformatics BIOL 510 Bioinformatics** Prerequisites: BIOL 367 or equivalent: COMP 228 (System Hardware) or permission of This course provides students with instruction in the basic techniques of bioinformatics, computational biology and biological data science. There are three major goals. The first the Diploma Program Director. goal is to introduce common bioinformatic software, databases and tools for analyzing This course provides the tools for life scientists to interpret and analyze biological sequence data. It provides a general overview of the growth in availability of genetic molecular data. The second, is to provide students with methods from computational biology to test hypotheses using programming techniques. The third, is to provide an information. The course covers the genetic databases; the rapidly increasing number of introduction to methods from data science for exploring large biological data sets using genome databases, including the human genome database; the seguence homology visualization, statistics and machine learning. This course is conducted through lectures search engines and search algorithms; software for the identification of structural sequence components; and the determination of evolutionary relationships between and computer laboratories. sequences. Rationale: Bioinformatics is a rapidly-evolving field of study. However, the current course descriptions are those which originated from the inception of the Diploma program in Biotechnology and Genomics. These course descriptions are in need of updating, in order to reflect modern bioinformatic approaches. The prerequisites are relevant only for the undergraduate calendar and their presence in the graduate calendar are artifacts of the cross-listing of these courses. Students would not be admitted to the graduate program if they lack the necessary undergraduate educational background. Thus the prerequisites are not necessary in the graduate calendar and their removal will facilitate smoother registration. **Resource Implications:**

None.

None at graduate level.

Other Programs within which course is listed:

Also offered under BIOL 480 (undergraduate).

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: BIOL-26 VERSION: 5 **COURSE CHANGE: BIOL 511** New Course Number: **Proposed** [ ] Undergraduate or [X] Graduate Curriculum Changes Calendar for academic year: 2020/2021 **Implementation Month/Year:** Summer 2020 Faculty/School: Arts and Science **Department:** Biology Program: Diploma in Biotechnology and Genomics Degree: Diploma Calendar Section/Graduate Page Number: Fall 2019 **Type of Change:** [ ] Course Number [X] Course Title [ ] Credit Value [] Prerequisite [ ] Course Description [ ] Editorial [] New Course [ ] Course Deletion [] Other - Specify: Present Text (from 2019/2020) calendar **Proposed Text BIOL 511 Structural Genomics BIOL 511 Genome Structure** This course provides an overview of genome analysis including: cloning systems; This course provides an overview of genome analysis including: cloning systems; sequencing strategies; methods of detecting genes and approaches to mapping genomes sequencing strategies; methods of detecting genes and approaches to mapping genomes. It covers the theory and design of the different approaches, and the analysis of genomic It covers the theory and design of the different approaches, and the analysis of genomic data generated from them. data generated from them. Rationale: The term "structural" oftentimes refers to proteins and their structure. However, this course deals strictly with genomes and how genomes are structured/organized. The new title will

The term "structural" oftentimes refers to proteins and their structure. However, this course deals strictly with genomes and how genomes are structured/organized. The new title will remove any confusion that has arisen in the past for the students of the course and for those looking into applying to the program.

#### **Resource Implications:**

None.

Other Programs within which course is listed:

None at graduate level.

Also offered under BIOL 481 (undergraduate).

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: BIOL-26 VERSION: 5 **COURSE CHANGE:** BIOL 512 New Course Number: **Proposed** [ ] Undergraduate or [X] Graduate Curriculum Changes Calendar for academic year: 2020/2021 Implementation Month/Year: Summer 2020 Faculty/School: Arts and Science **Department:** Biology Program: Diploma in Biotechnology and Genomics Degree: Diploma Calendar Section/Graduate Page Number: Fall 2019 **Type of Change:** [ ] Course Number [ ] Course Title [ ] Credit Value [ ] Prerequisite [X] Course Description [ ] Editorial [] New Course [ ] Course Deletion Other - Specify: Present Text (from 2019/2020) calendar **Proposed Text BIOL 512 Functional Genomics BIOL 512 Functional Genomics** This course focuses on the functional analysis of expressed genes and their products. This course focuses on the functional analysis of expressed genes and their products. Course content includes the construction and screening of normalized cDNA libraries. Course content includes transcription profiling using microarrays and RNA-Seq. analysis of expressed sequence tags (ESTs), functional analysis by gene knock-outs, systematic identification of proteins using mass spectrometry, functional analysis by gene localization of gene products by gene knowk-ins, transcription profiling, systematic knock-outs, localization of gene products by gene knock-ins, recombinant protein identification of proteins, and functional analysis of proteins by detection of protein-protein synthesis and protein-protein interactions using affinity co-purification and protein complementation assays. This course is given through lectures only. interactions. Rationale: This course exposes students to methods of anlyzing the function of gene products. Like many areas of biology, this is one that has seen the emergence of many new techniques over recent years. The new description updates the topics and demonstrates to current and future students the contemporaneous nature of this course.

Resource Implications:

None at graduate level.

Other Programs within which course is listed:

Also offered under BIOL 482 (undergraduate).

None.

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: BIOL-26 VERSION: 5

COURSE CHANGE: BIOL 516 New Course Number:

**Proposed** [ ] Undergraduate or [X] Graduate Curriculum Changes

Calendar for academic year: 2020/2021 Implementation Month/Year: Summer 2020

Faculty/School: Arts and Science

**Department:** Biology

**Program:** Diploma in Biotechnology and Genomics

**Degree:** Diploma Calendar Section/Graduate Page Number: Fall 2019

**Type of Change:** 

[] Course Number [] Course Title [] Credit Value [X] Prerequisite

[X] Course Description [] Editorial [] New Course

[] Course Deletion [] Other - Specify:

#### Present Text (from 2019/2020) calendar

#### **BIOL 516 Project in Biotechnology and Genomics** (6 credits)

Prorequisites: BIOL 466; BIOL 368; or permission of the Diploma Program Director. Each student conducts a project under the supervision of a faculty member at Concordia or other research institutions affiliated with the program. The project topic requires approval by the course coordinator. The project-can be taken over an 8-month (10 hours per week) of a 4-month period (20 hours per week) at Concordia or other approved institutions or companies. The project will be chosen from one or more of the following fields: biotechnology, genomics, bioinformatics, and high-throughput experimentation. The nature of the project can be research, development, or application. A student who is working full-time or part-time can pursue the project in his/her place of employment subject to approval. (Approval will-only be given to projects which are clearly demonstrated to be independent of the regular work requirement). At the end of the project, the student is required to submit a report on the results of the project and present the results publicly in the form of a scientific poster or a short talk at a scheduled Genomics/Biotechnology Research Day.

#### **Proposed Text**

#### **BIOL 516 Project in Biotechnology and Genomics** (6 credits)

Each student conducts a project under the supervision of a faculty member at Concordia or other research institutions affiliated with the program. The project topic requires approval by the course coordinator. The project is taken over an 8-month (10 hours per week) period at Concordia or other approved institutions or companies. The project is chosen from one or more of the following fields: biotechnology, genomics, bioinformatics, cell/molecular biology, synthetic biology and high-throughput experimentation. The nature of the project can be research, development, or application. A student who is working full-time or part-time can pursue the project in his/her place of employment subject to approval. (Approval is only given to projects which are clearly demonstrated to be independent of the regular work requirement). At the end of the project, the student is required to submit a report on the results of the project and present the results publicly in the form of a scientific poster or a short talk at a scheduled Genomics/Biotechnology Research Day.

#### Rationale:

The prerequisites are relevant only for the undergraduate calendar and their presence in the graduate calendar are artifacts of the cross-listing of these courses. Students would not be admitted to the graduate program if they lack the necessary undergraduate educational background. Thus the prerequisites are not necessary in the graduate calendar and their removal will facilitate smoother registration.

In addition, the removal of the four month option was decided upon since it is rarely used and can be implemented on an ad hoc basis. The nature of the work in this project is such that students in fact need two semesters to produce results of value. In exceptional circumstances the program director and the course coordinator will allow for a shorter period of time but this will depend upon the nature of the work and the student's abilities.

The inclusion of synthetic biology and cell and molecular biology is in line with growing and new programs within the biology department.

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None.

Other Programs within which course is listed:

None.		

**COURSE CHANGE: PHIL 530** New Course Number: **Proposed** [ ] Undergraduate or [X] Graduate Curriculum Changes Calendar for academic year: 2020/2021 **Implementation Month/Year:** Summer 2020 Faculty/School: Arts and Science **Department:** Biology Program: Diploma in Biotechnology and Genomics Degree: Diploma Calendar Section/Graduate Page Number: Fall 2019 **Type of Change:** [] Course Number [ ] Course Title [] Credit Value [X] Prerequisite [ ] Course Description [] Editorial [] New Course [ ] Course Deletion Other - Specify: Present Text (from 2019/2020) calendar **Proposed Text** PHIL 530 Ethical, Legal, and Social Implications of Biotechnology PHIL 530 Ethical, Legal, and Social Implications of Biotechnology Prerequisite: BIOL 367 or permission of the Diploma Program Director. This interdisciplinary course examines some of the ethical, legal, and social implications of This interdisciplinary course examines some of the ethical, legal, and social implications of recent developments in biotechnology, genomics, and bioinformatics. Students explore recent developments in biotechnology, genomics, and bioinformatics. Students explore current debates about biotechnologies in the fields of agricultural biotechnology, global current debates about biotechnologies in the fields of agricultural biotechnology, global development, and environmental risk. Issues such as commercialization and intellectual development, and environmental risk. Issues such as commercialization and intellectual property, the role of media and public perceptions of biotechnologies, and social property, the role of media and public perceptions of biotechnologies, and social responsibility and policy formation are also addressed. responsibility and policy formation are also addressed. Rationale: This is a required course that introduces students to the many important ethical, legal, and social issues within biotech and genomics. The prerequisites are relevant only for the undergraduate calendar and their presence in the graduate calendar are artifacts of the cross-listing of these courses. Students would not be admitted to the graduate program if they lack the necessary undergraduate educational background. Thus the prerequisites are not necessary in the graduate calendar and their removal will facilitate smoother registration. The course is housed in the Biology section of the calendar. It is also offered as a topics course under PHIL 633 Selected Topics in Value Theory but is not a required course in the Philosophy MA program. As PHIL 633 is a topics course, it does not require any changes to its current description in the calendar nor are changes required to the description that appears on SIS. **Resource Implications:** None. Other Programs within which course is listed: None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: BIOL-26 VERSION: 5

#### **Nicole Freeman**

From: Michael Sacher

**Sent:** Friday, August 16, 2019 3:00 PM

To: Nicole Freeman

**Subject:** Fwd: enrollment changes in BIOL 530/PHIL 498/PHIL 633

Follow Up Flag: Follow up Flag Status: Flagged

### **Outlook for Android**

----- Forwarded message -----

From: "Matthew Barker" < Matthew.Barker@concordia.ca>

Date: Fri, Aug 16, 2019 at 2:52 PM -0400

Subject: Re: enrollment changes in BIOL 530/PHIL 498/PHIL 633

To: "Michael Sacher" < michael.sacher@concordia.ca>

Hi Michael,

Yes, not a problem, I agree with that.

Thanks,

Matt Barker, Chair, Department of Philosophy

From: Michael Sacher

Sent: August 8, 2019 4:29 PM

To: Matthew Barker

Subject: Re: enrollment changes in BIOL 530/PHIL 498/PHIL 633

Hi Matt,

I just wanted to confirm that you agree with removing the prerequisite of BIOL 367 from the graduate calendar for PHIL 530. Thanks.

Michael



#### 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:** October 16, 2019

**SUBJECT: GRADUATE CURRICULUM CHANGES (EDUC-74)** 

(CALENDAR - 2019/2020)

**DEPARTMENT OF EDUCATION** 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 Education is proposing to update their calendar entry regarding the availability of elective courses in the MA Child Studies.

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

R. Courtemanche, Associate Dean, Academic Programs, Faculty of Arts and Science cc:

J. Johnston, University Curriculum Administrator, Office of the Provost and Vice-President,

Academic Affairs



#### INTERNAL MEMORANDUM

**TO:** Dr Bradley Nelson

Associate Dean, School of Graduate Studies Chair, Graduate Curriculum Committee

**FROM:** Dr André Roy, Dean, Faculty of Arts and Science

Chair, Arts and Science Faculty Council

**DATE:** September 27, 2019

**SUBJECT:** Graduate Calendar Curriculum Changes

Department of Education

EDUC-74

MA in Child Studies (Elective courses statement)

The following proposal was reviewed and approved at the Arts and Science Faculty Council meeting of September 20, 2019. We request that this proposal be considered at the next Graduate Curriculum Committee meeting.

The **Department of Education** is amending the introductory text to the section referring to elective courses under the MA in Child Studies. The current text states that CHST 630 (Issues in Education: Language, Literacy, Numeracy, and Scientific Reasoning) is offered every year. As this course is offered on a rotating basis as are the other elective courses within the program, the statement is revised to: "These courses focus on the child and the wider community. They are offered on a rotating basis."

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

Reference documents: FCC 2019.1\_EDUC-74 ASFC 2019-5M-T

# **Department of Education**

# EDUC-74

**Memo from Chair** 

**Change to elective courses statement** 

MA in Child Studies



#### INTERNAL MEMORANDUM

**TO:** Richard Courtemanche

Associate Dean, Academic Programs

**FROM:** Sara Kennedy

Chair, Department of Education

**DATE:** August 12, 2019

SUBJECT: EDUC-74: MA in Child Studies (CHST) Elective Rotation Curriculum Changes

The Department proposes for consideration, the attached dossier (EDUC-74), which was approved at the April 11, 2018 Department of Education Council meeting, with the following modifications to MA in Child Studies (CHST) Programs:

 CHST 630 (Issues in Education: Language, Literacy, Numeracy, and Scientific Reasoning) is offered on a rotational basis with the other CHST elective courses offerings in the MA in CHST with Thesis or Internship. It no longer requires specific mention as an exception under the introductory statement.

Note: This change was originally submitted under the Track A process under EDUC-59 on May 23, 2018, but this content was withdrawn from the process.

PROGRAM CHANGE: MA in Child Studies

Proposed [ ] Undergraduate or [X] Graduate Curriculum Changes

Calendar for academic year: 2020/2021 Implementation Month/Year: Summer 2020

Faculty/School:Arts and ScienceDepartment:EducationProgram:Child StudiesDegree:MA

Calendar Section/Graduate Page Number: Summer 2019

**Type of Change:** 

[ ] Editorial [X] Requirements [ ] Regulations [	] Program Deletion [ ] New Program		
Present Text (from 2019/2020) calendar	Proposed Text		
Child Studies MA	Child Studies MA		
Admission Requirements	Admission Requirements		
Requirements for the Degree	Requirements for the Degree		
Academic Regulations	Academic Regulations		
Courses	Courses		
The following courses are offered:	The following courses are offered:		
Required Courses	Required Courses		
Elective Courses	Elective Courses		
These courses focus on (a) the child and (b) the wider community. They are offered on a rotating basis with the exception of CHST 630 which is offered every year.	These courses focus on the child and the wider community. They are offered on a rotating basis.		

<b></b>	<b></b>		
Directed Study Course	Directed Study Course		
<b></b>	Internship Option		
Internship Option			
Rationale: The amended text addresses current practice in that all elective courses are now offered on a rotating basis.			
Resource Implications: 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:** November 12, 2019

SUBJECT: GRADUATE CURRICULUM CHANGES (CIISE-65)

(CALENDAR - 2019/2020)

CONCORDIA INSTITUTE FOR INFORMATION SYSTEMS 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 Concordia Institute for information Systems Engineering is proposing changes to the structure of the required courses in the PhD in Information and Systems Engineering, MASc in Information Systems Engineering, MEng in Information Systems Engineering, MASc in Quality Systems Engineering, and MEng in Quality Systems Engineering.

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

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:** Kristy Clarke

Academic Programs and Development

School of Graduate Studies

**DATE:** October 4, 2019

RE: Graduate Curriculum Proposal for the 2019-20 Academic Year (CIISE-65)

Gina Cody Council of Engineering and Computer Science

At its meeting on October 4th, 2019, the Council of the Gina Cody School of Engineering and Computer Science reviewed and approved, with minor corrections, the proposed changes to the graduate degree programs of CIISE.

Details of the curriculum items are indicated and explained in the internal memorandums and in the CIISE-65 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

Chair of the Faculty Council

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:** September 5, 2019

RE: Graduate Curriculum Proposal for the 2019-20 Academic Year (CIISE-65)

**Concordia Institute for Information Systems Engineering (CIISE)** 

At its meeting on April 30, 2019, the Engineering and Computer Science Graduate Studies Committee (ECSGSC) reviewed and approved, with minor modifications, the graduate curriculum changes proposed by the CIISE. The proposed changes reflect a better breakdown of the required credits of course work for each of its graduate degree programs to be in line with other graduate programs offered by the GCS of Engineering and Computer Science.

Details of the graduate curriculum items are indicated and explained in the Department's internal memorandum and in the CIISE#65 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.



## GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

Concordia Institute for Information Systems Engineering

## INTERNAL MEMORANDUM

**DATE:** April 17, 2019

TO: Dr. Mourad Debbabi, Associate Dean, Research and Graduate Studies

Gina Cody School of Engineering and Computer Science

**FROM:** Dr. Abdessamad Ben Hamza, Director

Concordia Institute for Information Systems Engineering

**SUBJECT**: Changes to Degree Requirements for our Programs

Please find Dossier #65 submitted by the Concordia Institute for Information Systems Engineering.

We have included program changes as follows:

- PhD in Information and Systems Engineering
- MASc in Information Systems Engineering
- MEng in Information Systems Engineering
- MASc in Quality Systems Engineering
- MEng in Quality Systems Engineering

The objective of these changes is to revise the breakdown of the required credits of course work for the completion of the degree in each of these programs.

These curriculum changes have been approved at the Department Curriculum Committee meeting held April 3, 2019 and at the CIISE Department Council meeting held April 17, 2019.

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

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: CIISE-65 VERSION: 5

**PROGRAM CHANGE:** PhD ISE Degree Requirements

**Proposed** [ ] Undergraduate or [X] Graduate Curriculum Changes

Calendar for academic year: 2020/2021 Implementation Month/Year: January 2020

**Faculty/School:** Gina Cody School of Engineering and Computer Science **Department:** Concordia Institute for Information Systems Engr.

**Program:** Information and Systems Engineering

Degree: PhD Calendar Section/Graduate Page Number: 337

**Type of Change:** 

[X] Editorial [X] Requirements [] Regulations [] Program Deletion [] New Program

Present Text (from 2019/2020) calendar

**Proposed Text** 

# Information and Systems Engineering PhD

See the description of the Doctor of/Doctorate in Philosophy requirements in the general section on the Gina Cody School of Engineering and Computer Science.

The twelve-credit course component for the PhD in Information and Systems Engineering is specified as follows:

- 1. 4 credits (1 core course): INSE 6421 Systems Integration and Testing:
- 8 credits (2 elective courses): chosen from 6000 or 7000 numbered courses
  offered by the Gina Cody School of Engineering and Computer Science and
  approved by the thesis supervisor and graduate program director.

# Information and Systems Engineering PhD

Students must complete a minimum of 12 credits of course work at the 6000 or 7000 level as follows:

- 8 credits of course work chosen from courses offered by the Gina Cody School of Engineering and Computer Science
- The remaining credits should be chosen from INSE courses, unless approved by the Graduate Program Director.

For topic area course lists, please visit the Graduate Calendar.

For course descriptions, please visit the Graduate Calendar.

#### Rationale:

The objective of these changes is to revise the breakdown of the 12 credits of coursework for the completion of the PhD program in Information and Systems Engineering. These changes are in line with other PhD programs offered by the Gina Cody School of Engineering and Computer Science.

**Resource Implications:** 

None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: CIISE-65 VERSION: 5

**PROGRAM CHANGE:** MASc ISS Degree Requirements

**Proposed** [ ] Undergraduate or [X] Graduate Curriculum Changes

Calendar for academic year: 2020/2020 Implementation Month/Year: January 2020

**Faculty/School:** Gina Cody School of Engineering and Computer Science **Department:** Concordia Institute for Information Systems Engr.

**Program:** Information Systems Security

**Degree:** MASc Calendar Section/Graduate Page Number: 338-339

**Type of Change:** 

[X] Editorial [X] Requirements [] Regulations [] Program Deletion [] New Program

Present Text (from 2019/2020) calendar

#### **Proposed Text**

# Requirements for the Degree

The requirements described here are in addition to the general degree requirements for the Master's programs in the Gina Cody School of Engineering and Computer Science.

In order to graduate, students must have a CGPA of at least 2.70.

- Program of Study. The student will follow the proposed course sequence. In addition, students have to consult with their supervisor for selecting a research topic. Students can enter this program as Co-op students. See item 6. Thesis
- Credits. A fully qualified candidate is required to successfully complete a minimum of 45 credits. Additional credits may be required in some cases.
- 3. Transfer Credits. Students may be granted transfer academic credits for, in general, not more than eight credits taken in approved graduate studies prior to their entry into this program. A course submitted for transfer credit must be appropriate to the student's program of study at Concordia University. An application for such credit will be considered only at the time of admission.
- 4. **Time Limit.** Please refer to the Academic Regulation page for further details regarding the Time Limit requirements.
- Courses. Students must complete a minimum of 20 credits, including 16 credits
  of core courses (INSE 6110, INSE 6120, INSE 6130, and INSE 6140) and one
  4 credit course as shown below:

# **Requirements for the Degree**

The requirements described here are in addition to the general degree requirements for the Master's programs in the Gina Cody School of Engineering and Computer Science.

In order to graduate, students must have a CGPA of at least 2.70.

- Program of Study. The student will follow the proposed course sequence. In addition, students have to consult with their supervisor for selecting a research topic. Students can enter this program as Co-op students. See item 6. Thesis
- Credits. A fully qualified candidate is required to successfully complete a minimum of 45 credits. Additional credits may be required in some cases.
- 3. Transfer Credits. Students may be granted transfer academic credits for, in general, not more than eight credits taken in approved graduate studies prior to their entry into this program. A course submitted for transfer credit must be appropriate to the student's program of study at Concordia University. An application for such credit will be considered only at the time of admission.
- 4. **Time Limit.** Please refer to the Academic Regulation page for further details regarding the Time Limit requirements.
- Courses. Students must complete a minimum of 16 credits of course work as follows:
  - Twelve credits of core courses (INSE 6110, INSE 6120, INSE 6130);

- a course chosen from the topic area E69 Information Systems
   Security, approved by the student's supervisor, or
- an INSE course, approved by the student's supervisor and either the Graduate Program Director or the Director of the Institute.
- 6. Thesis. Students must complete a 25-credit thesis as part of their degree requirements. The thesis must represent the results of the student's independent work after admission to the program. The proposed topic for the thesis, together with a brief statement outlining the proposed method of treatment, and the arrangement made for faculty supervision, must be approved by the GCS Graduate Studies Committee. For purposes of registration, this work will be designated as INSE 8901. The thesis will be evaluated by the student's supervisor(s), and at least two examiners appointed by GCS Graduate Studies Committee, one of whom shall be external to the student's department.

Students have the option to do the thesis work within the industrial milieu through the Institute for Co-operative Education. The suggested schedule of the program is as follows: fall and winter terms will be dedicated to course work, followed by two or three terms for research and development in industry, culminating in one or two terms in the Institute for the writing and defence of the thesis. Each student in this case will have a supervisor from the Institute and a mentor from industry. The intellectual property will be managed according to the University policy.

- The remaining credits can be chosen from courses approved by the student's supervisor(s), and either the Graduate Program Director of the Director of the Institute.
- Thesis. Students must complete a <u>29</u>-credit thesis as part of their degree requirements.

Students have the option to do the thesis work within the industrial milieu through the Institute for Co-operative Education. The suggested schedule of the program is as follows: fall and winter terms will be dedicated to course work, followed by two or three terms for research and development in industry, culminating in one or two terms in the Institute for the writing and defence of the thesis. Each student in this case will have a supervisor from the Institute and a mentor from industry. The intellectual property will be managed according to the University policy.

#### Rationale:

The objective of these changes is to revise the breakdown of the 45 credits of course work for the completion of the MASc program in Information Systems Security. These changes are in line with other Master's programs offered by the Gina Cody School of Engineering and Computer Science.

In all other Master's programs offered by GCS, students must complete a 29-credit thesis as part of their degree requirements. So, to be in line with these GCS programs and to speed-up time to completion, CIISE students must also complete a 29-credit thesis by focusing more on their research. These changes were made at the request of Master's thesis students and their supervisors. Students, in particular, strongly believe that they are at a disadvantage compared to their peers in the other academic units, as the thesis-work is the same but the course-work is not.

INSE 6140 is a general course that introduces students to the basic security applications. All thesis students are exposed to these applications while doing research in information systems security. Hence, the material covered in this course is not mandatory to complete the thesis-based degree.

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None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: CIISE-65 VERSION: 5

**PROGRAM CHANGE:** MEng ISS Degree Requirements

**Proposed** [ ] Undergraduate or [X] Graduate Curriculum Changes

Calendar for academic year: 2020/2021 Implementation Month/Year: January 2020

**Faculty/School:** Gina Cody School of Engineering and Computer Science **Department:** Concordia Institute for Information Systems Engr.

**Program:** Information Systems Security

**Degree:** MEng Calendar Section/Graduate Page Number: 340

Type of Change:

[X] Editorial [X] Requirements [] Regulations [] Program Deletion [] New Program

Present Text (from 2019/2020) calendar

## **Proposed Text**

# Requirements for the Degree

The requirements described here are in addition to the general degree requirements for the Master's programs in the Gina Cody School of Engineering and Computer Science.

In order to graduate, students must have a CGPA of at least 2.70.

- 1. **Credits.** A fully qualified candidate is required to successfully complete a minimum of 45 credits. Additional credits may be required in some cases.
- 2. Transfer Credits. Students may be granted transfer academic credits for, in general, not more than eight credits taken in approved graduate studies prior to their entry into this program. A course submitted for transfer credits must be appropriate to the student's program study at Concordia University. An application for such credit will be considered only at the time of admission.
- 3. **Time Limit.** Please refer to the Academic Regulation page for further details regarding the Time Limit requirements.
- Courses. Students must take-a total of 45 credits of course work at the 6000 or 7000 level.

The breakdown of the 45 credits is as follows:

- Twenty credits of core courses (INSE-6110, 6120, 6130, 6140, 6150) from topic area E69.
- b. Twenty five credits of 6000 or 7000 numbered courses from any topic area from departments within the Gina Cody School of Engineering

# **Requirements for the Degree**

The requirements described here are in addition to the general degree requirements for the Master's programs in the Gina Cody School of Engineering and Computer Science.

In order to graduate, students must have a CGPA of at least 2.70.

- Credits. A fully qualified candidate is required to successfully complete a minimum of 45 credits. Additional credits may be required in some cases.
- 2. Transfer Credits. Students may be granted transfer academic credits for, in general, not more than eight credits taken in approved graduate studies prior to their entry into this program. A course submitted for transfer credits must be appropriate to the student's program study at Concordia University. An application for such credit will be considered only at the time of admission.
- 3. **Time Limit.** Please refer to the Academic Regulation page for further details regarding the Time Limit requirements.
- 4. **Courses.** Students must <u>complete</u> a total of 45 credits of course work at the 6000 or 7000 level.

The breakdown of the 45 credits is as follows:

- Twelve credits of core courses (INSE 6110, 6120, 6130);
- A minimum of 16 credits of courses offered by CIISE from topic area F69:
- The remaining credits chosen from other courses offered by the Gina

and Computer Science. Students shall only take one of the courses (INSE 6961, ENGR 6991, ENCS 6931) from topic area E63.

Cody School of Engineering and Computer Science. Students shall only take one of the following courses: INSE 6961 (1-credit seminar), ENGR 6991 (5-credit project course), or ENCS 6931 (9-credit Industrial Stage and Training course).

#### Rationale:

The objective of these changes is to revise the breakdown of the 45 credits of course work for the completion of the MEng program in Information Systems Security. Due to the specialized nature of the program, students must take more elective courses in Information Systems Security to meet the requirements.

Both INSE 6140 and INSE 6150 are general courses that introduce students to the basic computer security applications and methodologies. According to the proposed breakdown of the 45 credits, course-based students enrolled in the information systems security program are now required to take a higher number of credits of courses from topic area "E69 - Information Systems Security". So, students will learn various applications and methodologies while doing final course projects. Hence, the material covered in INSE 6140 and INSE 6150 is not mandatory to complete the course-based degree.

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None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: CIISE-65 VERSION: 5

PROGRAM CHANGE: MASC QSE Degree Requirements

**Proposed** [ ] Undergraduate or [X] Graduate Curriculum Changes

Calendar for academic year: 2020/2021 Implementation Month/Year: January 2020

**Faculty/School:** Gina Cody School of Engineering and Computer Science **Department:** Concordia Institute for Information Systems Engr.

**Program:** Quality Systems Engineering

**Degree:** MASc Calendar Section/Graduate Page Number: 341-342

Type of Change:

[X] Editorial [X] Requirements [] Regulations [] Program Deletion [] New Program

Present Text (from 2019/2020) calendar

## **Proposed Text**

# Requirements for the Degree

The requirements described here are in addition to the general degree requirements for the Master's programs in the Gina Cody School of Engineering and Computer Science.

In order to graduate, students must have a CGPA of at least 2.70.

- Program of Study. The student will follow the proposed course sequence. In addition, students have to consult with their supervisor for selecting a research topic. Students can enter this program as Co-op students. See item 6. Thesis
- Credits. A fully qualified candidate is required to successfully complete a minimum of 45 credits. Additional credits may be required in some cases.
- 3. Transfer Credits. Students may be granted transfer academic credits for, in general, not more than eight credits taken in approved graduate studies prior to their entry into this program. A course submitted for transfer credit must be appropriate to the student's program of study at Concordia University. An application for such credit will be considered only at the time of admission.
- 4. **Time Limit.** Please refer to the Academic Regulation page for further details regarding the Time Limit requirements.
- Courses. Students must complete a total of 20 credits of course work. Three
  core courses (INSE 6210, INSE 6220, INSE 6230) from Topic Area E68. A
  minimum of one 4-credit course must be chosen from the program elective
  courses in Topic Areas E66, E67, E68, E69 and E70. A maximum of

# **Requirements for the Degree**

The requirements described here are in addition to the general degree requirements for the Master's programs in the Gina Cody School of Engineering and Computer Science.

In order to graduate, students must have a CGPA of at least 2.70.

- Program of Study. The student will follow the proposed course sequence. In addition, students have to consult with their supervisor for selecting a research topic. Students can enter this program as Co-op students. See item 6. Thesis
- Credits. A fully qualified candidate is required to successfully complete a minimum of 45 credits. Additional credits may be required in some cases.
- 3. Transfer Credits. Students may be granted transfer academic credits for, in general, not more than eight credits taken in approved graduate studies prior to their entry into this program. A course submitted for transfer credit must be appropriate to the student's program of study at Concordia University. An application for such credit will be considered only at the time of admission.
- 4. **Time Limit.** Please refer to the Academic Regulation page for further details regarding the Time Limit requirements.
- Courses. Students must complete a total of 16 credits of course work as follows:

- one 4-credit elective course at the 6000 or 7000 level may be chosen from other Topic Areas in the Engineering Courses section, subject to the approval of the supervisor(s) and the Graduate Program Director.
- 6. Thesis. Students must complete a 25-credit thesis as part of their degree requirements. The thesis must represent the results of the student's independent work after admission to the program. The proposed topic for the thesis, together with a brief statement outlining the proposed method of treatment, and the arrangement made for faculty supervision, must be approved by the GCS Graduate Studies Committee. For purposes of registration, this work will be designated as INSE 8901. The thesis will be evaluated by the student's supervisor(s), and at least two examiners appointed by the GCS Graduate Studies Committee, one of whom shall be external to the student's department.

Students have the option to do the thesis work within the industrial milieu through the Institute for Co-operative Education. The suggested schedule of the program is as follows: Fall and Winter terms will be dedicated to course work, followed by two or three terms for research and development in industry, culminating in one or two terms in the Institute for the writing and the defence of the thesis. Each student in this case will have a supervisor from the Institute and a mentor from industry. The intellectual property will be managed according to the University policy.

- Twelve credits of core courses (INSE 6210, INSE 6220, INSE 6230);
- The remaining credits can be chosen from courses approved by the student's supervisor(s), and either the Graduate Program Director or the Director of the Institute.

6. **Thesis.** Students must complete a <u>29</u>-credit thesis as part of their degree requirements.

Students have the option to do the thesis work within the industrial milieu through the Institute for Co-operative Education. The suggested schedule of the program is as follows: Fall and Winter terms will be dedicated to course work, followed by two or three terms for research and development in industry, culminating in one or two terms in the Institute for the writing and the defence of the thesis. Each student in this case will have a supervisor from the Institute and a mentor from industry. The intellectual property will be managed according to the University policy.

#### Rationale:

The objective of these changes is to revise the breakdown of the 45 credits of course work for the completion of the MASc program in Quality Systems Engineering. These changes are in line with other Master's programs offered by the Gina Cody School of Engineering and Computer Science.

In all other Master's programs offered by GCS, students must complete a 29-credit thesis as part of their degree requirements. So, to be in line with these GCS programs and to speed-up time to completion, CIISE students must also complete a 29-credit thesis by focusing more on their research. These changes were made at the request of Master's thesis students and their supervisors. Students, in particular, strongly believe that they are at a disadvantage compared to their peers in the other academic units, as the thesis-work is the same but the course-work is not.

Resource Implications:

None.

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: CIISE-65 VERSION: 5

**PROGRAM CHANGE:** MEng QSE Degree Requirements

**Proposed** [ ] Undergraduate or [X] Graduate Curriculum Changes

Calendar for academic year: 2020/2021 Implementation Month/Year: January 2020

**Faculty/School:** Gina Cody School of Engineering and Computer Science **Department:** Concordia Institute for Information Systems Engr.

**Program:** Quality Systems Engineering

Degree: MEng Calendar Section/Graduate Page Number: 343-344

Type of Change:

[X] Editorial [X] Requirements [] Regulations [] Program Deletion [] New Program

Present Text (from 2019/2020) calendar

## **Proposed Text**

# Requirements for the Degree

The requirements described here are in addition to the general degree requirements for the Master's programs in the Gina Cody School of Engineering and Computer Science.

In order to graduate, students must have a CGPA of at least 2.70.

- 1. **Credits.** A fully qualified candidate is required to successfully complete a minimum of 45 credits. Additional credits may be required in some cases.
- 2. Transfer Credits. Students may be granted transfer academic credits for, in general, not more than eight credits taken in approved graduate studies prior to their entry into this program. A course submitted for transfer credit must be appropriate to the student's program of study at Concordia University. An application for such credit will be considered only at the time of admission.
- 3. **Time Limit.** Please refer to the Academic Regulation page for further details regarding the Time Limit requirements.
- 4. **Courses.** Students must complete a total of 45 credits of course work at the 6000 or 7000 level.

The breakdown of the 45 credits is as follows:

- Twelve credits of core courses (INSE 6210, INSE 6220, INSE 6230) from Topic Area E68.
- b. A minimum of twenty-four credits of program elective INSE

# **Requirements for the Degree**

The requirements described here are in addition to the general degree requirements for the Master's programs in the Gina Cody School of Engineering and Computer Science.

In order to graduate, students must have a CGPA of at least 2.70.

- Credits. A fully qualified candidate is required to successfully complete a minimum of 45 credits. Additional credits may be required in some cases.
- 2. Transfer Credits. Students may be granted transfer academic credits for, in general, not more than eight credits taken in approved graduate studies prior to their entry into this program. A course submitted for transfer credit must be appropriate to the student's program of study at Concordia University. An application for such credit will be considered only at the time of admission.
- 3. **Time Limit.** Please refer to the Academic Regulation page for further details regarding the Time Limit requirements.
- 4. **Courses.** Students must complete a total of 45 credits of course work at the 6000 or 7000 level.

The breakdown of the 45 credits is as follows:

- Twelve credits of core courses (INSE 6210, INSE 6220, INSE 6230).
- A minimum of 16 credits of courses offered by CIISE from topic areas

- courses from Topic Areas E66, E67, E68, E69, E70 and E02.
- c. The remaining credits may be obtained by selecting one of the following options:
  - -A maximum of two 4-credit courses chosen from departments within the Gina Cody School of Engineering and Computer Science, together with INSE 6240 (1-credit course) or INSE 6961 (1-credit seminar).
  - ENGR 6991 (5-credit project course) and a maximumm of one 4-credit course chosen from departments within the Gina Cody School
  - -ENCS 6931 (9-credit Industrial Stage and Training course).

of Engineering and Computer Science

- E66. E68. E70 and E02.
- The remaining credits chosen from other courses offered by the Gina Cody School of Engineering and Computer Science. Students shall only take one of the following courses: INSE 6961 (1-credit seminar). ENGR 6991 (5-credit project course) or ENCS 6931 (9-credit Industrial Stage and Training course).

#### Rationale:

The objective of these changes is to revise the breakdown of the 45 credits of course work for the completion of the MEng program in Quality Systems Engineering. Due to the multidisciplinary nature of the program, students may take elective courses from various topic areas of the Engineering Courses Section to meet the requirements.

Resource Implications: 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:** November 12, 2019

SUBJECT: GRADUATE CURRICULUM CHANGES (ELEC-107)

(CALENDAR - 2019/2020)

DEPARTMENT OF ELECTRICAL AND COMPUTER 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 Electrical and Computer Engineering is proposing a new course, ENGR 6121.

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

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:** Kristy Clarke

Academic Programs and Development

School of Graduate Studies

**DATE:** October 4, 2019

RE: Graduate Curriculum Proposal for the 2020-21 Academic Year (ELEC-107)

Gina Cody Council of Engineering and Computer Science

At its meeting on October 4th, 2019, the Council of the Gina Cody School of Engineering and Computer Science reviewed and approved, as presented, the creation of a new course **ENGR 6121 Control of Multi-Agent Systems** proposed by the Department of Electrical and Computer Engineering (ECE).

Details of the new course proposal are indicated and explained in the internal memorandums and in the ELEC-107 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

Chair of the Faculty Council

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:** September 5 2019

RE: Graduate Curriculum Proposal for the 2020-21Academic Year (ELEC-107)

Department of Electrical and Computer Engineering (ECE)

At its meeting on March 26, 2019, the Engineering and Computer Science Graduate Studies Committee (ECSGSC) reviewed and approved, with minor modifications, the creation of a new course entitled *ENGR 6121 Control of Multi-Agent Systems* proposed by the ECE Department. The course has been successfully offered as a slot course with increasing enrolment and the Department now wants to convert it to a permanent course next year. The course will provide students with the necessary background and knowledge in the area of multi-agent systems.

Details of the graduate curriculum item are indicated and explained in the Department's internal memorandum and in the ELEC-107 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.



#### GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

Department of Electrical and Computer Engineering

#### INTERNAL MEMORANDUM

**DATE:** March 25, 2019

TO: Dr. M. Debbabi, Associate Dean, Research and Graduate Studies

Faculty of Engineering and Computer Science

**FROM:** Dr. W.E. Lynch, Chair

Department of Electrical and Computer Engineering

SUBJECT: Graduate Curriculum – May 2020

Please find enclosed Dossier #107 submitted by the Department of Electrical and Computer Engineering.

#### **ENGR 6121 Control of Multi-Agent Systems**

This was slot course in multi-agent systems area. The goal of this course is to provide a necessary formal training to students interested in research and development of multi-agent systems and related areas, MATLAB or other simulation environment will be used in the project. Modern controls research is moving from control of a single agent to control of multiple agents, and from the centralized to the distributed control. This course was offered as a slot course in Winter 2018 with 23 graduate students enrolled and is offered in Winter 2019 with 30 students enrolled. This course would be under topic areas E03 - Systems and Control

This course has been approved at the Department Curriculum Committee meeting held on December 12, 2018 and February 4, 2019 and at the Department Council meeting held on January 11, 2019.

I would be grateful if you could put this on the agenda of the next ENCS Graduate Studies Committee

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: ELEC-107 VERSION: 2

#### **PROGRAM CHANGE:** Topic Areas

**Proposed** [ ] Undergraduate or [X] Graduate Curriculum Changes

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

**Faculty/School:** Gina Cody School of Engineering and Computer Science **Department:** Department of Electrical and Computer Engineering

**Program:** Electrical & Computer Engineering

**Degree:** MEng, MASc, PhD **Calendar Section/Graduate Page Number:** Summer 2019

#### **Type of Change:**

[] Editorial	[X] Requirements	[] Regulations	[ ] Program Deletion [ ] New Program
Present Text (f	om 20xx/20xx) calendar		Proposed Text
List of Courses	by Topic Areas		List of Courses by Topic Areas
E03 - SYSTEMS	AND CONTROL		E03 - SYSTEMS AND CONTROL
ELEC 6061 Rea ELEC 6091 Disc ENGR 6071 Sw ENGR 6131 Lin ENGR 6141 Non ENGR 6412 Aut ENGR 7121 And ENGR 7131 Add ENGR 7181 Dig	ge-scale Control Systems I-time Computer Control Systems crete Event Systems tched and Hybrid Control System ear Systems (*) nlinear Systems onomy for Mobile Robots (*) nlysis and Design of Linear Multiv nptive Control ital Control of Dynamic Systems namics and Control of Nonholono	ns variable Systems	ELEC 6041 Large-scale Control Systems ELEC 6061 Real-time Computer Control Systems ELEC 6091 Discrete Event Systems ENGR 6071 Switched and Hybrid Control Systems ENGR 6121 Control of Multi-Agent Systems ENGR 6131 Linear Systems (*) ENGR 6141 Nonlinear Systems ENGR 6412 Autonomy for Mobile Robots (*) ENGR 7121 Analysis and Design of Linear Multivariable Systems ENGR 7131 Adaptive Control ENGR 7181 Digital Control of Dynamic Systems MECH 6681 Dynamics and Control of Nonholonomic Systems
Rationale: The topic areas	reflect the addition of the new cours	e.	, and the second
Resource Implic None	ations:		

#### **COURSE CHANGE:** ENGR 6121 New Course Number: **Proposed** [ ] Undergraduate or [X] Graduate Curriculum Changes Calendar for academic year: 2020/2021 Implementation Month/Year: May 2020 **Faculty/School:** Gina Cody School of Engineering and Computer Science **Department:** Department of Electrical and Computer Engineering Electrical and Computer Engineering **Program:** Degree: MEng, MASc, PhD Calendar Section/Graduate Page Number: Summer 2019 Type of Change: [ ] Course Number [] Credit Value [ ] Course Title [ ] Prerequisite [ ] Course Description [ ] Editorial [X] New Course [ ] Course Deletion [] Other - Specify: Present Text (from 20xx/20xx) calendar **Proposed Text** ENGR 6121 Control of Multi-Agent Systems (4 credits) Prerequisite: ENGR 6131 This course reviews stability and systems theory. It covers basics of nonlinear systems, Lyapunov theory, and graph theory related to multi-agents. The course focuses on spectral graph theory, Voronoi diagrams and Delaunay triangulations, cooperative control, formation control, coverage control, and distributed estimation over multi-agents. Additional topics include cooperative localization, leader-follower networks, and application to sensor networks. A project is required. Rationale: The topic of multi-agent systems is important for modern control systems, networked control, control of UAV's and ground based mobile robots. Modern controls research is moving from control of a single agent to control of mutiple agents, and from the centralized to the distributed control. This course will provide a necessary formal training to students interested in research and development of multi-agent systems and related areas, MATLAB or other simulation environment will be used in the project. This course was offered as a slot course in Winter 2018 with 23 graduate students enrolled and is offered in Winter 2019 with 30 students enrolled. This course would be under topic areas E03 - Systems and Control. Resource Implications: The course will be part of a faculty member's teaching load and drawn from our current course allotment. Other Programs within which course is listed: None

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: ELEC-107 VERSION: 2



#### 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:** November 12, 2019

SUBJECT: GRADUATE CURRICULUM CHANGES (ELEC-108)

(CALENDAR - 2019/2020)

DEPARTMENT OF ELECTRICAL AND COMPUTER 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 Electrical and Computer Engineering is proposing changes to two course descriptions, ELEC 6961 and ELEC 6412.

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

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:** Kristy Clarke

Academic Programs and Development

School of Graduate Studies

**DATE:** October 4, 2019

RE: Graduate Curriculum Proposal for the 2020-21 Academic Year (ELEC-108)

Gina Cody Council of Engineering and Computer Science

At its meeting on October 4th, 2019, the Council of the Gina Cody School of Engineering and Computer Science reviewed and approved, as presented, the proposed changes to the following graduate seminar and course from the ECE Department:

- 1. ELEC 6961 Graduate Seminar in Electrical and Computer Engineering.
- 2. ENGR 6412 Autonomy for Mobile Robots

Details of the curriculum items are indicated and explained in the internal memorandums and in the ELEC-108 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

Chair of the Faculty Council

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: September 23, 2019

RE: Graduate Curriculum Proposal for the 2020-21 Academic Year (ELEC-108)

Department of Electrical and Computer Engineering (ECE)

At its meeting on September 17, 2019, the Engineering and Computer Science Graduate Studies Committee (ECSGSC) reviewed and approved, with minor modifications, the changes to the course descriptions of:

- 1. ELEC 6961 Graduate Seminar in Electrical and Computer Engineering.
- 2. ENGR 6412 Autonomy for Mobile Robots.

Details of the graduate curriculum items are indicated and explained in the Department's internal memorandum and in the ELEC-108 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.



#### GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

Department of Electrical and Computer Engineering

#### INTERNAL MEMORANDUM

**DATE:** August 27, 2019

TO: Dr. M. Debbabi, Associate Dean, Research and Graduate Studies

Faculty of Engineering and Computer Science

**FROM:** Dr. Yousef Shayan, Chair

Department of Electrical and Computer Engineering

SUBJECT: Graduate Curriculum – May 2020

Please find enclosed Dossier #108 submitted by the Department of Electrical and Computer Engineering.

#### **ENGR 6412: Autonomy for Mobile Robots**

The change in the description reflects the new equipment that was purchased to add a hands-on component to the course. The course content has changed to improve student's learning. The new equipment is 5 Turtlebot mobile robots equipped with sensors. The hands-on learning opportunity is that for the assignment the students can implement the algorithms we learn in class themselves on the robot, instead of working with a pre-existing dataset. In addition to witnessing the physical manifestation of their programs first-hand in real-time, they will also be directly exposed to the uncertainties that can arise when dealing with real sensor data.

#### **ELEC 6961 Graduate Seminar in Electrical and Computer Engineering**

The course content has been changed to improve students' learning, it is suggested that students give a presentation about a technical topic rather than attending other presentations and writing a report. The new approach will improve their abilities for oral presentation.

This course has been approved at the Department Curriculum Committee meeting held September 7, 2018 and January 8, 2019 and at the Department Council meeting held January 11, 2019 and May 24, 2019.

I would be grateful if you could put this on the agenda of the next ENCS Graduate Studies Committee

#### **COURSE CHANGE:** ELEC 6961 New Course Number: **Proposed** [ ] Undergraduate or [X] Graduate Curriculum Changes Calendar for academic year: 2020/2021 Implementation Month/Year: May 2020 **Faculty/School:** Gina Cody School of Engineering and Computer Science Department of Electrical and Computer Engineering **Department:** Electrical and Computer Engineering **Program:** Degree: M.Eng, M.A.Sc., Ph.D. Calendar Section/Graduate Page Number: Fall 2019 Type of Change: [ ] Course Number [ ] Course Title [ ] Credit Value [ ] Prerequisite [X] Course Description [ ] Editorial [] New Course [ ] Course Deletion Other - Specify: Present Text (from 2019/2020) calendar **Proposed Text** ELEC 6961 Graduate Seminar in Electrical and Computer Engineering (1 credit) ELEC 6961 Graduate Seminar in Electrical and Computer Engineering (1 credit) Students identify a technical topic in the field of Electrical and Computer Engineering and Students must attend a set of seminars identified by the Department and submit a after getting approval from the instructor of the course, prepare a presentation about the comprehensive report on topics presented in one of these seminars. The report, including topic. The topic is based on one or a small number of articles in reputed journals in the an abstract, must be suitably documented and illustrated, should be at least 1000 words in field. Students present their technical topic in the class and answer oral questions from 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 Form and Style: Thesis, Reports, other students and the instructor. Students are expected to attend a significant number of Term Papers, fourth edition by Campbell and Ballou, published by Houghton Mifflin. presentations by other students and get involved by asking questions. Seminar: one hour Seminar: two hours per week. and a half per week. Rationale: To improve student learning, it is suggested that students give a presentation about a technical topic rather than attending other presentations and writing a report. The new approach will improve their abilities for oral presentation. Resource Implications: The course will be part of a faculty member's teaching load and drawn from our current course allotment. Other Programs within which course is listed: None

PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: ELEC-108 VERSION: 5

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: ELEC-108 VERSION: 5 **COURSE CHANGE:** ENGR 6412 New Course Number: **Proposed** [ ] Undergraduate or [X] Graduate Curriculum Changes Calendar for academic year: 2020/2021 Implementation Month/Year: May 2020 **Faculty/School:** Gina Cody School of Engineering and Computer Science Department of Electrical and Computer Engineering **Department: Electrical and Computer Engineering Program:** Degree: MEng., M.A.Sc., Ph.D. Calendar Section/Graduate Page Number: xx Type of Change: [ ] Course Number [ ] Course Title [ ] Credit Value [ ] Prerequisite [X] Course Description [ ] Editorial [] New Course [ ] Course Deletion Other - Specify: Present Text (from 2019/2020) calendar **Proposed Text** ENGR 6412 Autonomy for Mobile Robots (\*) (4 credits) ENGR 6412 Autonomy for Mobile Robots (\*) (4 credits) Topics include application of autonomous wheeled robots: autonomous cars, indoor Students learn to estimate a mobile robot's state (i.e. its pose; position and orientation) robots, (off-road) unmanned ground vehicles; robot motion models, robot odometry; robot based on integrating its own odometry with sensor information (beam models of range finders, feature-based measurement models). Sensor information is used to discern robot sensor models: beam models of range finders, feature-based measurement models; pose with respect to an existing map, or used to create a new map in unknown occupancy grid mapping; the Bayes Filter; the Kalman filter; the particle filter; robot localization: particle filter localization. Kalman filter localization: introduction to environments. Simultaneous localization and mapping (SLAM) is introduced. Algorithms are implemented on a real mobile robot. A project is required. simultaneous localization and mapping (SLAM). A project is required. Note: Students who have received credit for ELEC 691 MM (Autonomy for Mobile Robots) Note: Students who have received credit for ELEC 691 MM (Autonomy for Mobile Robots) may not take this course for credit. may not take this course for credit. Rationale: The changes in the course description reflect the current content of the course and intent to advance hands-on training.

**Resource Implications:** 

Other Programs within which course is listed:

None

None



#### INTERNAL MEMORANDUM

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

Office of the Provost and Vice-President, Academic Affairs

Chair, Academic Programs Committee

**FROM:** Dr André Roy, Dean, Faculty of Arts and Science

Chair, Arts and Science Faculty Council

**DATE:** November 15, 2019

**SUBJECT:** Undergraduate Calendar Program Proposal

Department of Journalism

JOUR-23

New program: Minor in Science Journalism; new course JOUR 340;

prerequisite changes to JOUR 206 and 207

The following proposal was reviewed and approved at the Arts and Science Faculty Council meeting of November 15, 2019. We request that this proposal be considered at the next meeting of APC.

The **Department of Journalism** is proposing a new Minor in Science Journalism aimed to attract science students and to communicate science more effectively to society. Additional resources include one new section for the new course JOUR 340 *Communicating Science with Society*. Also, an additional section for JOUR 206 *Introduction to Reporting* and JOUR 207 *Introduction to Multimedia* is requested to accommodate students in the new minor as these courses are typically full and cannot be taught to groups larger than 25.

Thank you for your consideration in reviewing the attached proposal.

Reference documents: FCC 2019.2/JOUR-23 ASFC 2019-7M-C

#### **Department of Journalism**

#### JOUR-23

Memo and program proposal from Chair

**Department Objectives** 

**Admission and Graduation Requirements** 

**New program** 

Minor in Science Journalism

#### **Prequisite change**

JOUR 206 Introduction to Reporting

JOUR 207 Introduction to Multimedia

JOUR 450 Journalism Practicum

JOUR 451 Independent Study

**New course** 

JOUR 340 Communicating Science with Society



#### **FACULTY OF ARTS AND SCIENCE**

Department of Journalism

#### **MEMORANDUM**

To: Richard Courtemanche, Associate Dean, Academic Programs, Arts and Sciences

From: David Secko, Chair, Department of Journalism

Re: Proposal – Minor in Science Journalism

Date: 19 March 2017; revised 07 November 2017; revised 10 September 2019

Dear Dr. Courtemanche and Colleagues,

The Department of Journalism is very pleased to propose the creation of a **Minor in Science Journalism**. The goal of this minor is to significantly enhance the communication skills of undergraduate science students at the university. We have been building capacity in science journalism since 2008, accumulating specialized faculty, successful courses, strong internship connections, research projects, and the reputation to make this minor a success. The minor was approved by the department's faculty on August 29, 2019.

The minor will be unique in Canada and provide an innovative and creative enhancement to a B.Sc. degree at Concordia, potentially expanding to other degrees, departments and faculties in the future and upon the success of its initial focus on science students. The minor will also give FAS science departments a competitive recruitment edge. We see the proposal as a strong step towards making Concordia the go-to destination for science journalism in Canada.

Dr. David Secko Chair, Journalism

#### **Proposal**

#### Minor in Science Journalism

Department of Journalism, Faculty of Arts and Science, Concordia University

#### 1. Program Description

As part of the ongoing process of curriculum innovation for next-generation learning, we are proposing the creation of a *Minor in Science Journalism* within the Department of Journalism. The goal of this minor is to <u>significantly enhance</u> the communication skills of undergraduate science students at the university.

This proposal emerged from meetings between of several Science Departments and the Department of Journalism, beginning in the summer of 2016. These meetings expressed the strategic importance of this initiative and the strong belief that the new minor will be of interest to many of our current and future students. Letters of support for the program from science departments are appended to this proposal.

The proposal has been revised to conform to the new approval system for minors, feedback from the Faculty Curriculum Committee (FCC) and the Vice-Provost of Innovation in Teaching and Learning (VPITL), as well as recent full-time hiring and strategic experiential learning projects in science journalism in the Department of Journalism. The Department of Journalism has been developing specific capacity in this area since 2008 and is ready to take important next steps with this exciting new program.

Present at the strategic meetings (Summer 2016): Alexandre Champagne (Chair, Physics); Richard Courtemanche (Chair, Exercise Science); Christine DeWolf (Chair, Chemistry and Biochemistry); Dylan Fraser (Biology); Brian Gabrial (Journalism); Patrick J. Gulick (Chair, Biology); Paul Joyce (Associate Dean, Academic Programs, Faculty of Arts and Science); Virginia Penhune (Chair, Psychology); David Secko (Chair, Journalism)

#### 2. General Curriculum Description and Pedagogical Goals

Undergraduate students and their professors are increasingly aware of the need for science to be effectively communicated to society. Historically, the communication of science has been viewed as a key conduit between scientific knowledge and public understanding of science. In recent decades, it has been increasingly argued that science journalism is key to the impact, transparency and visibility of scientific research. Clear professional benefits in terms of greater citation rates, increased academic productivity, more journalist/public interactions, and improved career enjoyment have also been documented. While all important, perhaps the most striking reason to improve the communication of science is the emergence of an online media ecosystem, which not only allows easy and direct communication with audiences, but also increasing concerns about misinformation and biohype.

To academically excel, undergraduate science students need strong communication skills. Those graduating with a B.Sc. find themselves in a competitive job market where unique skills can help differentiate them when applying for graduate school or employment. The Departments of Biology, Chemistry and Biochemistry, Health, Kinesiology, and Applied Physiology, Physics, and Psychology have all identified this context as a priority in need of support. This desire extends beyond the goal of *training students to better communicate with broad audiences* to the important need for journalistic skills to be *actively applied by students to their scientific studies in each department*.

Current undergraduate students require better writing skills, the improved ability to create scientific visualizations and multi-media content, more sophisticated understanding of how evolving journalistic practices (including social media use) are impacting their fields, and professional experience that will allow alternative careers to be explored and chosen. (With the success of the minor, this strategic focus on science students could be expanded to other disciplines.)

Responding to these realities, Concordia's *Minor in Science Journalism* would support the **pedagogical goals** of improving the education of undergraduate students, while building a student body interested in robust science journalism. The program would:

- (1) teach professional science journalism production skills;
- (2) promote the acquistion of knowledge needed to theoretically and critically assess the role of communication at science/society interfaces; and
- (3) provide industry interactions through a practicum (a test of what it is like to be a professional science journalist) or professional developent via applied research-creation projects (the production and display of final works).

The *Minor in Science Journalism* thereby combines an experiential and entrepreneurial curriculum where practical skills are combined with theory, and then tested outside the classroom to challenge students to grow as individuals. **Core knowledge acquisition and skills** in the minor include:

- Fundamentals in journalistic writing and multi-media production;
- Theoretical and critical understanding of science and society issues with a focus on communications, media and journalism (*i.e.*, briefly, defined as knowledge and analysis of the path of scientific knowledge from lab to public arena, as well as theories for how science can/should be communicated with society);
- Exposure to diverse communication issues through Faculty-wide electives (*i.e.*, elective classes will help address what practises, norms and values define concepts of science and its various interactions with society);
- Professional journalism experience or an applied research-creation project;
- A capstone course in advanced science journalism production, with the aim to produce

publishable, professional quality science journalism, in a variety of digital formats, upon completion of the minor.

To support these pedagogical goals and core skills, the program would require students to complete: 12 core credits in science journalism fundamentals and 12 elective credits that include a choice to complete a practicum or applied research-creation project (see Appendix 1 for program content and course descriptions).

#### 3. Target Audience of the Program, Expected Enrollment and Unit Alignment

This proposal addresses an existing demand expressed by the Departments of Biology, Chemistry and Biochemistry, Health, Kinesiology, and Applied Physiology, Physics, and Psychology. These departments serve hundreds of undergraduate science students, and we will advertise the minor to this student pool each year. We also expect students in other science and social science departments to be attracted to the unique skills provided in the minor. The minor will be unique in Canada and provide an innovative and creative enhancement – a value added component to their major or **a form of B.Sc.** + **degree** – to those in the program, as well as give FAS science departments a competitive recruitment edge.

The proposal also addresses a strategic priority for the Department of Journalism, which has been at the forefront of training students in science journalism since 2008, when the *Concordia Science Journalism Project*<sup>1</sup> was created to develop a research and teaching platform on science journalism. The readiness of the department to launch a *Minor in Science Journalism* is also based on: (a) the existing course JOUR 402 (Specialist Reporting: Science), which has run since 2007 with very positive reviews; (b) the development of a hugely successful and intensive science journalism summer school<sup>2</sup> (Projected Futures) which has run for three summers (2017, 2018, 2019) and is overflowing with external applications (evidence of student interest in this area); (c) being host to an emergent nation-wide science journalism educator (SJE) network<sup>2</sup> to focus on next generation teaching in the area<sup>4</sup>, (d) hosting a Journalist-in-Residence and Michener-Deacon Fellow (Patti Sonntag) whose experiential collaborative teaching focuses on science and environmental issues<sup>5</sup>, (e) recent hiring of two assistant professors, Elyse Amend, with a focus on data, science journalism and food studies, and Amelie Daoust-Boisvert, with a focus on health journalism, and (f) piloting an international MOOC on science journalism<sup>6</sup> for junior professionals with an international partner (WFSJ).

<sup>&</sup>lt;sup>1</sup> http://www.csjp.ca

<sup>&</sup>lt;sup>2</sup> https://www.concordia.ca/artsci/journalism/programs/journalism-studies.html

<sup>&</sup>lt;sup>3</sup> http://www.concordia.ca/cunews/main/stories/2017/07/20/exploring-next-generation-science-reporting-journalism-conference.html?c=artsci/journalism/news/archive

<sup>&</sup>lt;sup>4</sup> http://theconcordian.com/2017/08/the-projected-future-of-science-journalism/

<sup>&</sup>lt;sup>5</sup> http://www.concordia.ca/cunews/main/stories/2017/10/02/patti-sonntag-concordia-nationwide-student-powered-investigative-journalism.html?c=artsci/journalism/news/archive

<sup>&</sup>lt;sup>6</sup> http://wfsj.org/v2/2017/10/12/register-for-the-mooc-on-science-controversies-the-case-of-vaccines/

In addition, the minor will have a recognized science journalism expert/champion in the department (Dr. David Secko), three additional full-time faculty who can teach in the program (Dr. Andrea Hunter, Dr. Elyse Amend and Prof. Daoust-Boisvert), a robust network of potential part-time teachers (e.g., Andre Picard [Globe and Mail], Jay Ingram [Beakerhead], Ivan Semeniuk [Globe and Mail], Vik Adhopia [CBC] and Kate Lunau [Vice] have taught in the department's summer school on science journalism), and a **growing international reputation as a go-to location for training in the area**. For example, science students from Dartmouth, Harvard, University of California (Santa Cruz), Utrecht University, University of Toronto, McMaster University, Simon Fraser University, among others (57 students in total), have sought out our international summer school in science journalism over the past three years.

The strong involvement of science students in all these items suggests that the time is ripe to coalesce these activities around a *Minor in Science Journalism*. Importantly, there are only a few science journalism courses in the country (i.e., notably at Carleton University and Université Laval). In Quebec, only the Université Laval offers a graduate micro-certificate (3 courses) in science communication. So far, no Canadian University has developed a program as robust in experiential and entrepreneurial learning as the one we are proposing. Furthermore, the minor represents an opportunity to open journalism classes (traditionally closed and available only to journalism majors) to new non-journalism students at Concordia.

We expect an initial enrolment of 20 new students per year for the first two years, increasing to 25 students in years three to five. This corresponds to an enrolment of 115 students in this program after five years. While this enrolment is capped due to the capacity journalism production classes can support, we are also proposing **the creation of a new open discipline blended/experimental course** (JOUR 340 Communicating Science with Society) that will seek to innovate on capacity issues and eventually enrol large class sizes (100+). This course will allow a larger percentage of undergrads access to some training in journalism and is proposed as the *one course in science journalism that every student should take*. JOUR 340 will be a significant innovation point in the minor, and as mentioned above, we have already launched a pilot MOOC<sup>7</sup> with the World Federation of Science Journalists and KnowledgeOne/eConcordia with 190+ junior professionals registered.

#### 4. Benefits to the University and Alignment with the Strategic Directions:

The *Minor in Science Journalism* presents significant opportunities for Concordia University. While a very limited set of science journalism courses exist in the country, a robust experiential/entrepreneurial program will be unique to Quebec and in Canada.

This uniqueness will address multiple strategic directions of the University:

- **Teach for tomorrow:** The minor will provide both foundations of evidence-based science

<sup>&</sup>lt;sup>7</sup> http://wfsj.org/v2/2017/10/12/register-for-the-mooc-on-science-controversies-the-case-of-vaccines/

- journalism as well as promote experimentation to create new forms of scientific storytelling through a focus on digital innovation and future practice in science journalism.
- Get your hands dirty: The minor will provide experiential learning (hands on learning in the community, internships and capstone projects) and will get science students communicating their work and knowledge to diverse audiences, as well as have students report on the research ongoing in Concordia's labs. The <u>best work in the minor will be</u> <u>documented on a vibrant website</u>, enhancing the univeristy's research profile.
- **Mix it up:** The minor will support internal collaboration by mixing science students with journalism students, as well as journalism and science professors.
- **Embrace the City:** The minor will get science students out into the city and mobilize them around important science and society issues.

In short, this minor, with both fundamental skills courses and experiential/entrepreneurial learning, will allow students to build science journalism literacy into their degree program in a way not offered at any other university in Canada. Furthermore, the minor will be an excellent complement to the department's connection to the Science College, which allows journalism students to gain a solid foundation in science as well.

#### 5. Consultation

This proposal addresses an existing demand expressed by the Departments of Biology, Chemistry and Biochemistry, Health, Kinesiology, and Applied Physiology, Physics, and Psychology. It was developed in consultation with these departments (see the attached letters of support). In addition, consultation on elective choices was done with the Departments of Communication Studies and English, and the Loyola College for Diversity and Sustainability. Everyone was very supportive.

#### 6. Resource needs of the Program

There are minimal resource implications associated with this minor, since most of these classes are extant and offered by full-time professors. The department is well placed regarding internships due to having an internship coordinator and experience running dozens of internships for credit each year. We anticipate a small number of independent studies at the start, and supervisor burden can be lessened through independent study classes being co-taught with professors in science departments.

Three resource implications are however unavoidable, and the program could not proceed without their approval:

1. JOUR 206 and JOUR 207 are core 200-level courses in the Major in Journalism program and are filled to capacity each year with incoming journalism students. These are fundamental skills courses that cannot be taught to groups larger than 25. For the minor

- to include JOUR 206 and JOUR 207 one additional section for each course (two in total) will be needed.
- 2. The bridging of the fundamental and advanced levels of study with an intermediate stage will require the creation of a new 300-level course (one section) in *Communicating Science with Society*. This course, however, will be a course open to the University and enroll large class sizes.
- 3. Advising for students taking the minor: the Department of Journalism would assume responsibility for student advising.

#### 7. Departmental approval

The Minor in Science Journalism was unanimously approved by the Department's faculty on August 29, 2019.

#### 8. Summary

The leading position of Concordia in science journalism studies will not last forever; this proposal seeks to solidify FAS and Concordia as the go-to place for science majors to significantly enhance their communication skills while gaining an excellent B.Sc. education. It will create new opportunities to add value to a B.Sc. degree in a competitive job market in an age of increasing concern over the misuse of scientific information and the recognized importance of effective communication.

#### Appendix 1

### **Curriculum Program Proposal: Minor in Science Journalism Faculty of Arts and Science, Concordia University (24 Credits)**

The goal of this minor would be to significantly enhance the communication skills of undergraduate science students at the university.

#### **Course Requirements: Minor in Science Journalism**

#### **Core Courses (12 Credits)**

JOUR 206	Introduction to Reporting (3 credits)
JOUR 207	Introduction to Multimedia (3 credits)
<b>JOUR 340</b>	Communicating Science with Society (3 credits) *proposed new blended course
<b>JOUR 402</b>	Specialist Reporting (3 credits) *focused on science and health

#### **Electives (12 Credits)**

12 credits chosen from the elective list. With permission of the program director, up to 6 credits in alternative courses, which meet the goals of the program, can be taken outside the department.

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#### **Core Course List**

#### JOUR 206 Introduction to Reporting (3 credits)

Prerequisite: Enrolment in the Major in Journalism <u>or the Minor in Science Journalism</u>. This workshop course lays the foundation for all subsequent reporting and writing courses. Students learn how to do library and online research, structure and conduct interviews, and write news and feature stories for print and digital outlets. Students learn Canadian Press style.

#### JOUR 207 Introduction to Multimedia (3 credits)

Prerequisite: Enrolment in the Major in Journalism <u>or the Minor in Science Journalism</u>. This workshop course introduces students to the use of technology across all digital news platforms, including audio and visual equipment and software. It focuses on the development of the necessary professional, technical and aesthetic skills to produce editorially sound audio and visual stories. Students are expected to master the use of cameras, recording equipment, and editing software as well as basic digital tools for journalists.

#### JOUR 340 Communicating Science with Society (3 credits)

This is an experiential course that blends journalism theory and practice to examine issues and practices related to the communication of science with society. Students learn to both produce and critique science journalism in a variety of multimedia formats.

#### JOUR 402 Specialist Reporting\*

This workshop course focuses on a specified topic area and introduces students to the particular "beat" reporting and analytical demands of the topic and the institutions that form the basis of this reporting specialty. (\*for this minor, JOUR 402 focuses on science and health topics)

#### **Elective Course List**

#### JOUR 205 Principles of Journalistic Thought and Practice (3 credits)

This course provides a survey of the foundational ideas about journalism and its role in society, from the time of an emergent press to the present. It addresses received ideas about journalism's place in democratic society as well as current critical thought.

#### JOUR 208 Intermediate Reporting (3 credits)

Prerequisite: JOUR 206 and 207. This workshop course builds on reporting, writing and research fundamentals with increased emphasis on reporting stories in the community. Practical out-of-class assignments focus on the city of Montreal. Students are expected to report on public events, conduct interviews, and write news and feature stories for print and digital outlets.

#### JOUR 209 Intermediate Multimedia (3 credits)

Prerequisite: JOUR 206 and 207. This workshop course expands on technical and editorial fundamentals with increased emphasis on the use of digital news technology in journalistic storytelling. Students also learn the basics of web layout and design, CMS, and writing formats for these news platforms. Students strengthen their skills by producing multimedia stories using the city of Montreal as their focus.

#### JOUR 215 Contemporary News Media (3 credits)

This course introduces students to the increasingly complex structures of modern media, and considers them in the context of journalism ideals. It examines the organizations, practices and problems of news media, focusing on key functions in day-to-day activities. In any given year, it may explore in detail a particular development or problem in the news media.

#### JOUR 216 Law and Ethics in Journalism (3 credits)

Prerequisite: JOUR 206 and 207. This course looks at issues and practices in journalism within the contexts of law and ethics. It aims to provide students with an understanding of professional standards and legal norms, together with a strong foundation in ethical reasoning.

#### JOUR 298 Special Topics in Journalism (3 credits)

Specific topics for this course, and prerequisites relevant in each case, are stated in the Undergraduate Class Schedule.

#### JOUR 302 Reporting and Research Methods for Journalism (3 credits)

Prerequisite: JOUR 206, 207, 208 and 209. This course introduces students to research methods with a particular focus on primary sources, such as official documents, legal and financial records, access-to-information requests, electronic databases, as well as in-depth interviews. These methods are treated as both sources of story ideas and as essential elements of good reporting.

#### JOUR 325 Social Media and Mobile Reporting (3 credits)

Prerequisite: JOUR 206, 207, 208 and 209. This workshop course emphasizes the professional and ethical use of social media and mobile technology to report on current affairs topics. Students are expected to use all forms of social media to report on the community.

#### JOUR 450 Journalism Practicum

Prerequisite: 60 credits and enrolment in the Major in Journalism <u>or the Minor in Science</u>

<u>Journalism</u>. Students who have demonstrated ability, near the end of their program, undertake a practicum at a recognized media outlet, under the supervision of a senior journalist and with permission of the Department's undergraduate program director.

#### JOUR 451 Independent Study (3 credits)

Prerequisite: 60 credits and enrolment in the Major in Journalism <u>or the Minor in Science</u> <u>Journalism.</u> Students who have demonstrated ability may, near the end of their program, undertake an independent study on a topic not otherwise covered by the program, under the direction of one or more faculty members.

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#### **Elective courses outside the Department\***

\*electives not on the list can be taken with permission of the program director, if they meet the goals of the program.

#### COMS 360 Mass Media (3 credits)

The course examines the nature and forms of mass media, its social sources and uses, audiences, and effects. Issues such as media ownership and access, government and self-regulation, technological implications, ethics and accountability may be discussed.

#### COMS 361 Propaganda (3 credits)

Prerequisite: See N.B. number (1). This course offers a critical understanding of the concept of propaganda and analyzes its historical development and contemporary impact on people's lives. It also explores its various manifestations in society, politics, and culture and the methods of identifying its different forms.

#### ENGL 391 Studies in Literature and Science (3 credits)

This course compares the modes of description, investigation, and analysis in science and literature as reflections of the division of modern knowledge into the arts and sciences. How have scientific discoveries enriched or impoverished literature or critical thinking? How have literary texts represented science and the scientist? In what ways has scientific investigation been informed by literature? How does the comparison with science make it possible to explore and question the methodologies that have been developed from the study of literature? The course may focus on such topics as the development of the microscope, the telescope, evolutionary theory, and neuroscience.

#### LOYC 340 Culture and Communication (3 credits)

This course is an anthropological approach to variations in cultural experience as they relate to communication. Students explore modes of expression and communication, including literature and film, with a view to examining questions of interpretation, aesthetics, and ethical judgment. Personal expression and communication are also discussed. This course is intended to develop an awareness of the role of imagination and creativity in expression and interpretation, and sensitivity to the role of cultural and other differences in processes of communication.

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: JOUR-23 VERSION: 4

**PROGRAM CHANGE:** Department Objectives

**Proposed** [X] Undergraduate or [] Graduate Curriculum Changes

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

**Faculty/School:** Arts and Science **Department:** Journalism

**Program:** Major in Journalism, Minor in Science Journalism

Degree: BA Calendar Section/Graduate Page Number: 31.180

#### Type of Change:

[ ] Editorial [] Requirements [X] Regulations [ ] Program Deletion [] New Program **Proposed Text** 

#### Present Text (from 2019/2020) calendar

#### **Department Objectives**

The Journalism program is designed to produce intelligent, thoughtful, and versatile journalists and writers who engage citizens in a democratic society, helping them make informed decisions about their communities. Above all, journalism is a rigorous intellectual activity with professional standards for gathering, processing, and disseminating information. The Department of Journalism offers a professional education that combines writing and production workshops, requiring students to complete real-world assignments according to professional and ethical standards, with lectures and seminars that critically examine the social and political contexts in which journalism is produced.

#### **Department Objectives**

The Major in Journalism is designed to produce intelligent, thoughtful, and versatile journalists and writers who engage citizens in a democratic society, helping them make informed decisions about their communities. The Minor in Science Journalism has the same foundations and focuses on the communication of scientific topics. Above all, journalism is a rigorous intellectual activity with professional standards for gathering, processing, and disseminating information. The Department of Journalism offers a professional education that combines writing and production workshops, requiring students to complete real-world assignments according to professional and ethical standards, with lectures and seminars that critically examine the social and political contexts in which journalism is produced.

#### Rationale:

The calendar text is modified to include and reflect the objectives of the new Minor in Science Journalism.

The May 2020 implementation refers to the date that the department will begin advertising the minor, so that they may start the admissions in Winter 2021. The first classes will be offered in Fall 2021.

**Resource Implications:** 

See proposal.

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: JOUR-23 VERSION: 4

**PROGRAM CHANGE:** Admission and Graduation Requirements

**Proposed** [X] Undergraduate or [] Graduate Curriculum Changes

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

**Faculty/School:** Arts and Science **Department:** Journalism

**Program:** Major in Journalism, Minor in Science Journalism

Degree: BA Calendar Section/Graduate Page Number: 31.180

#### **Type of Change:**

[] Editorial [] Requirements [X] Regulations [] Program Deletion [] New Program

#### Present Text (from 2019/2020) calendar

#### **Admission and Graduation Requirements**

Enrolment in the workshops in the Department of Journalism is limited and depends on the applicants' successful completion of the admission procedures outlined in the following paragraphs. All applicants should apply through the Concordia University Admissions Application Centre. Applicants must also submit a separate application to the Department by March 1 to make an appointment for a test of English proficiency. More information can be found at concordia.ca/artsci/journalism/programs/undergraduate.

A student must achieve a final mark of "C" or better in the reporting workshops in order to proceed to the next level.

To graduate with a Major in Journalism, a student must demonstrate a working knowledge of French. Tests of oral proficiency in French are administered by the Département d'études françaises on behalf of the Department of Journalism, which is responsible for the final evaluation of each student's competence.

#### **Proposed Text**

#### **Admission and Graduation Requirements**

Enrolment in <u>courses offered by</u> the Department of Journalism is limited and depends on the applicants' successful completion of the admission procedures outlined in the following paragraphs. All applicants to the <u>Major in Journalism and the Minor in Science Journalism</u> should apply through the Concordia University Admissions Application Centre. Applicants must also submit a separate application to the Department by March 1 to make an appointment for a test of English proficiency. More information can be found at concordia.ca/artsci/journalism/programs/undergraduate.

A student must achieve a final mark of "C" or better in the reporting workshops in order to proceed to the next level.

To graduate with a Major in Journalism, a student must demonstrate a working knowledge of French. Tests of oral proficiency in French are administered by the Département d'études françaises on behalf of the Department of Journalism, which is responsible for the final evaluation of each student's competence.

#### Rationale:

The calendar text is modified to include the new Minor in Science Journalism.

The May 2020 implementation refers to the date that the department will begin advertising the minor, so that they may start the admissions in Winter 2021. The first classes will be offered in Fall 2021.

#### **Resource Implications:**

See proposal.

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: JOUR-23 VERSION: 4

#### **PROGRAM CHANGE:** Minor in Science Journalism

Proposed [X] Undergraduate or [] Graduate Curriculum Changes

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

**Faculty/School:** Arts and Science **Department:** Journalism

**Program:** Minor in Science Journalism

**Degree:** None **Calendar Section/Graduate Page Number:** 31.180

#### **Type of Change:**

[] Editorial	[] Requirements	[] Regulations	[ ] Pr	rogram Deletion [X] New Program
Present Text (fre	om 20xx/20xx) calendar		F	Proposed Text
			1 1 <i>N</i>	Minor in Science Journalism  JOUR 206 <sup>3</sup> , 207 <sup>3</sup> , 340 <sup>3</sup> , 402 <sup>3</sup> Chosen from JOUR 205 <sup>3</sup> , 208 <sup>3</sup> , 209 <sup>3</sup> , 215 <sup>3</sup> , 216 <sup>3</sup> , 298 <sup>3</sup> , 302 <sup>3</sup> , 325 <sup>3</sup> , 451 <sup>3</sup> ;  COMS 360 <sup>3</sup> , 361 <sup>3</sup> ; ENGL 391 <sup>3</sup> ; LOYC 340 <sup>3</sup> NOTE: With permission of the program director, up to 6 of the 12 elective credits can be taken in alternative courses, if these courses meet the goals of the program.  NOTE: This minor is intended for Science students.
Rationale: See proposal.				
The May 2020 im offered in Fall 202	•	that the department will begin adve	ertising the	e minor, so that they may start the admissions in Winter 2021. The first classes will be
Resource Implica See proposal.	tions:			

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: JOUR-23 VERSION: 4 **COURSE CHANGE:** JOUR 206 New Course Number: **Proposed** [X] Undergraduate or [] Graduate Curriculum Changes Calendar for academic year: 2021/2022 Implementation Month/Year: May 2020 **Faculty/School:** Arts and Science **Department:** Journalism **Program:** Major in Journalism, Minor in Science Journalism Degree: BA Calendar Section/Graduate Page Number: 31.180 Type of Change: [] Course Number [ ] Course Title [ ] Credit Value [X] Prerequisite [ ] Course Description [] Editorial [] New Course [ ] Course Deletion Other - Specify: Present Text (from 2019/2020) calendar **Proposed Text JOUR 206** Introduction to Reporting (3 credits) **JOUR 206** Introduction to Reporting (3 credits) Prerequisite: Enrolment in the Journalism program. This workshop course lays the Prerequisite: Enrolment in the Major in Journalism or the Minor in Science Journalism. foundation for all subsequent reporting and writing courses. Students learn how to do This workshop course lays the foundation for all subsequent reporting and writing courses. library and online research, structure and conduct interviews, and write news and feature Students learn how to do library and online research, structure and conduct interviews, stories for print and digital outlets. Students learn Canadian Press style. and write news and feature stories for print and digital outlets. Students learn Canadian NOTE: Students who have received credit for JOUR 201 may not take this course for Press style. NOTE: Students who have received credit for JOUR 201 may not take this course for credit. credit. Rationale: JOUR 206 and JOUR 207 are core 200-level courses in the Major in Journalism program and are filled to capacity each year with incoming journalism students. The May 2020 implementation refers to the date that the department will begin advertising the minor, so that they may start the admissions in Winter 2021. The first classes will be

offered in Fall 2021.

#### **Resource Implications:**

JOUR 206 and JOUR 207 are core 200-level courses in the Major in Journalism program and are filled to capacity each year with incoming journalism students. These are fundamental skills courses that cannot be taught to groups larger than 25. For the minor to include JOUR 206 and JOUR 207 one additional section for each course (two in total) will be needed.

Other Programs wit	hin which	course is	listed:

None.

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: JOUR-23 VERSION: 4 **COURSE CHANGE:** JOUR 207 New Course Number: **Proposed** [X] Undergraduate or [] Graduate Curriculum Changes Calendar for academic year: 2021/2022 Implementation Month/Year: May 2020 **Faculty/School:** Arts and Science **Department:** Journalism **Program:** Major in Journalism, Minor in Science Journalism Degree: BA Calendar Section/Graduate Page Number: 31.180 Type of Change: [] Course Number [ ] Course Title [ ] Credit Value [X] Prerequisite [ ] Course Description [] Editorial [] New Course [ ] Course Deletion Other - Specify: Present Text (from 2019/2020) calendar **Proposed Text JOUR 207** Introduction to Multimedia (3 credits) **JOUR 207** Introduction to Multimedia (3 credits) Prerequisite: Enrolment in the Journalism program. This workshop course introduces Prerequisite: Enrolment in the Major in Journalism or the Minor in Science Journalism. students to the use of technology across all digital news platforms, including audio and This workshop course introduces students to the use of technology across all digital news visual equipment and software. It focuses on the development of the necessary platforms, including audio and visual equipment and software. It focuses on the professional, technical and aesthetic skills to produce editorially sound audio and visual development of the necessary professional, technical and aesthetic skills to produce editorially sound audio and visual stories. Students are expected to master the use of stories. Students are expected to master the use of cameras, recording equipment, and editing software as well as basic digital tools for journalists. cameras, recording equipment, and editing software as well as basic digital tools for NOTE: Students who have received credit for JOUR 200, 203 or 221 may not take this journalists. course for credit. NOTE: Students who have received credit for JOUR 200, 203 or 221 may not take this course for credit. Rationale: JOUR 206 and JOUR 207 are core 200-level courses in the Major in Journalism program and are filled to capacity each year with incoming journalism students. The May 2020 implementation refers to the date that the department will begin advertising the minor, so that they may start the admissions in Winter 2021. The first classes will be offered in Fall 2021. Resource Implications: JOUR 206 and JOUR 207 are core 200-level courses in the Major in Journalism program and are filled to capacity each year with incoming journalism students. These are

fundamental skills courses that cannot be taught to groups larger than 25. For the minor to include JOUR 206 and JOUR 207 one additional section for each course (two in total) will

Other Programs within which course is listed:

be needed.

None.

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: JOUR-23 VERSION: 4 **COURSE CHANGE:** JOUR 340 New Course Number: **Proposed** [X] Undergraduate or [] Graduate Curriculum Changes Calendar for academic year: 2021/2022 Implementation Month/Year: May 2020 **Faculty/School:** Arts and Science **Department:** Journalism **Program:** Minor in Science Journalism Degree: None Calendar Section/Graduate Page Number: 31.180 Type of Change: [] Course Number [ ] Course Title [ ] Credit Value [ ] Prerequisite [ ] Course Description [ ] Editorial [X] New Course [ ] Course Deletion [] Other - Specify: Present Text (from 20xx/20xx) calendar **Proposed Text** JOUR 340 Communicating Science with Society (3 credits) This is an experiential course that blends journalism theory and practice to examine issues and practices related to the communication of science with society. Students learn to both produce and critique science journalism in a variety of multimedia formats. Rationale: We are proposing the creation of a new open discipline blended/experimental course (JOUR 340) that will seek to innovate on capacity issues and enroll large class sizes (100+). This course will allow a larger percentage of undergrads access to some training in journalism and is proposed as the one course in science journalism that every student should take. JOUR 340 will be a significant innovation point in the Minor. We have already launched a pilot MOOC with the World Federation of Science Journalists and KnowledgeOne/ eConcordia with 190+ junior professionals registered. The May 2020 implementation refers to the date that the department will begin advertising the minor, so that they may start the admissions in Winter 2021. The first classes will be offered in Fall 2021.

The minor will require one additional section for this new 300-level course, which will bridge fundamental and advanced levels of study in the minor with an intermediate stage course.

**Resource Implications:** 

None.

Other Programs within which course is listed:

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: JOUR-23 VERSION: 4 **COURSE CHANGE:** JOUR 450 New Course Number: **Proposed** [X] Undergraduate or [] Graduate Curriculum Changes Calendar for academic year: 2021/2022 Implementation Month/Year: May 2020 **Faculty/School:** Arts and Science **Department:** Journalism **Program:** Major in Journalism, Minor in Science Journalism Degree: BA Calendar Section/Graduate Page Number: 31.180 Type of Change: [ ] Course Number [ ] Course Title [ ] Credit Value [X] Prerequisite [ ] Course Description [] Editorial [] New Course [ ] Course Deletion Other - Specify: Present Text (from 2019/2020) calendar **Proposed Text** JOUR 450 Journalism Practicum (3 credits) **JOUR 450** Journalism Practicum (3 credits) Prerequisite: 60 credits and enrolment in a Journalism program. Students who have Prerequisite: 60 credits and enrolment in the Major in Journalism or the Minor in Science demonstrated ability, near the end of their program, undertake a practicum at a recognized Journalism. Students who have demonstrated ability, near the end of their program, media outlet, under the supervision of a senior journalist and with permission of the undertake a practicum at a recognized media outlet, under the supervision of a senior Department's undergraduate program director. journalist and with permission of the Department's undergraduate program director. Rationale: This course will help meet the pedagogical goal in the proposal of providing "industry interactions through a practicum (a test of what it is like to be a professional science journalist).

The May 2020 implementation refers to the date that the department will begin advertising the minor, so that they may start the admissions in Winter 2021. The first classes will be offered in Fall 2021.

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None.

Other Programs within which course is listed:

None.

#### PROGRAM AND COURSES CHANGE FORMS FOR DOCUMENT: JOUR-23 VERSION: 4 **COURSE CHANGE:** JOUR 451 New Course Number: **Proposed** [X] Undergraduate or [] Graduate Curriculum Changes Calendar for academic year: 2021/2022 Implementation Month/Year: May 2020 **Faculty/School:** Arts and Science **Department:** Journalism **Program:** Major in Journalism, Minor in Science Journalism Degree: BA Calendar Section/Graduate Page Number: 31.180 Type of Change: [ ] Course Number [ ] Course Title [ ] Credit Value [X] Prerequisite [ ] Course Description [] Editorial [] New Course [ ] Course Deletion Other - Specify: Present Text (from 2019/2020) calendar **Proposed Text JOUR 451** Independent Study (3 credits) **JOUR 451** Independent Study (3 credits) Prerequisite: 60 credits and enrolment in a Journalism program. Students who have Prerequisite: 60 credits and enrolment in the Major in Journalism or the Minor in Science Journalism. Students who have demonstrated ability may, near the end of their program, demonstrated ability may, near the end of their program, undertake an independent study on a topic not otherwise covered by the program, under the direction of one or more undertake an independent study on a topic not otherwise covered by the program, under faculty members. the direction of one or more faculty members. Rationale: This course will help meet the pedagogical goal in the proposal of providing "professional envelopment via applied research-creation projects (the production and display of final

works).

The May 2020 implementation refers to the date that the department will begin advertising the minor, so that they may start the admissions in Winter 2021. The first classes will be offered in Fall 2021.

Resource Im	plications
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None.

Other Programs within which course is listed:

None.

Re: Minor in SJ

----- Forwarded Message ------

**Subject:**Re: Minor in SJ **Date:**Fri, 8 Nov 2019 08:21:19 -0500

From:Pascale Biron pascale.biron@concordia.ca> To:David Secko <a href="mailto:david.secko@concordia.ca">david.secko@concordia.ca</a>

Hi David,

This is a great initiative, as we definitely need more journalists with a science background! This is particularly true when discussing questions related to climate change, which is a big topic in my department.

I would gladly promote this Minor to our BSc students once it is launched, so hopefully it will get approved soon.

Cheers,

**Pascale** 

On 2019-11-07 10:41 a.m., David Secko wrote:

Hi Pascale,

I hope all is well!

I wanted to alert you that Journalism is proposing a new minor in science journalism (attached). It will be open to BSc students to start, if some undergrad GEOG students would be interested (if it worked with their degree).

It is in process with FCC and was developed with some of the science depts at LOY. Not sure if it would be a recruiting tool for you, but happy for you to use it this way.

Happy to answer question about it.

12/3/2019, 9:23 AM 1 of 2

Cheers, Dave.

#### David M. Secko, Ph.D.

Chair of Journalism | Professor

Department of Journalism & Centre for Structural and Functional Genomics | Concordia University

7141 Sherbrooke St. West | CJ-3.247 | Montréal, Québec | H4B 1R6

Tel: (514) 848-2424 ext 5175 | Fax: (514) 848-2473 | E-mail: david.secko@concordia.ca

CSJP | Concordia Journalism | CSFG

- -

Dr. Pascale Biron
Professor and Chair
Professeure titulaire et directrice
Department of Geography, Planning and Environment
Concordia University
1455, de Maisonneuve Blvd. W.
Montreal, Quebec, Canada, H3G 1M8

Tel: (514) 848-2424 ext 2061

E-mail: pascale.biron@concordia.ca

2 of 2 12/3/2019, 9:23 AM

#### JOUR 450-Journalism Practicum

#### **REQUIREMENTS:**

Any student wishing to complete a practicum (internship) for credit must have <u>prior</u> approval from the Undergraduate Program Director or the Internship Coordinator, based upon a written proposal describing the nature of the work that will be done and providing the name of the *media outlet* as well as the contact information of the person who will supervise the student during the practicum.

The student is responsible for researching and obtaining the necessary permission from the participating *media outlet*.

Basic Journalism Practicum requirements:

- \* Only a departmentally-approved media outlet, which can provide the necessary supervision and assessment of the student is acceptable.
- \* To complete a practicum successfully, students must complete 160 hours of service. As of Fall 2019 this may be paid.

**IMPORTANT**: Students must obtain departmental approval before enrolling in the Journalism Practicum. Practicums cannot interfere with the student's regular coursework.

Once the student has received the required departmental approval:

\* The student must enroll in JOUR 450 either during the term of the practicum or in the term immediately following.

**NOTE:** Some media outlets require that the student enroll in the Journalism Practicum before the internship can begin.

- \* The student must complete and submit a three-to four-page (double-spaced) proposal at least three weeks prior to beginning the practicum. The proposal should outline the student's goals and objectives during the practicum. For example, does the student hope to write stories, edit copy, shadow reporters or photographers? The proposal should explain in some detail how this practicum will further the student's career in journalism. The proposal must also provide the name and contact information of the student's direct supervisor at the host media outlet and some background on it.
- \* Midway through the practicum, the student's supervisor must provide the department with a <u>mid-point assessment</u> of the student's progress. (This may be done by email.)
- \* The student must keep a detailed, daily journal of their practicum experience via an an online blog.

Upon completion of the practicum:

- \* The student will submit a well-written, 15-page essay (double-spaced), which details the entire practicum experience as well as how the practicum met or did not meet the student's expectations as expressed in the student's proposal.
- \* The participating media outlet must submit <u>a final assessment</u> of the student's performance. (This may be done by email.)

## JOUR 450 Student Checklist. All items are REQUIRED unless noted:

 Approval from a media outlet
 Approval from the Department of Journalism
 Enroll in JOUR 450
 Proposal due at least three weeks prior to beginning the practicum
 Daily blog journal
 Mid-point assessment
 Final assessment
 15-page personal essay
 Clippings/work samples (not required but recommended)
 Debrief with undergraduate program director

### **JOUR 450-Journalism Practicum**

		ID #:
Written approval from a media	a outlet (required)	
Approval from the Departmen	t of Journalism (required)	
Enroll in JOUR 450 (required)		
Proposal in at least three week	cs prior to beginning the practicum (	required)
Daily work journal posted as a	blog (e.g. Blogspot, Tumblr or Edu	blog) (required)
Mid-point assessment (require	d)	
Final assessment (required)		
15-page personal essay (require	red)	
Clippings/work samples (not r	equired but recommended)	
Debrief with undergraduate pr	ogram director (required)	
Comments:		
Departmental approval		
Signature)	(Print Name)	(Date)
inal Departmental Assessment	(Grade)	
Signature)	(Print Name)	(Date)



To: Paul Joyce, Associate Dean, Academic Programs, Arts and Sciences

From: Christine DeWolf, Chair, Department of Chemistry and Biochemistry

Date: 10 March 2017

Re: Support the proposed Minor in Science Journalism

Dear Dr. Joyce,

This letter is to express the support of the Department of Chemistry and Biochemistry for the "LOI – Minor in Science Journalism" proposed by the Department of Journalism. The goal of this minor is to significantly enhance the communication skills of undergraduate science students at the university and would be highly complementary and beneficial for our students.

The Department of Chemistry and Biochemistry was one of the initiating departments for a minor aimed at developing science communication skills beyond what is taught through our own science-based courses, in particular allowing interested students to develop a broader concept of science communication than reporting findings to specialists in the field (the latter is already incorporated into curriculum through projects and presentations). From these initial meetings, the minor in science journalism emerged as one step to address the importance of improving the science communication skills of Concordia students. I believe that this minor will provide value-added to our students and open up career possibilities and paths that they had not previously considered. I am confident there will be significant interest in this minor form the undergraduate student body in the Department of Chemistry and Biochemistry and look forward to working with Dr. David Secko to make this new program a success.

Yours Sincerely,

Dr. Christine DeWolf



March 9th, 2017

Department of Physics Concordia University 7141 Sherbrooke Street West Montreal, QC H4B 1R6

Dr. Paul Joyce Associate Dean, Academic Programs Faculty of Arts and Science

**Subject: Support for LOI - Minor in Science Journalism** 

Dear Dr. Joyce and Colleagues,

This letter is to express the support of the Department of Physics for the "LOI – Minor in Science Journalism" proposed by the Department of Journalism. The stated goal of this Minor is to significantly enhance the communication skills of undergraduate science students at the university. This Minor emerged from a meeting, in which we participated, in the Summer of 2016 to address the importance of improving the communication skills of Concordia Science students.

From the perspective of the Department of Physics, we think that this Minor will attract a modest, but regular number of Physics Major students. Most importantly, it can have a profound impact on those physics students joining the program. It can give them skills to pursue a wide range of careers in scientific writing, reporting and editorial work, which are not currently accessible to our Major graduates. Having even a modest number of Physics BSc students join this program will have major impact on all our BSc Physics programs, because we have been desperately lacking BSc students who have leadership in communications/journalism. These physics/journalism students are likely to fill the gap in our student leadership to organize student life, and help inform students of their career opportunities. These students will be better equipped to give meaningful and regular feedback to our Department about the academic training and experiences we offer, and help us promote our programs to support our enrollment. While some of these may be indirect benefits of the proposed program, they will be very consequential for our students.

Such a program is also crucial step to break down the barriers that have separated our Science programs from other FAS programs. This cross-fertilization is infectious, and we believe that future initiatives will naturally emerge from this first step (e.g. graduate writing program, or science policy program). We look forward to collaborations with the Dept. of Journalism to make this new program a success.

Sincerely,

Alexandre Champagne, Chair of Physics



Faculty of Arts and Science

To: Paul Joyce, Associate Dean, Academic Programs, Arts and Sciences

From: Virginia Penhune, Chair, Department of Psychology

Date: 9 March 2017

Re: Support for a LOI, Minor in Science Journalism

This is to express my support for the "LOI – Minor in Science Journalism" proposed by the Department of Journalism. The goal of this minor is to significantly enhance the communication skills of undergraduate science students at the university.

The Department of Psychology was part of meetings initiated by you in the Summer of 2016, from which the LOI for a minor in science journalism emerged as one step to address the importance of improving the science communication skills of Concordia students. We also think that it would provide interested students with a valuable career option, and we look forward to collaborations with Dr. David Secko to make this new proposal a success.



To: Paul Joyce, Associate Dean, Academic Programs, Arts and Sciences

From: Dr. Patrick Gulick, Professor and Chair, Biology Department

Date: 28 March 2017

Re: Support for a LOI, Minor in Science Journalism

Dear Dr. Joyce,

I'm writing to express my support for the "LOI – Minor in Science Journalism" proposed by the Department of Journalism. The goal of this minor is to significantly enhance the communication skills of undergraduate science students at the university.

I participated in the meeting that you organized in the Summer of 2016, from which the LOI for a minor in science journalism emerged as one step to establishing the minor. Science students who enrolled in the program would acquire extensive skills in the different facets of journalism that would improve their concrete communication skills and enhance their career opportunities. Communication skills are essential for a wide range of career paths that are associated with science degrees so the program would be extremely beneficial for our students. I look forward to collaborations with Dr. David Secko to make this new proposal a success.

Sincerely,

Dr. Patrick Gulick Professor, Chair

Department of Biology

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Dr. Paul Joyce Associate Dean, Curriculum and Appraisals Faculty of Arts and Science Concordia University

Dear Paul,

I am writing this letter to voice my strong support in favour of the establishment of a *Minor in Scientific Journalism* at Concordia, housed in the Department of Journalism. I have had discussions with Dr. David Secko, main promoter of the curriculum, and Chair of the Department of Journalism, in two group discussions organized by yourself, as well as in individual discussions. The objective is excellent, the courses interesting, and the department has a dynamic vision.

In the context of the curriculum in my department, this Minor can be nicely joined with our current Major in Exercise Science, and provide an interesting amalgamation of knowledge related to health (anatomy and physiology, nutrition, exercise, health and epidemiology), along with the proposed coursework in journalism. The program would also benefit students in our specializations in AT and KCEP, should they choose to pursue this Minor. From my understanding, in an application in a health-related context, the proposed coursework aims to provide basic theory and skills in journalism and communication in research destined to the public, or various agents in the healthcare sector. This is an area that we have too few professionals in, those that have skills and knowledge in both the basic functional aspects of the body and brain, the important health societal questions, along with a strong capacity to present these notions to the public and various agents, in their optimal context. To better communicate science implications can only improve the general scientific literacy of Canadian and Québec society. Closer to home, this will ultimately serve both the researchers, in improving the general milieu in which they produce their research (maybe eventually even an increased leverage towards the research funding at the government level?) and the public, in understanding key issues that touch society, the value of basic research, evidence-based practice in healthcare, providing for an even stronger understanding of how the needs of our society evolve.

Please receive my strong support so that this curriculum can be offered to Concordia University students.

Please accept my kind regards,

trolled Contenants

Richard Courtemanche, Ph.D.

Associate Professor, Concordia University Chair, Department of Exercise Science

SP-165-03, 7141 Sherbrooke Street West

Montréal, QC, Canada, H4B 1R6

Phone: 514-848-2424 x3302, E-Mail: richard.courtemanche@concordia.ca